

Exhibit D

Copy of the Mortgage and Deed of Trust, dated as of July 1, 1946, as heretofore amended and supplemented by 22 Supplemental Indentures, to Deutsche Bank Trust Company Americas (formerly Bankers Trust Company), Trustee

PORTLAND GAS & COKE COMPANY

TO

BANKERS TRUST COMPANY

AND

R. G. PAGE,
TRUSTEES.

Mortgage and Deed of Trust

Dated as of July 1, 1946.

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INDENTURE, dated as of the 1st day of July, 1946, made and entered into by and between PORTLAND GAS & COKE COMPANY, a corporation of the State of Oregon, whose post office address is Public Service Building, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is 16 Wall Street, New York, New York (hereinafter sometimes called the Corporate Trustee), and R. G. PAGE, whose post office address is 735 Belvidere Avenue, Plainfield, New Jersey (hereinafter sometimes called the Co-Trustee), as Trustees, parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees);

WHEREAS, the Company has deemed it necessary to borrow money for its corporate purposes and to issue its bonds therefor from time to time in one or more series, and to mortgage and pledge its property hereinafter described or mentioned to secure the payment of the same, such bonds to be coupon bonds and/or fully registered bonds, authenticated by the certificate of the Corporate Trustee and issuable as in this Indenture hereinafter provided, such coupon bonds, coupons, fully registered bonds and Corporate Trustee's authentication certificate to be substantially in the forms following, respectively, with such insertions, omissions and variations as the Board of Directors of the Company may determine in accordance with the provisions of this Indenture:

[GENERAL FORM OF COUPON BOND]

PORTLAND GAS & COKE COMPANY

..... MORTGAGE BOND

No. Series \$.....

PORTLAND GAS & COKE COMPANY, a corporation of the State of Oregon (hereinafter called the Company), for value received, hereby promises to pay to the bearer, or, if this bond be registered, to the

registered owner hereof, on _____, _____, at the office or agency of the Company in _____, _____ dollars in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, and to pay interest thereon from the date hereof at the rate of _____ per centum per annum in like coin or currency at such office or agency on _____ and _____ in each year, until the Company's obligation with respect to the payment of such principal shall have been discharged. The interest accrued on the principal hereof prior to such principal's becoming due and payable shall be paid only upon presentation and surrender of the interest coupons therefor hereto attached as they severally mature.

This bond is one of an issue of bonds of the Company issuable in series and is one of a series known as its _____ Mortgage Bonds, _____ Series _____, all bonds of all series issued and to be issued under and equally secured (except in so far as any sinking or other fund, established in accordance with the provisions of the Mortgage hereinafter mentioned, may afford additional security for the bonds of any particular series) by a Mortgage and Deed of Trust (herein, together with any indenture supplemental thereto, called the Mortgage), dated as of July 1, 1946, executed by the Company to Bankers Trust Company and R. G. Page, as Trustees. Reference is made to the Mortgage for a description of the property mortgaged and pledged, the nature and extent of the security, the rights of the holders of the bonds and of the Trustees in respect thereof, the duties and immunities of the Trustees, the terms and conditions upon which the bonds are and are to be secured, and the circumstances under which additional bonds may be issued. With the consent of the Company and to the extent permitted by and as provided in the Mortgage, the rights and obligations of the Company and/or the rights of the holders of the bonds and/or coupons and/or the terms and provisions of the Mortgage may be modified or altered by affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding under the Mortgage and, if the rights of the holders of one or more, but less than all, series of bonds then outstanding are to be affected, then also by affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding of each series of bonds so to be affected (excluding

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in any case bonds disqualified from voting by reason of the Company's interest therein as provided in the Mortgage); provided that, without the consent of the holder hereof, no such modification or alteration shall, among other things, impair or affect the right of the holder to receive payment of the principal of (and premium, if any) and interest on this bond, on or after the respective due dates expressed herein, or permit the creation of any lien equal or prior to the lien of the Mortgage or deprive the holder of the benefit of a lien on the mortgaged and pledged property.

The principal hereof may be declared or may become due prior to the maturity date hereinbefore named on the conditions, in the manner and at the time set forth in the Mortgage, upon the occurrence of a default as in the Mortgage provided.

This bond is negotiable and shall pass by delivery unless registered as to principal at the office or agency of the Company in and such registration noted hereon, after which no valid transfer hereof can be made, except at such office or agency, until after registered transfer to bearer, but after such registered transfer to bearer this bond shall be again transferable by delivery. Such registration, however, shall not affect the negotiability of the coupons, which shall always remain payable to bearer and transferable by delivery. The Company and the Trustees may deem and treat the bearer of this bond if it be not registered as to principal, or, if this bond is registered as herein authorized, the person in whose name the same is registered, as the absolute owner hereof, and the bearer of any coupon hereunto appertaining as the absolute owner thereof, whether or not this bond or such coupon shall be overdue, for the purpose of receiving payment and for all others purposes, and neither the Company nor the Trustees shall be affected by any notice to the contrary.

As provided in the Mortgage, the Company shall not be required to make transfers or exchanges of bonds of any series for a period of ten days next preceding any interest payment date for bonds of such series, or next preceding any designation of bonds of such series to be redeemed, and the Company shall not be required to make transfers or exchanges of any bonds designated in whole or in part for redemption.

No recourse shall be had for the payment of the principal of or interest on this bond against any incorporator or any past, present or future subscriber to the capital stock, stockholder, officer or director

of the Company or of any predecessor or successor corporation, as such, either directly or through the Company or any predecessor or successor corporation, under any rule of law, statute or constitution or by the enforcement of any assessment or otherwise, all such liability of incorporators, subscribers, stockholders, officers and directors being released by the holder or owner hereof by the acceptance of this bond and being likewise waived and released by the terms of the Mortgage.

Neither this bond nor the coupons hereto attached shall become obligatory until Bankers Trust Company, the Corporate Trustee under the Mortgage, or its successor thereunder, shall have signed the form of authentication certificate endorsed hereon.

IN WITNESS WHEREOF, PORTLAND GAS & COKE COMPANY has caused this bond to be signed in its corporate name by its President or one of its Vice-Presidents and its corporate seal to be impressed or imprinted hereon and attested by its Secretary or one of its Assistant Secretaries, and interest coupons bearing the facsimile signature of its Treasurer to be attached hereto, as of,

PORTLAND GAS & COKE COMPANY,

By.....

Attest:

President.

.....

Secretary.

[GENERAL FORM OF COUPON]

No.

\$.....

On,, unless the bond hereafter mentioned shall have previously become due and payable, PORTLAND GAS & COKE COMPANY will pay to bearer, upon surrender of this coupon, at its office or agency in, dollars in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, being six months' interest then due on its Mortgage Bond, Series, No.....

.....

Treasurer.

[GENERAL FORM OF FULLY REGISTERED BOND]

PORTLAND GAS & COKE COMPANY

..... MORTGAGE BOND

No. SERIES \$.....

PORTLAND GAS & COKE COMPANY, a corporation of the State of Oregon (hereinafter called the Company), for value received, hereby promises to pay to, or registered assigns, on, at the office or agency of the Company in

..... dollars in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, and to pay to the registered owner hereof interest thereon from the or next preceding the date of this bond, at the rate of per centum per annum in like coin or currency at such office or agency on and in each year, until the Company's obligation with respect to the payment of such principal shall have been discharged.

This bond is one of an issue of bonds of the Company issuable in series and is one of a series known as its Mortgage Bonds, Series, all bonds of all series issued and to be issued under and equally secured (except in so far as any sinking or other fund, established in accordance with the provisions of the Mortgage hereinafter mentioned, may afford additional security for the bonds of any particular series) by a Mortgage and Deed of Trust (herein, together with any indenture supplemental thereto, called the Mortgage), dated as of July 1, 1946, executed by the Company to Bankers Trust Company and R. G. Page, as Trustees. Reference is made to the Mortgage for a description of the property mortgaged and pledged, the nature and extent of the security, the rights of the holders of the bonds and of the Trustees in respect thereof, the duties and immunities of the Trustees, the terms and conditions upon which the bonds are and are to be secured, and the circumstances

under which additional bonds may be issued. With the consent of the Company and to the extent permitted by and as provided in the Mortgage, the rights and obligations of the Company and/or the rights of the holders of the bonds and/or coupons and/or the terms and provisions of the Mortgage may be modified or altered by affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding under the Mortgage and, if the rights of the holders of one or more, but less than all, series of bonds then outstanding are to be affected, then also by affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding of each series of bonds so to be affected (excluding in any case bonds disqualified from voting by reason of the Company's interest therein as provided in the Mortgage); provided that, without the consent of the holder hereof, no such modification or alteration shall, among other things, impair or affect the right of the holder to receive payment of the principal of (and premium, if any) and interest on this bond, on or after the respective due dates expressed herein, or permit the creation of any lien equal or prior to the lien of the Mortgage or deprive the holder of the benefit of a lien on the mortgaged and pledged property.

The principal hereof may be declared or may become due prior to the maturity date hereinbefore named on the conditions, in the manner and at the time set forth in the Mortgage, upon the occurrence of a default as in the Mortgage provided.

This bond is transferable as prescribed in the Mortgage by the registered owner hereof in person, or by his duly authorized attorney, at the office or agency of the Company in, upon surrender and cancellation of this bond, and upon payment, if the Company shall require it, of the transfer charges provided for in the Mortgage, and, thereupon, a new fully registered bond of the same series for a like principal amount will be issued to the transferee in exchange herefor as provided in the Mortgage. The Company and the Trustees may deem and treat the person in whose name this bond is registered as the absolute owner hereof for the purpose of receiving payment and for all other purposes, and neither the Company nor the Trustees shall be affected by any notice to the contrary.

As provided in the Mortgage, the Company shall not be required to make transfers or exchanges of bonds of any series for a period of ten days next preceding any interest payment date for bonds of such series, or next preceding any designation of bonds of such series to be redeemed, and the Company shall not be required to make transfers or exchanges of any bonds designated in whole or in part for redemption.

No recourse shall be had for the payment of the principal of or interest on this bond against any incorporator or any past, present or future subscriber to the capital stock, stockholder, officer or director of the Company or of any predecessor or successor corporation, as such, either directly or through the Company or any predecessor or successor corporation, under any rule of law, statute or constitution or by the enforcement of any assessment or otherwise, all such liability of incorporators, subscribers, stockholders, officers and directors being released by the holder or owner hereof by the acceptance of this bond and being likewise waived and released by the terms of the Mortgage.

This bond shall not become obligatory until Bankers Trust Company, the Corporate Trustee under the Mortgage, or its successor thereunder, shall have signed the form of authentication certificate endorsed hereon.

IN WITNESS WHEREOF, PORTLAND GAS & COKE COMPANY has caused this bond to be signed in its corporate name by its President or one of its Vice-Presidents and its corporate seal to be impressed or imprinted hereon and attested by its Secretary or one of its Assistant Secretaries on

PORTLAND GAS & COKE COMPANY,

By.....
President.

Attest:

.....
Secretary.

[FORM OF CORPORATE TRUSTEE'S AUTHENTICATION CERTIFICATE ON ALL BONDS]
CORPORATE TRUSTEE'S AUTHENTICATION CERTIFICATE.

This bond is one of the bonds, of the series herein designated, described or provided for in the within-mentioned Mortgage.

BANKERS TRUST COMPANY,
as Corporate Trustee,

By.....

and

WHEREAS, all things necessary to make this Indenture a valid, binding and legal instrument for the security of such bonds have been performed, and the issuance of such bonds, subject to the terms of this Indenture, has been in all respects duly authorized;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Portland Gas & Coke Company, in consideration of the premises and of One Dollar (\$1) to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in order to secure the payment of both the principal of and interest and premium, if any, on the bonds from time to time issued hereunder, according to their tenor and effect and the performance of all the provisions hereof (including any instruments supplemental hereto and any modification made as in this Indenture provided) and of said bonds, hath granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over and confirmed and by these presents doth grant, bargain, sell, release, convey, assign, transfer, mortgage, pledge, set over and confirm (subject, however, to Excepted Encumbrances as defined in Section 6 hereof) unto R. G. Page and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all the properties of the Company specifically described in Article XXI hereof.

Also all other property, real, personal and mixed, of the kind or nature specifically mentioned in Article XXI hereof or of any other kind or nature (except any herein expressly excepted), now owned or, subject to the provisions of subsection (I) of Section 87 hereof, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing or of any general description contained in this Indenture) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracks, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein expressly excepted)

all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 hereof) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 hereof, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein expressly excepted; shall be and are as fully granted and conveyed hereby and as fully embraced within the Lien hereof as if such property, rights and franchises were now owned by the Company and were specifically described herein and conveyed hereby.

PROVIDED that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Indenture, viz.: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held hereunder or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation

of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged hereunder or hereinafter covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the Lien hereof; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 hereof; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Indenture in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII hereof by reason of the occurrence of a Default as defined in Section 65 hereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto R. G. Page and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, upon the terms and trusts herein set forth, for the equal pro rata benefit and security of all and every of the bonds and coupons issued and to be issued hereunder, or any of them, in

accordance with the terms of this Indenture, without preference, priority or distinction as to lien of any of said bonds and coupons over any others thereof by reason of priority in the time of the issue or negotiation thereof, or otherwise howsoever, except in so far as any sinking or other fund established by, or in accordance with the provisions of, this Indenture, may afford additional security for the bonds of any particular series, and subject to the provisions hereinafter set forth in reference to extended, transferred or pledged coupons and claims for interest; it being intended that, subject as aforesaid, the lien and security of all of said bonds and coupons of all series issued or to be issued hereunder shall take effect from the execution and delivery of this Indenture, and that the lien and security of this Indenture shall take effect from the date of execution and delivery hereof as though all of the said bonds of all series were actually authenticated and delivered and issued upon such date.

PROVIDED, HOWEVER, and these presents are upon the condition that if the Company, its successors or assigns, shall pay or cause to be paid, the principal of and interest on said bonds, together with the premium, if any, payable on such of said bonds as may have been called for redemption prior to maturity, or shall provide, as permitted hereby, for the payment thereof by depositing with the Corporate Trustee the entire amount due or to become due thereon for principal, interest and premium, if any, and if the Company shall also pay or cause to be paid all other sums payable hereunder by it, then this Indenture and the estate and rights hereby granted shall cease, determine and be void, otherwise to be and remain in full force and effect.

IT IS HEREBY COVENANTED, DECLARED AND AGREED by and between the parties hereto that all such bonds and coupons are to be authenticated, delivered and issued, and that all property subject or to become subject hereto is to be held subject to the further covenants, conditions, uses and trusts hereinafter set forth, and the Company, for itself and its successors and assigns, does hereby covenant and agree to and with

the Trustees and their successor or successors in such trust, for the benefit of those who shall hold said bonds and interest coupons, or any of them, as follows:

ARTICLE I.

Definitions.

SECTION 1. The terms defined in the next succeeding six Sections hereof, numbered from 2 to 7, both inclusive, shall (except as herein otherwise expressly provided) for all purposes of this Indenture, and of any indenture supplemental hereto, have the respective meanings in such Sections specified. Any term defined in Section 303 of the Trust Indenture Act of 1939 and not defined in this Indenture shall have the meaning assigned to such term in such Section 303 as in force on the date of the execution of this Indenture.

SECTION 2. The term "the Company" shall mean the party of the first part hereto, PORTLAND GAS & COKE COMPANY, and, subject to the provisions of Article XVI hereof, shall also include its successors and assigns. For the purposes of (i) clause (2) of subdivision (c) of Section 35 hereof, (ii) the second paragraph of Section 71 hereof, (iii) the second and third paragraphs of Section 78 hereof, (iv) Section 98 hereof, (v) Section 99 hereof, and (vi) paragraph (3) of subdivision (a) of Section 100 hereof, the word "Company" shall be deemed to mean and refer to the Company and any other obligor on the bonds secured hereby.

The term "the Trustees" shall mean the parties of the second part hereto, Bankers Trust Company and R. G. Page, and, subject to the provisions of Article XVII hereof, shall also include their respective successors and assigns.

The term "the Corporate Trustee" shall mean Bankers Trust Company, and, subject as aforesaid, shall also include its successors and assigns. The term "the Co-Trustee" shall mean R. G. Page, and,

subject as aforesaid, shall also include his successors and assigns. The term "Trustee", when used in the singular, shall mean the Corporate Trustee or the Co-Trustee, or any separate trustee or co-trustee appointed as in this Indenture provided. The term "the Original Corporate Trustee" shall mean Bankers Trust Company. The term "the Original Co-Trustee" shall mean R. G. Page.

The term "this Indenture" or "the Mortgage" (the latter being referred to in the general forms of bonds) shall mean this instrument and all indentures supplemental hereto.

The terms "the Lien hereof" and "the Lien of this Indenture" shall mean the lien created by these presents (including the after-acquired property clauses hereof) and the lien created by any subsequent conveyance or delivery to or pledge with the Trustees or either of them hereunder (whether made by the Company or any other corporation or any individual or co-partnership) effectively constituting any property a part of the security held by the Trustees or either of them upon the terms and trusts and subject to the covenants, conditions and uses specified in this Indenture.

The term "the Mortgaged and Pledged Property" shall mean as of any particular time the property (including securities and other personal property) which at said time is subject or intended to be subject to the Lien of this Indenture, whether such lien be created by these presents (including the after-acquired property clauses hereof) or by subsequent conveyance or delivery to or pledge with the Trustees or either of them hereunder or otherwise.

The term "Outstanding", subject to the provisions of Sections 71 and 113 hereof, shall mean as of any particular time with respect to bonds issued or issuable under this Indenture all bonds which theretofore shall have been authenticated and delivered by the Corporate Trustee under this Indenture, except (a) bonds theretofore paid, retired, redeemed, discharged or canceled, or bonds for the purchase, payment or redemption of which money in the necessary amount shall

§3, Art. I

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have been deposited with or shall then be held by the Corporate Trustee with irrevocable direction so to apply the same, provided that, in the case of redemption, the notice required by Article X hereof shall have been given or have been provided for to the satisfaction of the Corporate Trustee; (b) bonds deposited with or held in pledge by the Corporate Trustee under any of the provisions of this Indenture, including any so held under any sinking or other fund; and (c) bonds authenticated and delivered hereunder, upon transfer of which or in exchange or substitution for and/or in lieu of which other bonds have been authenticated and delivered under any of the provisions of this Indenture. Notwithstanding the foregoing provision of this paragraph, for the purpose of determining the right of bondholders to annul a declaration and destroy its effect under Section 67 hereof and for the purpose of determining the right of bondholders to direct the Trustees under Section 71 hereof, and under other provisions of this Indenture relating to the right of bondholders to direct the Trustees, and solely for such purposes, bonds in exchange or substitution for and/or in lieu of which other bonds have been authenticated and delivered under Section 16 hereof and which have not been surrendered to the Corporate Trustee for cancellation, shall be deemed to be Outstanding.

The term "Daily Newspaper" shall mean a newspaper usually published at least five days a week.

SECTION 3. The term "Resolution" shall mean a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors of the Company and to be in full force and effect on the date certified.

The term "Engineer" shall mean an individual who is an engineer or a co-partnership or a corporation engaged in an engineering business, who or which, unless required to be independent, may be regularly employed by the Company.

The term "Officers' Certificate" shall mean a certificate signed by the President or a Vice-President and the Treasurer or an Assistant

Treasurer of the Company. If and to the extent required by the provisions of Section 121 hereof, each such certificate shall include the statements provided for in said Section.

The term "Engineer's Certificate" shall mean a certificate signed by the President or a Vice-President of the Company and by an Engineer (who may be an employee of the Company) appointed by the Board of Directors of the Company, provided, however, if any property or securities are to be released from the Lien of this Indenture, the Engineer's Certificate as to the fair value of such property or securities and as to matters referred to in clause (f) of subdivision (3) of Section 59 hereof shall be made by an independent Engineer, appraiser, or other expert, if the fair value of such property or securities and of all other property or securities released since the commencement of the then current calendar year, as set forth in the certificates required by this Indenture, is ten per centum (10%) or more of the aggregate principal amount of the bonds at the time Outstanding; but such a certificate of an independent Engineer, appraiser, or other expert shall not be required in the case of any release of property or securities, if the fair value thereof as set forth in the certificates required by this Indenture is less than Twenty-five Thousand Dollars (\$25,000) or less than one per centum (1%) of the aggregate principal amount of the bonds at the time Outstanding. If and to the extent required by the provisions of Section 121 hereof, each such certificate shall include the statements provided for in said Section.

The term "independent", when applied to any accountant, Engineer, appraiser or other expert, shall mean such a person who is in fact independent, selected by the Company and approved by the Corporate Trustee in the exercise of reasonable care.

The term "Independent Engineer's Certificate" shall mean a certificate signed by an independent Engineer appointed by the Board of Directors of the Company and approved by the Corporate Trustee in the exercise of reasonable care. If and to the extent required by the

§4(I), Art. I

provisions of Section 121 hereof, each such certificate shall include the statements provided for in such Section.

The term "Opinion of Counsel" shall mean an opinion in writing signed by counsel (who may be of counsel to the Company) appointed by the Board of Directors of the Company. If and to the extent required by the provisions of Section 121 hereof, each such opinion shall include the statements provided for in said Section.

The acceptance by the Corporate Trustee of any document the signer of which is required by some provision hereof to be approved by the Corporate Trustee, shall be sufficient evidence of its approval of the signer within the meaning of this Indenture.

The term "Responsible Officers" of any Trustee shall mean and include the chairman of the board of directors, the chairman and vice-chairman of the executive committee of the board of directors, the president, every vice-president, every assistant or second vice-president, the secretary, every assistant secretary, the cashier, every assistant cashier, the treasurer, every assistant treasurer, every trust officer and assistant trust officer, and every officer and assistant officer of such Trustee, other than those specifically above mentioned, to whom any corporate trust matter is referred because of his knowledge of, and familiarity with, a particular subject; and the term "Responsible Officer" shall mean and include any of said officers.

The term "Proceeds of Released Property" shall mean the aggregate of the cash deposited with or received by the Corporate Trustee pursuant to the provisions of Section 59, Section 60, Section 61 (except such cash as is to be paid over to the Company under the provisions of Section 61), or Section 62 hereof.

SECTION 4. (I) The term "Property Additions" shall mean plants, lines, pipes, mains, cables, machinery, boilers, transmission lines, pipe lines, distribution systems, service systems and supply systems and other property, real or personal, and improvements, extensions, additions, renewals or replacements, acquired by the Company by pur-

§4(I) (cont.), Art. I

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chase, consolidation, merger, donation, construction, erection or in any other way whatsoever, subsequent to March 31, 1946, or in the process of construction or erection in so far as actually constructed or erected subsequent to March 31, 1946, and used or useful or to be used in or in connection with the business of generating, manufacturing, producing, transmitting, transporting, distributing or supplying gas or electricity for heat, power, refrigeration, light or other purposes, or steam or hot water for power, heat or other purposes or in the gas by-product business. The term "Property Additions" shall not, however, include (1) any shares of stock, bonds, notes or other obligations or other securities or contracts, leases, or operating agreements, bills, notes, accounts receivable or choses in action, or (2) except as herein otherwise specifically provided, going value, good will, franchises or governmental permits or licenses, as such, granted to or acquired by the Company separately and distinctly from the property operated thereunder or in connection therewith or incident thereto, or (3) any merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil or similar materials or supplies consumable in the operation of any of the properties of the Company; or aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks or other vehicles, or materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; or timber, minerals, mineral rights or royalties or Natural Gas and Oil Production Property, or (4) any property which is located outside of the limits of the States of Oregon, Washington, Idaho and California, and states contiguous thereto, as the same may be now or hereafter constituted, unless such property shall be connected by pipe line, transmission, distribution or other line owned by the Company with a system, line, plant or power house owned or operated by the Company which is located within such limits or shall be auxiliary to property so located or connected, or (5) any property which is located outside of the limits of the United States of America, or (6) any

§4(II)(A), Art. I

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natural gas transmission lines (other than lines replacing artificial gas transmission lines between distribution systems) or other works or property used primarily and principally in the transmission of natural gas up to the point of connection with any distribution system, or (7) any property, the cost of acquiring, making or constructing which is chargeable under accepted principles of accounting to operating expenses.

The term "Natural Gas and Oil Production Property" shall mean all leases, consolidated leases and operating agreements, fee lands and other mineral interests, gas and oil rights, wells, field compressors, equipment and other properties and rights whether producing or non-producing, used or useful primarily and principally for the production and gathering of natural gas up to the point of connection with any gas transmission or distribution system or used or useful primarily and principally for the production or gathering of oil.

(II) When any Property Additions are certified to the Corporate Trustee in any certificate in any application under any of the provisions of this Indenture as the basis either of the authentication and delivery of bonds or of the release of property or the withdrawal of cash (except in the case of the release of property, or the withdrawal of cash representing the proceeds of insurance on or of the release of property or payment of or on account of obligations secured by purchase money mortgages, in each case on the basis of Property Additions acquired or constructed within ninety (90) days prior to the date of application for such release, or to the receipt by the Corporate Trustee of such cash, or subsequent to such application or receipt of cash, and except under the provisions of Section 39 hereof),

(A) there shall be deducted from the Cost or fair value thereof to the Company, as the case may be (as of the date so certified), an amount equal to the Cost (or as to Property Additions of which the fair value to the Company at the time the same became Funded Property was less than the Cost as determined pursuant to this Section, then such fair value in lieu of Cost)

§4(II)(B), Art. I

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of all Funded Property of the Company retired subsequent to March 31, 1946 (other than the Funded Property, if any, in connection with the application for the release of which such certificate is filed) and not theretofore deducted from the Cost or fair value to the Company of Property Additions theretofore certified to the Corporate Trustee, and

(B) there may, at the option of the Company, be added to such Cost or fair value, as the case may be, the sum of

(a) the principal amount of any obligations secured by purchase money mortgages and any cash (other than proceeds of such purchase money obligations), not theretofore so added and which the Company then elects so to add, received by the Corporate Trustee or the trustee or other holder of any Qualified Lien, in either case representing the proceeds of insurance on, or of the release or other disposition of, Funded Property retired;

(b) the principal amount of any bond(s) or fraction of a bond, not theretofore so added and which the Company then elects so to add, the right to the authentication and delivery of which under the provisions of Section 26 or Section 29 hereof shall have been waived as the basis of the release of Funded Property retired;

(c) the fair value, not theretofore so added and which the Company then elects so to add, at the time of its release of any Funded Property released from the Lien hereof to the extent that such release has been made on the basis of Property Additions and which Funded Property has been retired on the books of the Company;

(d) unless all bonds of the First Series shall have ceased to be Outstanding, the Cost or fair value (whichever is less) to the Company of any Property Additions, not theretofore so added and which the Company then elects so to add, which shall have been made the basis of a credit under the provisions of clause (3) or clause (b) of subsection (I) of Section 39 hereof;

(e) unless all bonds of the First Series shall have ceased to be Outstanding, the aggregate principal amount of bonds issued hereunder, not theretofore so added and which the Company then

§4(III), Art. I

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elects so to add, which bonds shall have been purchased or redeemed with cash deposited pursuant to the provisions of Section 39 hereof, or the right to the authentication and delivery of which bonds the Company has made the basis of a credit under clause (4) or clause (c) of subsection (I) of said Section 39; and

(f) the Cost to the Company of any Property Additions not theretofore so added and which the Company then elects so to add, to the extent that the same shall have been substituted (otherwise than under the release or cash withdrawal provisions hereof) for Funded Property retired;

provided, however, that the aggregate of the amounts added under clause (B) above shall in no event exceed the amounts deducted under clause (A) above and provided further, that neither any reduction in the Cost or book value of property recorded in the plant account of the Company nor the transfer of any amounts appearing in such account to intangible and/or adjustment accounts otherwise than in connection with actual retirements of physical property abandoned, destroyed, released or disposed of, or retired from plant account, subsequent to March 31, 1946, shall be deemed to be Funded Property retired for the purposes of this Section.

(III) The term "Cost" with respect to Property Additions made the basis under any of the provisions of this Indenture of the authentication and delivery of bonds, or the withdrawal of cash or the release of property or the basis of a credit under the provisions of Section 39 or Section 40 hereof shall mean the sum of (i) any cash forming a part of such Cost, (ii) an amount equivalent to the fair market value in cash (as of the date of delivery) of any securities delivered in payment therefor or for the acquisition thereof, (iii) the principal amount of any prior lien bonds secured by prior lien upon such Property Additions, outstanding at the time of their acquisition, unless the Engineer's Certificate in subdivision (3) of Section 28 hereof provided for shall state that the required amount has theretofore been deducted in compliance with the provisions of Section 26 hereof when other Property

§4(III) (cont.), Art. I

Additions subject to such prior lien shall have been made the basis under any of the provisions of this Indenture of the authentication and delivery of bonds or the withdrawal of cash or the release of property or the basis of a credit under the provisions of Section 39 or Section 40 hereof, and (iv) the principal amount of any other indebtedness incurred or assumed as all or part of the Cost to the Company of such Property Additions; provided, however, that, notwithstanding any other provision of this Indenture, in any case where Property Additions shall have been acquired (otherwise than by construction) by the Company without any consideration consisting of cash, property or securities or the incurring or assumption of indebtedness, no determination of Cost shall be required, and wherever in this Indenture provision is made for Cost or fair value, the Cost, in such case, shall mean an amount equal to the fair value thereof.

If any Property Additions are shown by the Engineer's Certificate provided for in subdivision (3) of Section 28 hereof to include property which has been used or operated by others than the Company in a business similar to that in which it has been or is to be used or operated by the Company, the Cost thereof may include the amount of cash or the value of any portion of the securities paid or delivered for any rights and intangible property simultaneously acquired for which no separate or distinct consideration shall have been paid or apportioned, and in such case the term Property Additions as defined herein may include such rights and intangible property.

For the purposes of the deductions required by this Section, the Cost and/or the fair value to the Company of Funded Property retired shall be determined as follows: (aa) in the case of property which was owned by Portland Gas & Coke Company on March 31, 1946, the Cost thereof shall be the Cost as shown on the books of the Company or, if not so separately shown, the Cost as estimated by the Company; and (bb) in the case of Property Additions retired, the Cost or the fair value thereof to the Company shall be the Cost or the fair value thereof to the Company as shown by the Engineer's Certificate or

Independent Engineer's Certificate furnished to the Corporate Trustee at the time such Property Additions became Funded Property, or, if not separately shown in such certificate, shall be such portion of the Cost or the fair value to the Company of Property Additions shown in such certificate as shall be allocated to such Property Additions retired in any Engineer's Certificate subsequently delivered to the Corporate Trustee; and in case such Property Additions shall not have been included in any Engineer's Certificate or Independent Engineer's Certificate theretofore furnished to the Corporate Trustee, the Cost or the fair value thereof to the Company shall be as shown, as of the time when they became Funded Property, in an Engineer's Certificate then delivered to the Corporate Trustee.

SECTION 5. The term "Funded Property" shall mean:

(1) all property, except property expressly excepted from the Lien of this Indenture, owned by Portland Gas & Coke Company on March 31, 1946;

(2) all Property Additions to the extent that the same shall have been made the basis of the authentication and delivery of bonds under this Indenture;

(3) all Property Additions to the extent that the same shall have been made the basis of the release of property from the Lien of this Indenture, subject, however, to the provisions of Section 59 hereof;

(4) all Property Additions to the extent that the same shall have been substituted (otherwise than under the release or cash withdrawal provisions hereof) for Funded Property retired;

(5) all Property Additions to the extent that the same shall have been made the basis of the withdrawal of any Funded Cash, as hereinafter defined, held by the Corporate Trustee hereunder or by the trustee or other holder of a Qualified Lien as hereinafter defined, subject, however, to the provisions of Section 37 hereof and clause (a) of Section 61 hereof, and except to the extent that any such Property Additions shall no longer be deemed to be Funded Property in accordance with the provi-

sions of clause (b) of Section 61 hereof or clause (d) of this Section; and

(6) unless all bonds of the First Series shall have ceased to be Outstanding, all Property Additions to the extent that the same shall have been made the basis of a credit under the provisions of clause (3), clause (b) or clause (ii) of subsection (I) of Section 39 hereof or under the provisions of Section 40 hereof.

In the event that, in any certificate filed with the Corporate Trustee in connection with any of the transactions referred to in clauses (2), (3), (5) and (6) of this Section, only a part of the Cost or fair value of the Property Additions described in such certificate shall be required for the purposes of such certificate, then such Property Additions shall be deemed to be Funded Property only to the extent so required for the purposes of such certificate.

All Funded Property that shall be retired on the books of the Company from plant account or abandoned, destroyed or released or otherwise disposed of shall for the purpose of Section 4 hereof be deemed Funded Property retired and for other purposes of this Indenture shall thereupon cease to be Funded Property but as in this Indenture provided may at any time thereafter again become Funded Property.

The term "Funded Cash" shall mean:

(a) cash, held by the Corporate Trustee hereunder or by the trustee or other holder of a Qualified Lien as hereinafter defined, to the extent that it represents the proceeds of insurance on or the release of or the taking by eminent domain of property, or the proceeds of property purchased by any governmental body or agency or its designee upon exercise of any right which it may have to purchase the same or designate a purchaser thereof, or the proceeds of the release of obligations secured by purchase money mortgage which obligations have been delivered to the Corporate Trustee or to the trustee or other holder of a Qualified Lien pursuant to Article XI hereof and used as a credit in any application for the release of property hereunder, or the proceeds of payment to the Corporate Trustee or to such other trus-

tee or holder on account of the principal of obligations secured by purchase money mortgage which obligations have been delivered to it pursuant to Article XI hereof and used as a credit in any application for the release of property hereunder;

(b) cash held at any time in any sinking or improvement fund or other similar device for the retirement of bonds of one or more series issued hereunder (other than cash deposited pursuant to Section 64 hereof), but when all bonds of such one or more series shall have ceased to be Outstanding hereunder, such cash shall no longer be deemed to be or to have been Funded Cash;

(c) any cash deposited with the Corporate Trustee under Sections 30 and/or 46 hereof;

(d) subject to the provisions of Section 61 hereof, any cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 hereof, including cash deposited with the Corporate Trustee solely by reason of the Company's obligation under Section 64 to replace an equivalent amount of cash theretofore withdrawn from the Corporate Trustee on the basis of Property Additions; provided, however, that from and after the making of such deposit of cash with the Corporate Trustee solely by reason of the Company's obligation under Section 64 as aforesaid, and after the Company has irrevocably directed the Corporate Trustee to apply such cash to the retirement of bonds pursuant to the provisions of said Section 64, any Property Additions so made the basis of such withdrawal of cash shall no longer be deemed to be Funded Property, except to the extent of any amount which shall, at the time such Property Additions were made the basis of such withdrawal, have been deducted from the Cost or fair value of such Property Additions pursuant to the provisions of clause (A) of Section 4 hereof less any amount which shall then have been added thereto pursuant to the provisions of clause (B) of said Section 4, and except to the extent of any amount which shall then have been deducted in respect of Qualified Liens on such Property Additions pursuant to Section 26 hereof; and

(e) any cash deposited with the Corporate Trustee under Section 39 (subject to the provisions of said Section 39 permitting

§6(a), (b), (c), (d), (e), Art. I

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bonds purchased or redeemed by application of cash pursuant to the provisions of said Section 39 to cease to be deemed to have been purchased or redeemed with Funded Cash) or Section 40 hereof, but when all bonds of the First Series shall have ceased to be Outstanding hereunder, such cash shall no longer be deemed to be or to have been Funded Cash.

SECTION 6. The term "Excepted Encumbrances" shall mean as of any particular time any of the following:

(a) liens for taxes, assessments or governmental charges not then delinquent, and liens for workmen's compensation awards and similar obligations not then delinquent, and undetermined liens or charges incidental to construction, and liens for taxes, assessments or governmental charges then delinquent but the validity of which is being contested at the time by the Company in good faith as provided in Section 36 hereof;

(b) any liens securing indebtedness, neither assumed nor guaranteed by the Company nor on which it customarily pays interest, existing upon real estate or rights in or relating to real estate acquired by the Company for substation, transmission line, transportation line, distribution line or right of way purposes;

(c) rights reserved to or vested in any municipality or public authority by the terms of any right, power, franchise, grant, license or permit, or by any provision of law, to terminate such right, power, franchise, grant, license or permit or to purchase or recapture or to designate a purchaser of any of the property of the Company;

(d) rights reserved to or vested in others to take or receive any part of the power, gas, oil or other minerals or timber generated, developed, produced, manufactured, pumped or stored by, or grown on, or acquired with, any property of the Company;

(e) easements, restrictions, exceptions or reservations in any property and/or rights of way of the Company for the purpose of roads, pipe lines, transmission lines, distribution lines, removal of coal or other minerals or timber, and other like purposes, or for the joint or common use of real property, rights

§5(f), (g), Art. I

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of way, facilities and/or equipment, and defects, irregularities and deficiencies in titles of any property and/or rights of way, which do not materially impair the use of such property and/or rights of way for the purposes for which such property and/or rights of way are held by the Company;

(f) rights reserved to or vested in any municipality or public authority to control or regulate any property of the Company, or to use such property in a manner which does not materially impair the use of such property for the purposes for which it is held by the Company; or

(g) any obligations or duties, affecting the property of the Company, to any municipality or public authority with respect to any franchise, grant, license or permit.

The term "Qualified Lien" shall mean any mortgage or other lien (not included in the term Excepted Encumbrances) prior to the Lien of this Indenture, existing at any particular time upon any Property Additions (so long as such Property Additions remain subject to the Lien hereof) then or theretofore made the basis under any of the provisions of this Indenture for the authentication and delivery of bonds or the withdrawal of cash or the release of property or the basis of a credit under the provisions of Section 39 or Section 40 hereof. The term "Qualified Lien Bonds" shall mean bonds, obligations or other principal indebtedness secured by a Qualified Lien.

The term "Outstanding" with respect to Qualified Lien Bonds shall mean as of any particular time all Qualified Lien Bonds theretofore authenticated and delivered by the trustee or other holder of the Qualified Lien securing the same and/or, if there be no such trustee or other holder, all Qualified Lien Bonds theretofore made and delivered by the maker (or his successor) of such Qualified Lien, except (A) Qualified Lien Bonds theretofore paid, retired, redeemed, discharged or canceled, (B) Qualified Lien Bonds held hereunder, (C) Qualified Lien Bonds held by the trustee or other holder of a Qualified Lien (under conditions such that no transfer of ownership or possession of such Qualified Lien Bonds

§7(A), Art. I

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by the trustee or other holder of such Qualified Lien is permissible thereunder except upon a default thereunder or except to the Corporate Trustee hereunder to be held subject to the provisions of Article IX hereof or to the trustee or other holder of a Qualified Lien for cancellation or to be held uncanceled under the terms of a Qualified Lien under like conditions), (D) Qualified Lien Bonds for the purchase, payment or redemption of which moneys in the necessary amount shall have been deposited with or be held, with irrevocable direction so to apply, by the Corporate Trustee hereunder or by the trustee or other holder of a Qualified Lien (provided that, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee), and (E) Qualified Lien Bonds upon transfer of which or in exchange or substitution for and/or in lieu of which other Qualified Lien Bonds have been authenticated and delivered or made and delivered under any of the provisions of the Qualified Lien securing such Qualified Lien Bonds.

SECTION 7. The term "Net Earning Certificate" shall mean a certificate signed by the President or a Vice-President of the Company and an accountant, who unless required to be independent, may be an officer or employee of the Company, stating

(A) the Adjusted Net Earnings of the Company for a period of twelve (12) consecutive calendar months within the fifteen (15) calendar months immediately preceding the first day of the month in which the application for the authentication and delivery under this Indenture of bonds then applied for is made, specifying:

(1) its operating revenues, with the principal divisions thereof;

(2) its operating expenses, with the principal divisions thereof, including, but without limitation, all expenses and accruals for repairs and maintenance and all appropriations out of income for property retirement not only in respect of the Mortgaged and Pledged Property but also in respect of all other property owned by the Company; provided, however, that, in lieu of including in such operating expenses the amounts actually

appropriated out of income for depreciation and retirement of the Mortgaged and Pledged Property used primarily and principally in the gas, electric, steam and/or hot water utility business or gas by-product business and of the automotive equipment of the Company used in the operation of such property, there shall be included in such operating expenses an amount for each full calendar month included in such period of twelve (12) consecutive calendar months equal to (i) one-twelfth (1/12th) of Four Hundred Thousand Dollars (\$400,000), plus (ii) one-twelfth (1/12th) of two per centum (2%) of the gross charges to plant account for additions to the depreciable property included in the Mortgaged and Pledged Property, used primarily and principally in the gas, electric, steam, and/or hot water utility business or gas by-product business, made subsequent to March 31, 1946, and prior to the beginning of the calendar year within which such calendar month is included, less (iii) one-twelfth (1/12th) of two per centum (2%) of the gross credits to plant account for retirement of the depreciable property included in the Mortgaged and Pledged Property, used primarily and principally in the gas, electric, steam and/or hot water utility business or gas by-product business, made subsequent to March 31, 1946, and prior to the beginning of the calendar year within which such calendar month is included, in each case, excluding from plant account any amounts included in utility plant acquisition adjustment accounts or utility plant adjustment accounts or in any accounts for similar purposes;

(3) the amount remaining after deducting the amount required to be stated in such certificate by clause (2) of this Section from the amount required to be stated therein by clause (1) of this Section;

(4) its rental expenses for plants or systems not otherwise deducted from revenues or from other income in such certificate;

(5) the balance remaining after deducting such rental expenses from the amount required to be stated in such certificate by clause (3) of this Section;

(6) its rental revenues from plants or systems not otherwise included in revenues, or in other income (net), in such certificate;

(7) the sum of the amounts required to be stated in such certificate by clauses (5) and (6) of this Section;

(8) its other income (net);

(9) the sum of the amounts required to be stated in such certificate by clauses (7) and (8) of this Section;

(10) the amount, if any, by which the aggregate of (a) such other income (net) and (b) that portion of the amount required to be stated in such certificate by clause (7) of this Section which, in the opinion of the signers, is directly derived from the operations of property (other than paving, grading and other improvements to, under or upon public highways, bridges, parks or other public properties of analogous character) not subject to the Lien of this Indenture at the date of such certificate, exceeds fifteen per centum (15%) of the sum required to be stated by clause (9) of this Section; provided, however, if the amount required to be stated in such certificate by clause (7) of this Section includes revenues from the operation of property not subject to the Lien of this Indenture, there shall be included in the calculation to be made pursuant to this clause (10) such reasonable interdepartmental or interproperty revenues and expenses between the Mortgaged and Pledged Property and the property not subject to the Lien hereof as shall be allocated to such respective properties by the Company, and

(11) the Adjusted Net Earnings of the Company for such period of twelve (12) consecutive calendar months (being the amount remaining after deducting in such certificate the amount required to be stated by clause (10) of this Section from the sum required to be stated by clause (9) of this Section);

(B) the Annual Interest Requirements, being the interest requirements for twelve (12) months upon:

(i) all bonds Outstanding hereunder at the date of such certificate, except any for the refunding of which the bonds applied for are to be issued;

(ii) all bonds then applied for in pending applications, including the application in connection with which such certificate is made;

(iii) all Qualified Lien Bonds which will be Outstanding immediately after the authentication of the bonds then applied for in pending applications, including the application in connection with which such certificate is made; and

(iv) the principal amount of all other indebtedness (except indebtedness for the payment of which the bonds applied for are to be issued and indebtedness for the purchase, payment or redemption of which moneys in the necessary amount shall have been deposited with or be held by the Corporate Trustee or the trustee or other holder of a Qualified Lien or lien prior to the Lien of this Indenture upon property subject to the Lien of this Indenture with irrevocable direction so to apply the same; provided that, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee), outstanding in the hands of the public on the date of such certificate and secured by lien prior to the Lien of this Indenture upon property subject to the Lien of this Indenture, if said indebtedness has been assumed by the Company or if the Company customarily pays the interest upon the principal thereof.

In calculating such Adjusted Net Earnings, all the Company's expenses for taxes (other than income, profits and other taxes measured by, or dependent on, net income), assessments, rentals and insurance and expenses for current repairs and maintenance shall be included in its operating expenses, or otherwise deducted from its revenues and income; provided, however, that no expenses or provisions for interest on any of its indebtedness or for the amortization of debt discount and expense or for other amortization or for any improvement or sinking fund or other device for the retirement of any indebtedness, shall be required to be included in operating expenses to be deducted from, or shall be otherwise required to be deducted from, its revenues or its other income.

If any of the property of the Company owned by it at the time of the making of any Net Earning Certificate shall have been acquired during or after any period for which Adjusted Net Earnings of the

Company are to be computed, the Adjusted Net Earnings of such property (computed in the manner in this Section provided for the computation of the Adjusted Net Earnings of the Company) during such period or such part of such period as shall have preceded the acquisition thereof, to the extent that the same have not otherwise been included and unless such property shall have been acquired in exchange or substitution for property the earnings of which have been included, may, at the option of the Company, be included in the Adjusted Net Earnings of the Company for all purposes of this Indenture, and shall be included if such property has been operated as a separate unit or if the earnings therefrom are readily ascertainable.

In any case where a Net Earning Certificate is required as a condition precedent to the authentication and delivery of bonds, such certificate shall also be made and signed by an independent public accountant selected or approved by the Corporate Trustee in the exercise of reasonable care, if the aggregate principal amount of bonds then applied for plus the aggregate principal amount of bonds authenticated and delivered hereunder since the commencement of the then current calendar year (other than those with respect to which a Net Earning Certificate is not required, or with respect to which a Net Earning Certificate made and signed by an independent public accountant has previously been furnished to the Corporate Trustee) is ten per centum (10%) or more of the aggregate amount of the bonds at the time Outstanding; but no Net Earning Certificate need be made and signed by any person other than the President or a Vice-President and an accountant, as to dates or periods not covered by annual reports required to be filed by the Company, in the case of conditions precedent which depend upon a state of facts as of a date or dates or for a period or periods different from that required to be covered by such annual reports.

Each such certificate shall include the statements required by Section 121 hereof.

The phrase "appropriations out of income for property retirement"; and other phrases of similar import shall be deemed to include

not only charges made upon a retirement accounting theory but also charges made on any depreciation or other accounting theory intended to provide for retirement of property.

The accounting terms used in this Indenture shall be construed either in accordance with generally accepted accounting principles and practices in use at the time by companies operating like properties or, at the option of the Company, in accordance with generally accepted accounting principles and practices in use at the date of this Indenture.

ARTICLE II.

Form, Execution, Registration and Exchange of Bonds.

SECTION 8. At the option of the Company, the bonds issued hereunder may be issued in one or more series, the bonds of each series (other than the First Series, hereinafter in Section 19 described) maturing on such date or dates and bearing interest at such rate or rates as the Board of Directors of the Company prior to the authentication thereof may determine. Subject to the provisions of Section 19 hereof as to the First Series, the form of each series of bonds issued hereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company. The bonds and coupons of any one or more series may be expressed in one or more foreign languages, if also expressed in the English language. The English text shall govern the construction thereof and both or all texts shall constitute but a single obligation. The English text of the coupon bonds, coupons, fully registered bonds and the Corporate Trustee's authentication certificate shall be respectively substantially of the tenor and purport hereinbefore recited; provided, however, that the form of each series, as established by the Board of Directors, shall specify the descriptive title of the bonds (which shall contain the words "Mortgage Bond"), the designation of the series, the date of the coupon bonds of that

series, the rate or rates of interest to be borne by the bonds of that series, the coin or currency in which payable, the date or dates of maturity, the dates for the payment of interest, and a place or places for the payment of principal and interest. Subject to the provisions of Section 19 hereof with respect to the First Series, any series of bonds may also contain such provisions not inconsistent with the provisions of this Indenture as the Board of Directors may, in its discretion, cause to be inserted therein:

(a) specifying any additional place or places, either in the United States of America or, subject to the provisions of Section 18 hereof, elsewhere, for the payment of principal and/or interest and/or a place or places for the registration of bonds and/or the transfer of bonds;

(b) expressing any obligation of the Company for the payment of the principal of the bonds of that series or the interest thereon, or both, without deduction for taxes and/or for the reimbursement of taxes in case of payment by the bondholders, it being agreed that such obligation may be limited to taxes imposed by any taxing authorities of a specified class and may exclude from its operation or be limited to any specified tax or taxes or any portion thereof; and/or expressing any obligation of the Company for the creation of a sinking fund or other analogous device for the bonds of that series, and/or expressing any obligation of the Company to permit the conversion of bonds of that series into capital stock of the Company or of any other corporation of any designated class or classes;

(c) permitting the bondholders to make, at a specified place or places, any or all of the following exchanges, viz.: exchanges of coupon bonds for fully registered bonds; exchanges of fully registered bonds for coupon bonds; exchanges of coupon bonds for coupon bonds of other authorized denominations; exchanges of fully registered bonds for fully registered bonds of other authorized denominations; and exchanges of bonds of one series for bonds of another series; and such privilege of exchange may in any case be made subject to such conditions, limitations or restrictions as the Board of Directors may determine and the

privilege of exchange may in any case be conferred upon the holders of bonds of one or more denominations and withheld from the holders of bonds of other denominations of the same series and may in any case be conferred on the holders of fully registered bonds and withheld from the holders of coupon bonds or vice versa;

(d) reserving to the Company the right to redeem all or any part of the bonds of that series before maturity at a time or times and at a redemption price or prices to be specified in the form of bond; and/or

(e) in any other respect expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under this Indenture.

SECTION 9. Any series of bonds may be executed, authenticated and delivered originally as coupon bonds and/or as fully registered bonds, of such denomination or denominations as the Board of Directors of the Company may from time to time authorize.

SECTION 10. Every fully registered bond shall be dated as of the date of authentication (except that if any fully registered bond of any series shall be authenticated upon any interest payment date for that series, it shall be dated as of the day following) and shall bear interest from the beginning of the current interest period for that series; provided, however, that if any fully registered bond shall be authenticated and delivered upon a transfer of, or in exchange for or in lieu of, any bond or bonds upon which interest is in default, it shall be dated so that such bond shall bear interest from the last preceding date to which interest shall have been paid on the bond or bonds in respect of which such fully registered bond shall have been delivered. The coupon bonds of each series of bonds issued hereunder shall be dated as of such date as may be determined by the Board of Directors of the Company and designated in the form established for such series.

SECTION 11. Any bond may have imprinted thereon or included therein any legend or legends required in order to comply with any law

§12, Art. II

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or with any rules or regulations made pursuant thereto or with the rules or regulations of any stock exchange or to conform to usage, and the Board of Directors of the Company by Resolution may at any time amend the form of any legend to be used on bonds then Outstanding so as to comply with any such law, rule or regulation, or so as to conform to usage.

SECTION 12. In all cases in which the privilege of exchanging bonds exists and is exercised, the bonds to be exchanged shall be surrendered at such place or places as shall be designated by the Board of Directors of the Company for the purpose, with all unmatured coupons appertaining thereto (in the case of coupon bonds) and the Corporate Trustee shall authenticate and the Company shall deliver in exchange therefor the bond or bonds which the bondholder making the exchange shall be entitled to receive, having attached thereto, in the case of coupon bonds, all unmatured coupons appertaining thereto. In case at the time of any such exchange, interest on the bonds of such series is in default, all coupon bonds of such series surrendered for exchange and delivered in exchange shall have attached thereto all matured coupons in default. All bonds so surrendered for exchange shall be in bearer form or, if registered, accompanied by a written instrument or instruments of transfer, if required by the Company duly executed by the registered owner or his duly authorized attorney. All bonds so surrendered for exchange and the coupons appertaining thereto shall be canceled by the Corporate Trustee. Upon any transfer of bonds as permitted by the next succeeding Section, and upon any exchange of bonds, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge and in addition may charge a sum not exceeding Two Dollars (\$2) for each bond authenticated and delivered upon any such transfer or exchange, which shall be paid by the party requesting such transfer or exchange as a condition precedent to the exercise of the privilege of making such transfer or exchange. The Company shall not be required to make transfers or exchanges of bonds of any series for a

period of ten (10) days next preceding any interest payment date of such series, or next preceding any designation of bonds of such series to be redeemed. The Company shall not be required to make transfers or exchanges of any bonds designated in whole or in part for redemption.

SECTION 13. The Company shall keep, at such place or places as shall be designated for the purpose, books for the registration and transfer of bonds issued hereunder, which, at all reasonable times, shall be open for inspection by the Corporate Trustee; and upon presentation for such purposes at any such place or places, the Company will register or cause to be registered therein, and permit to be transferred thereon, under such reasonable regulations as it may prescribe, any bonds issued under this Indenture and entitled to registration or transfer at such office. Upon the registration of any coupon bond as to principal, the fact of such registration shall be noted on such bond. Upon the transfer of any fully registered bond, the Corporate Trustee shall authenticate and the Company shall issue in the name of the transferee or transferees a new fully registered bond or new fully registered bonds of the same series for a like principal amount. All fully registered bonds so surrendered for transfer shall be cancelled by the Corporate Trustee.

SECTION 14. All bonds authenticated and delivered hereunder shall, from time to time, be executed on behalf of the Company by its President or one of its Vice-Presidents and its corporate seal shall be thereon impressed or imprinted and attested by its Secretary or one of its Assistant Secretaries. The coupons to be attached to coupon bonds shall bear the facsimile signature of the present or any future Treasurer of the Company. In case any of the officers who shall have signed any bonds or attested the seal thereon, or whose facsimile signature appears on any coupon, shall cease to be such officers of the Company before the bonds so signed and/or sealed shall have been actually authenticated and delivered by the Corporate Trustee or issued by the Company, such bonds nevertheless may be authenticated, delivered

§15, Art. II

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and/or issued with the same force and effect as though the person or persons who signed such bonds and/or attested the seal thereon and/or whose facsimile signature appears on any coupon had not ceased to be such officer or officers of the Company. Before authenticating any coupon bonds, the Corporate Trustee shall cut off and cancel all matured coupons thereto attached (except as otherwise provided or permitted in Sections 12 and 16 hereof).

SECTION 15. There may be authenticated and delivered and issued from time to time in lieu of (or in exchange for) any definitive bond or bonds issued or issuable under this Indenture one or more temporary typewritten, printed, lithographed or engraved bonds substantially of the tenor of the bonds hereinbefore described, with or without one or more coupons, and with or without the privilege of registration as to principal only, or as to both principal and interest, and with or without a recital of specific redemption prices, and such temporary bond or bonds may be in such denomination or denominations as the Board of Directors of the Company may determine. Definitive bonds may be in the form of fully engraved bonds, or lithographed bonds or (in the case of fully registered bonds) printed bonds on engraved borders. Until a definitive bond or bonds secured hereby are delivered in exchange therefor, each such temporary bond or bonds shall be entitled to the Lien and benefit of this Indenture. Upon the exchange by the Company of definitive coupon bonds or definitive fully registered bonds for temporary bonds (which exchange the Company shall make on request of, and without charge to, the holder, when definitive bonds are ready for delivery) such temporary bond or bonds and any unmatured coupons appertaining thereto shall be canceled by the Corporate Trustee. When and as interest is paid upon any unregistered temporary bond without coupons, the fact of such payment shall be noted thereon and interest due on any temporary bond which is represented by a coupon shall be paid only upon presentation and surrender of such coupon for cancellation. Temporary bonds without coupons of any series shall bear interest from the beginning of the current

interest period for bonds of that series in which such temporary bonds without coupons shall be authenticated. The holder of one or more temporary bonds may exchange the same on the surrender thereof, for cancellation, in bearer form with all unmatured coupons, if any, appertaining thereto, or, if registered, accompanied by a written instrument or instruments of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, at the office or agency of the Company, and shall be entitled to receive a temporary bond or bonds of the same series of like aggregate principal amount of such other denominations as the Board of Directors of the Company may determine to issue in exchange.

SECTION 16. Upon receipt by the Company and the Corporate Trustee of evidence satisfactory to them of the loss, destruction or mutilation of any bond Outstanding hereunder and/or the coupons appertaining thereto, and of indemnity satisfactory to them, and upon payment, if the Company or the Corporate Trustee shall require it, of a reasonable charge and upon reimbursement to the Company and the Corporate Trustee of all reasonable expense incident thereto, and upon surrender and cancellation of such bond, if mutilated, and the coupons appertaining thereto, if any, the Company may execute, and the Corporate Trustee shall thereupon authenticate and deliver a new bond of like tenor and of the same series with all unpaid coupons, if any, appertaining thereto in lieu of such lost, destroyed or mutilated bond and coupons, if any, or if any such bond or any coupon shall have matured or be about to mature, instead of issuing a substituted bond or coupon the Company may pay the same without surrender thereof. Any indemnity bond shall name as obligees the Company, the Trustees, and if requested by the Company, any paying agent.

SECTION 17. No bond shall be secured hereby unless there shall be endorsed thereon the certificate of the Corporate Trustee, substantially in the form hereinbefore recited, that it is one of the bonds (or temporary bonds) of the series therein designated, herein described or pro-

vided for; and such certificate on any such bond shall be conclusive evidence that such bond has been duly authenticated and delivered by the Corporate Trustee and when delivered by the Company will be secured hereby.

SECTION 18. The Company may provide for the collection of principal of and/or interest on bonds of any series at one or more places in foreign countries, provided that the payment to be so collected shall be only the stated amount of such principal and/or interest in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, or the equivalent thereof in the appropriate local foreign currency at the current buying rate for similar obligations payable in New York, at the time of presentation for such collection of bonds and/or coupons, of the bank, bankers, or authorized dealer in foreign exchange appointed by the Company for such purpose.

SECTION 19. Notwithstanding any other provisions hereof, there shall be a series of bonds designated "3 $\frac{1}{8}$ % Series due 1976" (herein sometimes referred to as the "First Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, or by officers of the Company pursuant to authority delegated by such Board of Directors, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the First Series shall mature on July 1, 1976, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registerable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and Ten Thousand Dollars and, at the option of the Company, as to either coupon bonds or fully registered bonds, in the denomination of One Hundred Dollars or in any multiple or multiples thereof (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of three and one-eighth per centum

(3 $\frac{1}{8}$ %) per annum, payable semi-annually on January 1 and July 1 of each year; the principal of and interest on each said bond to be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the First Series shall be dated as of July 1, 1946, and fully registered bonds of the First Series shall be dated as in Section 10 hereof provided.

(I) Bonds of the First Series shall be redeemable either at the option of the Company or pursuant to the requirements of this Indenture in whole at any time, or in part from time to time, prior to maturity, upon notice published as provided in Section 52 hereof, once on at least four different days before the date fixed for redemption, unless notice by publication shall not be required as provided in Section 52 hereof, in which event notice shall be given by mailing, the first publication, or mailing, as the case may be, to be at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during 12 months period ending June 30,

1947.....	104.46%	1957.....	102.93%	1967.....	101.39%
1948.....	104.31%	1958.....	102.77%	1968.....	101.24%
1949.....	104.16%	1959.....	102.62%	1969.....	101.08%
1950.....	104.00%	1960.....	102.47%	1970.....	100.93%
1951.....	103.85%	1961.....	102.31%	1971.....	100.77%
1952.....	103.70%	1962.....	102.16%	1972.....	100.62%
1953.....	103.54%	1963.....	102.00%	1973.....	100.47%
1954.....	103.39%	1964.....	101.85%	1974.....	100.31%
1955.....	103.23%	1965.....	101.70%	1975.....	100.16%
1956.....	103.08%	1966.....	101.54%	1976.....	100.00%

in each case, together with accrued interest to the date fixed for redemption.

(II) Bonds of the First Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like

§19(II) (cont.), Art. II

notice, by the application (either at the option of the Company or pursuant to the requirements of this Indenture) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39, Section 40, Section 64 or Section 87 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 40 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 40 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 40 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39, Section 64 or Section 87 hereof or with the Proceeds of Released Property,

they shall be redeemable at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during 12 months period ending June 30,

1947.....	101.47%	1957.....	101.12%	1967.....	100.65%
1948.....	101.44%	1958.....	101.08%	1968.....	100.59%
1949.....	101.41%	1959.....	101.04%	1969.....	100.53%
1950.....	101.38%	1960.....	100.99%	1970.....	100.47%
1951.....	101.34%	1961.....	100.95%	1971.....	100.41%
1952.....	101.31%	1962.....	100.90%	1972.....	100.35%
1953.....	101.27%	1963.....	100.85%	1973.....	100.29%
1954.....	101.24%	1964.....	100.80%	1974.....	100.22%
1955.....	101.20%	1965.....	100.75%	1975.....	100.15%
1956.....	101.16%	1966.....	100.70%	1976.....	100.00%

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in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the holder, any coupon bonds of the First Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 hereof) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the First Series, upon surrender thereof, for cancellation, at said office or agency of the Company, together with a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 hereof) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the First Series may have the ownership thereof registered as to principal at the office or agency of the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney and similarly noted on such bond; but (subject to the provisions of Section 12 hereof) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with

§20, §21, Art. III; §22, Art. IV

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the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the First Series shall also be transferable (subject to the provisions of Section 12 hereof) at said office or agency of the Company.

ARTICLE III.

General Provisions as to Issuance of Bonds.

SECTION 20. The aggregate principal amount of bonds which may be secured by this Indenture shall be such aggregate principal amount as may now or hereafter from time to time be authenticated and delivered under the provisions hereof. The parties to the obligations to be secured hereby shall be the Company, the Trustees hereunder (to the extent and as provided in this Indenture) and the respective owners of the bonds and coupons issued or to be issued hereunder.

SECTION 21. Nothing in this Indenture contained shall limit the power of the Board of Directors of the Company (in conformity with applicable law) to fix the price at which the bonds authenticated and delivered under any of the provisions of this Indenture may be issued, exchanged, sold or disposed of, but any or all of such bonds may be issued, exchanged, sold or disposed of upon such terms and for such considerations as the Board of Directors of the Company may deem fit.

ARTICLE IV.

Initial Issue of Bonds.

SECTION 22. Bonds of the First Series for the aggregate principal amount of Ten Million Dollars (\$10,000,000) shall forthwith be executed by the Company and delivered to the Corporate Trustee and shall be authenticated by the Corporate Trustee, and delivered (whether

before or after the filing or recording hereof), in accordance with the order or orders of the Company, evidenced by a writing or writings signed by the Company by its President or one of its Vice-Presidents and its Treasurer or one of its Assistant Treasurers. Upon the delivery of this Indenture, bonds of the First Series for such aggregate principal amount of Ten Million Dollars (\$10,000,000) are to be issued forthwith.

ARTICLE V.

Issuance of Bonds Upon the Basis of Property Additions.

SECTION 23. Bonds in addition to those provided for in other Sections hereof and of any one or more series may from time to time be executed by the Company and delivered to the Corporate Trustee, and shall be authenticated by the Corporate Trustee and delivered from time to time in accordance with the written order or orders of the Company signed by its President or a Vice-President and its Treasurer or an Assistant Treasurer upon the basis of Property Additions, but only in accordance with and subject to the conditions, provisions and limitations set forth in the next succeeding five Sections of this Indenture, numbered from 24 to 28, both inclusive.

SECTION 24. No bonds shall be authenticated and delivered at any time under the provisions of this Article V upon the basis of Funded Property.

SECTION 25. Bonds of any one or more series may be authenticated and delivered under the provisions of this Article V upon the basis of Property Additions for a principal amount not exceeding sixty per centum (60%) of the balance of the Cost or of the fair value thereof to the Company (whichever shall be less) after making any deductions and any additions pursuant to Section 4 hereof.

SECTION 26. In all cases in which it shall appear, from the certificate hereinafter in Section 28 hereof provided for, that Property

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Additions proposed to be made the basis of the authentication and delivery of bonds or the withdrawal of cash or the release of property or the basis of a credit under the provisions of Section 39 or Section 40 hereof are subject to Qualified Lien, the principal amount of the then Outstanding Qualified Lien Bonds secured by Qualified Lien thereon (in the case of the authentication and delivery of bonds under the provisions of this Article V or the withdrawal of cash under Section 31 hereof or the withdrawal of cash or other use as a credit under the provisions of Section 40 hereof) or ten-sixths (10/6ths) of such principal amount (in the case of the release of property under any provisions hereof or the withdrawal of cash under Section 39 or Section 61 hereof or other use as a credit under Section 39) shall be deducted from the principal amount of bonds which might otherwise be authenticated or from the amount of cash which might otherwise be withdrawn or from the fair value of property which might otherwise be released or from the amount for which the Company might otherwise be entitled to a credit, unless such certificate shall also state that the required amount has theretofore been deducted pursuant to the provisions of this Section when other Property Additions subject to such Qualified Lien have theretofore been made the basis under any of the provisions of this Indenture of the authentication and delivery of bonds or the withdrawal of cash or the release of property or the basis of a credit under the provisions of Section 39 or Section 40 hereof, and that since the date of such deduction property subject to the Lien of this Indenture has continued to be subject to such Qualified Lien.

If, at any time after an amount equal to the principal amount of any Outstanding Qualified Lien Bonds shall have been, in accordance with the provisions of this Section, deducted from the principal amount of bonds which might otherwise be authenticated and delivered hereunder, or the required amount shall have been deducted in connection with the withdrawal of cash or the release of property or the taking of a

credit under the provisions of Section 39 or Section 40 hereof, the Company shall either

(A) deposit with the Corporate Trustee any such Qualified Lien Bonds to be held and dealt with by the Corporate Trustee in the manner and subject to the conditions and provisions set forth in Article IX hereof; or

(B) file with the Corporate Trustee an Officers' Certificate to the effect that the principal amount of such Outstanding Qualified Lien Bonds, (1) has been reduced, or concurrently with the action requested will be reduced, by payment, or by the irrevocable deposit with the trustee or other holder of the Qualified Lien securing the same, of moneys in the necessary amount for the purchase, payment or redemption thereof, or otherwise reduced, and that such reduction has not been, and will not be, effected by the use, by the trustee or other holder of such Qualified Lien, of cash which (after giving effect to the provisions of Sections 5 and 61 hereof) is then deemed to be or to have been Funded Cash; provided that, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee, or (2) has been ascertained by final judicial determination or otherwise to the satisfaction of the Corporate Trustee to be in whole or in part invalid, and specifying the amount of reduction or the extent of the invalidity, as the case may be, supported by an Opinion of Counsel;

then, and in either such case, the Company shall be entitled to the authentication and delivery of further bonds to a principal amount equivalent to and on the basis of the principal amount of the Qualified Lien Bonds so deposited with the Corporate Trustee, or (as the case may be) equivalent to and on the basis of the amount by which the principal amount of such Qualified Lien Bonds shall be certified to have been and/or to be reduced or to have been ascertained to be invalid, but not exceeding in the aggregate a principal amount equivalent to the aggregate of the respective principal amounts of Qualified Lien

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Bonds Outstanding under each respective Qualified Lien immediately after such lien shall have become a Qualified Lien and in respect of which bonds the deductions required by the provisions of this Section shall have been made.

Notwithstanding any other provisions herein contained, it shall not be necessary to comply with the provisions of Section 27 hereof or to furnish any Net Earning Certificate in connection with the authentication and delivery of bonds under the foregoing provisions of this Section.

No bonds shall be authenticated and delivered under the provisions of this Section by reason of the deposit of any Qualified Lien Bonds or the payment, reduction or ascertainment of invalidity thereof to the extent that such deposit or payment, reduction or ascertainment of invalidity shall theretofore have been used as a basis, under the provisions of this Section, of the authentication and delivery of bonds or to the extent that a waiver by the Company of its right to the authentication and delivery of bonds on the basis of any such deposit, payment, reduction or ascertainment of invalidity is then in effect, or by reason of the deposit of any Qualified Lien Bonds with respect to which deposit the Company shall have certified that it elects not to have any bonds authenticated hereunder on the basis thereof, or by reason of the deposit of any Qualified Lien Bonds with the Corporate Trustee under the provisions of Section 46 hereof.

No bonds shall be authenticated and delivered under the provisions of this Article V (nor Funded Cash be withdrawn nor Funded Property be released under any of the provisions of this Indenture nor credit taken under the provisions of Section 39 or Section 40 hereof) upon the basis of any Property Additions subject to Qualified Lien unless it shall be stated in an Engineer's Certificate accompanying the application that

(a) the principal amount of all bonds theretofore authenticated and delivered by the Corporate Trustee (including any bonds for the authentication and delivery of which application

is then made) under the provisions of this Article V upon the basis of such Property Additions subject to Qualified Lien as shall have continued to be subject to Qualified Lien or upon the basis of a reduction in the principal amount of Outstanding Qualified Lien Bonds on such Property Additions as shall have continued to be subject to Qualified Lien,

(b) the total amount of Funded Cash deposited with the Corporate Trustee under the provisions of Section 30 hereof (and unless all bonds of the First Series have ceased to be Outstanding, the total amount of Funded Cash deposited with the Corporate Trustee under the provisions of Section 40 hereof) and theretofore withdrawn (including any such Funded Cash for the withdrawal of which application is then made) under any of the provisions of this Indenture upon the basis of such Property Additions subject to Qualified Lien as shall have continued to be subject to Qualified Lien,

(c) sixty per centum (60%) of all Funded Cash deposited with the Corporate Trustee under any of the provisions of this Indenture (other than the provisions of Section 30 or Section 40 hereof) and theretofore withdrawn (including any such Funded Cash for the withdrawal of which application is then made) under any of the provisions of this Indenture upon the basis of such Property Additions subject to Qualified Lien as shall have continued to be subject to Qualified Lien,

(d) sixty per centum (60%) of the Cost or of the fair value to the Company, whichever is less (at the date of the Engineer's Certificate in which such Property Additions shall have been made the basis of the release or credit hereinafter in this clause (d) mentioned), of such Property Additions subject to Qualified Lien as shall have continued to be subject to Qualified Lien, used as a basis for the release from the Lien of this Indenture of Funded Property or, unless all bonds of the First Series have ceased to be Outstanding, used as the basis of a credit under the provisions of Section 39 or of credit (other than as mentioned in subdivision (b) above) under the provisions of Section 40 hereof, and

(e) the principal amount of all Qualified Lien Bonds to be Outstanding upon the granting of such application,

do not in the aggregate exceed fifteen per centum (15%) of the aggregate principal amount of (1) all bonds to be Outstanding under this Indenture upon the granting of such application, including those applied for, and (2) all Qualified Lien Bonds to the extent that such Qualified Lien Bonds shall be Outstanding upon the granting of such application.

No bonds shall be authenticated and delivered under the provisions of this Article V (nor Funded Cash be withdrawn, nor Funded Property be released under any of the provisions of this Indenture, nor credit taken under the provisions of Section 39 or Section 40 hereof) upon the basis of any Property Additions subject to Qualified Lien, in any case unless (a) it shall be stated in an Engineer's Certificate accompanying the application that the aggregate principal amount of Outstanding Qualified Lien Bonds secured by Qualified Lien on such Property Additions does not exceed in principal amount fifty per centum (50%) of the Cost (which shall be computed as in Section 4 hereof provided) or of the then fair value to the Company (whichever shall be less) of the Property Additions subject to such Qualified Lien or (b) such certificate shall show that the required amount has theretofore been deducted in compliance with the provisions of this Section when other Property Additions subject to such Qualified Lien shall have theretofore been made the basis under any of the provisions of this Indenture for the authentication and delivery of bonds or the withdrawal of cash or the release of property or the basis of a credit under the provisions of Section 39 or Section 40 hereof and that since the date of such deduction property subject to the Lien of this Indenture has continued to be subject to such Qualified Lien.

Subject to the provisions of Sections 88 and 89 hereof, the Corporate Trustee may assume that any Property Additions subject to Qualified Lien which shall have formed the basis, under any of the

provisions of this Indenture, for the authentication and delivery of bonds or the withdrawal of Funded Cash or the release of Funded Property or the basis of a credit under the provisions of Section 39 or Section 40 hereof have continued to be subject to a Qualified Lien until the Corporate Trustee shall have received an Officers' Certificate (accompanied by a concurring Opinion of Counsel) to the contrary.

If at any time and from time to time, by reason either of the discharge of any Qualified Lien or of an increase in the aggregate amount of bonds authenticated and delivered under this Indenture, there shall be a change in the aggregate principal amount of bonds which may be authenticated and delivered within the limitations prescribed by this Section, then any bonds, which before such change were not permitted to have been authenticated and delivered by reason of such limitations, may be authenticated and delivered subject to such limitations as fixed by such change.

No bonds shall be authenticated and delivered under the provisions of this Section unless the Corporate Trustee at the time of the application for such authentication and delivery shall receive a Resolution, Officers' Certificate and Opinion of Counsel such as are described in subdivisions (1), (2) and (8) of Section 28 hereof, together with the officially authenticated certificates or other documents, if any, specified in such Opinion of Counsel, and, in case the bonds are to be authenticated and delivered under the provisions of the next preceding paragraph of this Section by reason of an increase in the aggregate principal amount of bonds authenticated and delivered under this Indenture having increased the aggregate principal amount of bonds which may be authenticated and delivered within the limitations prescribed by this Section, a Net Earning Certificate showing the Adjusted Net Earnings of the Company to be as required by Section 27 hereof.

SECTION 27. No bonds shall be authenticated and delivered upon the basis of Property Additions unless, as shown by a Net Earning Certificate, the Adjusted Net Earnings of the Company for the period

therein referred to shall have been in the aggregate at least equivalent to twice the Annual Interest Requirements as shall be specified, pursuant to the provisions of subdivision (B) of Section 7 hereof, in such Net Earning Certificate.

SECTION 28. No bonds shall be authenticated or delivered hereunder by the Corporate Trustee upon the basis of Property Additions, until the Corporate Trustee shall have received:

(1) a Resolution requesting the Corporate Trustee to authenticate and deliver bonds, (a) specifying the principal amount of bonds called for, the series thereof and any other matters with respect thereto required by this Indenture, and (b) specifying the officer or officers of the Company to whom, or upon whose written order, such bonds shall be delivered;

(2) an Officers' Certificate stating that the Company is not to the knowledge of the signers in default under this Indenture;

(3) an Engineer's Certificate made and dated not more than ninety (90) days prior to the date of such application,

(a) describing in reasonable detail the Property Additions made the basis of the application;

(b) stating that all the Property Additions made the basis of the application are Property Additions as defined in Section 4 hereof;

(c) stating that such Property Additions are desirable for use in the proper conduct of the business of the Company;

(d) stating that such Property Additions, to the extent of the Cost or fair value thereof (whichever is less) to the Company made the basis of the application, do not consist of Funded Property;

(e) stating, except as to Property Additions acquired, made or constructed wholly through the delivery of securities, that the amount of cash forming all or part of the Cost thereof was equal to or more than an amount to be stated therein;

(f) briefly describing, with respect to any Property Additions acquired, made or constructed in whole or in part through the delivery of securities, the securities so delivered and stating the date of such delivery;

(g) stating what part, if any, of such Property Additions includes property which within six months prior to the date of acquisition thereof by the Company has been used or operated by others than the Company in a business similar to that in which it has been or is to be used or operated by the Company and showing whether or not the fair value thereof to the Company is less than Twenty-five Thousand Dollars (\$25,000) and whether or not the fair value thereof to the Company is less than one per centum (1%) of the aggregate principal amount of the bonds at the time Outstanding hereunder;

(h) stating, except as to Property Additions in respect to the fair value to the Company of which a statement is to be made in an Independent Engineer's Certificate as provided for in subdivision (4) of this Section, that the fair value to the Company as of the date of such certificate of such Property Additions is a specified amount;

(i) stating the amount required to be deducted under the provisions of subdivision (A) of Section 4 hereof and the amounts elected to be added under the provisions of clauses (a), (b), (c), (d), (e) and (f) of subdivision (B) of Section 4 hereof in respect of Funded Property retired of the Company;

(j) specifying the nature and extent of any Qualified Lien existing upon any of such Property Additions and the principal amount of all Outstanding Qualified Lien Bonds secured thereby;

(k) stating whether or not the required amount has theretofore been deducted in compliance with the provisions of Section 26 hereof when other Property Additions subject to such Qualified Lien were made the basis under any of the provisions of this Indenture of the authentication and delivery of bonds or the withdrawal of cash or the release of property or the basis of a credit under the provisions of Section 39 or Sec-

tion 40 hereof and, if so, when such deduction was made and whether since the date of such deduction property subject to the Lien of this Indenture has continued to be subject to such Qualified Lien;

(l) making such other statements, if any, as may be required to be stated in an Engineer's Certificate by the provisions of Section 26 hereof; and

(m) stating that the easements, restrictions, exceptions, reservations or rights, if any, of the character mentioned in clauses (e) and (f) of Section 6 hereof, to which any property or rights of way included in such Property Additions are subject, and the defects, irregularities and deficiencies in titles of the character mentioned in said clauses of any property or rights of way included in such Property Additions do not materially impair the use of such property or rights of way for the purposes for which the same are held by the Company;

(4) in case any Property Additions are shown by the Engineer's Certificate provided for in subdivision (3) above to include property which within six months prior to the date of acquisition thereof by the Company, has been used or operated by others than the Company in a business similar to that in which it has been or is to be used or operated by the Company and such certificate does not show the fair value thereof to the Company, as of the date of such certificate, to be less than Twenty-five Thousand Dollars (\$25,000) or less than one per centum (1%) of the aggregate principal amount of the bonds at the time Outstanding hereunder, a further certificate consisting of an Independent Engineer's Certificate stating as to such Property Additions which have been so used or operated and (at the option of the Company) as to any other Property Additions included in the Engineer's Certificate provided for in subdivision (3) of this Section that the then aggregate fair value thereof to the Company, as of the date of such Independent Engineer's Certificate, in the opinion of the signer is a specified amount; and in the case of the authentication and delivery of bonds, the fair value to the Company in the opinion of the signer, of any property so used or operated which has been subjected to

the Lien of this Indenture since the commencement of the then current calendar year as the basis for the authentication and delivery of bonds, and to which an Independent Engineer's Certificate has not previously been furnished to the Corporate Trustee;

(5) in case any Property Additions are shown by the Engineer's Certificate provided for in subdivision (3) above to have been acquired, made or constructed in whole or in part through the delivery of securities, a written appraisal of an engineer, appraiser or other expert person, firm or corporation to be selected by the Board of Directors of the Company and approved by the Corporate Trustee, stating in the opinion of the signer the fair market value in cash of such securities at the time of delivery thereof in payment for or for the acquisition of such Property Additions;

(6) a Net Earning Certificate showing the Adjusted Net Earnings of the Company to be as required by Section 27 hereof;

(7) an Opinion of Counsel stating the signer's opinion to the effect:

(a) that (except as to paving, grading and other improvements to, under or upon public highways, bridges, parks or other public property of analogous character) this Indenture is, or upon the delivery of, and/or the filing and/or recording in the proper places and manner of, the instruments of conveyance, assignment or transfer, if any, specified in said opinion, will be, a lien on all the Property Additions made the basis of such application, subject to no lien thereon prior or equal to the Lien of this Indenture, except Qualified Liens and Excepted Encumbrances and that the Company has the right to remove any such Property Additions which are located on any leasehold or which are on property as to which the Company has an easement, prior to or upon the termination of such leasehold or easement, without compensation or other remuneration and free of any lien prior or equal to the Lien of this Indenture, except Qualified Liens and Excepted Encumbrances;

(b) that the Company has corporate authority and all necessary permission from governmental authorities to operate the

§28(8), (9), (10), Art. V

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Property Additions in respect to which such application is made;
and

(c) that the general nature and extent of Qualified Liens, and the principal amount of the then Outstanding Qualified Lien Bonds secured thereby, if any, mentioned in the accompanying Engineer's Certificate, are correctly stated;

(8) an Opinion of Counsel stating the signer's opinion to the effect that the issue of the bonds has been duly authorized by the Company and by any and all governmental authorities the consent of which is requisite to the legal issue of such bonds, specifying any officially authenticated certificates, or other documents, by which such consent is or may be evidenced, or that no consent of any governmental authorities is requisite, and further stating the signer's opinion to the effect that the Company has sold or contracted to sell or to issue for value such bonds, or contracted to pledge such bonds to secure indebtedness of a principal amount not less than seventy-five per centum (75%) of the principal amount of such bonds;

(9) the instruments of conveyance, assignment and transfer, if any, specified in the Opinion of Counsel provided for in subdivision (7) above; and

(10) the officially authenticated certificates, or other documents, if any, specified in the Opinion of Counsel provided for in subdivision (8) above.

If, in order to render the Opinion of Counsel provided for in subdivision (7) or subdivision (8) above, the signer thereof shall deem it necessary that additional facts or matters be stated in the Engineer's Certificate provided for in subdivision (3) above, then in such event the Engineer's Certificate may state all such additional facts or matters as the signer of such Opinion of Counsel may request.

The amount of the Cost of any Property Additions and the fair value thereof to the Company and the fair market value in cash of any securities so delivered in payment therefor or for the acquisition thereof

and the amount of any deductions and any additions made pursuant to Section 4 hereof shall be determined for the purposes of this Article V by the appropriate certificate provided for in this Section. In the case of Property Additions subject to a Qualified Lien, the fair value of such Property Additions shall be determined as if such Property Additions were free of such Qualified Lien.

ARTICLE VI

Issuance of Bonds Upon Retirement of Bonds Previously Outstanding Hereunder.

SECTION 29. The Corporate Trustee shall from time to time upon the written request of the Company signed by its President or a Vice-President and its Treasurer or an Assistant Treasurer authenticate and deliver bonds hereunder of any one or more series of a principal amount equal to and on the basis of the principal amount of any bonds theretofore authenticated and delivered under this Indenture (and not theretofore made the basis under any of the provisions of this Indenture of the authentication and delivery of bonds, the withdrawal of cash, other than under the provisions of Section 39 or Section 40 hereof, or the release of property, or, unless all bonds of the First Series shall have ceased to be Outstanding, the basis of the withdrawal of cash or of another credit under the provisions of Section 39 or Section 40 hereof, subject to the provisions of Section 39, Section 59 and Section 61 hereof permitting the revocation of the waiver of the right to the authentication and delivery of bonds) that shall have been purchased, paid, retired, redeemed or canceled or surrendered to the Corporate Trustee for cancellation or for the purchase, payment, retirement or redemption of which moneys in the necessary amount shall have been deposited with or shall then be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase, payment, retirement, redemption, cancellation or surrender of bonds shall have been, or is to be, effected otherwise than with cash

which, after giving effect to the provisions of Sections 5 and 61 hereof, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee), but only after the Corporate Trustee shall have received:

(1) a Resolution such as is described in subdivision (1) of Section 28 hereof;

(2) an Officers' Certificate such as is described in subdivision (2) of Section 28 hereof;

(3) an Officers' Certificate stating that bonds theretofore authenticated and delivered under this Indenture of a specified principal amount (not less than the principal amount of bonds for which such request for authentication and delivery is made under this Section), which bonds have theretofore been sold or issued for value or pledged to secure indebtedness of a principal amount not less than seventy-five per centum (75%) of the principal amount of such bonds, have been purchased, paid, retired, redeemed or canceled or concurrently with the authentication and delivery of the bonds requested will be surrendered to the Corporate Trustee for cancellation (otherwise than upon exchanges or transfers of bonds) and/or that cash (other than cash which, after giving effect to the provisions of Sections 5 and 61 hereof, is then deemed to be Funded Cash) in the necessary amount for the purchase, payment, retirement or redemption thereof is then held by or will be deposited with the Corporate Trustee, with irrevocable direction so to apply the same (provided that, in the case of redemption, the notice required by Article X hereof shall have been given or have been provided for to the satisfaction of the Corporate Trustee), prior to or concurrently with the authentication and delivery of the bonds so requested, and further stating that no part of such principal amount of bonds has been theretofore made the basis under any of the provisions of this Indenture of the authentication and delivery of bonds, the withdrawal of cash (other than under the provisions of Section 39 or Section 40 hereof) or the release of property, or, unless all bonds of the First Series shall have

ceased to be Outstanding, the basis of the withdrawal of cash or of another credit under the provisions of Section 39 or Section 40 hereof, subject to the provisions of Sections 39, 59 and 61 hereof, permitting the revocation of the waiver of the right to the authentication and delivery of bonds, and that none of the bonds so retired and made the basis of such application has been retired by the use of cash which (after giving effect to the provisions of Sections 5 and 61 hereof) is then deemed to be or to have been Funded Cash;

(4) an Opinion of Counsel such as is described in subdivision (8) of Section 28 hereof; and

(5) the officially authenticated certificates, or other documents, if any, specified in the Opinion of Counsel provided for in subdivision (4) of this Section.

In case (i) an application for the authentication and delivery of bonds under any of the provisions of this Indenture, which shall have contained a Net Earning Certificate, shall have been made to the Corporate Trustee subsequent to the delivery to the Corporate Trustee of an irrevocable direction to apply moneys to any such purchase, payment, retirement and/or redemption of, or subsequent to the cancellation or surrender for cancellation of, any bonds on the basis of which other bonds are to be authenticated and delivered pursuant to the provisions of this Article VI, and in such Net Earning Certificate the annual interest requirements on any such bonds to be authenticated and delivered shall not have been included, or (ii) the bonds on the basis of which other bonds are to be so authenticated and delivered mature by their terms at a date more than two years after the date of authentication and delivery of the bonds applied for and bear a lower interest rate than the bonds applied for, then the Corporate Trustee shall in either such case also receive a Net Earning Certificate showing the Adjusted Net Earnings to be as required by Section 27 hereof.

Any and all coupon bonds delivered to the Corporate Trustee pursuant to this Article shall have attached thereto all unmatured coupons appertaining thereto.

ARTICLE VII.

Issuance of Bonds Upon Deposit of Cash with Corporate Trustee.

SECTION 30. The Corporate Trustee shall from time to time upon the written request of the Company signed by its President or a Vice-President and its Treasurer or an Assistant Treasurer authenticate and deliver bonds hereunder of any one or more series upon deposit with the Corporate Trustee by the Company of cash equal to the aggregate principal amount of the bonds so requested to be authenticated and delivered but only after the Corporate Trustee shall have received:

- (1) a Resolution such as is described in subdivision (1) of Section 28 hereof;
- (2) an Officers' Certificate such as is described in subdivision (2) of Section 28 hereof;
- (3) a Net Earning Certificate showing the Adjusted Net Earnings of the Company to be as required by Section 27 hereof;
- (4) an Opinion of Counsel such as is described in subdivision (8) of Section 28 hereof; and
- (5) the officially authenticated certificates, or other documents, if any, specified in the Opinion of Counsel provided for in subdivision (4) of this Section.

SECTION 31. All cash deposited with the Corporate Trustee under the provisions of the next preceding Section hereof shall be held by the Corporate Trustee as a part of the Mortgaged and Pledged Property, and may be withdrawn from time to time by the Company, upon application of the Company to the Corporate Trustee evidenced by a Resolution, in an amount equal to the principal amount of each bond or fraction of a bond to the authentication and delivery of which the Company shall be entitled under any of the provisions of this Indenture

by virtue of compliance with all applicable provisions of this Indenture (except as hereinafter in this Section otherwise provided).

Upon any such application for withdrawal the Company shall comply with all applicable provisions of this Indenture relating to the authentication and delivery of such bond(s) or fraction of a bond except that the Company shall not be required to comply with any earning requirement or to deliver to the Corporate Trustee any Resolution, Net Earning Certificate or Opinion of Counsel such as is described in subdivisions (1), (6) and (8) of Section 28 hereof.

Any withdrawal of cash under this Section shall operate as a waiver by the Company of its right to the authentication and delivery of the bond(s) or fraction of a bond on which it is based and such bond(s) or fraction of a bond may not thereafter be authenticated and delivered hereunder, and any Property Additions which have been made the basis of any such right to the authentication and delivery of bond(s) or fraction of a bond so waived shall have the status of Funded Property and shall be deemed to have been made the basis of the withdrawal of such cash, and any bonds or Qualified Lien Bonds which have been made the basis of any such right to the authentication and delivery of bond(s) or fraction of a bond so waived shall be deemed to have been made the basis of the withdrawal of such cash.

SECTION 32. If at any time the Company shall so direct, any sums deposited with the Corporate Trustee under the provisions of Section 30 hereof may be used or applied to the purchase, payment or redemption of bonds in the manner and subject to the conditions provided in subdivisions (3) and (4) of Section 61 hereof; provided, however, that none of such cash shall be applied to the payment of more than the principal amount of any bonds so purchased, paid or redeemed, except to the extent that the aggregate principal amount of all bonds theretofore, and of all bonds then to be purchased, paid and/or redeemed with cash deposited under Section 30 hereof shall have exceeded the aggregate cost for principal, interest, brokerage and premium, if any,

§33, §34, §35(a), Art. VIII

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on all bonds theretofore, and on all bonds then to be, purchased, paid and/or redeemed with cash so deposited.

ARTICLE VIII.

Particular Covenants of the Company.

SECTION 33. The Company covenants that it is lawfully possessed of all the aforesaid Mortgaged and Pledged Property; that it will maintain and preserve the Lien of this Indenture so long as any of the bonds issued hereunder are Outstanding; and that it has good right and lawful authority to mortgage and pledge the Mortgaged and Pledged Property, as provided in and by this Indenture.

SECTION 34. The Company covenants that it will duly and punctually pay the principal of and interest and premium, if any, on all bonds Outstanding hereunder, according to the terms thereof; and that as the coupons appertaining to said bonds are paid they will be canceled.

SECTION 35. (a) The Company covenants that, whenever necessary to avoid or fill a vacancy in the office of Corporate Trustee, the Company will in the manner provided in Section 102 hereof appoint a Corporate Trustee so that there shall at all times be a Corporate Trustee hereunder which shall at all times be a bank or trust company having its principal office and place of business in the Borough of Manhattan, The City of New York, if there be such a bank or trust company willing and able to accept the trust upon reasonable or customary terms, and which shall at all times be a corporation organized and doing business under the laws of the United States or of any State or Territory or of the District of Columbia, with a combined capital and surplus of at least Five Million Dollars (\$5,000,000), and authorized under such laws to exercise corporate trust powers and subject to supervision or examination by Federal, State, Territorial or District of Columbia authority.

(b) The Company covenants that it will keep an office or agency, while any of the bonds issued hereunder are Outstanding, at any and all places at which the principal of or interest on any of said bonds shall be payable, where notices, presentations and demands to or upon the Company in respect of such bonds or coupons as may be payable at such places or in respect of this Indenture may be given or made, and for the payment of the principal thereof and interest and premium, if any, thereon. The Company will from time to time give the Corporate Trustee written notice of the location of such office or offices or agency or agencies, and in case the Company shall fail to maintain such office or offices or agency or agencies or to give the Corporate Trustee written notice of the location thereof, then in addition to any other remedy or right arising as a result of the violation of the covenants contained in this Section, the Company agrees that any such notice, presentation or demand in respect of said bonds or coupons or of this Indenture may be given or made, unless other provision is expressly made herein, to or upon the Corporate Trustee at its principal office, and the Company hereby authorizes such presentation and demand to be made to and such notice to be served on the Corporate Trustee in either of such events and the principal of and interest and premium, if any, on said bonds shall in such event be payable at said office of the Corporate Trustee.

(c) The Company covenants that, if it shall appoint a paying agent other than the Corporate Trustee, it will cause such paying agent to execute and deliver to the Corporate Trustee an instrument in which it shall agree with the Corporate Trustee, subject to the provisions of this Section, (1) that such paying agent shall hold in trust for the benefit of the bondholders or the Corporate Trustee all sums held by such paying agent for the payment of the principal of or interest on the bonds (and premium, if any); and (2) that such paying agent shall give the Corporate Trustee notice of any default by the Company in the making of any deposit with it for the payment of the principal of or interest on the bonds (and premium if any), and of any default by the Com-

pany in the making of any such payment. Such paying agent shall not be obligated to segregate such sums from other funds of such paying agent except to the extent required by law.

(d) The Company covenants that, if the Company acts as its own paying agent, it will, on or before each due date of each instalment of principal or interest on the bonds, set aside and segregate and hold in trust for the benefit of the bondholders or the Corporate Trustee a sum sufficient to pay such principal or interest so becoming due on the bonds (and premium, if any) and will notify the Corporate Trustee of such action, or of any failure to take such action.

(e) Anything in this Section to the contrary notwithstanding, the Company may at any time, for the purpose of obtaining a release or satisfaction of this Indenture or for any other reason, pay or cause to be paid to the Corporate Trustee all sums held in trust by it or any paying agent as required by this Section, such sums to be held by the Corporate Trustee upon the trusts in this Indenture contained.

(f) Anything in this Section to the contrary notwithstanding, the holding of sums in trust as provided in this Section is subject to the provisions of Section 119 hereof.

SECTION 36. The Company covenants that it will pay all taxes and assessments and other governmental charges lawfully levied or assessed upon the Mortgaged and Pledged Property, or upon any part thereof or upon any income therefrom or upon the interest of the Trustees in the Mortgaged and Pledged Property, before the same shall become delinquent, and will duly observe and conform to all valid requirements of any governmental authority relative to any of the Mortgaged and Pledged Property, and all covenants, terms and conditions upon or under which any of the Mortgaged and Pledged Property is held; that it will not suffer any lien to be hereafter created upon the Mortgaged and Pledged Property, or any part thereof, or the income therefrom, prior to the Lien hereof, other than Excepted Encumbrances, and other than, in the case of

§37, Art. VIII

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property hereafter acquired, vendors' liens, purchase money mortgages and any lien thereon at the time of the acquisition thereof; and within four months after any lawful claim or demand for labor, materials, supplies or other objects has become delinquent which if unpaid would or might by law be given precedence over the Lien of this Indenture as a lien or charge upon any of the Mortgaged and Pledged Property, or the income therefrom, it will pay or cause to be discharged or make adequate provision to satisfy or discharge the same; provided, however, that nothing in this Section contained shall require the Company to observe or conform to any requirement of governmental authority or to cause to be paid or discharged, or to make provision for, any such lien or charge, or to pay any such tax, assessment or governmental charge so long as the validity thereof shall be contested in good faith and by appropriate legal proceedings; and provided that nothing in this Section contained shall require the Company to pay, discharge or make provision for any tax, assessment or other governmental charge the validity of which shall not be so contested if adequate security for the payment of such tax, assessment or other governmental charge and for any damages which may reasonably be anticipated from failure to pay the same shall be given to the Corporate Trustee; and that, save as aforesaid, it will not suffer any matter or thing whereby the Lien hereof might or could be impaired.

SECTION 37. The Company covenants that it will keep or cause to be kept all the property subject to the Lien hereof insured against fire to the extent that property of similar character is usually so insured by companies similarly situated and operating like properties, to a reasonable amount, by reputable insurance companies, any loss, except as to materials and supplies and except as to any particular loss less than Fifty Thousand Dollars (\$50,000), to be made payable to the Corporate Trustee as the interest of the Trustees may appear, or to the trustee or other holder of any mortgage or other lien constituting a Qualified Lien or a lien prior hereto upon property subject to the Lien hereof, if the terms thereof

§37 (cont.), Art. VIII

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require losses so to be made payable; or that it will, in lieu of or supplementing such insurance in whole or part, adopt some other method or plan of protection against loss by fire at least equal in protection to the method or plan of protection against loss by fire of companies similarly situated and operating properties subject to similar fire hazards or on which properties an equal primary fire insurance rate has been set by reputable insurance companies, and that if it shall adopt such other method or plan, it will, except as to materials and supplies and except as to any particular loss less than Fifty Thousand Dollars (\$50,000), pay to the Corporate Trustee on account of any loss sustained by reason of the destruction or damage of such property by fire, an amount of cash equal to such loss less any amounts otherwise paid to the Corporate Trustee or to the trustee or other holder of any mortgage or other lien constituting a Qualified Lien or a lien prior hereto upon property subject to the Lien hereof, if the terms thereof require losses so to be paid. Any amounts of cash so required to be paid by the Company pursuant to any such method or plan shall for the purposes of this Indenture be deemed to be proceeds of insurance. In case of the adoption of such other method or plan of protection, the Company shall also furnish to the Corporate Trustee a certificate of an actuary or other qualified person appointed by the Company with respect to the adequacy of such method or plan. There shall be delivered to the Corporate Trustee, once in each year and also whenever the Corporate Trustee shall make a request therefor, a detailed statement, signed by the Treasurer or an Assistant Treasurer of the Company, of any fire insurance policies then outstanding and in force upon the aforesaid property, or any part thereof, including, or by reference to former statements including, the names of the insurance companies which have issued the policies and the amounts and expiration dates thereof, together with a detailed statement, signed by the Treasurer or an Assistant Treasurer of the Company, of such other method or plan, if any.

All moneys paid to the Corporate Trustee by the Company in accordance with this Section or received by the Corporate Trustee as proceeds of any insurance against loss by fire shall, subject to the requirements of any mortgage constituting a Qualified Lien or a lien prior hereto upon property subject to the Lien hereof, be held by the Corporate Trustee and, subject as aforesaid, shall be paid by it to the Company to reimburse the Company for an equal amount spent in the rebuilding or renewal of the property destroyed or damaged, upon receipt by the Corporate Trustee of (1) a Resolution requesting such reimbursement, (2) an Engineer's Certificate stating the amount so expended and the nature of such rebuilding or renewal and the fair value to the Company of the property rebuilt or renewed and if

(A) within six months prior to the date of acquisition thereof by the Company, such property has been used or operated, by a person or persons other than the Company, in a business similar to that in which it has been or is to be used or operated by the Company, and

(B) the fair value to the Company of such property as set forth in such Engineer's Certificate is not less than Twenty-five Thousand Dollars (\$25,000) and not less than one per centum (1%) of the aggregate principal amount of the bonds at the time Outstanding under this Indenture,

the Engineer making such certificate shall be an independent Engineer, and (3) an Opinion of Counsel that the property so rebuilt or renewed is subject to the Lien hereof to the same extent as was the property so destroyed or damaged; provided, however, that to the extent that moneys paid by the Corporate Trustee to the Company for reimbursement, as aforesaid, shall represent the proceeds of property that was not Funded Property destroyed or damaged by fire, the property so rebuilt or renewed (for which reimbursement is so made), shall not be deemed to be Funded Property.

Any such money not so applied within eighteen (18) months after its receipt by the Corporate Trustee, or in respect of which notice in

writing of intention to apply the same to the work of rebuilding or renewal then in progress and uncompleted shall not have been given to the Corporate Trustee by the Company within such eighteen (18) months, or in respect of which the Company shall at any time notify the Corporate Trustee is not to be so applied, shall thereafter be withdrawn, used or applied in the manner, to the extent and for the purposes and subject to the conditions provided in Section 61 hereof.

SECTION 38. The Company will not, except as herein permitted, do or suffer any act or thing whereby the Mortgaged and Pledged Property might or could be impaired, and it will at all times maintain, preserve and keep the Mortgaged and Pledged Property, as an operating system or systems, in good repair, working order and condition. The Company will from time to time make all needful and proper repairs, replacements, additions, betterments and improvements, so that the operations and business of and pertaining to the Mortgaged and Pledged Property, as an operating system or systems, shall at all times be conducted properly and advantageously; and whenever any portion of the Mortgaged and Pledged Property shall have been worn out or destroyed or shall have become obsolete or otherwise unfit for use, the Company will procure substitutes of at least equal utility and efficiency, so that at all times the efficiency of the Mortgaged and Pledged Property, as an operating system or systems, shall be fully maintained.

Nothing herein contained, however, shall be held to prevent the Company from permanently discontinuing the operation of or reducing the capacity of any of its plants or properties, if, in the judgment of the Board of Directors of the Company, any such action which affects the Mortgaged and Pledged Property is necessary or desirable in the conduct of the business of the Company, or if the Company is ordered so to do by regulatory authority having jurisdiction in the premises, or if the Company intends to sell or dispose of the same and within a reasonable time shall endeavor to effectuate such sale; nor shall anything herein contained be construed to prevent the Company from

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§38 (cont.), Art. VIII

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taking such action with respect to the use of its plants and properties as is proper under the circumstances, including the cessation or omission to exercise rights, permits, licenses, privileges or franchises which, in the judgment of the Company, can no longer be profitably exercised or availed of.

The Company covenants that it will, within sixty (60) days after its determination permanently to discontinue the operation of any of its plants or properties subject to the lien of this Indenture of a Cost, determined as provided in Section 4 hereof, in any one case in excess of Five Hundred Thousand Dollars (\$500,000) or in the aggregate in any period of twelve (12) consecutive calendar months in excess of One Million Dollars (\$1,000,000), furnish the Corporate Trustee for information purposes with an Officers' Certificate setting forth the Cost, as so determined, to the Company of the plants or properties, the operation of which the Company shall have determined so to discontinue.

Whenever (but not oftener than once in any period of five (5) years) the holders of at least twenty-five per centum (25%) in principal amount of the bonds Outstanding hereunder shall deliver to the Corporate Trustee and to the Company a written statement that they have reasonable grounds to believe that the Mortgaged and Pledged Property has not been adequately maintained, as an operating system or systems, in good repair, working order and condition and request the Company to furnish to the Corporate Trustee an Independent Engineer's Certificate stating whether or not the Mortgaged and Pledged Property, as an operating system or systems, has been maintained in good repair, working order and condition, and whether or not there is any property subject to the lien of this Indenture which should be retired on the books of the Company as having ceased permanently to be used or useful in the business of the Company and which has not been so retired, the Company shall cause such Independent Engineer's Certificate to be furnished to the Corporate Trustee within a reasonable time after such request. If such independent Engineer shall report that the Mortgaged and Pledged Property, as an operating system or

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§38 (cont.), Art. VIII

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systems, has not been maintained in good repair, working order and condition, he shall state clearly in his report the character and extent of, and, if longer than one year, the time reasonably necessary to make good such deficiency and, if he shall report that there is a property subject to the lien of this Indenture which should be retired on the books of the Company as having ceased permanently to be used or useful in the business of the Company and which has not been so retired, his report shall briefly describe such property. Said report shall be placed on file by the Corporate Trustee and shall be open to inspection by any bondholder at any reasonable time.

Notwithstanding any provision of this Indenture, the Company shall not be required to incur expense in excess of Ten Thousand Dollars (\$10,000) during any period of five years in connection with furnishing the Independent Engineer's Certificate and reports referred to above in this Section and all obligations of the Company under this Section with respect to such certificates and reports shall be contingent upon its ability to furnish such certificates and reports without incurring expense in excess of such amount.

If the Company, within thirty (30) days after the filing of the report of such independent Engineer, objects in a writing delivered to the Corporate Trustee to the findings of such independent Engineer as to the character and extent of such maintenance deficiency and/or to the property which should be retired upon the books of the Company, then the character and extent of such maintenance deficiency, if any, and/or the property, if any, so to be retired upon the books of the Company shall be forthwith referred to three arbitrators selected in the following manner: The Corporate Trustee, within ten (10) days after the receipt of such objections, shall name one arbitrator and give notice of such selection to the Company. Within ten (10) days after receipt of such notice, the Company shall name one arbitrator and give notice of such selection to the Corporate Trustee, and failure so to do shall entitle the Corporate Trustee to name an arbitrator to represent the Company. The two thus selected shall,

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within ten (10) days after the appointment of the arbitrator representing the Company, select a third arbitrator, but if said arbitrators are unable, within said ten (10) days, to agree upon such third arbitrator, then, upon the election of either the Company or the Corporate Trustee, any District Judge of the United States of America for the District in which the Corporate Trustee has its principal place of business may appoint such third arbitrator, upon application to said District Judge by either party after five days' notice thereof to the other party. The written decision of a majority of such arbitrators shall be filed as soon as practicable with the Corporate Trustee and a copy thereof delivered to the Company, and shall be binding upon the Trustees, the Company and the bondholders.

Within one year from the date of the report of such independent Engineer or the date of such decision of arbitrators, whichever is later, or such longer period as may be reported by such independent Engineer or the arbitrators, as the case may be, to be reasonably necessary to make good any such deficiency, no statement contained in any report of any independent Engineer filed with the Corporate Trustee, as hereinbefore in this Section provided, shall be deemed to be in any way evidence or proof of a failure to comply with the provisions of this Section.

The Company shall, with all reasonable speed, do or cause to be done such maintenance work as may be necessary to make good any such maintenance deficiency as shall have been determined to exist as hereinabove provided at the time of the report of such independent Engineer or at the time of such decision of arbitrators, as the case may be, whereupon such independent Engineer or such arbitrators, as the case may be (or, in case of his or their refusal or inability to act, some other independent Engineer), shall report in writing to the Corporate Trustee whether such deficiency has been made good.

Unless the Corporate Trustee shall be so advised in writing by such independent Engineer or arbitrators, as the case may be, within one year from the date of the report of such independent Engineer

or the date of such decision of arbitrators, as the case may be, or such longer period as may be reported by such independent Engineer or the arbitrators, as the case may be, to be reasonably necessary for the purpose, that such deficiency has been made good, the Company shall be deemed to have defaulted in the due performance of the covenants of this Section, so far as concerns the maintenance of the Mortgaged and Pledged Property; and in any proceedings consequent upon such default, said report or reports of such independent Engineer or said decision or decisions of such arbitrators, as the case may be, shall be conclusive evidence against the Company of the existence of the facts and conditions therein set forth.

All expenses incurred pursuant to this Section shall be borne by the Company.

In the event that any regulatory authority having jurisdiction over the Company shall determine that the expenditures for repairs and maintenance necessary to make good any such maintenance deficiency as shall have been so determined would be excessive and shall, by order or regulation, prohibit, in whole or in part, such expenditures for repairs and maintenance, then, upon filing with the Corporate Trustee a certified copy of such order or a copy of such regulation, as the case may be, the Company shall, so long as such order or such regulation remains in effect, be relieved from compliance with the covenants contained in this Section in regard to the maintenance of the Mortgaged and Pledged Property, to the extent that such expenditures for repairs and maintenance shall have been held excessive and shall be prohibited.

The Company covenants that it will promptly retire on its books of account any of the Mortgaged and Pledged Property included in plant account (except real estate held for the purpose of sale or resale) that has, in the opinion of the Company, ceased permanently to be used or useful in its business or which pursuant to the provisions of this Section any independent Engineer has reported to the Company more than thirty (30) days prior thereto (without written objection thereto having been delivered to the Corporate Trustee by the Com-

pany), or any arbitrators have determined, should be retired on the books of the Company as having ceased permanently to be used or useful in the business of the Company.

SECTION 39. (I) The Company covenants that, so long as any bonds of the First Series remain Outstanding, it will, within ninety (90) days after the close of the calendar year 1947 and of each calendar year thereafter, file with the Corporate Trustee an Officers' Certificate (hereinafter called an "Officers' Certificate of Replacements"), stating the following:

(1) for the period of eighteen (18) calendar months beginning July 1, 1946, and ending December 31, 1947, Six Hundred Thousand Dollars (\$600,000); and for each calendar year thereafter, the amount which is equal to (x) Four Hundred Thousand Dollars (\$400,000), plus (y) two per centum (2%) of the gross charges to plant account for additions to the depreciable property included in the Mortgaged and Pledged Property, used primarily and principally in the gas, electric, steam and/or hot water utility business or gas by-product business, made subsequent to March 31, 1946, and prior to the beginning of the calendar year next preceding such filing, less (z) two per centum (2%) of the gross credits to plant account for retirement of the depreciable property included in the Mortgaged and Pledged Property, used primarily and principally in the gas, electric, steam and/or hot water utility business or gas by-product business, made subsequent to March 31, 1946, and prior to the beginning of the calendar year next preceding such filing, in each case, excluding from plant account any amounts included in utility plant acquisition adjustment accounts or utility plant adjustment accounts or in any accounts for similar purposes;

(2) the amount which is equal to the aggregate amounts deducted pursuant to the provisions of clause (A) of Section 4 hereof from the Cost or fair value of Property Additions in respect of Funded Property retired less the aggregate amounts added pursuant to the provisions of items (a), (b), (c), (d) and

§39(I), (3), (4), (5), (6), (7), Art. VIII

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(e) of clause (B) of said Section 4 in any Engineer's Certificate or Engineer's Certificates theretofore delivered to the Corporate Trustee pursuant to any of the provisions of this Indenture, which amounts shall not theretofore have been made the basis of a credit under this subsection (I) and which the Company then elects to make the basis of a credit under this subsection (I);

(3) the Cost or fair value to the Company, whichever is less, as shall be stated in an Engineer's Certificate and/or Independent Engineer's Certificate delivered to the Corporate Trustee, of any (gross) Property Additions which are not then Funded Property (without making any of the deductions and additions provided for in subsection (II) of Section 4 hereof) and which Property Additions the Company then elects to make the basis of a credit under this subsection (I);

(4) the principal amount of each bond to the authentication and delivery of which the Company shall then be entitled under the provisions of Section 26 or Section 29 hereof by virtue of compliance with all applicable provisions of said Section 26 or Section 29, as the case may be (except as hereinafter in this Section otherwise provided) and the right to the authentication and delivery of which the Company then elects to make the basis of a credit under this subsection (I);

(5) expenditures subsequent to March 31, 1946, for gross additions to automotive equipment of the Company used (in the operation of the Mortgaged and Pledged Property) in the gas, electric, steam and/or hot water utility business or gas by-product business, which expenditures shall not theretofore have been made the basis of a credit under this subsection (I) and which expenditures the Company then elects to make the basis of a credit under this subsection (I);

(6) the amount, if any, required to be stated by clause (7) below in the next preceding Officers' Certificate of Replacements, if any;

(7) the amount, if any, by which the aggregate of the amounts required to be stated by clauses (2) to (6), both in-

§39(I)(8), (a), (b), Art. VIII

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clusive, of this subsection (I) in the certificate then being made exceeds the amount required to be stated by clause (1) hereof in such certificate; and

(8) the amount, if any, by which the aggregate of the amounts required to be stated in clauses (2) to (6), both inclusive, of this subsection (I) in the certificate then being made is less than the amount required to be stated by clause (1) hereof in such certificate.

The Company covenants to deposit with the Corporate Trustee in cash within ninety (90) days after the close of such period of eighteen (18) calendar months and of each calendar year thereafter an amount equal to any amount required to be stated by clause (8) above in the Officers' Certificate of Replacements required to be filed within such ninety (90) day period.

Any cash deposited with the Corporate Trustee under the provisions of this subsection (I) shall be held by it as part of the Mortgaged and Pledged Property and

(a) may be withdrawn by the Company in an amount equal to the aggregate amounts deducted pursuant to the provisions of clause (A) of Section 4 hereof from the Cost or fair value of Property Additions in respect of Funded Property retired less the aggregate amounts added pursuant to the provisions of items (a), (b), (c), (d) and (e) of clause (B) of said Section 4 in any Engineer's Certificate or Engineer's Certificates theretofore delivered to the Corporate Trustee pursuant to any of the provisions of this Indenture, which amounts shall not theretofore have been made the basis of a credit under this subsection (I) and which amounts the Company then elects in an Officers' Certificate filed with the Corporate Trustee to make the basis of a credit under this subsection (I) against such withdrawal of cash;

(b) may be withdrawn by the Company in an amount equal to the Cost or fair value to the Company whichever is less, as shall be stated in any Engineer's Certificate or Independent

§39(I)(c), (d), (e), Art. VIII

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Engineer's Certificate delivered to the Corporate Trustee, of any (gross) Property Additions which are not then Funded Property (without making any of the deductions or additions provided for in Section 4 hereof) and which Property Additions the Company then elects to make the basis of a credit under this subsection (I) against such withdrawal of cash;

(c) may be withdrawn from time to time by the Company in an amount equal to the principal amount of each bond to the authentication and delivery of which the Company shall then be entitled under the provisions of Section 26 or Section 29 hereof by virtue of compliance with all applicable provisions of said Section 26 or Section 29, as the case may be (except as hereinafter in this Section otherwise provided), and the right to the authentication and delivery of which the Company then elects to make the basis of a credit under this subsection (I) against such withdrawal of cash;

(d) may, upon the request of the Company, be used by the Corporate Trustee for the purchase of bonds issued hereunder in accordance with the provisions of Section 55 hereof; or

(e) may, upon the request of the Company, be applied by the Corporate Trustee to the redemption of any bonds issued hereunder which are, by their terms, redeemable of such series as may be designated by the Company, such redemption to be in the manner and as provided in Article X hereof.

Such moneys shall, from time to time, be paid out or used or applied by the Corporate Trustee, as aforesaid, upon the request of the Company evidenced by a Resolution.

Unless all bonds of the First Series shall have ceased to be Outstanding, any Property Additions which shall have been made the basis of a credit for any purpose under this subsection (I) shall have the status of Funded Property. Unless all bonds of the First Series shall have ceased to be Outstanding any election of a credit for any purpose under this subsection (I) based upon the right to the authentication and delivery of any bond or fraction of a bond shall operate as a waiver by

§39(I) (i), (ii), Art. VIII

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the Company of its right to the authentication and delivery of such bond or fraction of a bond and such bond or fraction of a bond may not thereafter be authenticated and delivered hereunder and any bond or Qualified Lien Bond which has been made the basis of any such right to the authentication and delivery of any bond or fraction of a bond so waived shall be deemed to have been made the basis of a credit under this subsection (I); and all bonds purchased or redeemed by application of cash pursuant to the provisions of this Section shall be deemed to have been purchased or redeemed with Funded Cash; provided, however, that (notwithstanding the Company may have, as permitted by the provisions of clause (e) of subdivision (B) of Section 4 hereof, elected to have added any or all bonds purchased or redeemed by application of cash deposited pursuant to the provisions of this Section) if at any time and from time to time after such an election or application of cash and prior to the time when all bonds of the First Series shall have ceased to be Outstanding, the Company shall file with the Corporate Trustee an Officers' Certificate referring to such election and stating:

(i) the amount which is equal to the aggregate amounts deducted pursuant to the provisions of clause (A) of Section 4 hereof from the Cost or fair value of Property Additions in respect of Funded Property retired less the aggregate amounts added pursuant to the provisions of items (a), (b), (c), (d) and (e) of clause (B) of said Section 4 in any Engineer's Certificate or Engineer's Certificates theretofore delivered to the Corporate Trustee pursuant to any of the provisions of this Indenture, which amounts shall not theretofore have been made the basis of a credit under this subsection (I) and which amounts the Company then elects to make the basis of a credit under this subsection (I) in lieu of an equal principal amount of bonds, the right to the authentication and delivery of which has theretofore been waived pursuant to the provisions of this subsection (I), or which shall have been purchased or redeemed by the application of cash pursuant to the provisions of this Section; or

(ii) the Cost or fair value to the Company whichever is less, as shall be stated in an Engineer's Certificate or Independent

Engineer's Certificate delivered to the Corporate Trustee of any (gross) Property Additions which are not then Funded Property (without making any of the deductions and additions provided for in subdivision (II) of Section 4 hereof) and which Property Additions the Company then elects to make the basis of a credit under this subsection (I) in lieu of an equal principal amount of bonds, the right to the authentication and delivery of which has theretofore been waived pursuant to the provisions of this subsection (I), or which have been purchased or redeemed by application of cash pursuant to the provisions of this Section;

then, and in that event, notwithstanding any other provisions of this Indenture, the Company's waiver made by such election of the right to the authentication and delivery of bonds in the aggregate principal amount specified in the Officers' Certificate filed pursuant to this proviso shall forthwith cease to be effective and the waiver of such right shall no longer be deemed to have been made, or, as the case may be, bonds in the aggregate principal amount specified in the Officers' Certificate filed pursuant to this proviso shall forthwith cease to be deemed to have been purchased or redeemed with Funded Cash.

In every case in which any credit under this subsection (I) is, in whole or in part, based upon Property Additions as permitted under clause (3), clause (b) or clause (ii) of this subsection (I), the Company shall comply with all applicable provisions of this Indenture (except subsection (II) of Section 4 hereof) as if such Property Additions were made the basis of an application for the authentication and delivery of bonds thereon (equivalent in principal amount to sixty per centum (60%) of the credit so to be based on such Property Additions), except that in no such case shall the Company be required to comply with any earning requirements or to deliver to the Corporate Trustee any Resolution, Officers' Certificate, Net Earning Certificate or Opinion of Counsel, such as is described in subdivisions (1), (2), (6) and (8) of Section 28 hereof.

In every case in which any credit under this subsection (I) is to be based in whole or in part upon the right to the authentication and

delivery of bonds, as permitted under clause (4) or clause (c) of this subsection (I), the Company shall comply with all applicable provisions of Section 26 or Section 29 hereof, as the case may be, relating to such authentication and delivery, except that in no such case shall the Company be required to comply with any earning requirements or to deliver to the Corporate Trustee any Resolution, Officers' Certificate, Net Earning Certificate or Opinion of Counsel such as is described in subdivisions (1), (2), (6) and (8) of Section 28 hereof.

(II) If at any time cash in excess of Fifty Thousand Dollars (\$50,000) shall have remained on deposit with the Corporate Trustee under the provisions of subsection (I) of this Section for a period of five years, with respect to which the Company shall not have made a proper request for the withdrawal, use or application of the same as in said subsection (I) provided, all cash so remaining on deposit shall be applied by the Corporate Trustee to the purchase or redemption of bonds in accordance with the provisions of Article X hereof.

(III) So long as any of the bonds of the First Series remain Outstanding, the Company will not declare or pay dividends (other than dividends payable solely in shares of its common stock) on or make any other distribution on or acquire (unless acquired without cost to the Company) any shares of its common stock unless the provisions for depreciation and retirement of property (but excluding any provisions for amortization of any amounts included in utility plant acquisition adjustment accounts or utility plant adjustment accounts or in any accounts for similar purposes) during the period from July 1, 1946, to the date of the proposed payment of said dividends or making of such distribution or acquisition, plus earned surplus of the Company (including as earned surplus current net income available to be transferred to earned surplus) remaining:

(a) after payment of such dividends or making of such distribution or acquisition; and

(b) after deducting any remainder of the amount of the earned surplus of the Company as of June 30, 1946, after deducting from such amount the charges to earned surplus subsequent to June 30, 1946, other than charges occasioned by dividends (other than dividends payable solely in shares of its common stock) on shares of its common stock or occasioned by other distributions on or acquisitions of shares of its common stock and other than charges to earned surplus with corresponding credits to reserves for depreciation and retirement of property;

shall be at least equal to the aggregate amounts required to be stated for such period in the Officers' Certificates of Replacements by the provisions of subdivision (1) of subsection (I) of this Section (including proportionate amounts calculated as provided in such subdivision (1) for any portions of the period elapsed since June 30, 1946, not theretofore included in any such Officers' Certificates of Replacements).

SECTION 40. The Company covenants that, so long as any of the bonds of the First Series shall remain Outstanding, it will, on or before October 1, 1952, and on or before October 1 of each year thereafter, to and including the year 1975, deliver to (or deposit with) the Corporate Trustee:

(A) An Officers' Certificate which shall state:

(a) the greatest principal amount of all bonds of the First Series prior to January 1 of such year at any one time Outstanding;

(b) the aggregate principal amount of all bonds of the First Series retired prior to the date of such Officers' Certificate pursuant to the provisions of subdivision (3) or subdivision (4) of Section 61 hereof by use or application of the proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property, or pursuant to the provisions of Section 64 hereof;

(c) the aggregate principal amount of bonds the right to the authentication and delivery of which (on the basis of the

retirement of bonds of the First Series) shall have been waived prior to the date of such Officers' Certificate pursuant to the provisions of clause (c) of subdivision (4) of Section 59 hereof as the basis of the release of property or pursuant to the provisions of subdivision (2) of Section 61 hereof as the basis of the withdrawal of cash representing proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of property;

(d) the amount remaining after deducting the sum of the amounts stated pursuant to clauses (b) and (c) above from the amount stated pursuant to clause (a) above;

(e) one and one-half per centum (1½%) of the amount required to be stated by clause (d) above in the Officers' Certificate due on or before October 1 in each of the years 1952 to 1975 (both inclusive) pursuant to the provisions of this Section; and

(f) an aggregate principal amount of bond(s) or fraction of a bond to the authentication and delivery of which the Company shall then be entitled on the basis of Property Additions or on the basis of the retirement of bonds of the First Series by virtue of compliance with all applicable provisions of this Indenture (except as hereinafter in this Section otherwise provided) if the Company elects to make its right to the authentication and delivery of such bond(s) or fraction of a bond the basis of a credit under this Section.

(B) An amount in cash and/or principal amount of bonds of the First Series equivalent to the amount stated in the Officers' Certificate (due on or before October 1 of such year) provided for by this Section pursuant to the requirements of clause (e) of subdivision (A) of this Section; provided, however, that, against the amount of cash or bonds payable or deliverable pursuant to this paragraph (B), there shall be credited the principal amount of the bonds which shall be stated in such Officers' Certificate pursuant to the requirements of clause (f) of subdivision (A) of this Section.

Such cash together with any bonds delivered to the Corporate Trustee under the provisions of this Section shall be dealt with as provided for by this Section.

Notwithstanding any other provisions of this Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the requirements of this Section becoming due on October 1 of the then current year or any subsequent year or years by depositing cash and/or a principal amount of bonds of the First Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section and (ii) any cash so deposited, whether in full satisfaction or in partial satisfaction of the requirements of this Section whether becoming due on October 1 of the then current year or of a subsequent year, may be from time to time withdrawn, used or applied in the manner, to the extent, for the purposes and subject to the conditions provided in Section 31 hereof or in subdivisions (3) and/or (4) of Section 61 hereof; provided, however, that the retirement of no bonds of any series other than the First Series shall be made the basis of the withdrawal of cash deposited under this Section and, provided further that no bonds of any series other than the First Series shall be purchased or redeemed with cash deposited under the provisions of this Section and that no bonds of the First Series shall be purchased with cash deposited under this Section at such price (including accrued interest and brokerage) that the cost thereof to the Company is in excess of the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost).

In case credit under the provisions of this Section is applied for in whole or in part upon the basis of the right to the authentication and delivery of bonds, the Company shall comply with all applicable provisions of this Indenture relating to such authentication and delivery; except that the Company shall not be required to comply with any earning requirements or to deliver to the Corporate Trustee any Res-

olution, Officers' Certificate, Net Earning Certificate or Opinion of Counsel such as is described in subdivisions (1), (2) (6) and (8) of Section 28 hereof.

So long as any bonds of the First Series shall remain Outstanding, any election by the Company pursuant to clause (f) of subdivision (A) of this Section to make its right to the authentication and delivery of any bond(s) or fraction of a bond the basis of a credit under this Section shall operate as a waiver by the Company of its right to the authentication and delivery of such bond(s) or fraction of a bond and such bond(s) or fraction of a bond may not thereafter be authenticated and delivered hereunder, and any Property Additions which have been made the basis of any such right to the authentication and delivery of bond(s) or fraction of a bond so waived shall have the status of Funded Property and shall be deemed to have been made the basis of a credit under this Section.

Any bonds issued under this Indenture delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section;

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of

all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

SECTION 41. The Company covenants that it will, subject to the provisions of Article XVI hereof, at all times maintain its corporate existence and right to carry on business, and duly procure all renewals and extensions thereof, if and when any shall be necessary and, subject to the provisions of this Indenture, will use its best efforts to maintain, preserve and renew all the rights, powers, privileges and franchises owned by it, affecting the Mortgaged and Pledged Property.

SECTION 42. The Company covenants that it will cause this Indenture and all indentures and instruments supplemental hereto to be promptly recorded and filed and re-recorded and refiled in such manner and in such places as may be required by law in order fully to preserve and protect the security of the bondholders and all rights of the Trustees, and will furnish to the Corporate Trustee

(a) Promptly after the execution and delivery of this Indenture and of each supplemental indenture, an Opinion of Counsel either stating that in the opinion of such counsel this Indenture or such supplemental indenture has been properly recorded and filed, so as to make effective the lien intended to be created thereby, and reciting the details of such action, or stating that in the opinion of such counsel no such action is necessary to make such lien effective. It shall be a compliance with this subdivision (a) if (1) the Opinion of Counsel herein required to be delivered to the Corporate Trustee shall state that this Indenture or such supplemental indenture has been received for record or filing in each jurisdiction in which it is required to be recorded or filed and that, in the opinion of counsel (if such is the case), such receipt for record or filing makes effective the lien intended to be created by this Indenture or such supplemental indenture, and (2) such opinion is delivered to the Corporate Trustee within such time, following the date of the

execution and delivery of this Indenture or such supplemental indenture, as shall be practicable having due regard to the number and distance of the jurisdictions in which this Indenture or such supplemental indenture is required to be recorded or filed.

(b) Annually after the execution and delivery of this instrument, an Opinion of Counsel either stating that in the opinion of such counsel such action has been taken, since the date of the most recent Opinion of Counsel furnished pursuant to this subdivision (b) or the first Opinion of Counsel furnished pursuant to subdivision (a) of this Section, with respect to the recording, filing, re-recording, and re-filing of this instrument and of each indenture supplemental to this instrument, as is necessary to maintain the Lien hereof, and reciting the details of such action, or stating that in the opinion of such counsel no such action is necessary to maintain such lien. Such Opinion of Counsel shall be delivered to the Corporate Trustee within three (3) months after each anniversary of the execution and delivery of this instrument.

The Company covenants that it will execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as may be necessary or proper to carry out more effectually the purposes of this Indenture and to make subject to the Lien hereof any property hereafter acquired, made or constructed, intended to be subject to the Lien hereof, and to transfer to any new trustee or trustees or co-trustee or co-trustees, the estate, powers, instruments or funds held in trust hereunder.

SECTION 43. (a) The Company covenants and agrees that it will furnish or cause to be furnished to the Corporate Trustee after January 1, 1947, between February 15 and March 1 and between August 15 and September 1, in each year, and at such other times as the Corporate Trustee may request in writing, a list in such form as the Corporate Trustee may reasonably require containing all the information in the possession or control of the Company or of its paying agents, as to the

names and addresses of the holders of bonds obtained since the date as of which the next previous list, if any, was furnished. Any such list may be dated as of a date not more than fifteen (15) days prior to the time such information is furnished or caused to be furnished, and need not include information received after such date.

(b) The Corporate Trustee shall preserve, in as current a form as is reasonably practicable, all information as to the names and addresses of the holders of bonds (1) contained in the most recent list furnished to it as provided in subdivision (a) of this Section, (2) received by it in the capacity of paying agent hereunder and (3) filed with it within two preceding years pursuant to the provisions of paragraph (2) of subdivision (c) of Section 100 hereof. The Corporate Trustee may (1) destroy any list furnished to it as provided in subdivision (a) of this Section upon receipt of a new list so furnished; (2) destroy any information received by it as paying agent upon delivering to itself as Corporate Trustee, not earlier than forty-five (45) days after an interest payment date of the bonds, a list containing the names and addresses of the holders of bonds obtained from such information since the delivery of the next previous list, if any; (3) destroy any list delivered to itself as Corporate Trustee which was compiled from information received by it as paying agent upon the receipt of a new list so delivered; and (4) destroy any information received by it pursuant to the provisions of paragraph (2) of subdivision (c) of Section 100 hereof, but not until two years after such information has been filed with it.

(c) In case three or more holders of bonds (hereinafter referred to as "Applicants") apply in writing to the Corporate Trustee, and furnish to the Corporate Trustee reasonable proof that each such Applicant has owned a bond for a period of at least six months preceding the date of such application, and such application states that the Applicants desire to communicate with other holders of bonds with respect to their rights under this Indenture or under the bonds, and is

accompanied by a copy of the form of proxy or other communication which such Applicants propose to transmit, then the Corporate Trustee shall, within five business days after the receipt of such application, at its election, either

(1) afford to such Applicants access to the information preserved at the time by the Corporate Trustee in accordance with the provisions of subdivision (b) of this Section; or

(2) inform such Applicants as to the approximate number of holders of bonds whose names and addresses appear in the information preserved at the time by the Corporate Trustee, in accordance with the provisions of subdivision (b) of this Section, and as to the approximate cost of mailing to such bondholders the form of proxy or other communication, if any, specified in such application.

If the Corporate Trustee shall elect not to afford to such Applicants access to such information, the Corporate Trustee shall, upon the written request of such Applicants, mail to each bondholder whose name and address appears in the information preserved at the time by the Corporate Trustee in accordance with the provisions of subdivision (b) of this Section, a copy of the form of proxy or other communication which is specified in such request, with reasonable promptness after a tender to the Corporate Trustee of the material to be mailed and of payment or provision for the payment of the reasonable expenses of mailing, unless within five days after such tender the Corporate Trustee shall mail to such Applicants and file with the Securities and Exchange Commission together with a copy of the material to be mailed a written statement to the effect that, in the opinion of the Corporate Trustee, such mailing would be contrary to the best interests of the holders of bonds, or would be in violation of applicable law. Such written statement shall specify the basis of such opinion. If said Commission, after opportunity for a hearing upon the objections specified in the written statement so filed, shall enter an order refusing to sustain any of such

objections or if, after the entry of an order sustaining one or more of such objections, said Commission shall find, after notice and opportunity for a hearing, that all the objections so sustained have been met and shall enter an order so declaring, the Corporate Trustee shall mail copies of such material to all such bondholders with reasonable promptness after the entry of such order and the renewal of such tender; otherwise the Corporate Trustee shall be relieved of any obligation or duty to such Applicants respecting their application.

(d) Neither the Trustees nor any paying agent shall be held accountable by reason of the disclosure of information as to names and addresses or the mailing of any material pursuant to any request made under subdivision (c) of this Section.

SECTION 44. The Company covenants and agrees

(1) to file with the Corporate Trustee within fifteen (15) days after the Company is required to file the same with the Securities and Exchange Commission, copies of the annual reports and of the information, documents, and other reports (or copies of such portions of any of the foregoing as such Commission may from time to time by rules and regulations prescribe) which the Company may be required to file with such Commission pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934; or, if the Company is not required to file information, documents, or reports pursuant to either of such sections, then to file with the Corporate Trustee and the Securities and Exchange Commission, in accordance with rules and regulations prescribed from time to time by said Commission, such of the supplementary and periodic information, documents, and reports which may be required pursuant to Section 13 of the Securities Exchange Act of 1934 in respect of a security listed and registered on a national securities exchange as may be prescribed from time to time in such rules and regulations;

(2) to file with the Corporate Trustee and the Securities and Exchange Commission, in accordance with the rules and regulations prescribed from time to time by said Commission,

such additional information, documents and reports with respect to compliance by the Company with the conditions and covenants provided for in this Indenture as may be required from time to time by such rules and regulations, including, in the case of annual reports, if required by such rules and regulations, certificates or opinions of independent public accountants, conforming to the requirements of Section 121 hereof, as to compliance with conditions or covenants, compliance with which is subject to verification by accountants, but no such certificate or opinion shall be required as to (A) dates or periods not covered by annual reports required to be filed by the Company, in the case of conditions precedent which depend upon a state of facts as of a date or dates or for a period or periods different from that required to be covered by such annual reports, or (B) the amount and value of Property Additions, except as provided in Section 28 hereof, or (C) the adequacy of depreciation, maintenance, or repairs;

(3) to transmit to the holders of bonds, in the manner and to the extent provided in subdivision (c) of Section 100 hereof with respect to reports pursuant to subdivision (a) of Section 100 hereof, such summaries of any information, documents and reports required to be filed by the Company pursuant to subdivisions (1) and (2) of this Section as may be required by the rules and regulations prescribed from time to time by the Securities and Exchange Commission; and

(4) to furnish to the Corporate Trustee (a) with or as a part of each annual report and each other document or report filed with the Corporate Trustee pursuant to subdivision (1) or subdivision (2) of this Section, an Officers' Certificate stating that in the opinion of the signers such annual report or other document or report complies with the requirements of such subdivision (1) or subdivision (2), and (b), after the Company shall have transmitted to the holders of bonds any summary of information, documents or reports pursuant to subdivision (3) of this Section, an Officers' Certificate stating that in the opinion of the signers such summary complies with the requirements of such subdivision (3).

The Company covenants that it will file with the Corporate Trustee, on or before October 1 of each year beginning with the year 1947, an officers' Certificate stating that, except as may be set forth to the contrary in such certificate, the Company has complied with all of the provisions of this Indenture and as of the date of the certificate is not in default with respect to any of its covenants contained in this Indenture.

Each certificate furnished to the Corporate Trustee pursuant to the provisions of this Section shall conform to the requirements of Section 121 hereof.

SECTION 45. The Company covenants that books of record and account will be kept in which full, true and correct entries will be made of all dealings or transactions of, or in relation to, the plants, properties, business and affairs of the Company.

The Company covenants that it will not issue, or permit to be issued, any bonds hereunder in any manner other than in accordance with the provisions of this Indenture and that it will faithfully observe and perform all the conditions, covenants and requirements of this Indenture and of all indentures supplemental hereto and of the bonds issued hereunder.

SECTION 46. The Company covenants that it will promptly advise the Corporate Trustee in writing of any failure to pay interest upon or principal (whether at maturity as therein expressed or by declaration, or otherwise) of any Outstanding Qualified Lien Bonds continued beyond the period of grace, if any, specified in the Qualified Lien securing the same.

The Company covenants that upon the cancellation and discharge of any Qualified Lien securing Qualified Lien Bonds it will (unless the Qualified Lien Bonds, cash, proceeds and other property mentioned in subdivisions (a) and (b) below are thereupon otherwise disposed of as required by another Qualified Lien) cause

(a) any Qualified Lien Bonds deposited with and then held by the trustee or other holder of such Qualified Lien canceled and

discharged, to be canceled and notification thereof to be given to the Corporate Trustee, or, at the option of the Company, to be delivered to and deposited with the Corporate Trustee hereunder; and

(b) all cash which (after giving effect to the provisions of Section 61 hereof) is then deemed to be Funded Cash and all obligations secured by purchase money mortgages and all proceeds of insurance on, or of the release of, or the taking by eminent domain of, or the purchase by a governmental authority or its designee of, Funded Property, deposited with and then held by the trustee or other holder of such Qualified Lien canceled and discharged (including as to all of the foregoing all proceeds of or substitutes for any thereof then held as aforesaid), to be paid and/or delivered to and/or deposited with the Corporate Trustee hereunder, to be held as part of the Mortgaged and Pledged Property;

any such Qualified Lien Bonds constituting a part thereof to be held and disposed of under the provisions of Article IX hereof; any such cash and/or obligations secured by purchase money mortgages on property released (including any proceeds or substitutes therefor) constituting a part thereof to be paid over, withdrawn, used or applied, in the manner, to the extent, and for the purposes and subject to the conditions provided in Section 61 hereof with respect to cash and obligations secured by purchase money mortgages deposited under the provisions of Section 59 hereof; any bonds issued hereunder deposited with and then held by the trustee or other holder of such Qualified Lien canceled and discharged, to be canceled by the Corporate Trustee; and any other property constituting a part thereof to be subject to use and release as provided with respect to such property in Article XI hereof.

The Company covenants that it will not permit the amount of Qualified Lien Bonds to be increased by the issue of additional Qualified Lien Bonds unless (1) the Qualified Lien Bonds representing such increase shall be issued upon transfer of or in exchange for or in lieu of Outstanding Qualified Lien Bonds on the exercise by a holder or holders of such Outstanding Qualified Lien Bonds

of the right granted by the Qualified Lien securing such Qualified Lien Bonds to have such bonds issued or unless (2) the Qualified Lien Bonds representing such increase shall be deposited with the Corporate Trustee to be held under the provisions of Article IX hereof and/or unless such Qualified Lien Bonds representing such increase shall be deposited with the trustee or other holder of a Qualified Lien (under conditions such that no transfer of ownership or possession of such Qualified Lien Bonds representing such increase by the trustee or other holder of such Qualified Lien is permissible except upon a default thereunder, or except to the Corporate Trustee hereunder to be held subject to the provisions of Article IX hereof, or to the trustee or other holder of a Qualified Lien for cancellation, or to be held uncanceled under the terms of a Qualified Lien under like conditions); that it will not apply under any provision of this Indenture for the authentication and delivery of any bonds or the withdrawal of cash or the release of property or for a credit under the provisions of Section 39 or Section 40 hereof by reason of the deposit with the Corporate Trustee of such Qualified Lien Bonds representing such increase; and that it will not apply under any provisions of any Qualified Lien (i) for the withdrawal of cash (which, after giving effect to the provisions of Section 61 hereof, is then deemed to be Funded Cash) held by the trustee or other holder of such Qualified Lien on the basis of Funded Property, unless such cash so withdrawn shall be deposited with the Corporate Trustee hereunder, to be held as part of the Mortgaged and Pledged Property, and to be withdrawn, used or applied in the manner, to the extent, and for the purposes and subject to the conditions provided in Section 61 hereof with respect to cash deposited under the provisions of Section 59 hereof, or (ii) for the release of obligations secured by purchase money mortgage (the proceeds of which, after giving effect to the provisions of Section 61 hereof, would then be deemed to be Funded Cash) held by the trustee or other holder of such Qualified Lien on the basis of Funded Property, unless such obligations so released shall be delivered to the Corporate Trustee hereunder, to be held as part of the Mortgaged and Pledged Property,

and to be released and otherwise dealt with, in the manner, to the extent, and for the purposes and subject to the conditions provided in Section 61 hereof with respect to obligations secured by purchase money mortgage received by the Corporate Trustee in consideration of the release of property.

The Company covenants that, upon the cancellation and discharge of any other lien prior hereto (upon property subject to the Lien hereof), securing indebtedness, other than Qualified Lien Bonds, the Company will cause all cash, purchase money obligations and other property then held by the trustee or other holder of such lien, which were received by such trustee or other holder by reason of the release of, or the purchase by a governmental authority or its designee of, or which represents the proceeds of the taking by eminent domain of, or insurance on, any of the Mortgaged and Pledged Property (including all proceeds of or substitution for any thereof) to be paid and/or delivered to and/or deposited with the Corporate Trustee hereunder, to be held as part of the Mortgaged and Pledged Property, any such cash and/or purchase money obligations constituting a part thereof to be paid over, withdrawn, used or applied in the manner, to the extent and for the purposes and subject to the conditions provided in Section 61 hereof with respect to cash and purchase money obligations deposited under the provisions of Section 59 hereof, and any other property constituting a part thereof to be subject to use and release as provided with respect to such property in Article XI hereof.

Nothing in this Indenture contained shall be deemed to limit the right of any successor to the Company under the provisions of Article XVI hereof, which shall not have caused this Indenture or the indenture executed as in Section 86 hereof provided to become a lien upon any of the properties or franchises of the successor corporation except as contemplated by clauses (a), (b) and (c) of subsection (I) of Section 87 hereof, to increase the indebtedness secured by lien upon any of its properties or franchises not subject to the Lien of this Indenture or of such indenture executed as in Section 86 hereof provided.

ARTICLE IX.

Concerning Qualified Lien Bonds and Bonds Secured by Lien Prior to the Lien Hereof Deposited with Corporate Trustee.

SECTION 47. Each Qualified Lien Bond or bond secured by lien prior hereto, upon property subject to the Lien hereof, in coupon form deposited with the Corporate Trustee shall have all unmatured coupons attached when so deposited, or shall be accompanied by evidence satisfactory to the Corporate Trustee (which may be a certificate of the mortgagee or trustee under the Qualified Lien or lien prior hereto securing the same) that the discharge of the lien securing such bond may be obtained without the production of any coupon or coupons that may be missing; and each Qualified Lien Bond or bond secured by any such lien prior hereto so deposited shall be uncanceled. Each Qualified Lien Bond or bond secured by any such lien prior hereto deposited hereunder shall be in bearer form or accompanied by appropriate instrument of transfer; and the Corporate Trustee may cause any or all registered bonds deposited under this Article IX to be registered in its name as Corporate Trustee, or otherwise, or in the name or names of its nominee or nominees.

SECTION 48. All Qualified Lien Bonds and bonds secured by lien prior hereto, upon property subject to the Lien hereof, received by the Corporate Trustee for the purpose of this Article IX, shall be held by the Corporate Trustee, as part of the Mortgaged and Pledged Property and without impairment of the lien thereof, for the protection and further security of the bonds issued hereunder. Except during the continuance of a Default defined in Section 65 of this Indenture, no payment by way of principal, interest or otherwise on any of the Qualified Lien Bonds or bonds secured by any such lien prior hereto held by the Corporate Trustee shall be made or demanded and the coupons thereto appertaining as they mature shall be canceled by the Corporate Trustee and delivered so canceled to the Company, unless the Company shall,

by an instrument in writing, signed by its President or a Vice-President or its Treasurer or an Assistant Treasurer, and delivered to the Corporate Trustee, elect, with respect to any of such bonds, to have such payments made and demanded, in which event the Company shall, subject to the provisions hereinafter in this Section contained, be entitled to receive all such payments. In any event, except during the continuance of a Default as aforesaid, all cash received by the Corporate Trustee (a) on account of the principal of or interest or premium on said bonds, or (b) by reason of the sale or delivery of any of said bonds to the sinking fund or other similar device for the retirement of bonds provided for in any lien securing the same (as to both (a) and (b) above, to the extent that an Officers' Certificate delivered to the Corporate Trustee shall state that such cash is not cash which, after giving effect to the provisions of Section 61 hereof, is then deemed to be Funded Cash), shall be paid over by the Corporate Trustee to or upon the order of the Company; provided that, in the absence of such statement, the same shall be retained by the Corporate Trustee and held as part of the Mortgaged and Pledged Property, to be withdrawn, used or applied, in the manner, to the extent, and for the purposes, and subject to the conditions provided in Section 61 hereof with respect to cash deposited under the provisions of Section 59 hereof.

SECTION 49. Except during the continuance of a Default defined in Section 65 hereof, the Corporate Trustee, on the written request of the Company, signed by its President or a Vice-President and its Treasurer or an Assistant Treasurer, shall cause any Qualified Lien Bonds and/or bonds secured by lien prior hereto upon property subject to the Lien hereof, held by it under this Article IX, to be canceled, and the obligation thereby evidenced to be satisfied and discharged, provided, however, that it shall have received notice from the trustee or other holder of the lien securing the same that such trustee or other holder, on receipt of the bonds so held by the Corporate Trustee, will cause the lien securing the same to be satisfied and discharged of record,

§49 (cont.), Art. IX

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and provided, further, that the Corporate Trustee shall not be required to cause any bonds so held by it to be canceled or to be surrendered for cancellation pursuant to the foregoing provisions of this Section, unless and until the Corporate Trustee shall have received an Opinion of Counsel to the effect that there is no outstanding lien (other than Excepted Encumbrances) covering any part of the Mortgaged and Pledged Property upon which such lien exists junior to such lien and senior to the Lien hereof. Upon similar request the Corporate Trustee shall sell (on such terms as the Company shall designate) or surrender any bonds held by it subject to this Article IX to the trustee or other holder of the lien securing the same to be held uncanceled for the purposes of any improvement or sinking fund or other similar device for the retirement of bonds for which provision may have been made in the lien securing the bonds so sold or surrendered, or for cancellation, provided, however, that no such bonds shall be so sold or surrendered except for cancellation as aforesaid until the Corporate Trustee shall have received an Opinion of Counsel to the effect (a) that the provisions of the lien securing the bonds so to be sold or surrendered are such that no transfer of ownership or possession of such bonds by the trustee or other holder of such lien is permissible thereunder except upon default thereunder or except to the Corporate Trustee hereunder, to be held subject to the provisions of this Article IX, or to the trustee or other holder of any such lien prior hereto, for cancellation or to be held uncanceled under the terms of a lien prior hereto upon property subject to the Lien hereof, under like conditions, or (b) that all of the property subject to the lien, with respect to which such bonds have been deposited with the Corporate Trustee, has been released from the Lien of this Indenture, which shall be stated in any event if such be the fact; and provided further that if all of the property subject to any lien securing bonds deposited under this Article IX shall have been released from the Lien of this Indenture, such bonds as shall thereupon cease to be bonds secured by property subject to the Lien of this Indenture shall be surrendered forthwith by the Corporate Trustee to the Com-

§50, Art. IX; §51, Art. X

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pany upon its written request signed by its President or a Vice-President and its Treasurer or an Assistant Treasurer.

Prior to any sale or surrender of bonds by the Corporate Trustee in accordance with the foregoing provisions of this Section, there shall be delivered to the Corporate Trustee, an Engineer's Certificate, made and dated not more than ninety (90) days prior to the date of the Company's request for such sale or surrender, stating the fair value, in the opinion of the signers, of the bonds to be sold or surrendered, and stating that, in the opinion of the signers, the release thereof will not impair the security under this Indenture in contravention of the provisions hereof.

On the request of the Company evidenced by a Resolution, the Corporate Trustee shall permit the extension of the maturity of and/or any other modification of any bonds held by the Corporate Trustee subject to the provisions of this Article IX and/or any modification of a Qualified Lien or lien prior to the Lien hereof.

SECTION 50. Upon the occurrence of any Default defined in Section 65 hereof, the Corporate Trustee may exercise any and all rights of a bondholder with respect to the bonds then held by it under this Article IX or may take any other action which shall in its judgment be desirable or necessary to avail itself of the security created for such bonds by the liens securing the same.

ARTICLE X.

Redemption or Purchase of Bonds.

SECTION 51. Such of the bonds of any series issued hereunder as are, by their terms, redeemable before maturity, may, at the option of the Company, be redeemed at such times, in such amounts and at such prices as may be specified therein and in accordance with the provisions of the three next succeeding Sections numbered from 52 to 54, both inclusive.

SECTION 52. (A) In case of a redemption of a part only of any series of said bonds, of which series more than fifty per centum (50%) in principal amount of all bonds then Outstanding are Group B Bonds, as hereinafter in this Section defined, the particular bonds so to be redeemed shall be designated by the Corporate Trustee by lot, according to such method as it shall deem proper in its discretion. In any such designation by lot the designation may be made from the numbers of the bonds of such series then Outstanding (1) in groups of consecutive numbers (including or excluding, for the purpose of such grouping, the numbers of bonds previously called for redemption or otherwise retired), or (2) individually from the numbers of all such bonds not previously called for redemption or otherwise retired, or (3) if there is any portion to be called which is but a fraction of a group, individually by lot from the several individual numbers in any such group so designated by lot.

(B) In case of the redemption of a part only of any series of said bonds of which series not less than fifty per centum (50%) in principal amount of all bonds then Outstanding are Group A Bonds, as hereinafter in this Section defined,

(1) the Corporate Trustee shall first prorate the principal amount of bonds to be redeemed between Group A Bonds and Group B Bonds in proportion to the principal amount of Group A Bonds and the principal amount of Group B Bonds at the time Outstanding;

(2) the Corporate Trustee shall then designate for redemption in the manner provided in subsection (A) of this Section particular Group B Bonds to be redeemed of the principal amount prorated to Group B Bonds pursuant to subdivision (1) of this subsection (B);

(3) the Corporate Trustee shall then prorate the principal amount of Group A Bonds to be redeemed, as determined pursuant to subdivision (1) of this subsection (B), among all registered owners of Group A Bonds in proportion to the principal

amount of Group A Bonds registered in the name of each registered owner, and shall then designate with respect to each registered owner, according to such method, which need not be by lot, as it shall deem proper in its discretion, particular Group A Bonds or portions of Group A Bonds to be redeemed of the principal amount so prorated to such registered owner.

In any prorating pursuant to subdivision (1) or subdivision (3) of this subsection (B) the Corporate Trustee shall, according to such method, which need not be by lot, as it shall deem proper in its discretion, make such adjustments, by increasing or decreasing by not more than One Thousand Dollars (\$1,000) the amount which would be allocable on the basis of exact proportion to Group A Bonds or to Group B Bonds or to any one or more registered owners of Group A Bonds, as may be necessary to the end that the principal amount so prorated shall be One Thousand Dollars (\$1,000) or a multiple thereof.

The term "Group A Bond" shall mean any bond or a series then Outstanding hereunder, whether in temporary or definitive form, registered as to payment of both principal and interest in the name of an owner, in whose name bonds of such series at the time are registered as to both principal and interest of an aggregate principal amount of not less than One Hundred Thousand Dollars (\$100,000).

The term "Group B Bond" shall mean any bond of a series then Outstanding hereunder not included within the definition of Group A Bond.

Notice of intention to redeem to owners and/or holders of any bonds which are not registered as to principal and interest or principal only shall be given, by or on behalf of the Company, by publication as to the bonds of the First Series, in one Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, once on at least four different days before the date fixed for redemption as is specified in Section 19 hereof, provided, however, that each successive publication of any such notice may

§52 (cont.) Art. X

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be in the same Daily Newspaper in which such notice shall have been first published or in one or more other Daily Newspapers, and as to the bonds of any other series, in such newspaper(s) and for such period(s) as may be fixed for the bonds of such other series by the Resolutions establishing such series of bonds, or if no such newspaper(s) and/or period(s) be fixed, then once on at least four different days before the date fixed for redemption, the first publication to be at least thirty (30) days prior to the date fixed for redemption, in such a Daily Newspaper as is required with respect to publication in the case of the bonds of the First Series. If less than all bonds of any particular series are to be redeemed, the numbers of any bonds to be redeemed which are not so registered shall be included in such notice and may be stated in any one or more of the following ways: individually; in groups from one number to another number, both inclusive; in groups from one number to another number, both inclusive, except such as shall have been previously called for redemption or otherwise retired.

Notice of intention to redeem to the registered owner of any bond registered as to principal and interest or as to principal only which is to be redeemed in whole or part shall be mailed by or on behalf of the Company, not less than thirty (30) days before the date fixed for redemption, to him at his last address appearing upon the registry books.

Failure duly to give such notice by publication and/or by mailing to the owner or holder of any bond designated for redemption in whole or part shall not affect the validity of the proceedings for the redemption of any other bond.

If at the time of publication or mailing of any notice of redemption the Company shall not have deposited with the Corporate Trustee and/or irrevocably directed the Corporate Trustee to apply, from moneys held by it available to be used for the redemption of bonds, an amount in cash sufficient to redeem all of the bonds called for redemption, including accrued interest to such date fixed for redemption, such

notice shall state that it is subject to the receipt of the redemption moneys by the Corporate Trustee before the date fixed for redemption and such notice shall be of no effect unless such moneys are so received before such date.

The Corporate Trustee, upon the request of the Company evidenced by a Resolution delivered to the Corporate Trustee at least ten (10) days prior to the date on which notice of redemption must first be published or mailed (unless a shorter notice shall be accepted by the Corporate Trustee as sufficient) shall, for and in behalf of and in the name of the Company, call for redemption bonds secured hereby (whether or not for the sinking fund and whether or not the Corporate Trustee shall hold at the time of such call cash sufficient for such redemption) provided that, if cash sufficient for such purpose is not so held, the notice shall state that it is subject to the receipt of the redemption moneys by the Corporate Trustee before the date fixed for redemption and such notice shall be of no effect unless such moneys are so received before such date.

SECTION 53. Publication of the notice of redemption, if required, having been completed as above provided, or if mailing is required, notice of redemption having been mailed, as in Section 52 hereof provided, and the Company having before the redemption date specified in the notice of redemption deposited with the Corporate Trustee (and/or having irrevocably directed the Corporate Trustee to apply, from moneys held by it available to be used for the redemption of bonds) an amount in cash sufficient to redeem all of the bonds called for redemption, including accrued interest, the bonds called for redemption shall become due and payable on such redemption date.

SECTION 54. All moneys held by the Corporate Trustee for the redemption of bonds shall, subject to the provisions of Section 119 hereof, be held in trust for account of the holders of the bonds so to be redeemed, and shall be paid to them respectively, upon presentation and

§54 (cont.), Art. X

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surrender of such bonds, with all unmatured coupons, if any appertaining thereto. Coupons maturing on or prior to the date fixed for redemption shall remain payable in accordance with their terms. On and after such date fixed for redemption, if the moneys for the redemption of the bonds to be redeemed shall be held by the Corporate Trustee for the purpose, such bonds shall cease to bear interest and shall cease to be entitled to the benefit of the Lien of this Indenture and the coupons for interest, if any, maturing subsequent to the date fixed for redemption shall be void.

If any fully registered bond of a denomination larger than One Thousand Dollars (\$1,000) shall be called for redemption in part only, the notice of redemption shall specify the principal amount thereof to be redeemed, and such fully registered bond shall be presented for cancellation properly endorsed for transfer at or after the date fixed for the redemption of said bond so called for redemption, and thereupon the payment with respect to said bond shall be made upon surrender of said bond so endorsed, and coupon bonds or fully registered bonds for the unpaid balance of the principal amount of the fully registered bond so presented and surrendered shall be executed by the Company and authenticated and delivered by the Corporate Trustee without charge therefor to the holder thereof or, in the case of any fully registered bond of a denomination larger than Ten Thousand Dollars (\$10,000), if the registered owner shall not so surrender such fully registered bond for cancellation, the Corporate Trustee shall upon presentation of such bond at its office for such purpose make notation thereon of the payment of the portion of the principal amount of such bond so called for redemption in part and of the number or numbers, if any, of the coupon bonds theretofore endorsed upon or reserved for such fully registered bond which are canceled upon such payment. On and after the date fixed for such redemption, interest shall be payable only on the portion of each such fully registered bond not so called

for redemption and only such portion shall continue to be entitled to the benefit of the Lien of this Indenture.

SECTION 55. At any time, upon the request of the Company, expressed by Resolution, the Corporate Trustee shall, to the extent that such bonds are available for such purchase, apply all or any part of the cash held by it under any provision of this Indenture, subject to the provisions of Sections 32, 40, 54, 64 and 87 hereof, or any cash deposited with it by the Company for the purpose, to the purchase (including a purchase from the Company) of bonds then Outstanding hereunder of such series as the Company may designate at such price (including accrued interest and brokerage) that the cost thereof to the Company will not exceed the cost of redeeming, on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost), such bonds as shall be by their terms redeemable, or at not more than one hundred and five per centum (105%) of the principal of bonds not so redeemable, plus accrued interest. Before making any such purchase the Corporate Trustee may, and upon request of the Company shall, by notice published on two different days in one Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, advertise for written proposals (to be received by it on or before a specified date) to sell to it on or before a subsequent specified date bonds of the series designated by the Company then Outstanding hereunder; and the Corporate Trustee, to the extent, as nearly as is possible, of such funds then in its hands and requested by the Company to be so applied, shall purchase the bonds so offered at the price or prices most favorable to the Company, not exceeding the maximum amounts specified above, and reasonable notice shall be mailed by the Corporate Trustee to the holder or holders of the bonds whose proposals shall have been accepted. The Corporate Trustee shall, upon request of the Company, invite offers of bonds for sale to

it in any other usual manner. The Corporate Trustee in its discretion may reject any or all proposals in whole or in part, and shall reject any or all proposals in whole or in part if on the same day after opening said proposals it can purchase the requisite amount of such bonds or any part thereof at a price more favorable to the Company than it could by accepting said proposals. All offers by holders shall be subject to acceptance of a portion thereof unless otherwise expressed in the offers and all advertisements for written proposals shall so state.

SECTION 56. All bonds issued hereunder paid, retired or redeemed under any of the provisions of this Indenture or purchased by the Corporate Trustee as provided in Section 55 hereof and all appurtenant coupons, if any, shall forthwith be canceled by the Corporate Trustee, and the Corporate Trustee may periodically cremate any such canceled coupon bonds and deliver to the Company a certificate of such cremation and deliver any such canceled fully registered bonds to the Company.

ARTICLE XI.

Possession, Use and Release of Mortgaged and Pledged Property.

SECTION 57. Unless one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, the Company shall be suffered and permitted to possess, use and enjoy the Mortgaged and Pledged Property (except such cash as is expressly required to be deposited with the Corporate Trustee and except, to the extent not herein otherwise provided, such securities as are expressly required to be deposited with the Corporate Trustee), and to receive, use and dispose of the tolls, rents, revenues, issues, earnings, income, product and profit thereof, with power in the ordinary course of business, freely and without let or hindrance on the part of the Trustees or either of them or of the bondholders, except as herein otherwise

expressly provided to the contrary, to exercise any and all rights under choses in action, contracts, franchises and claims.

SECTION 58. Unless the Company is in default in the payment of the interest on any of the bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, the Company may at any time and from time to time, without any release or consent by, or report to, the Trustees or either of them:

(1) sell or otherwise dispose of, free from the Lien of this Indenture, any machinery, apparatus, equipment, mains, pipe, frames, towers, poles, wire, tools, implements and furniture, then subject to the Lien hereof, which shall have become old, inadequate, obsolete, worn out, unfit, unadapted, unserviceable, undesirable or unnecessary for use in the operations of the Company upon replacing the same by or substituting for the same machinery, apparatus, equipment, mains, pipe, frames, towers, poles, wire, tools, implements or furniture of at least equal value to that of the property sold or otherwise disposed of and subject to the Lien hereof subject to no liens prior hereto except liens to which the property sold or otherwise disposed of was subject;

(2) cancel or make changes or alterations in or substitutions of any and all right of way grants; and

(3) surrender or assent to the modification of any right, power, franchise, license, governmental consent or permit under which it may be operating, provided that, in the opinion of the Board of Directors of the Company (such opinion to be stated in a Resolution to be filed with the Corporate Trustee), any such surrender or modification which affects the Mortgaged and Pledged Property is necessary or desirable in the conduct of the business of the Company.

SECTION 59. Unless the Company is in default in the payment of the interest on any bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be

continuing, the Company may obtain the release of any of the Mortgaged and Pledged Property, except cash then held by the Corporate Trustee (provided, however, that Qualified Lien Bonds deposited with the Corporate Trustee shall not be released except as provided in Article IX hereof and obligations secured by purchase money mortgage deposited with the Corporate Trustee shall not be released except as provided in Section 61 hereof), and the Trustees or the Corporate Trustee shall release all the right, title and interest of the Trustees in and to the same from the Lien hereof upon the application of the Company and receipt by the Corporate Trustee of

(1) a Resolution describing in reasonable detail the property to be released and requesting such release;

(2) an Officers' Certificate stating that the Company is not in default in the payment of the interest on any bonds then Outstanding hereunder and that none of the Defaults defined in Section 65 hereof has occurred and is continuing;

(3) an Engineer's Certificate, made and dated not more than ninety (90) days prior to the date of such application, stating:

(a) that the Company has sold, exchanged, dedicated or otherwise disposed of, or agreed to sell, exchange, dedicate or otherwise dispose of, or that a governmental body or agency has exercised a right to order the Company to divest itself of, the property to be released; (b) the fair value, in the opinion of the signers, of the property (or securities) to be released; (c) the fair value, in the opinion of the signers, of any portion thereof that is Funded Property; (d) that (except in any case where a governmental body or agency has exercised a right to order the Company to divest itself of such property) such release is in the opinion of the signers desirable in the conduct of the business of the Company; (e) the amount of cash and/or principal amount of obligations secured by purchase money mortgage received or to be received for any portion of said property sold to any Federal, State, County, Municipal or other governmental bodies or agencies or public or semi-public

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corporations, districts or authorities or for any portion of said property as to which a governmental body or agency has exercised a right to order the Company to divest itself of property and which has been or is to be sold by the Company pursuant to such order; and (f) that in the opinion of the signers such release will not impair the security under this Indenture in contravention of the provisions hereof;

(4) an amount in cash, to be held by the Corporate Trustee as part of the Mortgaged and Pledged Property, equivalent to the amount, if any, by which the fair value of the property to be released, as specified in the Engineer's Certificate provided for in subdivision (3) above, exceeds the aggregate of the following items:

(a) the principal amount, subject to the limitations stated below in this subdivision (4), of any obligations delivered to the Corporate Trustee, to be held as part of the Mortgaged and Pledged property, consisting of obligations secured by purchase money mortgage upon the property released;

(b) the Cost or fair value to the Company (whichever is less) of any Property Additions made the basis of the application which are not then Funded Property (after making any deductions and any additions pursuant to the provisions of Section 4 hereof) as shown by a further Engineer's Certificate (made and dated not more than ninety (90) days prior to the date of such application) delivered to the Corporate Trustee; provided, however, that no such application for release may be based in whole or in part upon Property Additions acquired, made or constructed more than five years prior to the last day of the calendar month immediately preceding the date of such application, and provided, further, that Property Additions acquired, made or constructed within ninety (90) days prior to the date of such application for release, or subsequently thereto, may, at the option of the Company, not have deducted therefrom the deductions nor added thereto the additions pursuant to Section 4 hereof;

§59(4)(c), (d), (e), Art. XI

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(c) the principal amount of each bond or fraction of a bond to the authentication and delivery of which the Company shall be entitled under the provisions of Section 26 or Section 29 hereof, by virtue of compliance with all applicable provisions of said Section 26 or Section 29, as the case may be (except as hereinafter in this Section otherwise provided); provided, however, that (except as hereinafter in this Section otherwise provided) the application for such release shall operate as a waiver by the Company of such right to the authentication and delivery of each such bond or fraction thereof on the basis of which right such property is released and to such extent no such bond or fraction thereof may thereafter be authenticated and delivered hereunder, and any bonds or Qualified Lien Bonds which have been made the basis of any such right to the authentication and delivery of bond(s) or fraction of a bond so waived shall be deemed to have been made the basis of the release of such property;

(d) the principal amount, subject to the limitations stated below in this subdivision (4), of any obligations secured by purchase money mortgage upon the property to be released and/or any amount in cash, that is evidenced to the Corporate Trustee by a certificate of the trustee or other holder of a Qualified Lien or a lien prior hereto, as the case may be, to have been received by it in accordance with the provisions of such Qualified Lien or lien prior hereto in consideration for the release of such property or any part thereof from such Qualified Lien or lien prior hereto; and

(e) any taxes and expenses incidental to such sale, exchange, dedication or disposal;

provided, however, that (i) no obligations secured by purchase money mortgage upon any property being released from the Lien hereof shall be used as a credit in any application for such release unless all obligations secured by such purchase money mortgage shall be delivered to the Corporate Trustee or to the trustee or other holder of a Qualified Lien or lien prior hereto; (ii) in case the total principal amount of obligations secured by

purchase money mortgage upon property being released shall exceed seventy-five per centum (75%) of the fair value of such property, as specified in the Engineer's Certificate provided for in subdivision (3) above, the aggregate credit which may be used pursuant to clause (a) and clause (d) of this subdivision (4) in respect of such obligations shall not exceed seventy-five per centum (75%) of the fair value of the property to be released, as specified in such Engineer's Certificate; and (iii) no obligations secured by purchase money mortgage shall be used as a credit in any application for the release of property hereunder, if the aggregate credit in respect of such obligations to be used by the Company pursuant to clause (a) and clause (d) of this subdivision (4) plus the aggregate credits used by the Company pursuant to said clause (a) and clause (d) in all applications for the release of property theretofore released from the Lien hereof on the basis of purchase money obligations theretofore delivered to and then held by the Corporate Trustee or the trustee or other holder of a Qualified Lien or a lien prior hereto, shall, immediately after the release then being applied for, exceed fifteen per centum (15%) of the aggregate principal amount of bonds at such time Outstanding under this Indenture;

(5) in case any obligations secured by purchase money mortgage upon the property to be released are included in the consideration for such release and are delivered to the Corporate Trustee or to the trustee or other holder of a Qualified Lien or a lien prior hereto in connection with any release of such property, an Opinion of Counsel stating that, in his or their opinion, such obligations are valid obligations, and that the purchase money mortgage securing the same is sufficient to afford a valid purchase money lien upon the property to be released, subject to no lien prior thereto except such liens, if any, as shall have existed thereon just prior to such release as Qualified Liens or liens prior to the Lien of this Indenture; and

(6) in case any franchise is to be so released, an Opinion of Counsel stating that in his or their opinion such release will not impair the right of the Company to operate any of its remaining properties.

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All purchase money obligations and the mortgages securing the same delivered to the Corporate Trustee pursuant to this Section shall be duly assigned to the Trustees. The Company shall cause any such purchase money mortgage and the assignment thereof to be promptly recorded and filed in such place or places as shall be required by law in order fully to preserve and protect the security afforded thereby and shall furnish to the Corporate Trustee an Opinion of Counsel stating that in the opinion of such counsel such purchase money mortgage and the assignment thereof have been properly recorded and filed so as to make effective the lien intended to be created thereby. Should any re-recording or re-filing be necessary at any time or from time to time, the Company shall likewise cause the same to be duly effected and shall in each case furnish to the Corporate Trustee an Opinion of Counsel similar to the foregoing. The Corporate Trustee shall deliver to the Company any purchase money mortgage and/or assignment thereof whenever required for the purpose of recording or filing or re-recording or re-filing, as evidenced by an Opinion of Counsel, and the same shall be promptly returned to the Corporate Trustee when such purpose shall have been accomplished.

In case the release of property is, in whole or in part, based upon Property Additions (as permitted under the provisions of clause (b) of subdivision (4) of this Section), the Company shall, subject to the provisions of said clause (b), comply with all applicable provisions of this Indenture (including but not limited to the furnishing of the Engineer's Certificate provided for in subdivision (3) of Section 28 hereof and, in case the provisions of subdivision (4) of Section 28 hereof are applicable, the Independent Engineer's Certificate provided for in said subdivision (4) of Section 28 hereof) as if such Property Additions were made the basis of an application for the authentication and delivery of bonds thereon (equivalent in principal amount to sixty per centum (60%) of the fair value of that portion of the property to be released which is to be released on the basis of such Property Additions, as shown by the Engineer's Certificate in subdivision (3) of this Section

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provided for), and in case the release of property is in whole or in part based upon the right to the authentication and delivery of bonds (as permitted under the provisions of clause (c) of subdivision (4) of this Section) the Company shall comply with all applicable provisions of Section 26 or Section 29 hereof, as the case may be, relating to such authentication and delivery, except that in no such case shall the Company be required to comply with any earning requirements or to deliver to the Corporate Trustee any Resolution, Officers' Certificate, Net Earning Certificate or Opinion of Counsel such as is described in subdivisions (1), (2), (6) and (8) of Section 28 hereof; provided, however, that the Cost of any Property Additions received or to be received by the Company in whole or in part as consideration in exchange for the property to be released shall for all purposes of this Indenture be deemed to be the amount stated in the Engineer's Certificate provided for in subdivision (3) of this Section to be the fair value of the property to be released (a) plus the amount of any cash and the fair value of any other consideration, further to be stated in such Engineer's Certificate, paid and/or delivered or to be paid and/or delivered by, and the amount of any obligations assumed or to be assumed by, the Company in connection with such exchange as additional consideration for such Property Additions or (b) less the amount of any cash and the fair value to the Company of any other consideration, which shall also be stated in such Engineer's Certificate, received or to be received by the Company in connection with such exchange in addition to such Property Additions.

For all purposes of this Article XI, the fair value of property subject to a Qualified Lien shall be determined as if such property were free of such Qualified Lien and the fair value of property subject to a lien prior to the Lien hereof, which has not theretofore or is not then to become a Qualified Lien, shall be the fair value thereof less the principal amount of any obligations secured by such lien thereon if it will thereafter cease to be a lien on any property subject to the Lien hereof.

Notwithstanding any of the other provisions of this Indenture,

(A) to the extent that any property to be released is not Funded Property and the Property Additions made the basis of such release shall (as evidenced by a statement to such effect in an Engineer's Certificate) have been acquired in exchange or consideration for, or acquired, made or constructed in anticipation of, the release of property (and shall never previously have been used as the basis of the release of property under the provisions of clause (b) of subdivision (4) of this Section or as the basis of the withdrawal of cash under subdivision (1) of Section 61 or under a Qualified Lien), said Property Additions shall not have the status of Funded Property except to the extent of any amount which shall, at the time such Property Additions were made the basis of such release, have been deducted from the Cost or fair value of such Property Additions pursuant to the provisions of clause (A) of Section 4 hereof less any amount which shall then have been added thereto pursuant to the provisions of clause (B) of said Section 4, and except to the extent of any amount which shall then have been deducted in respect of Qualified Liens on such Property Additions pursuant to the provisions of Section 26 hereof, and

(B) to the extent that any property released shall not have been Funded Property just prior to its release,

(i) any Property Additions made the basis of such release of property shall not be deemed to be Funded Property except to the extent of any amount which shall, at the time such Property Additions were made the basis of such release, have been deducted from the Cost or fair value of such Property Additions pursuant to the provisions of clause (A) of Section 4 hereof less any amount which shall then have been added thereto pursuant to the provisions of clause (B) of said Section 4, and except to the extent of any amount which shall then have been deducted in respect of Qualified Liens on such Property Additions pursuant to the provisions of Section 26 hereof, and

(ii) any waiver of the right to the authentication and delivery of bonds made the basis of such release of property shall be revoked and cease to be effective and shall no longer be deemed to have been made,

if the Company shall within two years after the release of such property file with the Corporate Trustee such Officers' Certificates, Engineer's Certificates, Independent Engineer's Certificates, Opinions of Counsel and other papers (other than any Resolution, Net Earning Certificate or Opinion of Counsel such as is described in subdivisions (1), (6) and (8) of Section 28 hereof) as under the provisions of Article V hereof would entitle the Company, on the basis of Property Additions acquired, made or constructed subsequent to the application for the release of such property, to the authentication and delivery of bonds (equal in principal amount to sixty per centum (60%) of the fair value of such property so released), and the inclusion of such subsequently acquired Property Additions in any such Officers' Certificate, Engineer's Certificate, Independent Engineer's Certificate, Opinion of Counsel or other papers shall not make such subsequently acquired Property Additions Funded Property.

Any bonds Outstanding under this Indenture deposited with the Corporate Trustee, pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee, and any Qualified Lien Bonds deposited with the Corporate Trustee pursuant to the provisions of this Section shall be held by the Corporate Trustee subject to the provisions of Article IX hereof and any moneys and/or obligations secured by purchase money mortgage and/or other property and/or the proceeds of any thereof and/or substitutes therefor received by the Corporate Trustee under this Section shall be held as part of the Mortgaged and Pledged Property and such moneys and/or obligations secured by purchase money mortgage shall be paid over, withdrawn, used or applied, in the manner, to the extent, and for the purposes and subject to the conditions provided in Section 61 hereof.

Any property acquired by the Company by exchange or purchase to take the place of any property released under any provisions of this Article shall forthwith and without further conveyance become subject to the Lien of and be covered by this Indenture as a part of the Mortgaged and Pledged Property, subject to no lien except Qualified

Liens and Excepted Encumbrances and any liens existing thereon just prior to the acquisition thereof.

SECTION 60. Unless the Company shall be in default in the payment of the interest on any bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, the Trustees or the Corporate Trustee shall whenever from time to time requested by the Company (such request to be evidenced by a Resolution) and without requiring compliance with any of the provisions of Section 59 hereof, release from the Lien hereof all the right, title and interest of the Trustees in and to any real estate unimproved for use in the conduct of the business of the Company, provided the Company has sold, exchanged, dedicated or disposed of such real estate, or has agreed to sell, exchange, dedicate or dispose of such real estate, or, as evidenced by a Resolution, has authorized its officers to endeavor to sell such real estate, and provided the aggregate value of the interest of the Company in such real estate so released without such compliance in any period of twelve (12) consecutive calendar months shall not exceed the sum of Fifty Thousand Dollars (\$50,000). Prior to the granting of any such release, there shall be delivered to the Corporate Trustee an Engineer's Certificate stating the fair value of the property to be released and that in the opinion of the signers the release thereof will not impair the security under this Indenture in contravention of the provisions hereof and setting forth any other facts required to be known by it as a condition precedent to action by it under this Section. The Company covenants that it will deposit with the Corporate Trustee, to be dealt with in the manner provided in Section 61 hereof, the net consideration, if any, received by it upon the sale or other disposition of any such real estate so released (to the extent that the same shall not have been paid or delivered to the trustee or other holder of a Qualified Lien or a lien prior to the Lien of this Indenture in accordance with the provisions thereof and an Officers' Certificate to that effect shall have been furnished to the Corporate

Trustee), or if no consideration be received therefor or results therefrom to the Mortgaged and Pledged Property the Company will so deposit the fair value thereof.

SECTION 61. Unless the Company shall be in default in the payment of the interest on any bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, any money received by the Corporate Trustee in consideration of any release under this Article XI, including payment on account of the principal of any obligations secured by purchase money mortgage which obligations have been delivered to the Corporate Trustee, shall be held by the Corporate Trustee and, subject to the provisions of Section 64 hereof, such money and any money which may be applied as in this Section provided,

(1) may be withdrawn from time to time by the Company to the extent of the Cost or the fair value to the Company (whichever is less) of Property Additions not then Funded Property after making any deductions and additions pursuant to the provisions of Section 4 hereof; provided, however, that no such withdrawal of cash representing the proceeds of insurance on or the release of property or securities or payment of or on account of obligations secured by purchase money mortgages may be based in whole or in part upon Property Additions acquired, made or constructed more than five years prior to the last day of the calendar month immediately preceding the receipt by the Corporate Trustee of such cash, and provided further, that Property Additions acquired, made or constructed within ninety (90) days prior to the date of the receipt by the Corporate Trustee of such cash representing the proceeds of insurance on or the release of property (including securities and other personal property, if any), or payment of or on account of obligations secured by purchase money mortgages, or subsequent to such receipt of cash, may, at the option of the Company, not have deducted therefrom the deductions or added thereto the additions pursuant to Section 4 hereof;

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(2) may be withdrawn from time to time by the Company in an amount equal to the principal amount of each bond or fraction of a bond to the authentication and delivery of which the Company shall be entitled under the provisions of Section 26 or Section 29 hereof, by virtue of compliance with all applicable provisions of said Section 26 or Section 29, as the case may be (except as hereinafter in this Section otherwise provided); provided, however, that (except as hereinafter in this Section otherwise provided) the application for such withdrawal of cash shall operate as a waiver by the Company of such right to the authentication and delivery of each such bond or fraction thereof, on the basis of which right such cash is withdrawn, and any bonds or Qualified Lien Bonds which have been made the basis of any such right to the authentication and delivery of bond(s) or fraction of a bond so waived shall be deemed to have been made the basis of the withdrawal of such cash;

(3) may, upon the request of the Company, be used by the Corporate Trustee for the purchase of bonds issued hereunder in accordance with the provisions of Section 55 hereof; or

(4) may, upon the request of the Company, be applied by the Corporate Trustee to the payment at maturity of any bonds issued hereunder or to the redemption of any bonds issued hereunder which are, by their terms, redeemable and of such series as may be designated by the Company, such redemption to be in the manner and as provided in Article X hereof.

Such moneys shall, from time to time, be paid out or used or applied by the Corporate Trustee, as aforesaid, upon the request of the Company evidenced by a Resolution, and upon receipt by the Corporate Trustee of an Officers' Certificate stating that the Company is not in default in the payment of the interest on any bonds then Outstanding hereunder and that none of the Defaults defined in Section 65 hereof has occurred and is continuing. In case the withdrawal of cash is, in whole or in part, based upon Property Additions (as permitted under the provisions of clause (1) of this Section), the Company shall, sub-

ject to the provisions of said clause (1), comply with all applicable provisions of this Indenture (including but not limited to the furnishing of the Engineers' Certificate provided for in subdivision (3) of Section 28 hereof and, in case the provisions of subdivision (4) of Section 28 hereof are applicable, the Independent Engineer's Certificate provided for in said subdivision (4) of Section 28 hereof) as if such Property Additions were made the basis of an application for the authentication and delivery of bonds thereon equivalent in principal amount to sixty per centum (60%) of the cash to be withdrawn on such basis; or in case the withdrawal of cash is, in whole or in part, based upon the right to the authentication and delivery of bonds (as permitted under the provisions of clause (2) of this Section) the Company shall comply with all applicable provisions of Section 26 or Section 29 hereof, as the case may be, relating to such authentication and delivery; except that in no such case shall the Company be required to comply with any earning requirements or to deliver to the Corporate Trustee any Resolution, Officers' Certificate, Net Earning Certificate or Opinion of Counsel such as is described in subdivisions (1), (2), (6) and (8) of Section 28 hereof.

Notwithstanding any of the other provisions of this Indenture,

(a) to the extent that any cash to be withdrawn under the provisions of this Section or of a Qualified Lien represents the proceeds of property that was not Funded Property released, taken by eminent domain or purchased by any governmental body or agency or its designee upon exercise of any right which it may have to purchase the same or designate a purchaser thereof or damaged or destroyed by fire, or represents payment on account of principal of, or consideration for the release of, obligations secured by purchase money mortgage which shall have been deposited with the Corporate Trustee or with the trustee or other holder of a Qualified Lien as the basis of the release of property that was not Funded Property, and the application for the withdrawal of such cash is based upon Property Additions (which shall never previously have been used

as the basis of the withdrawal of cash under subdivision (1) of this Section or under a Qualified Lien or as the basis of the release of property under the provisions of clause (b) of subdivision (4) of Section 59 hereof) acquired, made or constructed or to be acquired, made or constructed with such cash, or acquired, made or constructed in anticipation of the release of property or the withdrawal of cash (as evidenced by a statement to such effect in an Engineer's Certificate), then such Property Additions shall not have the status of Funded Property, except to the extent of any amount which shall, at the time such Property Additions were made the basis of such withdrawal of cash, have been deducted from the Cost or fair value of such Property Additions pursuant to the provisions of clause (A) of Section 4 hereof less any amount which shall then have been added thereto pursuant to the provisions of clause (B) of said Section 4 and except to the extent of any amount which shall then have been deducted in respect of Qualified Liens on such Property Additions pursuant to Section 26 hereof, and

(b) to the extent that any cash withdrawn, used or applied under the provisions of this Section or of a Qualified Lien shall have represented the proceeds of property that was not Funded Property released, taken by eminent domain or so purchased or damaged or destroyed by fire or shall have represented payment on account of principal of, or consideration for the release of, obligations secured by purchase money mortgage which shall have been deposited with the Corporate Trustee or the trustee or other holder of a Qualified Lien as the basis of the release of property that was not Funded Property,

(i) such cash shall no longer be deemed to be, or to have been at the time of such withdrawal, use or application, Funded Cash;

(ii) any Property Additions made the basis of such withdrawal of cash shall not be deemed to be Funded Property except to the extent of any amount which shall, at the time such Property Additions were made the basis of such withdrawal of cash, have been deducted from the Cost or fair value of such Property Additions pursuant to the provisions of

clause (A) of Section 4 hereof less any amount which shall then have been added thereto pursuant to the provisions of clause (B) of said Section 4, and except to the extent of any amount which shall then have been deducted in respect of Qualified Liens on such Property Additions pursuant to Section 26 hereof; and

(iii) any waiver of the right to the authentication and delivery of bonds, made the basis of such withdrawal of cash, shall be revoked and cease to be effective and shall no longer be deemed to have been made,

if the Company shall, within two years after the withdrawal, use or application of such cash, file with the Corporate Trustee such Officers' Certificates, Engineer's Certificates, Independent Engineer's Certificates, Opinions of Counsel and other papers (other than any Resolution, Net Earning Certificate or Opinion of Counsel such as is described in subdivisions (1), (6) and (8) of Section 28 hereof) as, under the provisions of Article V hereof, would entitle the Company, on the basis of Property Additions acquired, made or constructed subsequently to the receipt by the Corporate Trustee or the trustee or other holder of a Qualified Lien of such cash, to the authentication and delivery of bonds equal in principal amount to sixty per centum (60%) of such cash so withdrawn, used or applied, and the inclusion of such subsequently acquired Property Additions in any such Officers' Certificate, Engineer's Certificate, Independent Engineer's Certificate, Opinion of Counsel or other papers shall not make such subsequently acquired Property Additions Funded Property.

Any release of property or withdrawal of cash (representing the proceeds of insurance on or the release or condemnation of property) under this Article XI based upon the right to the authentication and delivery of any bond or fraction of a bond shall operate as a waiver by the Company of its right to the authentication and delivery of such bond or fraction of a bond and such bond or fraction of a bond may not thereafter be authenticated and delivered hereunder and any bond or Qualified Lien Bond which has been made the basis of any such right to the authentication and delivery of any bond or fraction of a bond so

waived shall be deemed to have been made the basis of a credit under this Article XI and all bonds purchased or redeemed by application of cash pursuant to the provisions of this Section shall be deemed to have been purchased or redeemed with Funded Cash; provided, however, that (notwithstanding the Company may have, as permitted by the provisions of clause (a) of subdivision (B) of Section 4 hereof, elected to have added any cash used or applied to the purchase or redemption of any or all such bonds), if at any time and from time to time thereafter the Company shall file with the Corporate Trustee an Officers' Certificate referring to such election and stating the Cost or fair value to the Company whichever is less, as shall be stated in an Engineer's Certificate or Independent Engineer's Certificate delivered to the Corporate Trustee of any (gross) Property Additions (acquired, made or constructed subsequent to the date of the receipt by the Corporate Trustee of such cash representing the proceeds of insurance on or the release or condemnation of property), which are not then Funded Property (without making any of the deductions and additions provided for in subsection (II) of Section 4 hereof) and which Property Additions the Company then elects to make the basis of such release of property or withdrawal of cash in lieu of an equal principal amount of bonds, the right to the authentication and delivery of which has theretofore been waived pursuant to the provisions of this Article XI, or which have been purchased or redeemed with cash (representing the proceeds of insurance on or release or condemnation of property); then such Property Additions shall thereupon be deemed to have been made the basis of the release of property or the withdrawal of cash, as the case may be, and then, and in that event, notwithstanding any other provisions of this Indenture, the Company's waiver made by such election of the right to the authentication and delivery of bonds in the aggregate principal amount specified in the Officers' Certificate filed pursuant to this proviso shall forthwith cease to be effective and the waiver of such right shall no longer be deemed to have been made or, as the case may be, bonds in the aggregate principal amount specified in the Officers' Certificate filed pursuant to this proviso shall forthwith cease to be deemed to

have been purchased or redeemed with Funded Cash (whether or not such cash shall have been deposited or applied pursuant to the provisions of Section 64 hereof); provided, further, that the aggregate principal amount of bonds the right to the authentication and delivery of which has been so waived and revoked plus the aggregate principal amount of bonds no longer so deemed to have been purchased or redeemed with Funded Cash pursuant to the provisions of this paragraph shall not exceed thirty per centum (30%) of the greatest principal amount of Bonds at any one time theretofore Outstanding hereunder.

In every case in which any Property Additions are certified for the purposes of the preceding paragraph, the Company shall comply with all applicable provisions of this Indenture (except subsection (II) of Section 4 hereof) as if such Property Additions were made the basis of an application for the authentication and delivery of bonds thereon (equivalent in principal amount to sixty per centum (60%) of the credit so to be based on such Property Additions), except that in no such case shall the Company be required to comply with any earning requirements or to deliver to the Corporate Trustee any Resolution, Officers' Certificate, Net Earning Certificate or Opinion of Counsel, such as is described in subdivisions (1), (2), (6) and (8) of Section 28 hereof.

Any obligation secured by purchase money mortgage received or to be received by the Corporate Trustee under any of the provisions of this Indenture in consideration of the release of any property may be released at any time upon payment by the Company to the Corporate Trustee of all or the unpaid portion of the principal of such obligation, provided, however, at any time after the Corporate Trustee shall have received on account of the principal of any obligations secured by purchase money mortgage on a specified property (from the Company, the obligor or otherwise), an amount in cash equal to the aggregate principal amount of such obligations to the extent made the basis of a credit in the application for the release from the Lien hereof of such property, the Corporate Trustee shall deliver to the

Company on the written request of the President or a Vice-President and the Treasurer or an Assistant Treasurer of the Company, the purchase money mortgage on such property and all obligations secured thereby then held by the Corporate Trustee including, but not limited to, any such obligations delivered to the Corporate Trustee as required by subdivision (4) of Section 59 hereof but not used as a credit thereunder.

The principal of and interest on any such obligations secured by purchase money mortgage held by the Corporate Trustee shall be collected by the Corporate Trustee as and when the same become payable. Unless the Company is in default in the payment of the interest on any of the bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, the interest received by the Corporate Trustee on any such obligations shall be paid over to the Company, and any payments received by the Corporate Trustee on account of the principal of any such obligations in excess of the amount of credit used by the Company in respect of such obligations upon the release of any property from the Lien hereof shall also be paid over to the Company.

The Corporate Trustee shall have and may exercise all the rights and powers of an owner of such obligations and of all substitutions therefor and, without limiting the generality of the foregoing, may collect and receive all insurance moneys payable to it under any of the provisions thereof and apply the same in accordance with the provisions thereof, may consent to extensions thereof at a higher or lower rate of interest, may join in any plan or plans of voluntary or involuntary reorganization or readjustment or rearrangement and may accept and hold hereunder new obligations, stocks or other securities issued in exchange therefor under any such plan. Any discretionary action which the Corporate Trustee may be entitled to take in connection with any such obligations or substitutions therefor shall be taken, so long as no Default as defined in Section 65 hereof shall exist, in accordance with the request of the Company, evidenced by a Resolution, and during

§62, Art. XI

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the existence of a Default as defined in Section 65 hereof in its own discretion.

Any bonds issued under this Indenture received by the Corporate Trustee pursuant to the provisions of this Section shall forthwith be canceled by the Corporate Trustee, and any Qualified Lien Bonds deposited with the Corporate Trustee, pursuant to the provisions of this Section shall be held by the Corporate Trustee subject to the provisions of Article IX hereof.

SECTION 62. Should any of the Mortgaged and Pledged Property be taken by exercise of the power of eminent domain or should any governmental body or agency, at any time, exercise any right which it may have to purchase or designate a purchaser of any part of the Mortgaged and Pledged Property, the Trustees or the Corporate Trustee shall, upon request of the Company, evidenced by a Resolution, release from the Lien hereof all the right, title and interest of the Trustees in and to the property so taken or purchased upon being furnished with an Opinion of Counsel to the effect that such property has been taken by exercise of the power of eminent domain, or purchased in the exercise of a right which a governmental body or agency had to purchase or designate a purchaser of the same. Such Opinion of Counsel shall state the amount of net proceeds received or to be received for such property so taken or purchased and the amount so stated shall be deemed to be the fair value of such property for the purpose of subdivision (b) of Section 100 hereof. An amount equal to the net proceeds of all property so taken or purchased (which proceeds shall, in either event, be required to be entirely in the form of cash) shall be paid over to the Corporate Trustee (unless the same shall have been paid or delivered to the trustee or other holder of a mortgage or other lien constituting a Qualified Lien or lien prior hereto, in accordance with the provisions thereof and a certificate of such trustee or other holder to that effect shall have been furnished to the Corporate Trustee), and (if paid over to the Corporate Trustee hereunder) may,

subject to the provisions of Section 64 hereof, thereafter be withdrawn, used or applied in the manner, to the extent and for the purposes and subject to the conditions provided in Section 61 hereof.

SECTION 63. In case the Mortgaged and Pledged Property shall be in the possession of a receiver or trustee, lawfully appointed, the powers hereinbefore conferred upon the Company with respect to the sale or other disposition of the Mortgaged and Pledged Property or the withdrawal of cash may be exercised, with the approval of the Corporate Trustee, by such receiver or trustee, notwithstanding the Company may be in default and any request, certificate, appointment or approval made or signed by such receiver or trustee for such purposes shall be as effective as if made by the Company or its Board of Directors or any of its officers or appointees in the manner herein provided; and if the Trustees or either of them shall be in possession of the Mortgaged and Pledged Property under any provision of this Indenture, then such powers may be exercised by the Trustees in their discretion notwithstanding the Company may be in default.

Notwithstanding the existence of a default in the payment of interest on any bonds Outstanding hereunder or the existence of a Default defined in Section 65 hereof, the Trustees, or the Corporate Trustee, in their or its discretion, may release from the Lien hereof any part of the Mortgaged and Pledged Property or permit the withdrawal of cash, upon compliance with the other conditions specified in this Article in respect thereof.

No purchaser in good faith of property purporting to have been released hereunder shall be bound to ascertain the authority of the Trustees, or either of them, to execute the release, or to inquire as to any facts required by the provisions hereof for the exercise of such authority; nor shall any purchaser or grantee of any property or rights permitted by this Article to be sold, granted, exchanged, dedicated or otherwise disposed of, be under obligation to ascertain or inquire into the authority of the Company to make any such sale, grant, exchange, dedication or other disposition.

ARTICLE XII.

Special Provision for Retirement of Bonds.

SECTION 64. (I) If during any twelve (12) months' period, any of the Mortgaged and Pledged Property is taken by the exercise of the power of eminent domain and/or any governmental body or agency exercises any rights which it may have to purchase or designate a purchaser of any part of such property and/or any of such property is sold by the Company to one or more Federal, State, County, Municipal or other governmental bodies or agencies or public or semi-public corporations, districts or authorities and/or any of such property is sold by the Company pursuant to the exercise by a governmental body or agency of its right to order the Company to divest itself of any of such property, with the result that (during such period) the Company receives or becomes entitled to receive (during such period or otherwise) proceeds, in cash and/or a principal amount of obligations secured by purchase money mortgage, aggregating not less than One Million Dollars (\$1,000,000), at a time or times when any bonds Outstanding hereunder are, by their express terms, redeemable by the application of cash deposited pursuant to the provisions of this Section, the Company covenants that (to the extent that any cash received by the Company for such property, or in payment on account of principal of such obligations, including cash proceeds from the disposition of any such obligations or of property received by the Company in exchange for any of such obligations, has not theretofore been applied to the purchase or redemption of bonds secured hereby, or is not paid or delivered by the Company to the trustee or other holder of a Qualified Lien or a lien prior hereto, under circumstances in which such cash may not be withdrawn and may not be applied for any purpose except to retire Qualified Lien Bonds or bonds secured by a lien prior hereto), the Company will deposit cash in an amount equal to the cash (less any taxes and expenses incidental to such taking or sale

§64(I) (cont.), Art. XII

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and the principal amount of bonds the right to the authentication and delivery of which pursuant to the provisions of Section 26 or Section 29 hereof shall have been waived as the basis of the release of said property or the basis of the withdrawal of the proceeds of the release of said property, and, at the option of the Company, evidenced by a Resolution, an amount not exceeding ten per centum (10%) of the proceeds of the property so taken, purchased or sold, as an arbitrary allowance for severance damage incident to such taking, purchase or sale, provided, however, the foregoing clause shall not be construed as relieving the Company from compliance with all applicable provisions of Article XI hereof in respect of such property or in respect of the proceeds thereof, including such ten per centum (10%) of the proceeds of such property) theretofore or then received by the Company for said property (including cash equivalent to any proceeds of said property theretofore withdrawn under the provisions of subdivision (1) of Section 61 hereof on the basis of Property Additions which cash shall for the purposes of this Indenture be deemed to be cash replaced—and including cash received on account of principal of such obligations as aforesaid) with the Corporate Trustee under the provisions of this Section and (to the extent that such cash is not paid or delivered to the trustee or other holder of a Qualified Lien or lien prior hereto, as aforesaid) will deposit, when and as received, all cash thereafter received for said property, including cash received on account of principal of such obligations as aforesaid, with the Corporate Trustee under the provisions of this Section (all of which deposits shall be deemed to have been made pursuant to the provisions of this Section), and, subject to Section 119 hereof, will (to the extent that any cash so deposited is not applied, within four months after the date deposited, to the purchase or redemption of bonds Outstanding hereunder, pursuant to the provisions of Article X hereof) irrevocably direct the Corporate Trustee to apply the cash so deposited with the Corporate Trustee to the redemption of bonds Outstanding hereunder pursuant to the provisions of Article X hereof to the extent that bonds then Outstanding hereunder are, by

§54(I), (II), Art. XII

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their express terms, redeemable by the application of cash deposited pursuant to the provisions of this Section.

For the purpose of this Section, cash at any time remaining on deposit with the Corporate Trustee representing payment to it on account of principal of any of such obligations secured by purchase money mortgage upon the property taken or sold as aforesaid, or representing consideration deposited by the Company in connection with the release of any of such obligations or representing amounts originally deposited pursuant to the provisions of Section 59 or Section 62 hereof by the Company in connection with the release of any property taken or sold as aforesaid, may, at the option of the Company (evidenced by a notice in writing signed by its President or a Vice-President and its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee), be deemed to have been deposited (as of the time of delivery of such notice) by the Company pursuant to the provisions of this Section and shall thereupon be credited against any amount required to be deposited by the Company pursuant to the provisions of this Section.

The Company shall in no event be required to deposit cash pursuant to the provisions of this Section nor shall any cash be required to remain on deposit pursuant to the provisions of this Section at a time when no bonds Outstanding hereunder are, by their express terms, redeemable with cash deposited pursuant to the provisions of this Section, and unless any such cash then on deposit is required to be held by the Corporate Trustee under some other provisions of this Indenture any cash remaining on deposit solely pursuant to the provisions of this Section shall be paid to the Company upon the written order of its President or a Vice-President and its Treasurer or an Assistant Treasurer.

(II) If the principal of the bonds hereby secured shall be declared due as provided in Section 67 hereof and if

§64(II) (cont.), Art. XII

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(a) the Corporate Trustee shall then hold any cash which shall be deemed to have been deposited pursuant to the provisions of this Section or the Company shall then be obligated to deposit cash pursuant to the provisions of this Section; or

(b) the Company shall then hold or be entitled to receive or the Corporate Trustee shall then hold any obligations secured by purchase money mortgage the proceeds of payment of which would (except for such declaration), if paid, be required to be deposited pursuant to this Section; or

(c) property of the Company shall have been taken by exercise of the power of eminent domain or proceedings for such taking shall have been commenced or are about to be commenced or the Company shall have sold or agreed to sell or shall then contemplate the sale of any of its property under circumstances which in any such case (assuming the completion of such taking or sale) would (except for such declaration) require the deposit of cash pursuant to the provisions of this Section or result in the receipt by the Company of obligations secured by purchase money mortgage, the proceeds of payment of which would (except for such declaration) be required to be deposited pursuant to the provisions of this Section;

then, to the extent that bonds then Outstanding would (except for such declaration) by their express terms be redeemable by the application of cash deposited pursuant to the provisions of this Section, the Corporate Trustee shall designate, in the manner provided in Section 52 hereof, such amount of bonds so redeemable as could be redeemed by the application of an amount of cash equal to the aggregate amount of cash and obligations (taken at their principal amount) referred to in clauses (a), (b) and (c) above, and the bonds so designated shall be deemed to have been called for redemption at the respective redemption prices then applicable in the case of the redemption of bonds with cash deposited pursuant to this Section and to have become due and payable by the Company at such redemption prices on the date upon which the principal thereof shall have been declared due and payable.

§64(III), Art. XII; §65, Art. XIII

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(III) The Company hereby irrevocably empowers the Corporate Trustee, in the event that any redemption is required pursuant to this Section, to give or cause to be given all requisite notices of redemption and to take all such action as may be necessary to effect such redemption.

Except as otherwise expressly provided in this Section, no cash deposited with the Corporate Trustee pursuant to this Section shall be withdrawn, used or applied for any purpose other than the purchase, payment or redemption of bonds Outstanding under this Indenture, but shall continue to be held by the Corporate Trustee until such time as such cash may be applied to the purchase, payment or redemption of bonds as permitted by this Section.

ARTICLE XIII

Remedies of Trustees and Bondholders Upon Default.

SECTION 65. The following events are hereby defined for all purposes of this Indenture (except where the term is otherwise defined for specific purposes) as "Defaults":

(a) Failure to pay the principal of any bond hereby secured when the same shall become due and payable, whether at maturity, as therein expressed, or by declaration or otherwise;

(b) Failure to pay interest upon any bond hereby secured for a period of sixty (60) days after such interest shall have become due and payable;

(c) Failure to pay interest upon or principal (whether at maturity as therein expressed or by declaration, or otherwise) of any Outstanding Qualified Lien Bonds continued beyond the period of grace, if any, specified in the Qualified Lien securing the same;

(d) Failure to pay any instalment of any fund required to be applied to the purchase or redemption of any of the bonds

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hereby secured for a period of sixty (60) days after the same shall have become overdue and payable;

(e) The expiration of a period of ninety (90) days following:

(1) the adjudication of the Company as a bankrupt by any court of competent jurisdiction;

(2) the entry of an order approving a petition seeking reorganization or arrangement of the Company upon the basis of insolvency or inability to pay debts as they mature under the Federal Bankruptcy Laws or any other applicable law or statute of the United States of America, or of any State thereof; or

(3) the appointment upon the basis of insolvency or inability to pay debts as they mature of a trustee or a receiver of all or substantially all of the property of the Company;

unless during such period such adjudication, order or appointment of a trustee or receiver shall be vacated or shall be stayed on appeal or otherwise or shall have otherwise ceased to continue in effect;

(f) The filing by the Company of a voluntary petition in bankruptcy or the making of an assignment for the benefit of creditors; the consenting by the Company to the appointment of a receiver or trustee of all or any part of its property upon the basis of insolvency or inability to pay debts as they mature; the filing by the Company of a petition or answer seeking reorganization or arrangement upon the basis of insolvency or inability to pay debts as they mature under the Federal Bankruptcy Laws, or any other applicable law or statute of the United States of America, or of any State thereof; or the filing by the Company of a petition to take advantage of any insolvency act; and

(g) The expiration of a period of ninety (90) days after the mailing by the Corporate Trustee to the Company of a written demand (citing this provision), or by the holders of fifteen per centum (15%) in principal amount of the bonds at the time

Outstanding hereunder (determined as provided in Section 71 hereof) to the Company and to the Corporate Trustee of a written demand, that the Company perform a specified covenant or agreement contained herein or in any indenture supplemental hereto or in any bond secured hereby, which specified covenant or agreement the Company shall have failed to perform prior to such mailing, unless the Company during such period shall have performed such specified covenant or agreement. The Corporate Trustee may, and, if requested in writing so to do by the holders of a majority in principal amount of the bonds then Outstanding, shall, make such demand.

SECTION 66. The Trustees and, if a separate or co-trustee is appointed pursuant to Section 103 hereof, such separate or co-trustee shall, within ninety (90) days after the occurrence thereof, give to the bondholders, in the manner and to the extent provided in subdivision (c) of Section 100 hereof, notice of all defaults known to the Trustees or to such separate or co-trustee, as the case may be, unless such defaults shall have been cured before the giving of such notice (the term "defaults" for the purposes of this Section being hereby defined to be the events specified in subdivisions (a), (b), (c), (d), (e), (f) and (g) of Section 65 hereof not including any periods of grace provided for in said subdivisions) but in the case of any default as specified in subdivision (g) of Section 65 hereof, no such notice shall be given until at least sixty (60) days after the occurrence thereof; provided that, except in the case of default in the payment of the principal of or interest on any of the bonds hereby secured, or in the payment of any sinking or purchase fund instalment, the Corporate Trustee shall be protected in withholding such notice if and so long as the board of directors, executive committee, or a trust committee of directors and/or Responsible Officers, of the Corporate Trustee in good faith determine that the withholding of such notice is in the

interests of the bondholders and the Co-Trustee shall be protected in withholding such notice if and so long as the Co-Trustee in good faith determines that the withholding of such notice is in the interests of the bondholders and the separate or co-trustee shall be protected in withholding such notice if and so long as such separate or co-trustee in good faith determines that the withholding of such notice is in the interest of the bondholders.

SECTION 67. Upon the occurrence of a Default as defined in Section 65 hereof, the Corporate Trustee may, and upon the written request of the holders of a majority in principal amount of the bonds then Outstanding (determined as provided in Section 71 hereof) shall, and the holders of twenty-five per centum (25%) in principal amount of the bonds at the time Outstanding hereunder may, by notice in writing given to the Company (and to the Corporate Trustee if such notice be given by bondholders) declare the principal of all of the bonds hereby secured and the interest accrued thereon immediately due and payable, and such principal and interest shall thereupon become and be immediately due and payable; subject, however, to the right of the holders of a majority in principal amount of all Outstanding bonds (determined as provided in Section 71 hereof), by written notice to the Company and to the Trustees, thereafter to annul such declaration and destroy its effect at any time before any sale hereunder, if, before any such sale, all covenants with respect to which Default shall have been made shall be fully performed or made good, and all arrears of interest upon all bonds Outstanding hereunder and the reasonable expenses and charges of the Trustees, their agents and (to the extent permitted by law) their attorneys, and all other indebtedness secured hereby, except the principal of any bonds not then due by their terms and except interest accrued on such bonds since the last interest payment date, shall be paid, or the amount thereof shall be paid to the Corporate Trustee for the benefit of those entitled thereto.

SECTION 68. Upon the occurrence of one or more Defaults, as defined in Section 65 hereof, the Company, upon demand of the Trustees or either of them, shall (if at the time such action shall be lawful and may then lawfully be demanded by the Trustees) forthwith surrender to the Corporate Trustee or to both the Corporate Trustee and the Co-Trustee, or to the Co-Trustee to the extent that the Corporate Trustee is not legally qualified to take possession, as it or they may demand, the actual possession of, and (if at the time such action shall be lawful) the Corporate Trustee, or the Corporate Trustee and the Co-Trustee, or the Co-Trustee to the extent that the Corporate Trustee is not legally qualified to act in the premises, as shall be specified in such demand, by such officer or agent as it or they may appoint, may take possession of, all the Mortgaged and Pledged Property (with the books, papers and accounts of the Company) and hold, operate and manage the same, and from time to time make all needful repairs and such extensions, additions and improvements as to the Corporate Trustee, or the Corporate Trustee and the Co-Trustee, or the Co-Trustee to the extent that the Corporate Trustee is not legally qualified to act in the premises, shall seem wise; and receive the tolls, rents, revenues, issues, earnings, income, products and profits thereof, and out of the same pay all proper costs and expenses of so taking, holding, managing and operating the same, including reasonable compensation to the Trustees, their agents and (to the extent permitted by law) their attorneys, and any charges of the Trustees hereunder, and any taxes and assessments and other charges prior to the Lien of this Indenture which the Trustee or Trustees in possession may deem it wise to pay, and all expenses of such repairs, extensions, additions and improvements, and apply the remainder of the moneys so received by the Corporate Trustee, or the Corporate Trustee and the Co-Trustee, or the Co-Trustee to the extent that the Corporate Trustee is not legally qualified to act in the premises, subject to the provisions of Section 76 hereof with respect to extended, transferred or pledged coupons or claims for interest, first to the payment of the instalments of interest

which are due and unpaid, in the order of their maturity, and next, if the principal of any said bonds is due, to the payment of the principal and accrued interest thereon at the same rates as are expressed in the bonds pro rata without any preference or priority whatever, except as aforesaid. Whenever all that is due upon such bonds and instalments of interest and under any of the terms of this Indenture, shall have been paid and all Defaults, as defined in Section 65 hereof, made good, the Trustee or Trustees in possession shall surrender possession to the Company, its successors or assigns; the same right of entry, however, to exist upon any subsequent Default, as defined in Section 65 hereof.

SECTION 69. Upon the occurrence of one or more Defaults, as defined in Section 65 hereof, the Trustees, by such officer or agent as they may appoint, with or without entry, may, if at the time such action shall be lawful, sell all the Mortgaged and Pledged Property as an entirety, or in such parcels as the holders of a majority in principal amount of the bonds Outstanding hereunder (determined as provided in Section 71 hereof) shall in writing request, or in the absence of such request, as the Trustees may determine, at public auction, at some convenient place in the City of Portland, Oregon, or such other place or places as may be required by law, having first given notice of such sale by publication in at least one Daily Newspaper, printed in the English language, and of general circulation in the City of Portland, Oregon (if there be such a Daily Newspaper), once on at least four different days preceding such sale, the first publication to be made not less than twenty (20) days prior to the date of such sale, and by like publication in at least one Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, and any other notice which may be required by law, and from time to time may (to the extent permitted by law) adjourn such sale in their discretion by announcement at the time and place fixed for such sale without further notice, and upon such sale may make

and deliver to the purchaser or purchasers a good and sufficient instrument or instruments of conveyance, assignment or transfer for the same, which sale shall, to the extent then permitted by law, be a perpetual bar, both at law and in equity, against the Company and all persons, firms and corporations lawfully claiming or who may claim by, through or under it.

SECTION 70. In case of the breach of any of the covenants or conditions of this Indenture, the Trustees shall have the right and power to take appropriate judicial proceedings for the enforcement of their rights and the rights of the bondholders hereunder. In case of a Default, as defined in Section 65 hereof, the Trustees may either after entry, or without entry, proceed by suit or suits at law or in equity to enforce payment of the bonds then Outstanding hereunder and to foreclose this Indenture and to sell the Mortgaged and Pledged Property under the judgment or decree of a court or courts of competent jurisdiction.

No remedy by the terms of this Indenture conferred upon or reserved to the Trustees or either of them (or to the bondholders), is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and shall be in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or by statute.

No delay or omission to exercise any right or power accruing upon any Default, as defined in Section 65 hereof, shall impair any such right or power or shall be construed to be a waiver of any such Default or acquiescence therein; and every such right and power may be exercised from time to time and as often as may be deemed expedient.

No waiver of any Default, as defined in Section 65 hereof shall extend to or shall affect any subsequent default or shall impair any rights or remedies consequent thereon.

SECTION 71. The holders of not less than a majority in principal amount of the bonds at the time Outstanding hereunder may direct the time, method, and place of conducting any proceeding for any remedy available to the Trustees, or either of them, or exercising any trust or power conferred upon the Trustees, or either of them, provided, however, that such direction shall not be otherwise than in accordance with the provisions of law and this Indenture and that, subject to the provisions of Sections 88 and 89 hereof, the Trustees shall have the right to decline to follow any such direction if the Corporate Trustee in good faith shall by Responsible Officers determine that the action or proceeding so directed would involve the Trustees or either of them in personal liability or be unjustifiably prejudicial to nonassenting bondholders or that they will not be sufficiently indemnified for any expenditures in any action or proceeding so directed.

For the purposes of this Section and of Sections 65, 67, 69, 89, 101, 102, 108, and 122 hereof, and for the purpose of waiving, in accordance with any of the provisions of Section 113 hereof any past Default, defined in Section 65 hereof, of the Company and the consequences thereof, in determining whether the holders of the required percentage of the principal amount of bonds have concurred or participated in any direction or consent, (a) bonds for the purchase of which money in the necessary amount shall have been deposited with or shall then be held by the Corporate Trustee with irrevocable direction to apply the same to the purchase thereof shall be deemed Outstanding and (b) bonds owned by the Company, or by any person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company (unless all bonds at the time Outstanding hereunder are then so owned), shall be disregarded, except that for the purpose of determining whether the Trustees, or either of them, shall be protected in relying on any such direction or consent, only bonds which the Trustees know, or such Trustee knows, are so owned, shall be so disregarded. Bonds so owned which have

been pledged in good faith may be regarded as Outstanding for the purposes of this paragraph, if the pledgee shall establish to the satisfaction of the Trustees or the Corporate Trustee the pledgee's right to vote such bonds and that the pledgee is not a person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company. In case of a dispute as to such right, any decision by the Trustees, or either of them, taken upon the advice of counsel shall be full protection to the Trustees.

SECTION 72. In case of a Default, as defined in Section 65 hereof, and upon the filing of a bill in equity or other commencement of judicial proceedings to enforce the rights of the Trustees and of the bondholders under this Indenture, the Trustees shall be entitled, as a matter of right (to the extent that such right is enforceable under applicable law) to the appointment of a receiver or receivers of the Mortgaged and Pledged Property, and of the tolls, rents, revenues, issues, earnings, income, products and profits thereof, pending such proceedings, with such powers as the court making such appointment shall confer, whether or not the Mortgaged and Pledged Property shall be adequate to satisfy the bonds then Outstanding.

SECTION 73. Upon any sale being made either under the power of sale hereby given or under judgment or decree in any judicial proceedings for the foreclosure or otherwise for the enforcement of this Indenture, the principal of all bonds then secured hereby, if not previously due, shall become and be immediately due and payable.

SECTION 74. Upon any sale made either under the power of sale hereby given or under judgment or decree in any judicial proceedings for foreclosure or otherwise for the enforcement of this Indenture, any bondholder or bondholders may bid for and purchase the Mortgaged and Pledged Property or any part thereof and upon compliance with the terms of sale may hold, retain and possess and dispose of such

property in his, their or its own absolute right without further accountability, and any purchasers at any such sale may, in paying the purchase money, turn in any of the bonds Outstanding hereunder and coupons or claims for interest outstanding hereunder in lieu of cash to the amount which shall, upon distribution of the net proceeds of such sale, be payable thereon, subject, however, to the provisions of Section 76 hereof with respect to extended, transferred or pledged coupons or claims for interest. Said bonds and coupons, in case the amounts so payable thereon shall be less than the amount due thereon, shall be returned to the holders thereof after being appropriately stamped to show partial payment.

SECTION 75. Upon any sale made either under the power of sale hereby given or under judgment or decree in any judicial proceedings for the foreclosure or otherwise for the enforcement of this Indenture, the receipt of the Trustees or of the officer making such sale shall be a sufficient discharge to the purchaser or purchasers at any sale for his or their purchase money and such purchaser or purchasers, his or their assigns or personal representatives, shall not, after paying such purchase money and receiving such receipt of the Trustees or of such officer therefor, be obliged to see to the application of such purchase money, or be in anywise answerable for any loss, misapplication or non-application thereof.

Any sale made either under the power of sale hereby given or under judgment or decree in any judicial proceedings for foreclosure or otherwise for the enforcement of this Indenture shall, if and to the extent then permitted by law, operate to divest all right, title, interest, claim and demand whatsoever, either at law or in equity, of the Company of, in and to the property so sold, and be a perpetual bar both at law and in equity against the Company, its successors and assigns and against any and all persons, firms or corporations claiming or who may claim the property sold, or any part thereof, from, through or under the Company, its successors or assigns.

SECTION 76. The proceeds of any sale made either under the power of sale hereby given, or under judgment or decree in any judicial proceedings for the foreclosure or otherwise for the enforcement of this Indenture, together with any other amounts of cash which may then be held by the Trustees or either of them, as part of the Mortgaged and Pledged Property, shall be applied, as follows:

First.—To the payment of all taxes, assessments, governmental charges, Qualified Liens and liens prior to the Lien of this Indenture, except those subject to which such sale shall have been made, and of all the costs and expenses of such sale, including reasonable compensation to the Trustees, their agents and (to the extent permitted by law) their attorneys, and of all other sums payable to the Trustees hereunder by reason of any expenses or liability incurred (in good faith and without negligence by the Trustees) or advances made in connection with the management or administration of the trusts hereby created;

Second.—To the payment in full of the amounts then due and unpaid for principal, premium and interest upon the bonds then secured hereby; and in case such proceeds shall be insufficient to pay in full the amounts so due and unpaid, then to the payment thereof ratably, with interest on the overdue principal at the rates expressed in the bonds, without preference or priority as to principal, premium or interest, or of any instalment of interest over any other instalment of interest; provided, however, that if the time for the payment of any coupon or claim for interest upon any of the bonds secured hereby shall have been extended (except pursuant to action taken under Article XIX hereof) by or with the consent of the Company, or if any thereof at or after maturity shall have been transferred or pledged separate from the bond to which they relate, such coupons or claims for interest shall not be entitled in case of Default hereunder to the benefit or security of this Indenture except after the prior payment in full of the principal and premium, if any, of all bonds issued hereunder and then secured hereby and of all coupons and claims for interest on such bonds

the payment of which has not been so extended, or not so transferred or pledged; but the foregoing provisions of this paragraph *Second* shall not be applicable to any coupon or claim for interest the time for payment of which shall have been extended, if such extension be pursuant to a plan proposed by the Company to all holders of any one or more series of bonds then Outstanding and accepted by and binding upon the holder of such coupon or claim for interest; and

Third.—Subject to the provisions of subsection (II) of Section 64 hereof, any surplus thereof remaining to the Company, its successors or assigns or to it, him or them whosoever may be lawfully entitled to receive the same.

SECTION 77. In case of a Default, as defined in Section 65 hereof, to the extent that such rights may then lawfully be waived, neither the Company nor any one claiming through or under it shall or will set up, claim, or seek to take advantage of any appraisement, valuation, stay, extension or redemption laws now or hereafter in force in any locality where any of the Mortgaged and Pledged Property may be situated, in order to prevent or hinder the enforcement or foreclosure of this Indenture, or the absolute sale of the Mortgaged and Pledged Property, or the final and absolute putting into possession thereof, immediately after such sale, of the purchaser or purchasers thereat, but the Company, for itself and all who may claim through or under it, hereby waives, to the extent that it lawfully may do so, the benefit of all such laws and all right of appraisement and redemption to which it may be entitled under the laws of any State where any of the Mortgaged and Pledged Property may be situated. The Company, for itself and all who may claim through or under it, waives, to the extent that it lawfully may do so, any and all right to have the estate comprised in the security intended to be created hereby marshalled upon any foreclosure of the Lien hereof, and agrees that any court having jurisdiction to foreclose such Lien may sell the Mortgaged and Pledged Property as an entirety.

SECTION 78. The Company covenants that if default shall be made in the payment of the principal of any bond hereby secured when the same shall become payable, whether by the maturity of said bond or otherwise or in the case of a default in the payment of the interest on any bond for a period of sixty (60) days after such interest shall have become due and payable, then upon demand of the Corporate Trustee, the Company will pay to the Trustees, for the benefit of the holders of the bonds and coupons then secured hereby, the whole amount due and payable on all such bonds and coupons for principal, premium, if any and interest, with interest upon the overdue principal at the same rate borne by the bonds which are overdue.

In the case of a default in payment of the principal of any bond, when the same shall become due and payable, or in the case of a default in the payment of the interest on any bond for a period of sixty (60) days after such interest shall have become due and payable, the Trustees may recover judgment, in their own names and as trustees of an express trust, against the Company for the whole amount of such principal, interest and any premium remaining unpaid together with interest upon the overdue principal at the same rate borne by the bonds which are overdue.

The Trustees or either of them may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustees or either of them and of the bondholders allowed in any judicial proceedings relative to the Company, or its creditors, or its property. In case of any receivership, insolvency, bankruptcy, reorganization or other similar proceedings affecting the Company or its property, the Trustees, irrespective of whether the principal of the bonds shall then be due and payable and irrespective of whether the Trustees shall have made any demand for such payment, shall be entitled and empowered either in their own names or as trustees of an express trust or as attorneys in fact for the holders of the bonds and coupons, or in any one or more of such capacities, to file a proof of claim for the whole amount of prin-

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principal and interest (with interest upon such overdue principal at the same rate borne by the bonds which are overdue) which may be or become owing and unpaid in respect of the bonds and for any additional amount which may be or become payable by the Company hereunder, without regard to or deduction for any amount which may have been or which may thereafter be received, collected or realized by the Trustees from or out of the Mortgaged and Pledged Property or any part thereof or from or out of the proceeds thereof or any part thereof; but nothing in this Indenture contained shall authorize the Trustees or either of them to accept or consent to any composition or plan of reorganization on behalf of any bondholder.

The Trustees, to the extent permitted by law, shall be entitled to sue and recover judgment and/or to file and prove such claim as aforesaid either before or after or during the pendency of any proceedings for the enforcement of the Lien of this Indenture upon the Mortgaged and Pledged Property, and in case of a sale of any of the Mortgaged and Pledged Property and of the application of the proceeds of sale to the payment of the debt hereby secured, the Trustees in their own names and as trustees of an express trust shall be entitled to enforce payment of and to receive all amounts then remaining due and unpaid upon any and all the bonds and coupons then Outstanding hereunder, for the benefit of the holders thereof, and the Trustees shall be entitled to recover judgment for any portion of the debt remaining unpaid, with interest. No recovery of any such judgment by the Trustees and no levy of any execution upon any such judgment upon any of the Mortgaged and Pledged Property or upon any other property, shall in any manner or to any extent affect the Lien of this Indenture upon the Mortgaged and Pledged Property or any part thereof, or any rights, powers or remedies of the Trustees hereunder, or any lien, rights, powers or remedies of the holders of the said bonds, but such lien, rights, powers and remedies of the Trustees and of the bondholders shall continue unimpaired as before.

Any moneys thus collected or received by the Trustees under this Section shall be applied by them first, to the payment of their expenses, disbursements and compensation and the expenses, disbursements and compensation of their agents and (to the extent permitted by law) their attorneys, and, second, toward payment of the amounts then due and unpaid upon such bonds and coupons in respect of which such moneys shall have been collected, ratably and without preference or priority of any kind (subject to the provisions of Section 76 hereof with respect to extended, transferred or pledged coupons and claims for interest), according to the amounts due and payable upon such bonds and coupons, respectively, at the date fixed by the Corporate Trustee for the distribution of such moneys, with interest upon overdue principal at the same rate borne by the bonds which are overdue, upon presentation of the several bonds and coupons and upon stamping such payment thereon, if partly paid, and upon surrender thereof, if fully paid.

SECTION 79. All rights of action (including the right to file proofs of claim) under this Indenture or under any of the bonds or coupons may be enforced by the Trustees, or either of them, without the possession of any of the bonds or coupons or the production thereof in any trial or other proceeding relating thereto, and any such suit or proceeding instituted by the Trustees, or either of them, shall be brought in their names as Trustees, or in its or his name as Trustee, and any recovery of judgment shall be for the equal benefit of the holders of the Outstanding bonds and coupons, subject to the provisions of Section 76 hereof with respect to extended, transferred or pledged coupons and claims for interest.

In any proceeding brought by the Trustees, or either of them (including also any proceeding involving the interpretation of any provision of this Indenture to which the Trustees or either of them shall be parties), such Trustees or Trustee shall be held to represent all the holders of the bonds and coupons secured by this Indenture, and it shall not be necessary to make such holders of the bonds and coupons parties to any such proceedings.

SECTION 80. No holder of any bond or coupon shall have any right to institute any suit, action or proceeding in equity or at law for the foreclosure of this Indenture or for the execution of any trust hereof or for the appointment of a receiver or any other remedy hereunder unless such holder shall have previously given to the Trustees written notice of a Default, as defined in Section 65 hereof, nor unless also the holders of twenty-five per centum (25%) in principal amount of the bonds then Outstanding hereunder shall have made written request to the Trustees and shall have offered them reasonable opportunity either to proceed to exercise the powers hereinbefore granted or to institute such suit, action or proceeding in their own names and shall have offered to the Trustees security and indemnity satisfactory to the Trustees against the costs, expenses and liabilities to be incurred thereby without negligence or bad faith, and the Trustees shall have declined to take such action or shall have failed so to do within sixty (60) days thereafter; it being understood and intended that no one or more holders of the bonds or coupons shall have any right in any manner whatsoever to affect, disturb or prejudice the Lien of this Indenture by his or their action or to enforce any right hereunder except in the manner herein provided, and that all proceedings at law or in equity shall be instituted, had and maintained in the manner herein provided and for the equal benefit of all holders of Outstanding bonds and coupons. Such notification, request and offer of indemnity are hereby declared, at the option of the Trustees, but subject to the provisions of Sections 88 and 89 hereof, to be conditions precedent to the execution by them of the powers and trusts of this Indenture and to the exercise by them of any action or cause of action or remedy hereunder.

Notwithstanding any other provision of this Indenture, the right of any holder of any bond to receive payment of the principal of and interest on such bond, on or after the respective due dates expressed in such bond, or to institute suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of such holder.

SECTION 81. The Company may waive any period of grace provided for in this Article.

In case the Trustees shall have proceeded to enforce any right under this Indenture by foreclosure, entry or otherwise, and such proceedings shall have been discontinued or abandoned for any reason, or shall have been determined adversely to the Trustees, then and in every such case the Company and the Trustees shall be restored to their former positions and rights hereunder with respect to the Mortgaged and Pledged Property, and all rights, remedies and powers of the Trustees shall continue as if no such proceedings had been taken.

ARTICLE XIV.

Evidence of Rights of Bondholders and Ownership of Bonds.

SECTION 82. Any request, declaration or other instrument, which this Indenture may require or permit to be signed and executed by the bondholders, may be in any number of concurrent instruments of similar tenor, and shall be signed or executed by such bondholders in person or by attorney appointed in writing. Proof of the execution of any such request or other instrument, or of a writing appointing any such attorney, or of the holding by any person of the bonds or coupons appertaining thereto, shall be sufficient (subject, in so far as the Trustees are concerned, to the provisions of Section 88 and Section 89 hereof) for any purpose of this Indenture (except as otherwise herein expressly provided) if made in the following manner:

(a) The fact and date of the execution by any person of such request or other instrument or writing may be proved by a certificate acknowledged before a Notary Public or other officer authorized to take acknowledgments;

(b) The amount of bonds transferable by delivery held by any person executing such request or other instrument as a bondholder, and the series and serial numbers thereof, held by such person, and the date of his holding the same, may be proved by

a certificate executed by any trust company, bank, banker or other depository wherever situated, if such certificate shall be deemed by the Corporate Trustee to be satisfactory, showing that at the date therein mentioned such person had on deposit with such depository the bonds described in such certificate. The Trustees or either of them may nevertheless in their discretion require further proof in cases where they deem further proof desirable. The ownership of registered bonds shall be proved by the registry books.

Any request, consent or vote of the owner of any bond shall bind all future holders and owners of said bond or of any bond delivered by the Company in exchange or substitution for said bond in respect of anything done or suffered by the Company or the Trustees in pursuance thereof.

SECTION 83. The Company and the Trustees may deem and treat the bearer of any temporary or coupon bond Outstanding hereunder, which shall not at the time be registered as to principal as hereinbefore authorized, and the bearer of any coupon for interest on any such bond, whether such bond shall be registered or not, as the absolute owner of such bond or coupon, as the case may be, whether or not such bond or coupon shall be overdue, for the purpose of receiving payment thereof or on account thereof and for all other purposes, and neither the Company nor the Trustees shall be affected by any notice to the contrary.

The Company and the Trustees may deem and treat the person in whose name any fully registered bond Outstanding hereunder shall be registered upon the books of the Company, as herein authorized, as the absolute owner of such bond for the purpose of receiving payment of or on account of the principal of and interest and premium, if any, on such bond and for all other purposes, and they may deem and treat the person in whose name any coupon bond shall be so registered as to principal as the absolute owner thereof for the purpose of receiving payment of or on account of the principal thereof and for all other pur-

poses, except to receive payment of interest represented by outstanding coupons; and all such payments so made to any such registered owner, or upon his order, shall be valid and effectual to satisfy and discharge the liability upon such bond to the extent of the sum or sums so paid, and neither the Company nor the Trustees shall be affected by any notice to the contrary.

Neither the Company nor the Trustees shall be bound to recognize any person as the holder of a bond Outstanding under this Indenture unless and until his bond is submitted for inspection, if required, except as may otherwise be provided by regulations made under Section 109 hereof, and his title thereto satisfactorily established, if disputed.

ARTICLE XV.

Immunity of Incorporators, Subscribers to the Capital Stock, Stockholders, Officers and Directors.

SECTION 84. No recourse under or upon any obligation, covenant or agreement contained in this Indenture (including any indenture supplemental hereto) or in any bond or coupon hereby secured, or because of the creation of any indebtedness hereby secured, shall be had against any incorporator or any past, present or future subscriber to the capital stock, stockholder, officer or director of the Company or of any predecessor or successor corporation, as such, either directly or through the Company or any predecessor or successor corporation, under any rule of law, statute or constitution or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise; it being expressly agreed and understood that this Indenture and the obligations hereby secured are solely corporate obligations, and that no such personal liability shall attach to, or be incurred by, such incorporators, subscribers to the capital stock, stockholders, officers or directors of the Company or of any predecessor or successor corporation, or any of them, as such, because of the incurring of the indebtedness hereby authorized, or under or by reason of any of the obligations, covenants

or agreements contained in this Indenture or in any of the bonds or coupons hereby secured, or implied therefrom, and that any and all such personal liability of every name and nature, and any and all such rights and claims against every such incorporator, subscriber to the capital stock, stockholder, officer or director, as such, whether arising at common law or in equity, or created by rule of law, statute, constitution or otherwise, are expressly released and waived as a condition of, and as part of the consideration for, the execution of this Indenture and the issue of the bonds and interest obligations secured hereby.

ARTICLE XVI.

Effect of Merger, Consolidation, Etc.—Further Provisions for Retirement of Bonds.

SECTION 85. Nothing in this Indenture shall prevent any consolidation of the Company with, or merger of the Company into, any corporation having corporate authority to carry on any of the businesses mentioned in the first sentence of Section 4 of this Indenture, or any conveyance, transfer or lease, subject to the Lien of this Indenture, of all or substantially all of the Mortgaged and Pledged Property as an entirety to any corporation lawfully entitled to acquire or lease or operate the same; provided, however, and the Company covenants and agrees, that such consolidation, merger, conveyance, transfer or lease shall be upon such terms as fully to preserve and in no respect to impair the Lien or security of this Indenture, or any of the rights or powers of the Trustees or the bondholders hereunder; and provided, further, that any such lease shall be made expressly subject to immediate termination by the Company or by the Trustees at any time during the continuance of a Default, as defined in Section 65 hereof, and also by the purchaser of the property so leased at any sale thereof hereunder, whether such sale be made under the power of sale hereby conferred or under judicial proceedings; and provided, further, that, upon any such consolidation, merger, conveyance or transfer, or upon any such

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lease the term of which extends beyond the date of maturity of any of the bonds secured hereby, the due and punctual payment of the principal and interest of all said bonds according to their tenor and the due and punctual performance and observance of all the covenants and conditions of this Indenture to be kept or performed by the Company shall be expressly assumed by an instrument in writing executed and delivered to the Trustees by the corporation formed by such consolidation or into which such merger shall have been made, or acquiring all or substantially all the Mortgaged and Pledged Property as an entirety, as aforesaid, or by the lessee under any such lease the term of which extends beyond the date of maturity of any of the bonds secured hereby.

SECTION 86. In case the Company, as permitted by Section 85 hereof, shall be consolidated with or merged into any other corporation or shall convey or transfer, subject to the Lien of this Indenture, all or substantially all the Mortgaged and Pledged Property as an entirety, the successor corporation formed by such consolidation, or into which the Company shall have been merged, or which shall have received a conveyance or transfer as aforesaid—upon executing with the Trustees and causing to be recorded an indenture whereby such successor corporation shall assume and agree to pay, duly and punctually, the principal of and interest on the bonds issued hereunder in accordance with the provisions of said bonds and coupons and this Indenture, and shall agree to perform and fulfill all the covenants and conditions of this Indenture to be kept or performed by the Company—shall succeed to and be substituted for the Company with the same effect as if it had been named herein, and shall have and may exercise under this Indenture the same powers and rights as the Company, and (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing general powers and rights) such successor corporation thereafter may cause to be executed, authenticated and delivered, either in its own name or in the name of Portland Gas & Coke Company, as its name is now or shall then exist, in respect of

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property of the character defined in Section 4 hereof, as Property Additions, such bonds as could or might have been executed, issued and delivered by the Company had it acquired such property of such character by purchase on or after the date of such consolidation, merger, conveyance or transfer, and had such consolidation, merger, conveyance or transfer not occurred, and upon the order of such successor corporation in lieu of the Company, and subject to all the terms, conditions and restrictions in this Indenture prescribed, concerning the authentication and delivery of bonds, the Corporate Trustee shall authenticate and deliver any bonds delivered to it for authentication which shall have been previously signed by the proper officers of the Company, and such bonds as the successor corporation shall thereafter, in accordance with the provisions of this Indenture, cause to be executed and delivered to the Corporate Trustee for such purpose, and such successor corporation shall also have and may exercise in respect of the property of such character, and subject to all the terms, conditions and restrictions in this Indenture prescribed applicable thereto, whether as to withdrawal of cash, release of property, credit under Section 39 or Section 40 hereof, or otherwise, the same powers and rights which the Company might or could exercise had it acquired the property of such character by purchase on or after the date of such consolidation, merger, conveyance or transfer and had such consolidation, merger, conveyance or transfer not occurred. All the bonds so issued or delivered by the Company shall in all respects have the same legal right and security as the bonds theretofore issued or delivered in accordance with the terms of this Indenture as though all of said bonds had been authenticated and delivered at the date of the execution hereof. As a condition precedent to the execution by such successor corporation and the authentication and delivery by the Corporate Trustee of any such additional bonds or the withdrawal of cash or release of property under any of the provisions of this Indenture or the taking of a credit under Section 39 or Section 40 hereof, on the basis of property of the character defined in this Indenture as Property Addi-

tions acquired, made or constructed by the successor corporation or by any corporation with which the Company or any successor corporation may be so consolidated or into which the Company or any successor corporation may be so merged or to which the Company or any successor corporation may make any such conveyance, the indenture with the Trustees to be executed and caused to be recorded by the successor corporation as in this Section provided, or a subsequent indenture, shall contain a conveyance or transfer and mortgage in terms sufficient to subject such property to the Lien hereof; and provided further that the lien created thereby and the lien thereon shall have similar force, effect and standing as the Lien of this Indenture would have if the Company should not be consolidated with or merged into such other corporation or should not convey or transfer, subject to this Indenture, all or substantially all the Mortgaged and Pledged Property as an entirety, as aforesaid, to such successor corporation, and should itself on or after the date of such consolidation, merger, conveyance or transfer, acquire or construct such property, and in respect thereof should request the authentication and delivery of bonds or the withdrawal of cash or the release of property under the provisions of this Indenture or take a credit under Section 39 or Section 40 hereof.

SECTION 87. (I) In case the Company, as permitted by Section 85 of this Indenture, shall be consolidated with or merged into any other corporation, or shall convey or transfer, subject to the Lien of this Indenture, all or substantially all the Mortgaged and Pledged Property as an entirety as aforesaid, neither this Indenture nor the indenture with the Trustees to be executed and caused to be recorded by the successor corporation as in Section 86 hereof provided shall, unless such indenture shall otherwise provide, become or be or be required to become or be a lien upon any of the properties or franchises then owned or thereafter acquired by the successor corporation (by purchase, consolidation, merger, donation, construction, erection or in any other way) except (a) those acquired by it from the Company, and improve-

ments, extensions and additions thereto and renewals and replacements thereof, (b) the property made and used by the successor corporation as the basis under any of the provisions of this Indenture for the authentication and delivery of additional bonds or the withdrawal of cash or the release of property or a credit under Section 39 or Section 40 hereof, and (c) such franchises, repairs and additional property as may be acquired, made or constructed by the successor corporation (1) to maintain, renew and preserve the franchises covered by this Indenture, or (2) to maintain the property mortgaged and intended to be mortgaged hereunder as an operating system or systems in good repair, working order and condition, or (3) in rebuilding or renewal of property, subject to the Lien hereof, damaged or destroyed, or (4) in replacement of or substitution for machinery, apparatus, equipment, mains, pipe, frames, towers, poles, wire, tools, implements and furniture, subject to the Lien hereof, which shall have become old, inadequate, obsolete, worn out, unfit, unadapted, unserviceable, undesirable or unnecessary for use in the operation of the property mortgaged and intended to be mortgaged hereunder.

(II) In case the Company, as permitted by Section 85 of this Indenture, shall be consolidated with or merged into any other corporation, or shall convey or transfer, subject to the Lien of this Indenture, all or substantially all of the Mortgaged and Pledged Property as an entirety, and the plant account of the resulting or successor corporation immediately after such consolidation, merger, conveyance or transfer represented by assets other than those acquired from the Company, shall be not less than Five Million Dollars (\$5,000,000), then the resulting or successor corporation may, at its option, at any time within twelve (12) months subsequent to the date of such consolidation, merger, conveyance or transfer, deposit with the Corporate Trustee under the provisions of this Section an amount in cash to be held as part of the Mortgaged and Pledged Property and applied subject to the provisions of this Section, provided, however, that the amount of the cash so

deposited together with any other cash then held by the Corporate Trustee shall be not less than the amount necessary to redeem all bonds Outstanding under this Indenture.

(III) If one or more Federal, State, County, Municipal or other governmental bodies or agencies or public or semi-public corporations, districts or authorities shall acquire seventy per centum (70%) or more of the issued and then outstanding shares of capital stock of the Company of all classes not having preference over any other class of stock either as to payment of dividends or on liquidation, as a bona fide step precedent to dissolution of the Company, the Company may, at its option, at any time (within twelve (12) months subsequent to the date on which one or more of such bodies, agencies, corporations, districts or authorities, acquired such capital stock of the Company), deposit cash with the Corporate Trustee to be held as part of the Mortgaged and Pledged Property and applied subject to the provisions of this Section, provided, however, that the amount of cash so deposited together with any other cash then held by the Corporate Trustee shall be not less than the amount necessary to redeem all bonds Outstanding hereunder.

(IV) If, by exercise of the option specified in either subsection (II) or subsection (III) of this Section, cash for the redemption of bonds shall be deposited in the required amount, the Corporate Trustee shall as soon as may be practicable thereafter apply such cash together with any other cash then held by the Corporate Trustee to the redemption of all bonds then Outstanding hereunder in the manner provided in Article X hereof. In the event that bonds are redeemed as provided in this Section, all cash then deposited pursuant to this Section and all other cash then held by the Corporate Trustee under any provisions of this Indenture, shall, for the purpose of determining the redemption prices of bonds, be deemed to have been deposited pursuant to this Section.

ARTICLE XVII.

Concerning the Trustees.

SECTION 88. The Corporate Trustee shall at all times be a bank or trust company eligible under Section 35 hereof and have a combined capital and surplus of not less than Five Million Dollars (\$5,000,000). If the Corporate Trustee publishes reports of condition at least annually, pursuant to law or to the requirements of any supervising or examining authority referred to in Section 35 hereof, then for the purposes of this Section the combined capital and surplus of the Corporate Trustee shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

Any Co-Trustee appointed in succession to the Original Co-Trustee shall always be an individual, a citizen of the United States of America, or a bank or trust company having a combined capital and surplus of not less than One Hundred and Fifty Thousand Dollars (\$150,000), organized and doing business under the laws of the United States or of one of the States thereof or the District of Columbia which is authorized under such laws to exercise corporate trust powers, unless otherwise required by law.

The Trustees hereby accept the trust hereby created. The Trustees undertake and, if a separate or co-trustee is appointed pursuant to Section 103 hereof, such separate or co-trustee undertakes, prior to Default, as defined in Section 65 hereof, and after the curing of all such Defaults which may have occurred, to perform such duties and only such duties as are specifically set forth in this Indenture, and in case of such Default (which has not been cured) to exercise such of the rights and powers vested in them by this Indenture, and to use the same degree of care and skill in their exercise as a prudent man would exercise or use under the circumstances in the conduct of his own affairs. For the purposes of this Section 88 and of Section 89 hereof a Default shall be deemed cured when the act or omission or other event giving rise to such Default shall have been cured, remedied or terminated.

The Corporate Trustee, upon receipt of evidence furnished to it by or on behalf of the Company pursuant to any provision of this Indenture, will examine the same to determine whether or not such evidence conforms to the requirements of this Indenture.

SECTION 89. No provision of this Indenture shall be construed to relieve the Trustees or either of them from liability for their, its or his own negligent action, their, its or his own negligent failure to act, or their, its or his own wilful misconduct, except that

(a) prior to Default, as defined in Section 65 hereof, and after the curing of all such Defaults which may have occurred, the Trustees or either of them shall not be liable except for the performance of such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustees or either of them but the duties and obligations of the Trustees or either of them, prior to Default, as defined in Section 65 hereof, and after the curing of all such Defaults which may have occurred, shall be determined solely by the express provisions of this Indenture; and

(b) prior to Default, as defined in Section 65 hereof, and after the curing of all such Defaults which may have occurred, and in the absence of bad faith on the part of the Trustees or either of them, the Trustees or either of them may conclusively rely as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions conforming to the requirements of this Indenture; and

(c) no Trustee which is a corporation shall be personally liable for any error of judgment made in good faith by a Responsible Officer or Responsible Officers of such Trustee unless it shall be proved that such Trustee was negligent in ascertaining the pertinent facts and no Trustee who is an individual shall be personally liable for any error of judgment made in good faith by him unless it shall be proved that he was negligent in ascertaining the pertinent facts; and

(d) the Trustees or either of them shall not be personally liable with respect to any action taken or omitted to be taken by them, it or him in good faith in accordance with the direction of the holders of not less than a majority in principal amount of the bonds at the time Outstanding (determined as provided in Section 71 hereof) relating to the time, method, and place of conducting any proceeding for any remedy available to the Trustees or either of them, or exercising any trust or power conferred upon the Trustees or either of them, under this Indenture.

The provisions of this Section, which have been made specifically applicable to the Trustees, shall apply to the Trustees and, if a separate or co-trustee is appointed pursuant to Section 103 hereof, to any separate or co-trustee.

SECTION 90. The recitals contained herein and in the bonds shall be taken as the statements of the Company and the Trustees or either of them assume no responsibility for the correctness of the same. The Trustees or either of them make no representations as to the value of the Mortgaged and Pledged Property or any part thereof, or as to the title of the Company thereto, or as to the validity or adequacy of the security afforded thereby and hereby, or as to the validity of this Indenture or of the bonds or coupons issued hereunder. The Trustees, or either of them, shall be under no responsibility or duty with respect to the disposition of any bonds authenticated and delivered hereunder or the application of the proceeds thereof or the application of any moneys paid to the Company under any of the provisions hereof.

SECTION 91. The Trustees or either of them shall not be personally liable in case of entry by them, it or him upon the Mortgaged and Pledged Property for debts contracted or liability or damages incurred in the management or operation of said property.

Any Trustee in its or his individual or any other capacity, may become the owner or pledgee of bonds or coupons secured hereby with the same rights it or he would have if it or he were not Trustee.

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SECTION 92. Whenever it is provided in this Indenture that the Trustees or either of them shall take any action upon the happening of a specified event or upon the fulfillment of any condition or upon the request of the Company or of bondholders, the Trustees or either of them taking such action shall have full power to give any and all notices and to do any and all acts and things incidental to such action.

SECTION 93. Any notice or demand which by any provision of this Indenture is required or permitted to be given or served by the Trustees or either of them on the Company shall be deemed to have been sufficiently given or served, for all purposes, by being deposited postage prepaid in a postoffice letter box addressed (until another address is filed by the Company with the Corporate Trustee for the purpose of this Section) to the Company at the address given in the first paragraph of this Indenture.

SECTION 94. To the extent permitted by Sections 88 and 89 hereof:

(1) The Trustees or either of them may rely and shall be protected in acting upon any Resolution, Officers' Certificate, Engineer's Certificate, Independent Engineer's Certificate, Net Earning Certificate, Opinion of Counsel, resolution, certificate, opinion, notice, request, consent, order, appraisal, report, bond or other paper or document believed by them, it or him to be genuine and to have been signed or presented by the proper party or parties; and

(2) The Trustees or either of them may consult with counsel, who may be of counsel to the Company, and the opinion of such counsel shall be full and complete authorization and protection in respect of any action taken or suffered by them, it or him hereunder in good faith and in accordance with the opinion of such counsel.

The Trustees or either of them shall not be under any responsibility for the selection, appointment or approval of any expert for any

of the purposes expressed in this Indenture, except that nothing in this Section contained shall relieve the Trustees or either of them of their, its or his obligation to exercise reasonable care with respect to such selection, appointment or approval of independent experts who may furnish opinions or certificates to the Trustees or either of them pursuant to any provision of this Indenture.

Nothing contained in this Section shall be deemed to modify the obligation of the Trustees or either of them to exercise during the continuance of a Default, as defined in Section 65 hereof, the rights and powers vested in them, it or him by this Indenture with the degree of care and skill specified in Section 88 hereof.

SECTION 95. Subject to the provisions of Section 119 hereof, all moneys received by the Trustees or either of them whether as Trustee or paying agent shall, until used or applied as herein provided, be held in trust for the purposes for which they were paid, but need not be segregated from other funds except to the extent required by law. The Corporate Trustee may allow and credit to the Company interest on any moneys received by it hereunder at such rate, if any, as may be agreed upon with the Company from time to time and as may be permitted by law.

None of the provisions contained in this Indenture shall require the Trustees or either of them to expend or risk their, its or his own funds or otherwise incur personal financial liability in the performance of any of their, its or his duties or in the exercise of any of their, its or his rights or powers, if there is reasonable ground for believing that the repayment of such funds or liability is not reasonably assured to them, it or him.

SECTION 96. The Company covenants and agrees to pay to the Trustees from time to time, and the Trustees shall be entitled to, reasonable compensation for all services rendered by them in the execution of the trusts hereby created and in the exercise and performance

of any of the powers and duties hereunder of the Trustees, which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust, and the Company will reimburse the Trustees for all appropriate advances made by the Trustees or either of them and will pay to the Trustees from time to time their expenses and disbursements (including the reasonable compensation and the expenses and disbursements of all persons not regularly in their employ and, to the extent permitted by law, of their counsel) incurred without negligence or bad faith. The Company also covenants to indemnify the Trustees and each of them for, and to hold them and each of them harmless against, any loss, liability or expense incurred without negligence or bad faith on the part of the Trustees or such Trustee, arising out of or in connection with the acceptance or administration of this trust, including the cost and expenses of defending against any claim of liability in the premises. For the performance of the obligations of the Company under this Section, the Trustees and each of them shall have (in addition to any other right under this Indenture) a lien prior to the bonds on the trust estate, including all property and funds held or collected by the Trustees.

If, and to the extent that the Trustees or either of them and their, its or his counsel and other persons not regularly in their, its or his employ do not receive compensation for services rendered, reimbursement of their, its or his advances, expenses and disbursements, or indemnity, as herein provided, as the result of allowances made in any reorganization, bankruptcy, receivership, liquidation or other proceeding or by any plan of reorganization or readjustment of obligations of the Company, the Trustees or either of them shall be entitled, in priority to the holders of the bonds, to receive any distributions of any securities, dividends or other disbursements which would otherwise be made to the holders of bonds in any such proceeding or proceedings and the Corporate Trustee is hereby constituted and appointed, irrevocably, the attorney in fact for the holders of the bonds

and each of them to collect and receive, in their name, place and stead, such distributions, dividends or other disbursements, to deduct therefrom the amounts due to the Trustees or either of them, their, its or his counsel and other persons not regularly in their, its or his employ on account of services rendered, advances, expenses, and disbursements made or incurred, or indemnity, and to pay and distribute the balance, pro rata, to the holders of the bonds. The Trustees or either of them shall have a lien upon any securities or other considerations to which the holders of bonds may become entitled pursuant to any such plan of reorganization or readjustment of obligations, or in any such proceeding or proceedings; and the court or judge in any such proceeding or proceedings may determine the terms and conditions under which any such lien shall exist and be enforced.

SECTION 97. Whenever in the administration of the trust of this Indenture, prior to a Default, as defined in Section 65 hereof, and after the curing of any such Default, the Trustees or either of them shall deem it necessary or desirable that a matter be proved or established prior to taking or suffering any action hereunder, each matter (unless other evidence in respect thereof be herein specifically prescribed) may to the extent permitted by Sections 88 and 89 hereof be deemed to be conclusively proved and established by a certificate signed by the President or a Vice-President and the Treasurer or an Assistant Treasurer of the Company and delivered to the Trustees or either of them, and such certificate shall be full warrant to the Trustees or either of them for any action taken or suffered by them, it or him under the provisions of this Indenture upon the faith thereof.

SECTION 98. (a) Subject to the provisions of subdivision (b) of this Section, if a Trustee shall be or shall become a creditor, directly or indirectly, secured or unsecured, of the Company within four months prior to a default (as defined in the last paragraph of this subdivision), or subsequent to such a default, then, unless and until

such default shall be cured, such Trustee shall set apart and hold in a special account for the benefit of such Trustee individually, the holders of the bonds, and the holders of other indenture securities (as defined in the last paragraph of this subdivision (a)),

(1) an amount equal to any and all reductions in the amount due and owing upon any claim as such creditor in respect of principal or interest effected after the beginning of such four months' period and valid as against the Company and its other creditors, except any such reduction resulting from the receipt or disposition of any property described in paragraph (2) of this subdivision (a) or from the exercise of any right of set-off which such Trustee could have exercised if a petition in bankruptcy had been filed by or against the Company upon the date of such default; and

(2) all property received in respect of any claim as such creditor, either as security therefor, or in satisfaction or composition thereof, or otherwise, after the beginning of such four months' period, or an amount equal to the proceeds of any such property, if disposed of, subject, however, to the rights, if any, of the Company and its other creditors in such property or such proceeds.

Nothing herein contained, however, shall affect the right of a Trustee

(A) to retain for its or his own account (i) payments made on account of any such claim by any person (other than the Company) who is liable thereon, and (ii) the proceeds of the bona fide sale of any such claim by such Trustee to a third person, and (iii) distribution made in cash, securities, or other property in respect of claims filed against the Company in bankruptcy or receivership or in proceedings for reorganization pursuant to the Bankruptcy Act or applicable State law;

(B) to realize for its or his own account, upon any property held by it or him as security for any such claim, if such property was so held prior to the beginning of such four months' period;

(C) to realize, for its or his own account, but only to the extent of the claim hereinafter mentioned, upon any property held by it or him as security for any such claim, if such claim was created after the beginning of such four months' period and such property was received as security therefor simultaneously with the creation thereof, and if such Trustee shall sustain the burden of proving that at the time such property was so received such Trustee had no reasonable cause to believe that a default as defined in the last paragraph of this subdivision (a) would occur within four months; or

(D) to receive payment on any claim referred to in paragraphs (B) or (C), against the release of any property held as security for such claim as provided in paragraphs (B) or (C), as the case may be, to the extent of the fair value of such property.

For the purposes of paragraphs (B), (C), and (D), property substituted after the beginning of such four months' period for property held as security at the time of such substitution shall, to the extent of the fair value of the property released, have the same status as the property released, and, to the extent that any claim referred to in any of such paragraphs is created in renewal or in substitution for or for the purpose of repaying or refunding any pre-existing claim of a Trustee as such creditor, such claim shall have the same status as such pre-existing claim.

If a Trustee shall be required to account, the funds and property held in such special account and the proceeds thereof shall be apportioned between such Trustee, the bondholders, and the holders of other indenture securities in such manner that such Trustee, the bondholders, and the holders of other indenture securities realize, as a result of payments from such special account and payments of dividends on claims filed against the Company in bankruptcy or receivership or in proceedings for reorganization pursuant to the Bankruptcy Act or applicable State law, the same percentage of their respective claims,

figured before crediting to the claim of such Trustee anything on account of the receipt by it or him from the Company of the funds and property in such special account and before crediting to the respective claims of such Trustee, the bondholders, and the holders of other indenture securities dividends on claims filed against the Company in bankruptcy or receivership or in proceedings for reorganization pursuant to the Bankruptcy Act or applicable State law, but after crediting thereon receipts on account of the indebtedness represented by their respective claims from all sources other than from such dividends and from the funds and property so held in such special account. As used in this paragraph, with respect to any claim, the term "dividends" shall include any distribution with respect to such claim, in bankruptcy or receivership or in proceedings for reorganization pursuant to the Bankruptcy Act or applicable State law, whether such distribution is made in cash, securities, or other property, but shall not include any such distribution with respect to the secured portion, if any, of such claim. The court in which such bankruptcy, receivership or proceeding for reorganization is pending shall have jurisdiction (i) to apportion between such Trustee, the bondholders, and the holders of other indenture securities, in accordance with the provisions of this paragraph, the funds and property held in such special account and the proceeds thereof, or (ii) in lieu of such apportionment, in whole or in part, to give to the provisions of this paragraph due consideration in determining the fairness of the distributions to be made to such Trustee, the bondholders, and the holders of other indenture securities, with respect to their respective claims, in which event it shall not be necessary to liquidate or to appraise the value of any securities or other property held in such special account or as security for any such claim, or to make a specific allocation of such distributions as between the secured and unsecured portions of such claims, or otherwise to apply the provisions of this paragraph as a mathematical formula.

Any Trustee who has resigned or been removed after the beginning of such four months' period shall be subject to the provisions of this

subdivision (a) as though such resignation or removal had not occurred. If any Trustee has resigned or been removed prior to the beginning of such four months' period, it or he shall be subject to the provisions of this subdivision (a) if and only if the following conditions exist—

(i) the receipt of property, or reduction of claim which would have given rise to the obligation to account, if such Trustee had continued as trustee, occurred after the beginning of such four months' period; and

(ii) such receipt of property or reduction of claim occurred within four months after such resignation or removal.

As used in this Section, the term "default" means any failure to make payment in full of the principal of or interest upon the bonds or upon the other indenture securities when and as such principal or interest becomes due and payable; and the term "other indenture securities" means securities upon which the Company is an obligor (as defined in the Trust Indenture Act of 1939) outstanding under any other indenture (a) under which such Trustee is also trustee, (b) which contains provisions substantially similar to the provisions of this subdivision (a), and (c) under which a default exists at the time of the apportionment of the funds and property held in said special account.

(b) There shall be excluded from the operation of subdivision (a) of this Section a creditor relationship arising from—

(1) the ownership or acquisition of securities issued under any indenture, or any security or securities having a maturity of one (1) year or more at the time of acquisition by such Trustee;

(2) advances authorized by a receivership or bankruptcy court of competent jurisdiction or by this Indenture for the purpose of preserving the property subject to the Lien of this Indenture or of discharging tax liens or other prior liens or encumbrances on the trust estate, if notice of such advance and of the circumstances surrounding the making thereof is given to the bondholders as provided in subdivisions (a), (b) and (c) of Section 100 hereof with respect to advances by any Trustee as such;

(3) disbursements made in the ordinary course of business in the capacity of trustee under an indenture, transfer agent, registrar, custodian, paying agent, fiscal agent or depositary, or other similar capacity;

(4) an indebtedness created as a result of services rendered or premises rented; or an indebtedness created as a result of goods or securities sold in a cash transaction as defined in the last paragraph of this subdivision (b);

(5) the ownership of stock or of other securities of a corporation organized under the provisions of Section 25(a) of the Federal Reserve Act, as amended, which is directly or indirectly a creditor of the Company; or

(6) the acquisition, ownership, acceptance or negotiation of any drafts, bills of exchange, acceptances or obligations which fall within the classification of self-liquidating paper as defined in the last paragraph of this subdivision (b).

As used in this Section, the term "security" shall have the meaning assigned to such term in the Securities Act of 1933, as amended and in force on the date of the execution of this Indenture; the term "cash transaction" shall mean any transaction in which full payment for goods or securities sold is made within seven days after delivery of the goods or securities in currency or in checks or other orders drawn upon banks or bankers and payable upon demand; the term "self-liquidating paper" shall mean any draft, bill of exchange, acceptance or obligation which is made, drawn, negotiated or incurred by the Company for the purpose of financing the purchase, processing, manufacture, shipment, storage or sale of goods, wares or merchandise and which is secured by documents evidencing title to, possession of, or a lien upon, the goods, wares or merchandise or the receivables or proceeds arising from the sale of the goods, wares or merchandise previously constituting the security, provided the security is received by such Trustee simultaneously with the creation of the creditor relationship with the Company arising from the making, drawing, negotiating

or incurring of the draft, bill of exchange, acceptance or obligation; and the term "Trustee" shall include the Corporate Trustee, the Co-Trustee, and any separate trustee or co-trustee appointed pursuant to Section 103 hereof.

SECTION 99. (a) If any Trustee has or acquires any conflicting interest, as defined by subdivision (d) of this Section, such Trustee shall within ninety (90) days after ascertaining that it has such conflicting interest, either eliminate such conflicting interest or resign by giving written notice to the Company, but such resignation shall not become effective until the appointment of a successor trustee and such successor's acceptance of such appointment. The Company covenants to take prompt steps to have a successor appointed in the manner hereinafter provided in Section 102 hereof. Upon giving such notice of resignation, the resigning Trustee shall publish notice thereof in one newspaper printed in the English language and customarily published on each business day and of general circulation in the Borough of Manhattan, The City of New York, once in each of three successive calendar weeks, in each case on any business day of the week. If the resigning Trustee fails to publish such notice within ten (10) days after giving written notice of resignation to the Company, the Company shall publish such notice.

(b) In the event that any Trustee shall fail to comply with the provisions of the preceding subdivision (a) of this Section, such Trustee shall within ten (10) days after the expiration of such ninety (90) days period transmit notice of such failure to the bondholders in the manner and to the extent provided in subdivision (c) of Section 100 hereof with respect to reports pursuant to subdivision (a) of Section 100 hereof.

(c) Subject to the provisions of Section 122 hereof any bondholder who has been a bona fide holder of a bond or bonds for at least six months may, on behalf of himself and all others similarly situated,

petition any court of competent jurisdiction for the removal of any Trustee and the appointment of a successor if such Trustee fails, after written request therefor by such holder, to comply with the provisions of subdivision (a) of this Section.

(d) Any Trustee shall be deemed to have a conflicting interest if—

(1) such Trustee is trustee under another indenture under which any other securities, or certificates of interest or participation in any other securities, of the Company, are outstanding unless such other indenture is a collateral trust indenture under which the only collateral consists of bonds issued under this Indenture; provided that there shall be excluded from the operation of this paragraph (1) another indenture or indentures under which other securities, or certificates of interest or participation in other securities, of the Company are outstanding, if the Company shall have sustained the burden of proving, on application to the Securities and Exchange Commission and after opportunity for hearing thereon, that trusteeship under this Indenture and such other indenture is not so likely to involve a material conflict of interest as to make it necessary in the public interest or for the protection of investors to disqualify the Trustee from acting as such under one of such indentures;

(2) such Trustee or any of its directors or executive officers is an obligor upon the bonds or an underwriter for the Company;

(3) such Trustee directly or indirectly controls or is directly or indirectly controlled by or is under direct or indirect common control with the Company or an underwriter for the Company;

(4) such Trustee or any of its directors or executive officers is a director, officer, partner, employee, appointee or representative of the Company, or of an underwriter (other than such Trustee itself) for the Company who is currently engaged in the business of underwriting, except that (A) one individual may be a director and/or an executive officer of such Trustee and a director and/or an executive officer of the Company, but may not be at the same time an executive officer of both a Trustee and the Company; (B) if and so long as the number of directors

of a Trustee in office is more than nine, one additional individual may be a director and/or an executive officer of such Trustee and a director of the Company; and (C) any Trustee may be designated by the Company or by any underwriter for the Company to act in the capacity of transfer agent, registrar, custodian, paying agent, fiscal agent, escrow agent or depository or in any other similar capacity or, subject to the provisions of paragraph (1) of this subdivision (d), to act as trustee, whether under an indenture or otherwise;

(5) ten per centum (10%) or more of the voting securities of such Trustee is beneficially owned either by the Company or by any director, partner or executive officer thereof, or twenty per centum (20%) or more of such voting securities is beneficially owned, collectively, by any two or more of such persons; or ten per centum (10%) or more of the voting securities of such Trustee is beneficially owned either by an underwriter for the Company or by any director, partner or executive officer thereof, or is beneficially owned, collectively, by any two or more such persons;

(6) such Trustee is the beneficial owner of or holds as collateral security for an obligation which is in default, (A) five per centum (5%) or more of the voting securities or ten per centum (10%) or more of any other class of security of the Company, not including the bonds issued under this Indenture and securities issued under any other indenture under which such Trustee is also trustee, or (B) ten per centum (10%) or more of any class of security of an underwriter for the Company;

(7) such Trustee is the beneficial owner of, or holds as collateral security for an obligation which is in default, five per centum (5%) or more of the voting securities of any person who, to the knowledge of such Trustee, owns ten per centum (10%) or more of the voting securities of, or controls directly or indirectly or is under direct or indirect common control with, the Company;

(8) such Trustee is the beneficial owner of or holds as collateral security for an obligation which is in default, ten per-

centum (10%) or more of any class of security of any person who, to the knowledge of such Trustee, owns fifty per centum (50%) or more of the voting securities of the Company; or

(9) such Trustee owns on May 15 in any calendar year in the capacity of executor, administrator, testamentary or inter vivos trustee, guardian, committee or conservator, or in any other similar capacity an aggregate of twenty-five per centum (25%) or more of the voting securities or of any class of security, of any person, the beneficial ownership of a specified percentage of which would have constituted a conflicting interest under paragraphs (6), (7), or (8) of this subdivision (d). As to any such securities of which such Trustee acquired ownership through becoming executor, administrator or testamentary trustee of an estate which included them, the provisions of the preceding sentence shall not apply for a period of two years from the date of such acquisition, to the extent that such securities included in such estate do not exceed twenty-five per centum (25%) of such voting securities or twenty-five per centum (25%) of any such class of security. Promptly after May 15, in each calendar year, each Trustee shall make a check of its or his holdings of such securities in any of the above-mentioned capacities as of May 15. If the Company fails to make payment in full of principal or interest upon the bonds when and as the same becomes due and payable, and such failure continues for thirty (30) days thereafter, such Trustee shall make a prompt check of its or his holdings of such securities in any of the above-mentioned capacities as of the date of the expiration of such thirty-day period and after such date, notwithstanding the foregoing provisions of this paragraph, all such securities so held by such Trustee with sole or joint control over such securities vested in it or him, shall, but only so long as such failure shall continue, be considered as though beneficially owned by such Trustee for the purposes of paragraphs (6), (7), and (8) of this subdivision (d).

The specifications of percentages in paragraphs (5) to (9), inclusive, of this subdivision (d) shall not be construed as indicating that the ownership of such percentages of the securities of a person is or is not

necessary or sufficient to constitute direct or indirect control for the purposes of paragraph (3) or (7) of this subdivision (d).

For the purposes of paragraphs (6), (7), (8) and (9) of this subdivision (d) only, (A) the terms "security" and "securities" shall include only such securities as are generally known as corporate securities, but shall not include any note or other evidence of indebtedness issued to evidence an obligation to repay moneys lent to a person by one or more banks, trust companies or banking firms or any certificate of interest or participation in any such note or evidence of indebtedness; (B) an obligation shall be deemed to be in default when a default in payment of principal shall have continued for thirty (30) days or more and shall not have been cured; and (C) a Trustee shall not be deemed to be the owner or holder of (i) any security which it or he holds as collateral security (as trustee or otherwise) for an obligation which is not in default as above defined, or (ii) any security which it or he holds as collateral security under this Indenture, irrespective of any default hereunder, or (iii) any security which it or he holds as agent for collection, or as custodian, escrow agent or depositary, or in any similar representative capacity.

The percentages of voting securities and other securities specified in this Section shall be calculated in accordance with the following provisions:

(aa) A specified percentage of the voting securities of any Trustee, the Company or any other person referred to in this Section (each of whom is referred to as a "person" in this paragraph) means such amount of the outstanding voting securities of such person as entitles the holder or holders thereof to cast such specified percentage of the aggregate votes which the holders of all the outstanding voting securities of such person are entitled to cast in the direction or management of the affairs of such person.

(bb) A specified percentage of a class of securities of a person means such percentage of the aggregate amount of securities of the class outstanding.

(cc) The term "amount", when used in regard to securities, means the principal amount if relating to evidences of indebtedness, the number of shares if relating to capital shares, and the number of units if relating to any other kind of security.

(dd) The term "outstanding" means issued and not held by or for the account of the issuer. The following securities shall not be deemed outstanding within the meaning of this definition:

(1) Securities of an issuer held in a sinking fund relating to securities of the issuer of the same class;

(2) Securities of an issuer held in a sinking fund relating to another class of securities of the issuer, if the obligation evidenced by such other class of securities is not in default as to principal or interest or otherwise;

(3) Securities pledged by the issuer thereof as security for an obligation of the issuer not in default as to principal or interest or otherwise;

(4) Securities held in escrow if placed in escrow by the issuer thereof;

provided, however, that any voting securities of an issuer shall be deemed outstanding if any person other than the issuer is entitled to exercise the voting rights thereof.

(ee) A security shall be deemed to be of the same class as another security if both securities confer upon the holder or holders thereof substantially the same rights and privileges, provided, however, that, in the case of secured evidences of indebtedness, all of which are issued under a single indenture, differences in the interest rates or maturity dates of various series thereof shall not be deemed sufficient to constitute such series different classes, and provided, further, that, in the case of unsecured evidences of indebtedness, differences in the interest rates or maturity dates thereof shall not be deemed sufficient to constitute them securities of different classes, whether or not they are issued under a single indenture.

The provisions of this Section which have been made specifically applicable to a Trustee, shall apply to the Corporate Trustee, the Co-Trustee and, if a separate or co-trustee is appointed pursuant to Section 103 hereof, to any separate or co-trustee, except that in case of the resignation of the Co-Trustee or a separate or co-trustee such resignation and the appointment of a successor shall (subject to the provisions of subdivision (c) of this Section) be governed by the provisions of Section 102 and paragraph (3) of Section 103 hereof.

The term "underwriter" when used with reference to the Company means every person who, within three years prior to the time as of which the determination is made, has purchased from the Company with a view to, or has sold for the Company in connection with, the distribution of any security of the Company outstanding at such time, or has participated or has had a direct or indirect participation in any such undertaking, or has participated or has had a participation in the direct or indirect underwriting of any such undertaking, but such term shall not include a person whose interest was limited to a commission from an underwriter or dealer not in excess of the usual and customary distributors' or sellers' commission.

SECTION 100. (a) Each Trustee shall transmit, either jointly or severally as they may determine, within sixty (60) days after May 15 in each year, beginning with the year 1947, to the bondholders as hereinafter in this Section provided, a brief report dated as of such May 15 with respect to

(1) its or his eligibility and its or his qualifications under Sections 35, 88 and 99 hereof, or in lieu thereof, if to the best of its or his knowledge such Trustee has continued to be eligible and qualified under such Sections, a written statement to such effect;

(2) the character and amount of any advances (and if such Trustee elects so to state, the circumstances surrounding the making thereof) made by such Trustee as such which remain

unpaid on the date of such report, and for the reimbursement of which such Trustee claims or may claim a lien or charge, prior to that of the bonds on the trust estate or on property or funds held or collected by it or him as Trustee, provided that such Trustee shall not be required (but may elect) to state such advances, if such advances so remaining unpaid aggregate not more than one-half of one per centum ($\frac{1}{2}$ of 1%) of the principal amount of the bonds Outstanding on the date of such report;

(3) the amount, interest rate, and maturity date of all other indebtedness owing by the Company to such Trustee in its or his individual capacity on the date of such report, with a brief description of any property held as collateral security therefor, except an indebtedness based upon a creditor relationship arising in any manner described in paragraphs (2), (3), (4), or (6) of subdivision (b) of Section 98 hereof;

(4) the property and funds physically in the possession of such Trustee, as such Trustee, on the date of such report;

(5) any release, or release and substitution, of property subject to the Lien of this Indenture (and the consideration therefor, if any) which has not been previously reported, provided, however, that to the extent that the aggregate value as shown by the release papers of any or all of such released properties does not exceed an amount equal to one per centum (1%) of the principal amount of bonds then Outstanding, the report need only indicate the number of such releases, the total value of property released as shown by the release papers, the aggregate amount of cash received and the aggregate value of property received in substitution therefor as shown by the release papers;

(6) any additional issue of bonds which has not been previously reported; and

(7) any action taken by such Trustee in the performance of its or his duties under this Indenture which it or he has not previously reported and which in its or his opinion materially affects the bonds or the trust estate, except action in respect of a Default, as defined in Section 65 hereof, notice of which has been

or is to be withheld in accordance with the provisions of Section 66 hereof.

(b) Each Trustee shall transmit to the bondholders as hereinafter provided a brief report with respect to—

(1) the release, or release and substitution, of property subject to the Lien of this Indenture (and the consideration therefor, if any) unless the fair value of such property, as set forth in the certificate or opinion required by Section 49, 59, 60, 61 or 62 hereof is less than ten per centum (10%) of the principal amount of bonds Outstanding at the time of such release, or such release and substitution, such report to be so transmitted within ninety (90) days after such time, provided that if any such report is transmitted by the Corporate Trustee no report covering the same transaction need be made by any other Trustee; and

(2) the character and amount of any advances (and if such Trustee elects so to state, the circumstances surrounding the making thereof) made by such Trustee as such since the date of the last report transmitted pursuant to the provisions of subdivision (a) of this Section (or if no such report has yet been so transmitted, since the date of execution of this Indenture), for the reimbursement of which it or he claims or may claim a lien or charge prior to that of the bonds on the trust estate or on property or funds held or collected by it or him as Trustee, and which it or he has not previously reported pursuant to this paragraph, provided that such Trustee shall not be required (but may elect) to state such advances, if such advances remaining unpaid at any time aggregate not more than ten per centum (10%) of the principal amount of bonds Outstanding at such time, such report to be transmitted within ninety (90) days after such time.

(c) Reports pursuant to this Section shall be transmitted by mail—

(1) to all registered holders of bonds, as the names and addresses of such holders appear upon the registration books of the Company;

(2) to such holders of bonds as have, within two years preceding such transmission, filed their names and addresses with the Corporate Trustee for that purpose; and

(3) except in the case of reports pursuant to subdivision (b) of this Section, to each bondholder whose name and address is preserved at the time by the Corporate Trustee, as provided in subdivision (b) of Section 43 hereof.

(d) A copy of each such report shall, at the time of such transmission to bondholders, be filed by the Trustee with each stock exchange upon which the bonds are listed and also with the Securities and Exchange Commission. The Company will notify the Corporate Trustee of the name and address of each stock exchange on which the bonds are listed.

(e) The provisions of this Section which have been made specifically applicable to a Trustee, shall apply to the Corporate Trustee, the Co-Trustee and, if a separate or co-trustee is appointed pursuant to Section 103 hereof, to any separate or co-trustee. Notwithstanding any of the provisions of this Section which require the Co-Trustee to transmit reports to the bondholders and to file such reports with each stock exchange upon which the bonds are listed and also with the Securities and Exchange Commission, the Co-Trustee may, if it so elects, furnish to the Corporate Trustee all information concerning the Co-Trustee which the Co-Trustee is required to report, and the Corporate Trustee shall transmit and file such information, in accordance with the provisions of this Section, on behalf of the Co-Trustee.

SECTION 101. Any Trustee may at any time resign and be discharged of the trusts hereby created by giving written notice to the Company specifying the day upon which such resignation shall take effect and thereafter publishing notice thereof, in one Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, once in each of three successive

calendar weeks, in each case on any business day of the week, and such resignation shall take effect upon the day specified in such notice unless previously a successor trustee shall have been appointed by the bondholders or the Company in the manner hereinafter provided in Section 102 and in such event such resignation shall take effect immediately on the appointment of such successor trustee. This Section shall not be applicable to resignations pursuant to Section 99 hereof.

Any Trustee may be removed at any time by an instrument or concurrent instruments in writing filed with such Trustee and signed and acknowledged by the holders of a majority in principal amount of the bonds then Outstanding hereunder (determined as provided in Section 71 hereof) or by their attorneys in fact duly authorized.

In case at any time the Corporate Trustee or the Co-Trustee shall cease to be eligible in accordance with the provisions of Section 35 or Section 88 hereof, then the Trustee so ceasing to be eligible shall resign immediately in the manner and with the effect in this Section provided; and, in the event that it or he does not resign immediately in such case, then it or he may be removed forthwith by an instrument or concurrent instruments in writing filed with the Trustee so ceasing to be eligible and either (a) signed by the President or a Vice-President of the Company with its corporate seal attested by a Secretary or an Assistant Secretary of the Company or (b) signed and acknowledged by the holders of a majority in principal amount of the bonds then Outstanding hereunder (determined as provided in Section 71 hereof) or by their attorneys in fact duly authorized.

SECTION 102. In case at any time any Trustee shall resign or shall be removed (unless such Trustee shall be removed as provided in subdivision (c) of Section 99 hereof in which event the vacancy shall be filled as provided in said subdivision) or shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or if a receiver of any Trustee or of its or his property shall be appointed, or if any public officer shall take charge or control of any Trustee or of its or

his property or affairs for the purpose of rehabilitation, conservation or liquidation, a vacancy shall be deemed to exist in the office of such Trustee, and a successor or successors may be appointed by the holders of a majority in principal amount of the bonds then Outstanding hereunder (determined as provided in Section 71 hereof) by an instrument or concurrent instruments in writing signed and acknowledged by such bondholders or by their attorneys in fact duly authorized, and delivered to such new Trustee, notification thereof being given to the Company and the retiring Trustee; provided, nevertheless, that until a new Trustee shall be appointed by the bondholders as aforesaid, the Company, by instrument executed by order of its Board of Directors and duly acknowledged by its President or a Vice-President, may appoint a Trustee to fill such vacancy until a new Trustee shall be appointed by the bondholders as herein authorized. The Company shall publish notice of any such appointment made by it in the manner provided in Section 101 hereof. Any new Trustee appointed by the Company shall, immediately and without further act, be superseded by a Trustee appointed by the bondholders as above provided, if such appointment by the bondholders be made prior to the expiration of one year after the first publication of notice of the appointment of the new Trustee by the Company.

If in a proper case no appointment of a successor Trustee shall be made pursuant to the foregoing provisions of this Section within six months after a vacancy shall have occurred in the office of Trustee, the holder of any bond hereby secured or any retiring Trustee may apply to any court of competent jurisdiction to appoint a successor Trustee. Said court may thereupon after such notice, if any, as such court may deem proper and prescribe, appoint a successor Trustee.

If any Trustee resigns because of a conflict of interest as provided in subdivision (a) of Section 99 hereof and a successor has not been appointed by the Company or the bondholders or, if appointed, has not accepted the appointment, within thirty (30) days after the

date of such resignation, the resigning Trustee may apply to any court of competent jurisdiction for the appointment of a successor Trustee.

Any Trustee appointed under the provisions of this Section in succession to the Corporate Trustee shall be a bank or trust company eligible under Sections 35 and 88 hereof and qualified under Section 99 hereof.

Any Trustee which has resigned or been removed shall nevertheless retain the lien afforded to it or him by Section 96 hereof upon the trust estate, including all property or funds held or collected by such Trustee, as such, to secure the amounts due to such Trustee as compensation, reimbursement, expenses and indemnity, and shall retain the rights afforded to it or him by said Section 96 hereof.

SECTION 103. All the estates, rights, titles and interest by this Indenture conveyed or assigned or transferred to the Trustees are (to the extent permitted by law) conveyed, assigned and transferred to them as joint tenants and not as tenants in common.

Except as herein expressly provided to the contrary, any notice, request, or other writing by or on behalf of the Company delivered solely to the Corporate Trustee shall be deemed to have been delivered to both of the Trustees hereunder as effectually as if delivered to each of them.

All cash collected by, or payable to, the Trustees or either of them pursuant to this Indenture shall be paid to and deposited with, and all stocks, bonds and other obligations or securities shall be held by the Corporate Trustee, except as otherwise required by law. Any moneys at any time coming into the hands of the Co-Trustee pursuant to this Indenture shall be at once paid over to the Corporate Trustee.

Whenever any moneys, bonds, shares of stock or other obligations are, under any provision of this Indenture, paid or delivered to or deposited with the Corporate Trustee, title to the same shall be deemed to be vested in both Trustees hereunder, and the same shall be deemed

for all purposes hereunder to be part of the security for the bonds issued hereunder, but nothing in this Section contained shall be deemed to affect or impair any power or right conferred by any provision of this Indenture upon the Corporate Trustee to apply, disburse or otherwise act or deal with respect to any moneys, bonds, shares of stock or other obligations received or held by it as aforesaid.

Any request in writing by the Corporate Trustee to the Co-Trustee shall be a sufficient warrant (subject to the provisions of Sections 88 and 89 hereof) for the Co-Trustee to take such action as may be so requested.

The Co-Trustee or any successor, so far as permitted by law, may delegate to the Corporate Trustee, or any successor, the exercise of any power, discretionary or otherwise, conferred by any of the provisions of this Indenture.

The Co-Trustee has been joined as trustee in order to comply with any legal requirements respecting trustees under mortgages or deeds of trust of property in the States, or some of them, in which the mortgaged premises or part thereof are or may be situate, and shall as such trustee possess such powers, and such powers only, as may be necessary to comply with such requirements. If by reason of the repeal of such requirements, or for any other reason, it shall not be necessary, in the opinion of counsel, that there shall be a Co-Trustee and the Company shall file with the Corporate Trustee and also with the Co-Trustee, an Opinion of Counsel to that effect and a written request for the resignation or removal of the Co-Trustee, the Original Co-Trustee, or any successor, will thereupon resign or shall forthwith cease to be a Trustee hereunder, and all powers of the Co-Trustee shall forthwith terminate, as shall his right, title or interest in and to the trust estate; and, unless and until there shall be appointed a new Trustee or successor to the Co-Trustee, all the right, title and powers of the Trustees shall devolve upon the Corporate Trustee and its successors alone.

Any rights, powers, duties and obligations by any provisions of this Indenture conferred or imposed upon the Trustees or any of them shall,

in so far as permitted by law, be conferred or imposed upon and exercised or performed by the Corporate Trustee alone without reference to the Co-Trustee, and the Co-Trustee hereby irrevocably constitutes and appoints the Corporate Trustee his true and lawful attorney in fact with full power and authority, in so far as permitted by law, either in the name and on behalf of the Co-Trustee or of the Trustees jointly to exercise any and all rights or powers conferred upon the Co-Trustee alone, or upon the Trustees jointly, by any of the provisions of this Indenture, but subject to the duties hereby imposed upon the Co-Trustee, hereby ratifying and confirming all and singular the acts and things lawfully done by the Corporate Trustee by virtue of this power of attorney, except to the extent that under any law of any jurisdiction in which any particular act or acts are to be performed the Corporate Trustee shall be incompetent or unqualified to perform such act or acts, in which event such rights, powers, duties and obligations shall be exercised and performed by the Co-Trustee.

At any time or times, for the purpose of conforming to any legal requirements, restrictions or conditions in any State or jurisdiction in which any part of the Mortgaged and Pledged Property then or to become subject to the Lien of this Indenture may be located, the Company and the Trustees or the Corporate Trustee shall have power to appoint, and, upon the request of the Trustees or the Corporate Trustee the Company shall for such purpose join with the Trustees or the Corporate Trustee in the execution, delivery and performance of, all instruments and agreements necessary or proper to appoint another corporation or one or more persons approved by the Trustees or the Corporate Trustee, either to act as separate trustee or trustees, or co-trustee or co-trustees jointly with the Trustees or the Corporate Trustee, of all or any of the property subject to the Lien hereof. In the event that the Company shall not have joined in such appointment within fifteen (15) days after the receipt by it of a request so to do, the Trustees or the Corporate Trustee alone shall have power to make such appointment.

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Every separate trustee, every co-trustee and every successor trustee, other than any trustee which may be appointed as successor to the Original Corporate Trustee or the Original Co-Trustee, shall, to the extent permitted by law, but to such extent only, be appointed subject to the following provisions and conditions, namely:

(1) The rights, powers, duties and obligations conferred or imposed upon trustees hereunder or any of them shall be conferred or imposed upon and exercised or performed by the Corporate Trustee or the Trustees, or the Corporate Trustee and such separate trustee or separate trustees or co-trustee or co-trustees jointly, as shall be provided in the instruments and agreements appointing such separate trustee or separate trustees or co-trustee or co-trustees, except to the extent that under any law of any jurisdiction in which any particular act or acts are to be performed the Corporate Trustee shall be incompetent or unqualified to perform such act or acts, in which event such rights, powers, duties and obligations shall be exercised and performed by the Co-Trustee or by such separate trustee or separate trustees or co-trustee or co-trustees;

(2) The bonds secured hereby shall be authenticated and delivered, and all powers, duties, obligations and rights, conferred upon the Trustees or the Corporate Trustee in respect of the custody of all bonds and other securities and of all cash pledged or deposited hereunder, shall be exercised solely by the Original Corporate Trustee or its successors in the trust hereunder; and

(3) The Company, the Corporate Trustee and the Co-Trustee, at any time by an instrument in writing executed by them jointly, may accept the resignation of or remove any separate trustee or co-trustee appointed under this Section or otherwise, and, upon the request of the Corporate Trustee, the Company shall, for such purpose, join with the Corporate Trustee and the Co-Trustee in the execution, delivery and performance of all instruments and agreements necessary or proper to make effective such resignation or removal. In the event that the Company shall not have joined in such action within fifteen (15) days

after the receipt by it of a request so to do, the Corporate Trustee and the Co-Trustee alone shall have power to accept such resignation or to remove any such separate trustee or co-trustee. A successor to a separate trustee or co-trustee so resigned or removed may be appointed in the manner provided in this Section.

No Trustee hereunder shall be personally liable by reason of any act or omission of any other Trustee hereunder. .

Any notice, request or other writing, by or on behalf of the holders of the bonds delivered to the Original Corporate Trustee, or its successor in the trust hereunder, shall be deemed to have been delivered to all of the then trustees or co-trustees as effectually as if delivered to each of them. Every instrument appointing any trustee or trustees other than a successor to the Original Corporate Trustee shall refer to this Indenture and the condition in this Article expressed, and upon the acceptance in writing by such trustee or trustees or co-trustee or co-trustees, he, they or it shall be vested with the estates or property specified in such instrument, either jointly with the Original Corporate Trustee, or its successor, or separately, as may be provided therein, subject to all the trusts, conditions and provisions of this Indenture; and every such instrument shall be filed with the Original Corporate Trustee or its successor in the trust hereunder. Any separate trustee or trustees, or any co-trustee or co-trustees, may at any time by an instrument in writing constitute the Original Corporate Trustee or its successor in the trust hereunder his, their or its agent or attorney in fact, with full power and authority, to the extent which may be permitted by law, to do any and all acts and things and exercise any and all discretion authorized or permitted by him, them or it, for and in behalf of him, them or it, and in his, their or its name. In case any separate trustee or trustees or co-trustee or co-trustees, or a successor to any of them, shall die, become incapable of acting, resign or be removed, all the estates, property, rights, powers, trusts, duties and obligations of said separate trustee or co-trustee, so far as permitted

by law, shall vest in and be exercised by the Original Corporate Trustee or its successor in the trust hereunder, without the appointment of a new trustee as successor to such separate trustee or co-trustee.

SECTION 104. Any successor trustee appointed hereunder shall execute, acknowledge and deliver to his or its predecessor trustee, and also to the Company, an instrument accepting such appointment hereunder, and thereupon such successor trustee, without any further act, deed or conveyance, shall become fully vested with all the estates, properties, rights, powers, trusts, duties and obligations of his or its predecessor in trust hereunder, with like effect as if originally named as trustee herein; but the trustee ceasing to act shall nevertheless, on the written request of the Company, or of the successor trustee, or of the holders of ten per centum (10%) in principal amount of the bonds then Outstanding hereunder, execute, acknowledge and deliver such instruments of conveyance and further assurance and do such other things as may reasonably be required for more fully and certainly vesting and confirming in such successor trustee all the right, title and interest of the trustee to which he or it succeeds, in and to the Mortgaged and Pledged Property and such rights, powers, trusts, duties and obligations, and the trustee ceasing to act shall also, upon like request, pay over, assign and deliver to the successor trustee any money or other property subject to the Lien of this Indenture, including any pledged securities which may then be in his or its possession. Should any deed, conveyance or instrument in writing from the Company be required by the new trustee for more fully and certainly vesting in and confirming to such new trustee such estates, properties, rights, powers, trusts and duties, any and all such deeds, conveyances and instruments in writing shall, on request, be executed, acknowledged and delivered by the Company.

SECTION 105. Any corporation into which the Corporate Trustee may be merged or with which it may be consolidated or any corpora-

tion resulting from any merger or consolidation in which the Corporate Trustee shall be a party or any corporation to which substantially all the business and assets of the Corporate Trustee may be transferred, provided such corporation shall be eligible under the provisions of Sections 35 and 88 hereof and qualified under Section 99 hereof, shall be the successor Corporate Trustee under this Indenture, without the execution or filing of any paper or the performance of any further act on the part of any other parties hereto, anything herein to the contrary notwithstanding. In case any of the bonds contemplated to be issued hereunder shall have been authenticated but not delivered, any such successor to the Corporate Trustee may, subject to the same terms and conditions as though such successor had itself authenticated such bonds, adopt the certificate of authentication of the Original Corporate Trustee or of any successor to it, as trustee hereunder, and deliver the said bonds so authenticated; and in case any of said bonds shall not have been authenticated, any successor to the Corporate Trustee may authenticate such bonds either in the name of any predecessor hereunder or in the name of the successor trustee, and in all such cases such certificate shall have the full force which it is anywhere in said bonds or in this Indenture provided that the certificate of the Corporate Trustee shall have; provided, however, that the right to authenticate bonds in the name of the Original Corporate Trustee shall apply only to its successor or successors by merger or consolidation or sale as aforesaid.

ARTICLE XVIII.

Discharge of Mortgage.

SECTION 106. The Trustees (and any trustee or trustees or co-trustee or co-trustees appointed pursuant to the provisions of this Indenture) may, and upon request of the Company shall, cancel and discharge the Lien hereof and of all indentures supplemental hereto and execute and deliver to the Company such deeds and instruments as shall

be requisite to satisfy the Lien hereof and of all indentures supplemental hereto, and reconvey and transfer to the Company the Mortgaged and Pledged Property, whenever all indebtedness secured hereby shall have been paid, including all proper charges of the Trustees hereunder.

Notwithstanding the satisfaction and discharge of this Indenture, the Trustees shall have an unsecured right to charge and be reimbursed for any expenditures and liabilities (incurred in good faith and without negligence by the Trustees) which they or either of them may thereafter incur.

Bonds and interest obligations for the payment of which and bonds for the redemption of which moneys in the necessary amount shall have been set apart by or deposited with the Corporate Trustee, with irrevocable direction so to apply the same, subject to the provisions of Section 119 hereof (with or without any additional right given to the holders to surrender their bonds or obtain therefrom payment therefor prior to the redemption date) shall for purposes of satisfying the Lien of this Indenture be deemed to have been paid; provided that in case of redemption the notice requisite to the validity of such redemption shall have been given or arrangements shall have been made insuring to the satisfaction of the Corporate Trustee that the same will be given.

ARTICLE XIX.

Meetings of Bondholders.

SECTION 107. Modifications and alterations of this Indenture and/or of any indenture supplemental hereto and/or of the rights and obligations of the Company and/or of the rights of the holders of bonds and coupons issued hereunder may be made as provided in the nine next succeeding Sections hereof numbered 108 to 116, both inclusive.

SECTION 108. The Corporate Trustee may at any time call a meeting of the bondholders and it shall call such a meeting on written request of the holders of not less than a majority in principal amount of the bonds Outstanding hereunder (determined as provided in Section 71 hereof) at the time of such request. The Company, pursuant to a Resolution of its Board of Directors, may also call a meeting of the bondholders at any time. In each such case the purpose or purposes of such meeting shall be set forth in reasonable detail. In the event of the Corporate Trustee's failing for ten (10) days to call a meeting after being thereunto requested by the bondholders as above set forth, holders of Outstanding bonds to the amounts above specified in this Section or the Company, pursuant to Resolution of its Board of Directors, may call such meeting. Every such meeting called by and at the instance of the Corporate Trustee shall be held in the Borough of Manhattan, The City of New York, or with the written approval of the Company, at any other place in the United States of America, and written notice thereof, stating the place and time thereof and in general terms the business to be submitted, shall be mailed by the Corporate Trustee not less than thirty (30) days before such meeting (a) to all holders of bonds the names and addresses of whom are then preserved as required by Section 43 hereof, and (b) to the Company addressed to it at the address given in the first paragraph of this Indenture (or at such other address as may be designated by the Company from time to time), and shall be published by the Corporate Trustee once on at least four different days preceding the meeting, in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, the first publication to be not less than twenty (20) days prior to the date of such meeting; provided, however, that the mailing of such notice to any bondholders shall in no case be a condition precedent to the validity of any action taken at such meeting. If such meeting is called by or at the instance either of the Company or of the bondholders, it shall be held at such place in the United States of America

§109, Art. XIX

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as may be specified in the notice calling such meeting and notice thereof shall be sufficient for all purposes hereof if given by newspaper publication as aforesaid stating the place and time of the meeting and in general terms the business to be submitted. Any meeting of bondholders shall be valid without notice if the holders of all bonds then Outstanding hereunder are present in person or by proxy and if the Company and the Corporate Trustee are present by duly authorized representatives, or if notice is waived in writing before or after the meeting by the Company, the holders of all bonds Outstanding hereunder and by the Corporate Trustee, or by such of them as are not present in person or by proxy.

SECTION 109. Officers and nominees of the Corporate Trustee and of the Company and of the Co-Trustee or their or its nominees may attend such meeting, but shall not as such be entitled to vote thereat. Attendance by bondholders may be in person or by proxy. In order that the holder of any bond payable to bearer and his proxy may attend and vote without producing his bond, the Corporate Trustee, with respect to any such meeting called by the Corporate Trustee, may make and from time to time vary such regulations as it shall think fit for deposit of bonds with, or the stamping of bonds by, any banks, bankers or trust or insurance companies, and for the issue to the persons depositing the same of certificates by such depositaries entitling the holders thereof to be present and vote at any such meeting and to appoint proxies to represent them and vote for them at any such meeting in the same way as if the persons so present and voting, either personally or by proxy, were the actual bearers of the bonds in respect of which such certificates shall have been issued and any regulations so made shall be binding and effective. In lieu of or in addition to providing for such deposit, the Corporate Trustee may, in its discretion, permit such institutions to issue certificates stating that bonds were exhibited to them, which certificates shall entitle the holders thereof to vote at any meeting only if the bonds with

respect to which they are issued are not produced at the meeting by any other person and are not at the time of the meeting registered in the name of any other person. Each such certificate shall state the date on which the bond or bonds in respect of which such certificate shall have been issued were deposited with or submitted to such institution and the series, maturities and serial numbers of such bonds. In the event that two or more such certificates shall be issued with respect to any bond or bonds, the certificate bearing the latest date shall be recognized and be deemed to supersede any certificate or certificates previously issued with respect to such bond or bonds. If any such meeting shall have been called, under the provisions of Section 108 hereof, by bondholders or by the Company, regulations to like effect for such deposit, stamping or exhibition of bonds and the issue of certificates by any bank or trust company organized under the laws of the United States of America or of any State thereof, having a capital of not less than Five Hundred Thousand Dollars (\$500,000) shall be similarly binding and effective for all purposes hereof if adopted or approved by the bondholders calling such meeting or by the Board of Directors of the Company, if such meeting shall have been called by the Company, provided that in either such case copies of such regulations shall be filed with the Corporate Trustee.

SECTION 110. Subject to the restrictions specified in Sections 109 and 113 hereof, any registered holder of bonds Outstanding hereunder and any holder of a certificate (not superseded) provided for in Section 109 hereof, shall be entitled in person or by proxy to attend and vote at such meeting as holder of the bonds registered or certified in the name of such holder without producing such bonds. All others seeking to attend or vote at such meeting in person or by proxy must, if required by any authorized representative of the Corporate Trustee or the Company or by any other bondholder, produce the bonds claimed to be owned or represented at such meeting, and everyone seeking to attend or vote shall, if required as aforesaid, produce such further proof of

bond ownership or personal identity as shall be satisfactory to the authorized representative of the Corporate Trustee, or if none be present then to the Inspectors of Votes hereinafter provided for. Proxies shall be acknowledged before a Notary Public or other officer authorized to take acknowledgments or their genuineness shall be otherwise established to the satisfaction of the Inspectors of Votes, and all proxies and certificates presented at any meeting shall be delivered to said Inspectors of Votes and filed with the Corporate Trustee.

SECTION 111. Persons named by the Corporate Trustee if it is represented at the meeting shall act as temporary Chairman and Secretary, respectively, of the meeting, but if the Corporate Trustee shall not be represented or shall fail to nominate such persons or if any person so nominated shall not be present, the bondholders and proxies present shall by a majority vote, irrespective of the amount of their holdings, elect another person or other persons from those present to act as temporary Chairman and/or Secretary. A permanent Chairman and a permanent Secretary of such meeting shall be elected from those present by the bondholders and proxies present by a majority vote of bonds represented. The Corporate Trustee, if represented at the meeting, shall appoint two Inspectors of Votes who shall decide as to the right of anyone to vote and shall count all votes cast at such meeting, except votes on the election of a Chairman and Secretary, both temporary and permanent, as aforesaid, and who shall make and file with the permanent Secretary of the meeting their verified written report in duplicate of all such votes so cast at said meeting. If the Corporate Trustee shall not be represented at the meeting or shall fail to nominate such Inspectors of Votes or if either Inspector of Votes fails to attend the meeting, the vacancy shall be filled by appointment by the permanent Chairman of the meeting.

SECTION 112. Subject to the provisions of Section 116 hereof, the holders of not less than seventy per centum (70%) in principal amount

of the bonds Outstanding hereunder when such meeting is held must be present at such meeting in person or by proxy in order to constitute a quorum for the transaction of business, less than a quorum, however, having power to adjourn; provided, however, that if such meeting is adjourned by less than a quorum for more than fourteen (14) days, notice thereof shall forthwith be mailed by the Corporate Trustee if such meeting shall have been called by the Corporate Trustee (a) to the Company addressed to it at the address given in the first paragraph of this Indenture (or at such other address as may be designated by the Company in writing from time to time), and (b) to all holders of bonds then Outstanding hereunder, the names and addresses of whom are then preserved by the Corporate Trustee as required by the provisions of Section 43 hereof, and shall be published at least once in each fourteen (14) day period of such adjournment in a Daily Newspaper printed in the English language and of general circulation in the Borough of Manhattan, The City of New York. The failure to mail such notice to any such bondholder as aforesaid shall in no case affect the validity of any action taken at any meeting held pursuant to such adjournment. If such meeting shall have been called, under the provisions of Section 108 hereof, by bondholders or by the Company, notice of such adjournment shall be given by the permanent Chairman and permanent Secretary of the meeting in the newspaper and for the number of times above specified in this Section and shall be sufficient if so given.

SECTION 113. Subject to the provisions of Sections 71, 80 and 116 hereof, any modification or alteration of this Indenture (including any indenture supplemental hereto) and/or of the rights and obligations of the Company and/or the rights of the holders of bonds and/or coupons issued hereunder in any particular may be made at a meeting of bondholders duly convened and held in accordance with the provisions of this Article, but only by resolution duly adopted by the affirmative vote of the holders of seventy per centum (70%) or more in principal amount

of the bonds Outstanding hereunder, and, if the rights of one or more, but less than all, series of bonds then Outstanding are to be affected by action taken at such meeting, then also by affirmative vote of the holders of at least seventy per centum (70%) in principal amount of each series of bonds so to be affected and Outstanding hereunder, when such meeting is held, and in every case approved by Resolution of the Board of Directors of the Company as hereinafter specified; provided, however, that no such modification or alteration shall, without the consent of the holder of any bond issued hereunder affected thereby, (1) impair or affect the right of such holder to receive payment of the principal of (and premium, if any) and interest on such bond, on or after the respective due dates expressed in such bond, or to institute suit for the enforcement of any such payment on or after such respective dates, or (2) permit the creation of any lien ranking prior to, or on a parity with, the Lien of this Indenture with respect to any of the Mortgaged and Pledged Property, or (3) permit the deprivation of any non-assenting bondholder of the benefit of a lien upon the Mortgaged and Pledged Property for the security of his bonds (subject only to the lien of taxes, assessments or governmental charges not then delinquent and to any mortgage or other liens existing upon such property which are prior hereto at the date of the calling of any such bondholders' meeting), or (4) permit the modification of the obligations of the Company under the provisions of Section 64 hereof, or (5) permit the reduction of the percentage required by the provisions of this Section for the taking of any action under this Section with respect to any bond Outstanding hereunder.

Except for the purpose of waiving any past Default, defined in Section 65 hereof, of the Company and the consequences thereof, in which event the provisions of Section 71 hereof shall be applicable, bonds owned and/or held by and/or for account of and/or for the benefit or interest of the Company, or any corporation of which the Company shall own twenty-five per centum (25%) or more of the out-

standing voting stock, shall not be deemed Outstanding for the purpose of any vote or of any calculation of bonds Outstanding in this Article XIX provided for, except that, subject to the provisions of Sections 88 and 89 hereof, for the purpose of determining whether the Trustees, or either of them, shall be protected in relying on any such vote or calculation, only bonds which the Trustees, or either of them, know are so owned and/or held, shall be so excluded.

SECTION 114. A record in duplicate of the proceedings of each meeting of bondholders shall be prepared by the permanent Secretary of the meeting and shall have attached thereto the original reports of the Inspectors of Votes, and affidavits by one or more persons having knowledge of the facts showing a copy of the notice of the meeting and a copy of the notice of adjournment thereof, if required under the provisions of Section 112 hereof, and showing that said notices were mailed and published as provided in Section 108 hereof and, in a proper case, as provided in Section 112 hereof. Such record shall be signed and verified by the affidavits of the permanent Chairman and the permanent Secretary of the meeting, and one duplicate thereof shall be delivered to the Company and the other to the Corporate Trustee for preservation by the Corporate Trustee. Any record so signed and verified shall be proof of the matters therein stated, and if such record shall also be signed and verified by the affidavit of a duly authorized representative of the Corporate Trustee, such meeting shall be deemed conclusively to have been duly convened and held and such record shall be conclusive, and any resolution or proceeding stated in such record to have been adopted or taken shall be deemed conclusively to have been duly adopted or taken by such meeting. A true copy of any resolution adopted by such meeting shall be mailed by the Corporate Trustee to all holders of bonds Outstanding hereunder, the names and addresses of whom are then preserved by the Corporate Trustee pursuant to the provisions of Section 43 hereof, and proof of such mailing by the affidavit of some person having knowledge of the fact

shall be filed with the Corporate Trustee, but failure to mail copies of such resolution as aforesaid shall not affect the validity thereof. No such resolution shall be binding until and unless such resolution is approved by Resolution of the Board of Directors of the Company, of which such Resolution of approval, if any, it shall be the duty of the Company to file a copy certified by the Secretary or an Assistant Secretary of the Company with the Corporate Trustee, but if such Resolution of the Board of Directors of the Company is adopted and a certified copy thereof is filed with the Corporate Trustee, the resolution so adopted by such meeting shall (to the extent permitted by law) be deemed conclusively to be binding upon the Company, the Trustees and the holders of all bonds and coupons issued hereunder, at the expiration of sixty (60) days after such filing, except in the event of a final decree of a court of competent jurisdiction setting aside such resolution, or annulling the action taken thereby in a legal action or equitable proceeding for such purposes commenced within such sixty (60) day period; provided, however, that no such resolution of the bondholders, or Resolution of the Company, shall in any manner change or modify or be so construed as to change or modify any of the rights, immunities, or obligations of the Trustees or of either of them without their, its or his written assent thereto.

SECTION 115. Bonds authenticated and delivered after the date of any bondholders' meeting may bear a notation in form approved by the Corporate Trustee as to the action taken at meetings of bondholders theretofore held, and upon demand of the holder of any bond Outstanding at the date of any such meeting and presentation of his bond for the purpose at the principal office of the Corporate Trustee, the Company shall cause suitable notation to be made on such bond by endorsement or otherwise as to any action taken at any meeting of bondholders theretofore held. If the Company or the Corporate Trustee shall so determine, new bonds so modified as in the opinion of the Corporate Trustee and the Board of Directors of the Company to

§116, Art. XIX

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conform to such bondholders' resolution shall be prepared, authenticated and delivered, and upon demand of the holder of any bond then Outstanding and affected thereby shall be exchanged without cost to such bondholder for bonds then Outstanding hereunder upon surrender of such bonds with all unmatured coupons, if any, appertaining thereto. The Company or the Corporate Trustee may require bonds Outstanding to be presented for notation or exchange as aforesaid if either shall see fit to do so. Instruments supplemental to this Indenture embodying any modification or alteration of this Indenture (including any indenture supplemental hereto) made at any bondholders' meeting and approved, by Resolution of the Board of Directors of the Company, as aforesaid, may be executed by the Trustees and the Company and upon demand of the Corporate Trustee, or if so specified in any resolution adopted by any such bondholders' meeting, shall be executed by the Company and the Trustees.

Any instrument supplemental to this Indenture executed pursuant to the provisions of this Section, shall comply with all applicable provisions of the Trust Indenture Act of 1939 as in force on the date of the execution of such supplemental indenture.

SECTION 116. Notwithstanding anything in this Article contained, the Company may at any time, and from time to time, by Resolution of the Board of Directors filed with the Corporate Trustee, stipulate that from and after the date of the filing of such Resolution with the Corporate Trustee no action thereafter taken under the provisions of this Article shall be of any force and effect whatever either as respects (1) all bonds theretofore authenticated and delivered by the Corporate Trustee hereunder and then Outstanding and/or (2) as to any bonds and/or all bonds thereafter authenticated and delivered by the Corporate Trustee hereunder, and in any such event a supplemental indenture setting out in detail the stipulations contained in such Resolution shall be made.

ARTICLE XX.

Miscellaneous.

SECTION 117. Nothing in this Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding hereunder, any right, remedy, or claim under or by reason of this Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements in this Indenture contained by and on behalf of the Company shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding hereunder.

SECTION 118. Any money which is held by the Corporate Trustee (other than money which is held by it for the purpose of effecting the purchase, payment or redemption of any bonds issued hereunder or the payment of any coupons or interest claims appertaining to bonds issued hereunder or which it has been directed to apply to any such purchase, payment or redemption) shall, at the request of the Company evidenced by a Resolution, be invested or reinvested by the Corporate Trustee in any bonds or other obligations of the United States of America designated by the Company, and, unless the Company is in default in the payment of interest on any of the bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, any interest on such bonds or other obligations which may be received by the Corporate Trustee shall be forthwith paid to the Company. Such bonds or other obligations shall be held by the Corporate Trustee as a part of the Mortgaged and Pledged Property and subject to the same provisions hereof as the cash used to purchase the same, but upon a like request of the Company, the Corporate Trustee shall sell all or any designated part of the same and the proceeds of such sale shall be held by the Corporate Trustee subject

§119, Art. XX

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to the same provisions hereof as were applicable to the cash used by it to purchase the bonds or other obligations so sold. If such sale shall produce a net sum less than the cost of the bonds or other obligations so sold, the Company covenants that it will pay promptly to the Corporate Trustee such amount of cash as with the net proceeds from such sale will equal the cost of the bonds or other obligations so sold, and if such sale shall produce a net sum greater than the cost of the bonds or other obligations so sold, the Corporate Trustee shall promptly pay to the Company an amount in cash equal to such excess.

Unless the Company is in Default, as defined in Section 65 hereof, any money in excess of the sum of Fifty Thousand Dollars (\$50,000) which shall have been held by the Corporate Trustee for a period of five (5) years, invested or uninvested (other than money which is held by it for the purpose of effecting the purchase, payment or redemption of any bonds issued hereunder or the payment of any coupons or interest claims appertaining to bonds issued hereunder or which it has been directed to apply to any such purchase, payment or redemption), shall be applied by the Corporate Trustee to the purchase of bonds of any or all series in the manner provided for in Section 55 hereof, and at the price or prices, in the judgment of the Corporate Trustee most favorable to the Company (but not in excess of the maximum prices provided for in said Section 55) or in the discretion of the Corporate Trustee to the redemption of bonds selected as provided in Section 52 hereof from the bonds of all series then redeemable. In the case of any such redemption the Corporate Trustee shall have power to give any and all redemption notices for or on behalf of the Company.

SECTION 119. In the event that any bond issued hereunder shall not be presented for payment when the principal thereof becomes due, either at maturity or otherwise, or at the date fixed for the redemption thereof, or in the event that any coupon shall not be presented for payment at the due date thereof and the Company shall have deposited with the Corporate Trustee or any paying agent for the purpose or left

with either of them if previously so deposited, money sufficient to pay the principal of such bond (and premium, if any), together with all interest due thereon to the date of the maturity of such bond or to the date fixed for the redemption thereof, or to pay such coupon, as the case may be, for the use and benefit of the holder thereof, the Corporate Trustee or such paying agent shall, upon demand of the Company, in case the holder of any such bond or coupon shall not, within six (6) years after the maturity of any such bond or coupon or the date fixed for the redemption of any such bond, claim the amount deposited as above stated for the payment thereof, pay over to the Company such amount so deposited, if the Company is not at the time in default hereunder; and the Corporate Trustee or such paying agent shall thereupon be relieved from all responsibility to the holder thereof, and in the event of such payment to the Company the holder of any such bond or coupon shall (subject to any applicable statute of limitations) be deemed to be an unsecured creditor of the Company for an amount equivalent to the amount deposited as above stated for the payment thereof and so paid over to the Company.

SECTION 120. Any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of this Indenture, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued hereunder and provide that a breach thereof shall be equivalent to a default under this Indenture, or the Company may cure any ambiguity contained herein, or in any supplemental indenture, or may (in lieu of establishment by Resolution as provided in Section 8 hereof) establish the terms and provisions of any series of bonds other than the First Series, by an instrument in

writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the Lien hereof shall be situated. The Trustees are hereby authorized to join with the Company in the execution of any such instrument or instruments. Such instrument, executed and acknowledged as aforesaid, shall be delivered to the Trustees, and thereupon any modification of the provisions of these presents therein set forth, authorized by this Section, shall be binding upon the parties hereto, their successors and assigns, and the holders of the bonds and coupons hereby secured. Anything herein contained to the contrary notwithstanding, this Section shall not be construed to permit any act, waiver, surrender or restriction adversely affecting any bonds then Outstanding hereunder.

SECTION 121. Each certificate or opinion which is specifically required by the provisions of this Indenture to be delivered to the Corporate Trustee with respect to compliance with a condition or covenant herein contained shall include (1) a statement that the person making such certificate or opinion has read such covenant or condition; (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based; (3) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and (4) a statement as to whether or not in the opinion of such person such condition or covenant has been complied with.

Whenever any action to be taken by the Corporate Trustee upon the request or application of the Company pursuant to any of the provisions of this Indenture is dependent upon the compliance by the Company with any conditions precedent (including any covenants compliance with which constitutes a condition precedent) provided for in this Indenture, every such request or application shall be accompanied

by an Officers' Certificate and an Opinion of Counsel stating in each case that in the opinion of the person making such certificate or opinion the conditions precedent to such action, provided for in this Indenture (including any covenants compliance with which constitutes a condition precedent), have been complied with.

The same officer or officers of the Company, or the same engineer or counsel or other person, as the case may be, need not certify to all the matters required to be certified under the provisions of any Article, Section, subsection, subdivision, paragraph or clause hereof, but different officers, engineers, counsel or other persons may certify to different facts respectively.

SECTION 122. All parties to this Indenture agree, and each holder or owner of any bond by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustees or either of them for any action taken or omitted by them, as Trustees, or by it or him, as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorney's fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Trustees or either of them, to any suit instituted by any bondholder, or group of bondholders, holding in the aggregate more than ten per centum (10%) in principal amount of the bonds Outstanding (determined as provided in Section 71 hereof), or to any suit instituted by any bondholder for the enforcement of the payment of the principal of or interest on any bond, on or after the respective due dates expressed in such bond.

SECTION 123. Subject to the provisions of Article XVI and Article XVII hereof, whenever in this Indenture any of the parties hereto is

§124, §125, §126, §127, Art. XX

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named or referred to (except in subdivision (1) of Section 5 hereof) this shall be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 124. If any provision of this Indenture limits, qualifies, or conflicts with another provision of this Indenture which has been required to be included pursuant to any requirements of Sections 310 to 317, inclusive, of the Trust Indenture Act of 1939, such required provision shall control.

SECTION 125. Wherever reference is made in this Indenture to the Trust Indenture Act of 1939 (except in Section 115 hereof), reference is made to such Act as it was in force on the date of the execution of this Indenture.

SECTION 126. The titles of the several Articles of this Indenture and the marginal sectional and marginal Article references shall not be deemed to be any part thereof.

SECTION 127. This Indenture shall be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

ARTICLE XXI.

Specific Description of Property.

FIRST: The following described real property, situated on the west bank of the Willamette River, in the City of Portland, County of Multnomah, State of Oregon, being the site of the Company's gas and by-products manufacturing plant, namely:

All that part of Sections 12 and 13, Township 1 North, Range 1 West of Willamette Meridian, being a part of the W. W. Baker Donation Land Claim, bounded and described as follows:

Beginning at the most northerly corner of the Milton Doane Donation Land Claim, running thence south 32°00' west, tracing the westerly boundary of said Donation Land Claim, 25 chains 50 links to a stone monument near the middle of the right of way of the Northern Pacific Railway Company; thence south 44°30' west, still tracing said Claim line, to the middle of the St. Helens Road, 80 feet in width, formerly known as the Portland and Linnton Boulevard; thence northwesterly, tracing said center line of said road, to its point of intersection with the southwesterly projection of the easterly boundary of the tract of land known as the Government Moorings, conveyed by T. L. Eliot and Henrietta R. Eliot, his wife, to The United States of America by deed dated June 10, 1905, and recorded in Book 342 of Deeds at page 146, records of said Multnomah County; thence northeasterly, tracing said southwesterly projection and said easterly boundary of said Government Moorings tract, to its intersection with the harbor line on the west bank of the Willamette River; thence southeasterly, tracing said harbor line, to its intersection with the projection northeasterly of said westerly boundary of said Milton Doane Donation Land Claim; thence south 32°00' west, along said projection of said boundary line, to the point of beginning; together with all wharfage, riparian, and other rights appurtenant to said tract; subject, however, to the easement or right of way for railroad purposes over a strip of land sixty feet in width across the westerly side of said tract, approximately parallel to said St. Helens Road, as conveyed to the Northern Pacific Railroad Company by deed of H. P. Isaacs and wife dated March 13, 1883, and recorded in Book 65 of Deeds at page 242, records of said Multnomah County; and subject to the rights of the public in said St. Helens Road, located westerly of said Northern Pacific right of way, and to the rights of the public in North Front Avenue, a dedicated but unopened street over and across the southeasterly corner of said tract; said tract containing approximately 46.5 acres, exclusive of the areas in

the railroad, county road, and street rights of way above referred to.

SECOND: The following described real property situated on the west bank of the Willamette River in the City of Portland, County of Multnomah, State of Oregon, adjoining the tract of land described in Paragraph First of this Article XXI, being land acquired and held by the Company for future expansion and development of the manufacturing plant referred to in said Paragraph First, namely:

That certain tract or parcel of land bounded and described as follows:

Beginning at a point, marked by an iron pipe on the boundary line between the Milton Doane and the W. W. Baker Donation Land Claims, which is north $32^{\circ}00'$ east 419.21 feet from an iron pipe at the angular corner on said boundary line between said donation land claims; thence southeasterly, tracing the easterly line of the property conveyed by P. J. Mann and wife to Portland and Seattle Railway Company by deed dated August 7, 1906, and recorded in Book 367 of Deeds, at page 251, in the records of said Multnomah County, a distance of 1154.66 feet; thence north $32^{\circ}00'$ east 1768.32 feet, more or less to a point on the meander line of the Willamette River; thence continuing north $32^{\circ}00'$ east a distance of 186 feet, more or less, to a point on the harbor line; thence north $60^{\circ}45'$ west, tracing said harbor line, 1058.5 feet, more or less, to a point on the projection northeasterly of said boundary line between said donation land claims; thence along said projection of said boundary line south $32^{\circ}00'$ west 220.94 feet, more or less, to the most northerly corner of said Milton Doane Donation Land Claim; thence south $32^{\circ}00'$ west, tracing said boundary line between said donation land claims, a distance of 1218.49 feet, more or less, to the point of beginning; together with all wharfage, riparian, and other rights appurtenant to the above described property or any thereof; but subject to the rights of the public in North Front Avenue, a dedicated but unopened street, over and across the southerly and southwesterly part of said tract; said tract containing 38.499 acres, more or less, exclusive of the area in said North Front Avenue.

THIRD: The following described real property situated in the City of Portland, County of Multnomah, State of Oregon, being the site of the Company's so-called "Station E", upon which are located certain gas holders, compressors, and other equipment, namely:

A tract of land in Section 11, Township 1 South, Range 1 East of Willamette Meridian, bounded and described as follows:

Beginning at the intersection of the north line of Southeast Taggart Street and the east line of Southeast 9th Avenue; thence north $0^{\circ}13'$ east, along the east line of said Southeast 9th Avenue, 567.87 feet; thence east, and parallel to said north line of Southeast Taggart Street, 133.66 feet to the southeast corner of a tract of land conveyed to Montague-O'Reilly Company by Ladd Estate Company by deed dated January 6, 1924, and recorded in Book 952 of Deeds at page 233, records of said Multnomah County; thence, on a curve to the left with 350.8 foot radius the initial tangent to which bears north $17^{\circ}19'40''$ west, a distance of 64.67 feet; thence north $27^{\circ}53'30''$ west, 73.05 feet to a point in a line 33 feet southwesterly of and parallel to the southwesterly line of the right of way of the Oregon and California Railroad Company; thence south $51^{\circ}24'30''$ east, parallel to and 33 feet distant southwesterly from the southwesterly line of said right of way, 475.79 feet to an intersection with the westerly line of Southeast Milwaukie Avenue; thence south $18^{\circ}31'$ east, along said westerly line of Southeast Milwaukie Avenue, 48.8 feet; thence southerly and southwesterly, on a curve to the right with a radius of 50 feet and a central angle of $65^{\circ}39'$, 57.28 feet to a point on the northwesterly line of Southeast 10th Avenue (formerly Clinton Street); thence south $47^{\circ}08'$ west, following said northwesterly line of Southeast 10th Avenue, 339.23 feet; thence continuing southwesterly along said northwesterly line of Southeast 10th Avenue, on a curve to the right with a radius of 46.14 feet and a central angle of $42^{\circ}52'$, 34.52 feet to a point on the west line of said Southeast 10th Avenue; thence south, along said west line of Southeast 10th Avenue, 30 feet to the north line of said Southeast Taggart Street; thence west, along said north line of Southeast Taggart Street, 200 feet to the point of beginning; said tract containing 4.909 acres, more or less.

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FOURTH: The following described real property situated in the City of Portland, County of Multnomah, State of Oregon, being the site of the Company's shop and warehouse building, namely:

Lots 5, 6, 7, and 8, Block 15, Couch's Addition to the City of Portland.

FIFTH: The following described real property situated in the City of Portland, County of Multnomah, State of Oregon, being the site of one of the Company's gas holders, and of its garage and motor vehicle shop, namely:

Block 23, Couch's Addition to the City of Portland.

SIXTH: The following described real property situated in the City of Portland, County of Multnomah, State of Oregon, occupied by the Company's distribution office building and for other purposes, namely:

Lots 4, 5 and 8, Block 24, Couch's Addition to the City of Portland; and that Part of Lot 3 in said Block 24 described as follows:

Beginning at the southeast corner of said Lot 3; thence north, along the east boundary line of said Lot 3, 34 feet $1\frac{3}{8}$ inches; thence west, and parallel to the south boundary line of said Lot 3, 4 feet $11\frac{1}{8}$ inches; thence southerly to a point on the south boundary line of said Lot 3, which last mentioned point is 4 feet $11\frac{1}{2}$ inches west from the southeast corner of said Lot 3; thence east, along the south boundary line of said Lot 3, 4 feet $11\frac{1}{2}$ inches to the place of beginning.

SEVENTH: The following described real property situated in the City of Portland, County of Multnomah, State of Oregon, namely:

The South one-half of Block 92, Couch's Addition to the City of Portland.

EIGHTH: The following described real property, situated in the City of Portland, County of Multnomah, State of Oregon, being the site of one of the Company's gas holders, namely:

The South one-half of the South one-half of Lot O of the O. M. Patton Tract.

NINTH: The following described real property situated in the County of Multnomah, State of Oregon, being a site acquired by the Company for a compressor station and other purposes, namely:

A tract of land in Section 36, Township 1 North, Range 1 West of Willamette Meridian, bounded and described as follows:

Beginning at a point, marked by an iron pipe, which is north 88°18' east 330 feet, measured along the east and west center line of said Section 36, and north 1°28' west 285 feet, measured along a line parallel to the west line of said section, from the west quarter corner of said section; thence north 1°28' west, along said line parallel to the west line of said section 625 feet to an iron pipe, thence north 88°32' east, along a line at right angles to said parallel line, 271.3 feet to a point on the west line of the Miller Road; thence southerly along said west line of said Miller Road 93.08 feet, along the arc of a curve to the right having a radius of 256.5 feet and a chord bearing south 11°51¾' east to the end of said curve; thence south 1°28' east, continuing along said west line of said Miller Road, 530 feet to an iron pipe; thence south 87°45' west 288 feet, more or less, to the point of beginning; said tract containing 4.116 acres, more or less.

TENTH: The following described real property situated in the City of Salem, County of Marion, State of Oregon, being the site of one of the Company's gas holders, a shop building, and an auxiliary butane or liquefied gas installation, namely:

All of Lots 5, 6, 7, and 8, Block 62, of the Town (now City) of Salem, Oregon; but excepting therefrom a rectangular piece of land in Lots 5 and 6 bounded and described as follows:

Beginning at the southeasterly corner of said Lot 5; thence westerly, along the southerly boundary of said Lot 5, a distance of 49 feet to a point; thence northerly, and at right angles to the southerly line of said Lot 5 and parallel to the easterly line of said Lot 5, 98.5 feet to a point in said Lot 6; thence easterly, at right angles to said last described course and parallel to the

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southerly line of said Lot 6, 49 feet to a point in the easterly line of said Lot 6; thence southerly 98.5 feet along the easterly line of said Lot 6 and of said Lot 5 to the place of beginning;

the Company's said real property containing approximately 1.15 acres.

ELEVENTH: The following described real property situated near the City of Corvallis, in the County of Benton, State of Oregon, being the site of an auxiliary butane or liquefied gas installation, namely:

That certain tract of land bounded and described as follows:

Beginning at a $\frac{3}{4}$ " pipe in the center of Kings Road where said road intersects the north line of the city limits of the City of Corvallis; thence north $0^{\circ}53'$ west, along the center line of said Kings Road, 162.12 feet; thence north $89^{\circ}21\frac{1}{2}'$ east 268.7 feet; thence south $0^{\circ}53'$ east 162.48 feet, more or less, to said city limits; thence north $89^{\circ}25'$ west, along the north line of said city limits, 268.7 feet, more or less, to the place of beginning; but subject to the rights of the public in said Kings Road; said tract, exclusive of the area in said Kings Road, containing approximately .93 of an acre.

TWELFTH: The following described real property situated in the County of Benton, State of Oregon, being the site of an auxiliary butane or liquefied gas installation, namely:

That certain tract or parcel of land situated in the Anthony Roberts Donation Land Claim, in Section 4, Township 11 South, Range 4 West of Willamette Meridian, bounded and described as follows:

Beginning at the intersection of the northerly line of the Southern Pacific Railroad Company's right of way with the westerly line of the Granger-Independence Road, and extending thence northerly along the westerly side of said Granger-Independence Road 125 feet; thence southwesterly, and parallel to Southern Pacific Railroad Company's right of way, 200 feet; thence southerly, and parallel to said Granger-Independence

Road, 125 feet to the northerly line of said Southern Pacific Railroad Company's right of way; thence northeasterly, along the northerly line of said Southern Pacific Railroad Company's right of way, to the place of beginning; said tract containing approximately .52 of an acre.

THIRTEENTH: The following described real property situated in the City of Vancouver, County of Clark, State of Washington, being the site of an auxiliary butane or liquefied gas installation, namely:

Lot 7, Block 54, West Vancouver, and all that part of Lots 1, 2, and 8, in said Block 54, bounded and described as follows:

Beginning at the southeast corner of said Lot 8; thence west 100 feet to the southwest corner of Lot 7 in said Block 54; thence north 176 feet, more or less, to a point on the west line of Lot 2 in said Block 54, which point is distant 50 feet southwesterly from, measured at right angles to, the center line of the single main track of Spokane, Portland and Seattle Railway Company; thence southeasterly, parallel to and 50 feet southwesterly from said center line, to the east line of said Lot 8; thence south 64 feet, more or less, to the point of beginning; said tract containing 1200 square feet, more or less.

FOURTEENTH: The entire transmission and distribution system or systems used by the Company for delivering gas from the manufacturing plant referred to in Paragraph First of this Article XXI, and from its auxiliary butane or liquefied gas installations, to customers in the cities and towns and the unincorporated areas supplied by the Company with gas in the counties of Multnomah, Washington, Clackamas, Marion, Yamhill, Polk, Linn, and Benton, in the State of Oregon, and in the County of Clark, in the State of Washington, and any and all additions to and extensions of said gas transmission and distribution system or systems, wheresoever situated.

IN WITNESS WHEREOF, PORTLAND GAS & COKE COMPANY, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice-Presidents, and its corporate seal to be attested by its

Secretary or one of its Assistant Secretaries for and in its behalf, and BANKERS TRUST COMPANY, one of the parties hereto of the second part, in token of its acceptance of the trust hereby created, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice-Presidents and its corporate seal to be attested by one of its Assistant Secretaries, and R. G. PAGE, one of the parties hereto of the second part, for all like purposes has hereunto set his hand and affixed his seal, all in the City of New York, on the 15th day of July, 1946, as of July 1, 1946.

PORTLAND GAS & COKE COMPANY,

By

President.

Attest:

Secretary.

Executed, sealed and delivered by PORTLAND
GAS & COKE COMPANY in the presence of:

BANKERS TRUST COMPANY,

By

Vice-President.

Attest:

Assistant Secretary.

Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

R. G. PAGE

[L. S.]

Executed, sealed and delivered by R. G. PAGE
in the presence of:

STATE OF NEW YORK }
COUNTY OF NEW YORK } SS.:

July 15, A. D. 1946.

Before me personally appeared C. H. GUEFFROY, who, being duly sworn, did say that he is a Vice-President of PORTLAND GAS & COKE COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 15th day of July, 1946, before me personally appeared C. H. GUEFFROY, to me known to be a Vice-President of PORTLAND GAS & COKE COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Notary Public

Residing at Jackson Heights, N. Y.

ALICE M. POWELL
Notary Public, Queens County
Queens Co. Clk's No. 2075, Reg. No. 209-P-7
Certificates Filed in
N. Y. Co. Clk's No. 115, Reg. No. 105-P-7
Westchester County Clerk
Commission Expires March 30, 1947

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 15, A. D. 1946.

Before me personally appeared E. E. BEACH, who, being duly sworn, did say that he is a Vice-President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 15th day of July, 1946, before me personally appeared E. E. BEACH, to me known to be a Vice-President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Notary Public

Residing at Brightwaters, N. Y.

EUGENIE A. RICHARDS
Notary Public, Suffolk County
Certificates filed in
N. Y. Co. Clk's No. 662, Reg. No. 715-B-8
Commission Expires March 30, 1948

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STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 15, A. D. 1946.

Before me personally appeared the above-named R. G. PAGE and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me R. G. PAGE to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 15th day of July, 1946.

Notary Public

Residing at Brightwaters, N. Y.

EUGENIE A. RICHARDS
Notary Public, Suffolk County
Certificates filed in
N. Y. Co. Clk's No. 662, Reg. No. 715-B-8
Commission Expires March 30, 1948

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STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

C. H. GUEFFROY, being duly sworn, deposes and says that he is a Vice-President of PORTLAND GAS & COKE COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

Subscribed and sworn to before me }
this 15th day of July, 1946. }

Notary Public

Residing at Jackson Heights, N. Y.

ALICE M. POWELL
Notary Public, Queens County
Queens Co. Clk's No. 2075, Reg. No. 209-P-7
Certificates Filed in
N. Y. Co. Clk's No. 115, Reg. No. 105-P-7
Westchester County Clerk
Commission Expires March 30, 1947

SUCCESSION OF J. C. KENNEDY AS CO-TRUSTEE
IN PLACE OF R. G. PAGE

UNDER

Mortgage and Deed of Trust

Dated as of July 1, 1946

AND

First Supplemental Indenture

Dated as of June 1, 1949

PORTLAND GAS & COKE COMPANY

TO

BANKERS TRUST COMPANY

AND

R. G. PAGE,

TRUSTEES

RECORDATION DATA

OREGON

Dated Filed for Record	County	Office of	Real Estate Mortgage Records		Chattel Mortgage Records
			Book	Page	
7/19/46	Multnomah	Clerk	911	223	Indexed
7/19/46	Washington	Clerk	194	1	Indexed
7/19/46	Clackamas	Clerk	293	68	Indexed
7/19/46	Marion	Recorder	278	1	Indexed
7/19/46	Yamhill	Clerk	107	391	Indexed
7/19/46	Polk	Clerk	80	328	Book 6
7/19/46	Linn	Recorder	121	1	Indexed
7/19/46	Benton	Clerk	79	524	Indexed

WASHINGTON

7/19/46	Clark	Auditor	399	1	Indexed
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KNOW ALL MEN BY THESE PRESENTS

That the undersigned R. G. Page hereby resigns as Co-Trustee under the Mortgage and Deed of Trust made by the undersigned Portland Gas & Coke Company, a corporation of the State of Oregon, to Bankers Trust Company and said R. G. Page, as Trustees, dated as of July 1, 1946, supplemented by the First Supplemental Indenture dated as of June 1, 1949, such resignation to take effect on June 14, 1951, unless prior thereto a successor co-trustee shall have been appointed as provided in said Mortgage and Deed of Trust, in which event such resignation shall take effect immediately on the appointment of such successor co-trustee.

NOW THEREFORE, pursuant to the provisions of Section 102 of said Mortgage and Deed of Trust, and by order of its Board of Directors, the undersigned Portland Gas & Coke Company hereby appoints J. C. Kennedy, as successor Co-Trustee under said Mortgage and Deed of Trust, as supplemented, subject to the conditions expressed in Article XVII thereof.

The undersigned J. C. Kennedy, a citizen of the United States of America, hereby accepts his said appointment by Portland Gas & Coke Company as successor Co-Trustee under said Mortgage and Deed of Trust, as supplemented.

The undersigned R. G. Page will cause notice of his resignation to be published as provided in Section 101 of said Mortgage and Deed of Trust in the form provided in Exhibit A hereto annexed.

The undersigned Portland Gas & Coke Company will proceed with the publication of the notice of appointment of said J. C. Kennedy, as provided in Section 102 of said Mortgage and Deed of Trust, in substantially the form provided in Exhibit B hereto annexed.

This instrument may be executed in several counterparts, each of which shall be deemed to be an original.

IN WITNESS WHEREOF, Portland Gas & Coke Company has caused its corporate name to be hereunto affixed, and this instrument to be signed

and sealed by its President, and its corporate seal to be attested by its Secretary, and J. C. Kennedy and R. G. Page have hereunto set their hands and seals, all as of the 14th day of June, 1951.

PORTLAND GAS & COKE COMPANY,

[CORPORATE SEAL]

By C. H. GUEFFROY
President

Attest:

H. N. BURNSIDE
Secretary

Executed, sealed and delivered by Portland
Gas & Coke Company in the presence of:

N. H. STEPHENS

J. J. SIBERT

J. C. KENNEDY
----- [L.S.]
J. C. KENNEDY

Executed, sealed and delivered by
J. C. KENNEDY in the presence of:

WM. H. DEALE

A. P. SULLIVAN

R. G. PAGE
----- [L.S.]
R. G. PAGE

Executed, sealed and delivered by
R. G. PAGE in the presence of:

WM. H. DEALE

A. P. SULLIVAN

STATE OF OREGON }
County of Multnomah } ss.

June 14, A. D. 1951.

Before me personally appeared C. H. GUEFFROY, who, being duly sworn, did say that he is the President of Portland Gas & Coke Company and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by order of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 14th day of June, 1951, before me personally appeared C. H. GUEFFROY, to me known to be the President of Portland Gas & Coke Company, the Corporation that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

C. I. LANDSVERK

Notary Public for Oregon
Residing at Portland, Oregon
My Commission Expires October 4, 1954

STATE OF NEW YORK }
County of New York } ss.

June 25, A. D. 1951

Before me personally appeared the above-named R. G. PAGE and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me R. G. PAGE to me known to be one of the individuals described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 25th day of June, 1951.

[NOTARIAL SEAL]

ALOYSE A. STEPHENS
Notary Public

ALOYSE A. STEPHENS
NOTARY PUBLIC, State of New York
No. 08-3835150
Qualified in Bronx County
Certificates filed with
New York County Clerks & Registers
Bronx County Clerks & Registers
Term expires March 30, 1953

Residing at 1265 University Avenue
Bronx 52, N. Y.

STATE OF NEW YORK }
County of New York } ss.

June 25, A. D. 1951

Before me personally appeared the above named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 25th day of June, 1951.

[NOTARIAL SEAL]

ALOYSE A. STEPHENS
Notary Public

ALOYSE A. STEPHENS
NOTARY PUBLIC, State of New York
No. 03-3835150
Qualified in Bronx County
Certificates filed with
New York County Clerks & Registers
Bronx County Clerks & Registers
Term expires March 30, 1953

Residing at 1265 University Avenue
Bronx 52, N. Y.

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(EXHIBIT A)

NOTICE OF RESIGNATION OF CO-TRUSTEE

NOTICE IS HEREBY GIVEN that the undersigned R. G. PAGE has resigned as Co-Trustee under the Mortgage and Deed of Trust dated as of July 1, 1946, and the First Supplemental Indenture dated as of June 1, 1949, of Portland Gas & Coke Company to Bankers Trust Company and said R. G. Page, Trustees, such resignation to take effect on June 14, 1951, unless prior thereto a successor co-trustee shall have been appointed in the manner provided in said Mortgage and Deed of Trust, in which event such resignation shall take effect immediately upon the appointment of such successor co-trustee.

Dated, _____, 1951.

R. G. PAGE

(EXHIBIT B)

NOTICE OF APPOINTMENT OF SUCCESSOR TRUSTEE

NOTICE IS HEREBY GIVEN that the undersigned Portland Gas & Coke Company has received notice of and accepted the foregoing resignation of R. G. PAGE as Co-Trustee under its Mortgage and Deed of Trust dated as of July 1, 1946, as supplemented, and that as provided in said Mortgage and Deed of Trust the undersigned has appointed J. C. KENNEDY as successor Co-Trustee thereunder, effective June 14, 1951.

Dated, _____, 1951.

PORTLAND GAS & COKE COMPANY,
By C. H. GUEFFROY,
President.

SUMMARY OF RECORDING DATA

Succession of J. C. Kennedy as Co-Trustee
in Place of R. G. Page
Dated as of June 14, 1951

Oregon

Date Filed for Record	County	Office of	Real Estate Mortgage Records		Chattel Mortgage Records
			Book	Page	
6/29/51	Multnomah.....	Clerk.....	1372	317	Indexed
7/2/51	Washington.....	Clerk.....	268	264	Indexed
6/29/51	Clackamas.....	Clerk.....	372	136	Indexed
6/29/51	Marion.....	Recorder.....	360	769	Indexed
7/2/51	Yamhill.....	Clerk.....	129	311	Indexed
6/29/51	Polk.....	Clerk.....	95	671	Indexed
6/29/51	Linn.....	Recorder.....	154	785	Indexed
6/29/51	Benton.....	Clerk.....	94	763	Indexed
6/29/51	Clark.....	Washington Auditor.....	529	1	No. G80627

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First Supplemental Indenture
Dated as of June 1, 1949

Oregon

Date Filed for Record	County	Office of	Real Estate Mortgage Records		Chattel Mortgage Records
			Book	Page	
6/23/49	Multnomah.....	Clerk.....	1171	564	Indexed
6/25/49	Washington.....	Clerk.....	228	344	Indexed
6/25/49	Clackamas.....	Clerk.....	340	291	Indexed
6/25/49	Yamhill.....	Clerk.....	120	416	Indexed
6/25/49	Marion.....	Recorder.....	329	509	Indexed
6/27/49	Polk.....	Clerk.....	90	1	Indexed
6/25/49	Linn.....	Recorder.....	140	657	Indexed
6/25/49	Benton.....	Clerk.....	87	448	Indexed
		Washington			
6/27/49	Clark.....	Auditor.....	469	1	G26749

Mortgage and Deed of Trust
Dated as of July 1, 1946

Oregon

7/19/46	Multnomah.....	Clerk.....	911	223	Indexed
7/19/46	Washington.....	Clerk.....	194	1	Indexed
7/19/46	Clackamas.....	Clerk.....	293	68	Indexed
7/19/46	Marion.....	Recorder.....	278	1	Indexed
7/19/46	Yamhill.....	Clerk.....	107	391	Indexed
7/19/46	Polk.....	Clerk.....	80	328	Indexed
7/19/46	Linn.....	Recorder.....	121	1	Indexed
7/19/46	Benton.....	Clerk.....	79	524	Indexed
		Washington			
7/19/46	Clark.....	Auditor.....	399	1	No. F63495

I, Bruce Worthington, Auditor of Clark County, State of Washington, do hereby certify the foregoing to be a true and correct copy of the Succession of J. C. Kennedy as Co-Trustee in Place of R. G. Page under Mortgage and Deed of Trust dated as of July 1, 1946 of record in this office, File No. G30626, Vol. 529, Page No. 1, of Mortgages.

WITNESS my hand and official seal this 2nd day of July, 1965

BRUCE WORTHINGTON, Auditor, Clark County

By *Janet W. Field* Deputy.

PORTLAND GAS & COKE COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

As Trustees under Portland Gas & Coke
Company's Mortgage and Deed of
Trust, Dated as of July 1, 1946

Second Supplemental Indenture

Dated as of March 1, 1954

SECOND SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of March, 1954, made and entered into by and between **PORTLAND GAS & COKE COMPANY**, a corporation of the State of Oregon, whose post office address is Public Service Building, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and **BANKERS TRUST COMPANY**, a corporation of the State of New York, whose post office address is 16 Wall Street, New York, New York (hereinafter sometimes called the Corporate Trustee) and **J. C. KENNEDY** (successor to R. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Second Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Second Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture); and

WHEREAS said First Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, in the official records of the several counties in the States of Oregon and Washington listed below, as follows:

OREGON

Date Filed for Record	County	Office of	Real Estate Mortgage Records		Chattal Mortgage Records
			Book	Page	
6/23/49	Multnomah	Clerk	1171	564	Indexed
6/25/49	Washington	Clerk	228	344	Indexed
6/25/49	Clackamas	Clerk	340	291	Indexed
6/25/49	Yamhill	Clerk	120	416	Indexed
6/25/49	Marion	Recorder....	329	589	Indexed
6/27/49	Polk	Clerk	90	1	Indexed
6/25/49	Linn	Recorder....	140	657	Indexed
6/25/49	Benton	Clerk	87	448	Indexed

WASHINGTON

6/27/49	Clark	Auditor ...	469	1	G26749;
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and

WHEREAS, an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page, resigned, under said Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, bonds of a series entitled and designated First Mortgage Bonds, 3 1/8% Series due 1976 (hereinafter called the bonds of the First Series); and bonds of a series

entitled and designated First Mortgage Bonds, 3 $\frac{7}{8}$ % Series due 1974 (hereinafter called the bonds of the Second Series); and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented; and

WHEREAS the execution and delivery by the Company of this Second Supplemental Indenture, and the terms of the bonds of the Third Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Portland Gas & Coke Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned

in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title

and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in any wise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Second Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the

purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Second Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Second Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Third Series of Bonds.

SECTION 1. There shall be a series of bonds designated "4% Series due 1974" (herein sometimes referred to as the "Third Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Third Series shall be limited to One Million Dollars (\$1,000,000) in aggregate principal amount at any one time Outstanding except as provided in

Section 16 of the Mortgage and shall mature on June 1, 1974, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registerable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and Ten Thousand Dollars and, at the option of the Company, as to either coupon bonds or fully registered bonds, in the denomination of One Hundred Dollars or in any multiple or multiples thereof (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of four per centum (4%) per annum, payable semi-annually on June 1 and December 1 of each year; and the principal of and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the Third Series shall be dated as of March 1, 1954, and fully registered bonds of the Third Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Third Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice published as provided in Section 52 of the Mortgage once on at least four different days before the date fixed for redemption, unless notice by publication shall not be required as provided in Section 52 of the Mortgage, in which event notice shall be given by mailing, the first publication or mailing, as the case may be, to be at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed on or before May 31, 1955—104.00%.

If redeemed during the 12 months period ending May 31,

1956.....	103.80%	1963.....	102.40%	1970.....	101.00%
1957.....	103.60%	1964.....	102.20%	1971.....	100.75%
1958.....	103.40%	1965.....	102.00%	1972.....	100.50%
1959.....	103.20%	1966.....	101.80%	1973.....	100.25%
1960.....	103.00%	1967.....	101.60%	1974.....	100.00%
1961.....	102.80%	1968.....	101.40%		
1962.....	102.60%	1969.....	101.20%		

in each case, together with accrued interest to the date fixed for redemption, provided, however, that unless consented to by the holders of a majority in principal amount of bonds of the Third Series Outstanding at the time of such consent, no bonds of the Third Series may be redeemed pursuant to this subdivision (I) prior to June 1, 1960 as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having an interest rate or cost (calculated in accordance with acceptable financial practice) lower than four per centum (4%) per annum, except that, if the Company, prior to June 1, 1960, is consolidated with or merged with or into another corporation, this proviso shall not apply in the case of any redemption of bonds of the Third Series which is necessary to effect such consolidation or merger, and in any such case bonds of the Third Series may, at the option of the Company or its successor, be redeemed prior to June 1, 1960, at the then applicable general redemption price.

(II) Bonds of the Third Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of applica-

tion of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the principal amount of the bonds to be redeemed, without premium, together with accrued interest to the date fixed for redemption.

(III) At the option of the holder, any coupon bonds of the Third Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the Third Series, upon surrender thereof, for cancellation, at said office or agency of the Company, together with a written instrument of transfer, if required by the Company, duly executed by the registered

owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the Third Series may have the ownership thereof registered as to principal at the office or agency of the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney and similarly noted on such bond; but (subject to the provisions of Section 12 of the Mortgage) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the Third Series shall also be transferable (subject to the provisions of Section 12 of the Mortgage) at said office or agency of the Company.

ARTICLE II.

Sinking Fund for Bonds of the Third Series.

SECTION 2. The Company covenants that, unless all bonds of the Third Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Third Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Third Series, on October 1 of each year, beginning with the year 1956, to and including the year 1973, and on March 1 of the year 1974, equivalent to two per centum (2%) of (A) the greatest

principal amount of all bonds of the Third Series prior to January 1 of such year at any one time Outstanding, less (B) the aggregate principal amount of all bonds of the Third Series, prior to the date of such delivery or transfer, retired pursuant to the provisions of subdivision (3) or subdivision (4) of Section 61 of the Mortgage by use or application of the proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property, or pursuant to the provisions of Section 64 of the Mortgage, and less (C) the aggregate principal amount of bonds the right to the authentication and delivery of which (on the basis of the retirement of bonds of the Third Series) shall have been waived prior to such delivery of cash or bonds pursuant to the provisions of clause (c) of subdivision (4) of Section 59 of the Mortgage as the basis of the release of property or pursuant to the provisions of subdivision (2) of Section 61 of the Mortgage as the basis of the withdrawal of cash representing proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property.

The Company, at its option (as evidenced by a written order of its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Third Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and canceled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate

Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section or of Section 39 of the Mortgage (subject to the provisions of Sections 39, 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Second Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the requirements of this Section becoming due on October 1 of the then current year or any subsequent year or years or on March 1, 1974, by depositing cash and/or a principal amount of bonds of the Third Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on October 1 of the then current year or of a subsequent year or on March 1, 1974, shall be applied by the Corporate Trustee from time to time, as the Company may request,

(1) so long as any bond of the Third Series is in bearer form not registered as to principal, to the purchase of bonds of the Third Series, at the price or prices most favorable to the Company in the judgment of the Corporate Trustee, at public or private sale and with or without advertising in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, provided, however, that no bonds shall be purchased at such price (including accrued interest and brokerage) that the cost thereof to the Company will exceed the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost),

(2) so long as all bonds of the Third Series are in fully registered form, or in bearer form registered as to principal, to the purchase of bonds of the Third Series, at private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as provided in this clause (2), shall by mail notify all registered owners of bonds of the Third Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices most favorable to the Company but not exceeding the maximum price specified above and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Third Series registered in the names of the owners offering bonds at such price, or

(3) to the redemption of bonds of the Third Series;

provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Third Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Third Series Outstanding at the time of such consent, the Company may not deposit cash prior to June 1, 1960, in anticipation of the requirements of this Section other than a requirement becoming due on October 1 of any current year, if the cash so deposited represents a part of a refunding operation involving, directly

or indirectly, the incurring of indebtedness by the Company having an interest rate or cost (calculated in accordance with acceptable financial practice) lower than four per centum (4%) per annum.

For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Third Series remain Outstanding, as defined in Section 2 of the Mortgage:

(I) any cash deposited under the provisions of this Section or of Section 2 of the First Supplemental Indenture or of Section 40 of the Mortgage shall be deemed to be Funded Cash;

(II) any bonds of the First Series delivered to the Corporate Trustee pursuant to the provisions of Section 40 of the Mortgage and any bonds of the Second Series delivered to the Corporate Trustee pursuant to the provisions of Section 2 of the First Supplemental Indenture and any bonds of the Third Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall, after such delivery, be deemed to have been retired by the use of Funded Cash; and

(III) with respect to all credits taken under Section 40 of the Mortgage on the basis of waivers of the right to the authentication and delivery of bonds or otherwise, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof; and

(IV) with respect to all credits taken under Section 2 of the First Supplemental Indenture on the basis of the purchase or redemption of bonds of the Second Series or under this Section on the basis of the purchase or redemption of bonds of the Third Series, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions

of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Third Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section;

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Amendments of Certain Provisions of Mortgage.

SECTION 3. The Company covenants and agrees that the provisions of Section 39 of the Mortgage, which are to remain in effect so long as any bonds of the First Series shall remain Outstanding, shall also remain in full force and effect so long as any bonds of the Third Series shall remain Outstanding.

So long as any bonds of the Third Series shall remain Outstanding, no credit shall be given pursuant to the provisions of clause (5) of subsection (I) of Section 39 of the Mortgage for expenditures for gross additions to automotive equipment of the Company except for net cash expenditures for such automotive equipment (after reflecting salvage).

Clauses (d) and (e) of subsection (II) of Section 4 of the Mortgage, as amended, clause (6) and clause (e) of Section 5 of the Mortgage, as amended, and Section 29 of the Mortgage, as amended, are

hereby further amended by inserting therein the words "and all bonds of the Third Series" after the words "Second Series", wherever the latter words occur therein.

ARTICLE IV.

Limitation on Acquisition of Property Subject to Prior Lien and Limitation on Issuance of Prior Lien Bonds.

SECTION 4. Unless this requirement is waived by the holders of a majority of the bonds of the Third Series Outstanding at the time of such waiver, the provisions of Article IV and Article V of the First Supplemental Indenture shall remain in full force and effect so long as any bonds of the Third Series are Outstanding.

ARTICLE V.

Miscellaneous Provisions.

SECTION 5. Subject to the amendments provided for in this Second Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Second Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 6. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Section 2 of the Second Supplemental Indenture dated as of March 1, 1954", after the words "June 1, 1949".

SECTION 7. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Second Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Second Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Second Supplemental Indenture.

SECTION 8. Whenever in this Second Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Second Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 9. Nothing in this Second Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Second Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Second Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 10. This Second Supplemental Indenture has been executed in several identical counterparts, each of which, shall be an

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BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By E. E. BEACH
Vice President.

Attest:

WM. H. DEALE
Assistant Secretary

Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

C. D. BLAKELY

F. SCHNEIDER

J. C. KENNEDY (L. S.)
J. C. KENNEDY, as Trustee.

Executed, sealed and delivered by J. C.
KENNEDY in the presence of:

C. D. BLAKELY

F. SCHNEIDER

original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Portland Gas & Coke Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 12th day of March, 1954, as of March 1, 1954.

[CORPORATE SEAL]

PORTLAND GAS & COKE COMPANY,

By C. H. GUEFFROY
President.

Attest:

L. M. GANNON
Assistant Secretary

Executed, sealed and delivered by PORTLAND
GAS & COKE COMPANY in the presence of:

JOHN M. STUART

WILLIAM S. LYNCH

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

March 12, A. D. 1954.

Before me personally appeared C. H. GUEFFROY, who, being duly sworn, did say that he is President of PORTLAND GAS & COKE COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 12th day of March, 1954, before me personally appeared C. H. GUEFFROY, to me known to be President of PORTLAND GAS & COKE COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

ALICE M. POWELL
Notary Public

ALICE M. POWELL
Notary Public, State of New York
Qualified in Queens County
No. 41-3145500
Cert. filed in Queens, New York,
Kings & Westchester
Register's Office—Queens, N. Y. & Kings
Commission Expires March 30, 1955

Residing at Jackson Heights, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

March 12, A. D. 1954.

Before me personally appeared E. E. BEACH, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 12th day of March, 1954, before me personally appeared E. E. BEACH, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

ALOYSE A. STEPHENS
Notary Public

ALOYSE A. STEPHENS
NOTARY PUBLIC, State of New York
No. 03-3835150
Qualified in Bronx County
Certificates Filed with
New York County Clerks and Registers
Bronx County Clerks and Registers
Term Expires March 30, 1955

Residing at Bronx, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } SS:

March 12, A. D. 1954.

Before me personally appeared the above-named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 12th day of March, 1954.

[NOTABIAL SEAL]

ALOYSE A. STEPHENS
Notary Public

ALOYSE A. STEPHENS
NOTARY PUBLIC, State of New York
No. 03-3835150
Qualified in Bronx County
Certificates Filed with
New York County Clerks and Registers
Bronx County Clerks and Registers
Term Expires March 30, 1955

Residing at Bronx, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss:

C. H. GUEFFROY, being duly sworn, deposes and says that he is President of PORTLAND GAS & COKE COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

C. H. GUEFFROY

Subscribed and sworn to before me }
this 12th day of March, 1954. }

ALICE M. POWELL
Notary Public

[NOTARIAL SEAL]

ALICE M. POWELL
Notary Public, State of New York
Qualified in Queens County
No. 41-3145500
Cert. filed in Queens, New York,
Kings & Westchester
Register's Office—Queens, N. Y. & Kings
Commission Expires March 30, 1955

Residing at Jackson Heights, N. Y.

PORTLAND GAS & COKE COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

As Trustees under Portland Gas & Coke
Company's Mortgage and Deed of
Trust, Dated as of July 1, 1946

Third Supplemental Indenture

Dated as of April 1, 1956

SUMMARY OF RECORDING DATA

Oregon

Date Filed for Record	County	Office of	Real Estate Mortgage Records		Chattel Mortgage Records
			Book	Page	
3/17/54	Benton.....	Clerk.....	104	361	Indexed
3/17/54	Clackamas.....	Clerk.....	413	365	Indexed
3/17/54	Linn.....	Recorder.....	174	654	Indexed
3/17/54	Marion.....	Recorder.....	400	520	Indexed
3/15/54	Multnomah.....	Clerk.....	1606	331	Indexed
3/17/54	Polk.....	Clerk.....	102	492	Indexed
3/17/54	Washington.....	Clerk.....	309	195	Indexed
3/17/54	Yamhill.....	Clerk.....	139	492	Indexed
Washington					
3/17/54	Clark.....	Auditor.....	595	51	G142988 and G142984

THIRD SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of April, 1956, made and entered into by and between PORTLAND GAS & COKE COMPANY, a corporation of the State of Oregon, whose post office address is Public Service Building, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is 16 Wall Street, New York 15, New York (hereinafter sometimes called the Corporate Trustee) and J. C. KENNEDY (successor to R. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Third Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Third Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture); and

WHEREAS said First Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Third Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture); and

WHEREAS said Second Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, in the official records of the several counties in the States of Oregon and Washington listed below, as follows:

OREGON

Date Filed for Record	County	Office of	Real Estate Mortgage Records		Chattel Mortgage Records
			Book	Page	
3/17/54	Benton	Clerk	104	361	Indexed
3/17/54	Clackamas	Clerk	413	365	Indexed
3/17/54	Linn	Recorder	174	654	Indexed
3/17/54	Marion	Recorder	400	520	Indexed
3/15/54	Multnomah	Clerk	1606	331	Indexed
3/17/54	Polk	Clerk	102	492	Indexed
3/17/54	Washington	Clerk	309	195	Indexed
3/17/54	Yamhill	Clerk	139	492	Indexed

WASHINGTON

3/17/54	Clark	Auditor	595	51	G142983 and G142984;
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and

WHEREAS, an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession

to said R. G. Page, resigned, under said Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, bonds of a series entitled and designated First Mortgage Bonds, 3 $\frac{1}{8}$ % Series due 1976 (hereinafter called the bonds of the First Series), of which Ten Million Dollars (\$10,000,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, 3 $\frac{7}{8}$ % Series due 1974 (hereinafter called the bonds of the Second Series), of which Three Million One Hundred Fifty Thousand Dollars (\$3,150,000) in aggregate principal amount are now Outstanding; and bonds of a series entitled and designated First Mortgage Bonds, 4% Series due 1974 (hereinafter called the bonds of the Third Series), none of which bonds of the Third Series will be Outstanding at the time of the initial issue of bonds of the Fourth Series hereinafter referred to; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Third Supplemental Indenture, and the terms of the bonds of the Fourth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Portland Gas & Coke Company, in consideration of the premises and of One Dollar

to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works,

water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in any wise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation,

merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Third Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business;

all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Third Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Third Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically

and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I

Fourth Series of Bonds.

SECTION 1. There shall be a series of bonds designated "4 $\frac{3}{8}$ % Series due 1976" (herein sometimes referred to as the "Fourth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Fourth Series shall mature on April 1, 1976, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registerable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and Ten Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of four and three-eighths per centum (4 $\frac{3}{8}$ %) per annum, payable semi-annually on October 1 and April 1 of each year; and the principal of and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the Fourth Series shall be dated as of April 1, 1956, and fully registered bonds of the Fourth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Fourth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mort-

gage in whole at any time, or in part from time to time, prior to maturity, upon notice published as provided in Section 52 of the Mortgage once on at least four different days before the date fixed for redemption, unless notice by publication shall not be required as provided in Section 52 of the Mortgage, in which event notice shall be given by mailing, the first publication or mailing, as the case may be, to be at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending March 31,

1957.....	105.67%	1964.....	103.59%	1971.....	101.50%
1958.....	105.38%	1965.....	103.29%	1972.....	101.20%
1959.....	105.08%	1966.....	102.99%	1973.....	100.90%
1960.....	104.78%	1967.....	102.69%	1974.....	100.60%
1961.....	104.48%	1968.....	102.39%	1975.....	100.30%
1962.....	104.18%	1969.....	102.09%	1976.....	100.00%
1963.....	103.88%	1970.....	101.80%		

in each case, together with accrued interest to the date fixed for redemption.

(II) Bonds of the Fourth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit

of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending March 31,

1957.....	101.67%	1964.....	101.24%	1971.....	100.66%
1958.....	101.62%	1965.....	101.17%	1972.....	100.56%
1959.....	101.56%	1966.....	101.09%	1973.....	100.46%
1960.....	101.50%	1967.....	101.01%	1974.....	100.35%
1961.....	101.44%	1968.....	100.93%	1975.....	100.24%
1962.....	101.38%	1969.....	100.84%	1976.....	100.00%
1963.....	101.31%	1970.....	100.75%		

in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the holder, any coupon bonds of the Fourth Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of

Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the Fourth Series, upon surrender thereof, for cancellation, at said office or agency of the Company, together with a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the Fourth Series may have the ownership thereof registered as to principal at the office or agency of the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney and similarly noted on such bond; but (subject to the provisions of Section 12 of the Mortgage) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the Fourth Series shall also be transferable (subject to the provisions of Section 12 of the Mortgage) at said office or agency of the Company.

ARTICLE II.

Sinking Fund for Bonds of the Fourth Series.

SECTION 2. The Company covenants that, unless all bonds of the Fourth Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Fourth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Fourth Series, on October 1 of each year, beginning with the year 1960 to and including the year 1975, equivalent to three per centum (3%) of (A) the greatest principal amount of all bonds of the Fourth Series prior to January 1 of such year at any one time Outstanding, less (B) the aggregate principal amount of all bonds of the Fourth Series, prior to the date of such delivery or transfer, retired pursuant to the provisions of subdivision (3) or subdivision (4) of Section 61 of the Mortgage by use or application of the proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property, or pursuant to the provisions of Section 64 of the Mortgage, and less (C) the aggregate principal amount of bonds the right to the authentication and delivery of which (on the basis of the retirement of bonds of the Fourth Series) shall have been waived prior to such delivery of cash or bonds pursuant to the provisions of clause (c) of subdivision (4) of Section 59 of the Mortgage as the basis of the release of property or pursuant to the provisions of subdivision (2) of Section 61 of the Mortgage as the basis of the withdrawal of cash representing proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property.

For the purpose of the first paragraph of this Section the term "Outstanding" shall not include bonds of the Fourth Series pledged to secure indebtedness of the Company and not at any time otherwise issued by the Company.

The Company, at its option (as evidenced by a written order of its Treasurer or an Assistant Treasurer delivered to the Corporate

Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Fourth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and canceled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Notwithstanding any other provisions of this Third Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the requirements of this Section becoming due on October 1 of the then current year or any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Fourth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on October 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee from time to time, as the Company may request,

(1) so long as any bond of the Fourth Series is in bearer form not registered as to principal, to the purchase of bonds of the Fourth Series, at the price or prices most favorable to the Company in the judgment of the Corporate Trustee, at public or private sale and with or without advertising in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, provided, however, that no bonds shall be purchased at such price (including accrued interest and brokerage) that the cost thereof to the Company will exceed the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost),

(2) so long as all bonds of the Fourth Series are in fully registered form, or in bearer form registered as to principal, to the purchase of bonds of the Fourth Series, at private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as provided in this clause (2), shall by mail notify all registered owners of bonds of the Fourth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices most favorable to the Company but not exceeding the maximum price specified above and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Fourth Series registered in the names of the owners offering bonds at such price, or

(3) to the redemption of bonds of the Fourth Series;

provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant

to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Fourth Series.

For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Fourth Series remain Outstanding, as defined in Section 2 of the Mortgage:

(I) any cash deposited under the provisions of this Section shall be deemed to be Funded Cash;

(II) any bonds of the Fourth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall, after such delivery, be deemed to have been retired by the use of Funded Cash; and

(III) with respect to all credits taken under this Section on the basis of the purchase or redemption of bonds of the Fourth Series, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Fourth Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section;

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Amendments of Certain Provisions of Mortgage.

SECTION 3. The Company reserves the right, without any consent or other action by holders of bonds of the Fourth Series or of any subsequent series, to make such further amendments to the Mortgage, as supplemented, as shall be necessary in order to add the following proviso at the end of clause (4) of Section 5 of the Mortgage:

“provided, however, that when no bonds of the First, Second or Third Series remain Outstanding, Property Additions of a Cost not in excess of \$1,100,000 so substituted at any time under subdivision (B) of subsection (II) of Section 4 hereof for Funded Property used primarily and principally in the handling and processing of carbon owned at April 1, 1956 and retired subsequent to April 1, 1956 shall cease to be or to be deemed to have been Funded Property;”

The Company reserves the right, without any consent or other action by holders of bonds of the Fourth Series or of any subsequent series, to make such further amendments to the Mortgage, as supplemented, as shall be necessary in order to amend subdivision (A) of subsection (II) of Section 4 of the Mortgage by deleting the amendments made by Section 7 of the First Supplemental Indenture.

The holders and owners of bonds of the Fourth Series and of any subsequent series outstanding under the Mortgage, as supplemented, by

acceptance of such bonds, agree and consent to all of the provisions of this Third Supplemental Indenture including, but not limited to, the provisions of this Section and of Section 4 of this Third Supplemental Indenture.

SECTION 4. The Company reserves the right, without any consent or other action by holders of bonds of the Fourth Series or of any subsequent series, to make such further amendments to the Mortgage, as supplemented, as shall be necessary in order to amend Section 7 of the Mortgage by deleting from clause (2) of subsection (A) thereof the following provision:

“provided, however, that, in lieu of including in such operating expenses the amounts actually appropriated out of income for depreciation and retirement of the Mortgaged and Pledged Property used primarily and principally in the gas, electric, steam and/or hot water utility business or gas by-product business and of the automotive equipment of the Company used in the operation of such property, there shall be included in such operating expenses an amount for each full calendar month included in such period of twelve (12) consecutive calendar months equal to (i) one-twelfth (1/12th) of Four Hundred Thousand Dollars (\$400,000), plus (ii) one-twelfth (1/12th) of two per centum (2%) of the gross charges to plant account for additions to the depreciable property included in the Mortgaged and Pledged Property, used primarily and principally in the gas, electric, steam, and/or hot water utility business or gas by-product business, made subsequent to March 31, 1946, and prior to the beginning of the calendar year within which such calendar month is included, less (iii) one-twelfth (1/12th) of two per centum (2%) of the gross credits to plant account for retirement of the depreciable property included in the Mortgaged and Pledged Property, used primarily and principally in the gas, electric, steam and/or hot water utility business or gas by-product business, made subsequent to March 31, 1946, and prior to the beginning of the calendar year within which such calendar month is included, in each case, excluding from

plant account any amounts included in utility plant acquisition adjustment accounts or utility plant adjustment accounts or in any accounts for similar purposes;”.

ARTICLE IV.

Miscellaneous Provisions.

SECTION 5. Subject to the amendments provided for in this Third Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Third Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 6. Section 14 of the Mortgage is hereby amended to read as follows:

“SECTION 14. All bonds authenticated and delivered hereunder shall, from time to time, be executed on behalf of the Company by its President or one of its Vice-Presidents whose signature, except on bonds of the 3 $\frac{1}{8}$ % Series due 1976, 3 $\frac{7}{8}$ % Series due 1974 and 4% Series due 1974, may be facsimile and its corporate seal shall be thereon impressed or imprinted and attested by its Secretary or one of its Assistant Secretaries. The coupons to be attached to coupon bonds shall bear the facsimile signature of the present or any future Treasurer of the Company. In case any of the officers who shall have signed any bonds or attested the seal thereon, or whose facsimile signature appears on any bond or coupon, shall cease to be such officers of the Company before the bonds so signed and/or sealed shall have been actually authenticated and delivered by the Corporate Trustee or issued by the Company, such bonds nevertheless may be authenticated, delivered and/or issued with the same force and effect as though the person or persons who signed such bonds and/or attested the seal thereon and/or whose facsimile signature appears on any bond or coupon had not ceased to be such officer or officers of the Company. Before authenticating any coupon bonds, the Corporate Trustee shall cut off and cancel all

matured coupons thereto attached (except as otherwise provided or permitted in Sections 12 and 16 hereof).”

SECTION 7. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words “and subject to the provisions of Section 2 of the Third Supplemental Indenture dated as of April 1, 1956”, after the words “March 1, 1954”.

SECTION 8. Section 99 of the Mortgage is hereby amended to insert in the last paragraph thereof the words “offered or” before the word “sold”.

SECTION 9. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Third Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Third Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Third Supplemental Indenture.

SECTION 10. Whenever in this Third Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Third Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind

and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 11. Nothing in this Third Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Third Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Third Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 12. This Third Supplemental Indenture has been executed in several identical counterparts, each of which, shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Portland Gas & Coke Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second part, has hereunto

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set his hand and affixed his seal, all in The City of New York, on the
20th day of April, 1956, as of April 1, 1956.

PORTLAND GAS & COKE COMPANY,

[CORPORATE SEAL]

By C. H. GUEFFROY
President.

Attest:

L. M. GANNON
Assistant Secretary.

Executed, sealed and delivered by PORTLAND
GAS & COKE COMPANY in the presence of:

WILLIAM W. STAPLIN

JOHN M. STUART

BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By E. G. FARRELL
Vice President.

Attest:

L. E. VAN ETTEN
Assistant Secretary.

Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

C. D. BLAKELY

F. SCHNEIDER

J. C. KENNEDY (L. S.)
J. C. KENNEDY, as Trustee.

Executed, sealed and delivered by J. C.
KENNEDY in the presence of:

C. D. BLAKELY

F. SCHNEIDER

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

April 20, A. D. 1956.

Before me personally appeared C. H. GUEFFROY, who, being duly sworn, did say that he is President of PORTLAND GAS & COKE COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 20th day of April, 1956, before me personally appeared C. H. GUEFFROY, to me known to be President of PORTLAND GAS & COKE COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

ALICE M. POWELL (WADE)
Notary Public

[NOTARIAL SEAL]

ALICE M. POWELL (WADE)
Notary Public, State of New York
No. 41-3145500
Qualified in Queens County
Term Expires March 30, 1957

Residing at New York, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

April 20, A. D. 1956.

Before me personally appeared E. G. FARRELL, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 20th day of April, 1956, before me personally appeared E. G. FARRELL, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

ARTHUR P. SULLIVAN
Notary Public

[NOTARIAL SEAL]

ARTHUR P. SULLIVAN
NOTARY PUBLIC, State of New York
No. 43-3893015
Qualified in Richmond County
Certificate filed in New York County
Term Expires March 30, 1957

Residing at Staten Island, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

April 20, A. D. 1956.

Before me personally appeared the above-named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 20th day of April, 1956.

ARTHUR P. SULLIVAN
Notary Public

[NOTARIAL SEAL]

ARTHUR P. SULLIVAN
NOTARY PUBLIC, State of New York
No. 48-8898015
Qualified in Richmond County
Certificate filed in New York County
Term Expires March 30, 1957

Residing at Staten Island, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

C. H. GUEFFROY, being duly sworn, deposes and says that he is President of PORTLAND GAS & COKE COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

C. H. GUEFFROY

Subscribed and sworn to before me }
this 20th day of April, 1956. }

ALICE M. POWELL (WADE)
Notary Public

ALICE M. POWELL (WADE)
Notary Public, State of New York
No. 41-8145500
Qualified in Queens County
Term Expires March 30, 1967

[NOTARIAL SEAL]

Residing at New York, N. Y.

SUMMARY OF RECORDING DATA

Date Filed for Record	County	Real Estate Mortgage Records		Instrument Number	Chattel Mortgage Records
		Book	Page		
Oregon					
4/27/56	Benton.....	113	602	9823	Indexed
4/27/56	Clackamas.....	452	271	6431	Indexed
4/27/56	Linn.....	192	820	130005	Indexed
4/27/56	Marion.....	436	618	520478	Indexed
4/27/56	Multnomah.....	1808	562	17234	Indexed
4/27/56	Polk.....	108	648	101914	Indexed
4/27/56	Washington.....	345	688	927	Indexed
4/27/56	Yamhill.....	147	544	47209	Indexed
Washington					
4/27/56	Clark.....	M34	390		G193697

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

**As Trustees under the Mortgage and Deed
of Trust, Dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)**

Fourth Supplemental Indenture

Dated as of February 1, 1959

FOURTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of February, 1959, made and entered into by and between **NORTHWEST NATURAL GAS COMPANY** (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is Public Service Building, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and **BANKERS TRUST COMPANY**, a corporation of the State of New York, whose post office address is 16 Wall Street, New York 15, New York (hereinafter sometimes called the Corporate Trustee) and **J. C. KENNEDY** (successor to R. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Fourth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fourth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture) and its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture); and

WHEREAS said First and Second Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fourth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture); and

WHEREAS said Third Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, in the official records of the several counties in the States of Oregon and Washington listed below, as follows:

OREGON						
Date Filed for Record	County	Real Estate Mortgage Records		Instrument Number	Chattel Mortgage Records	
		Book or Reel	Page			
4/27/56	Benton	113	602	9823	Indexed	
4/27/56	Clackamas	452	271	6431	Indexed	
8/ 7/58	Lane	Reel 115—	'58M	45196	Indexed	
4/27/56	Linn	192	820	130005	Indexed	
4/27/56	Marion	436	618	520478	Indexed	
4/27/56	Multnomah	1808	562	17234	Indexed	
4/27/56	Polk	108	648	101914	Indexed	
8/ 7/58	Wasco	90	465	2477	Indexed	
4/27/56	Washington ...	345	688	927	Indexed	
4/27/56	Yamhill	147	544	47209	Indexed	

WASHINGTON						
4/27/56	Clark	M34	390			G193697;

and

WHEREAS, an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page, resigned, under said Mortgage and by J. C. Kennedy

accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, said Mortgage, said First and Second Supplemental Indentures and said instrument appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page were filed for record, and were recorded and indexed, as a mortgage of both real and personal property in the official records of Lane County, State of Oregon, and of Wasco County, State of Oregon, on August 7, 1958, in addition to the recording and indexing recited in prior supplemental indentures, as follows:

Instrument	County	—Real Property Mortgage Records—			Chattel Mortgage Records
		Book or Reel	Page	Instrument Numbered	
Mortgage	Lane	Reel 115—	'58M	45192	Indexed
	Wasco	Book 90	187	2473	Indexed
First Supplemental Indenture ...	Lane	Reel 115—	'58M	45198	Indexed
	Wasco	Book 90	400	2474	Indexed
Instrument	Lane	Reel 115—	'58M	45194	Indexed
	Wasco	Book 90	433	2475	Indexed
Second Supplemental Indenture ...	Lane	Reel 115—	'58M	45195	Indexed
	Wasco	Book 90	439	2476	Indexed

WHEREAS, in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, bonds of a series entitled and designated First Mortgage Bonds, 3 $\frac{1}{8}$ % Series due 1976 (hereinafter called the bonds of the First Series), of which Ten Million Dollars (\$10,000,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, 3 $\frac{7}{8}$ % Series due 1974 (hereinafter called the bonds of the Second Series), of which Two Million Nine Hundred Forty Thousand Dollars (\$2,940,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, 4% Series due 1974 (hereinafter called the bonds of the Third Series), none of which bonds of the Third Series are now Outstanding; and bonds of a series entitled and designated First Mortgage Bonds, 4 $\frac{3}{8}$ % Series due 1976 (hereinafter called the bonds of the Fourth Series),

of which Three Million Three Hundred Fifty Thousand Dollars (\$3,350,000) in aggregate principal amount are now Outstanding; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants

and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Fourth Supplemental Indenture, and the terms of the bonds of the Fifth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriat-

ing, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (1) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation,

merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Fourth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Fourth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supple-

mented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Fourth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Fifth Series of Bonds.

SECTION 1. There shall be a series of bonds designated "5 $\frac{1}{8}$ % Series due 1984" (herein sometimes referred to as the "Fifth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Fifth Series shall mature on February 1, 1984, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registrable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and Ten Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of five and one-eighth per centum (5 $\frac{1}{8}$ %) per annum, payable semi-annually on August 1 and February 1 of each year; and the principal of and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the Fifth Series shall be dated as of February 1, 1959, and fully registered bonds of the Fifth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Fifth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice published as provided in Section 52 of the Mortgage once on at least four different days before the date fixed for redemption, unless notice by publication shall not be required as provided in Section 52 of the Mortgage, in which event notice shall be given by mailing, the first publication or mailing, as the case may be, to be at least thirty (30) days prior to the date fixed for redemp-

tion, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending January 31,

1960.....	105.13%	1973.....	102.35%
1961.....	104.92%	1974.....	102.14%
1962.....	104.70%	1975.....	101.93%
1963.....	104.49%	1976.....	101.71%
1964.....	104.28%	1977.....	101.50%
1965.....	104.06%	1978.....	101.29%
1966.....	103.85%	1979.....	101.07%
1967.....	103.64%	1980.....	100.86%
1968.....	103.42%	1981.....	100.65%
1969.....	103.21%	1982.....	100.43%
1970.....	102.99%	1983.....	100.22%
1971.....	102.78%	1984.....	100.00%
1972.....	102.57%		

in each case, together with accrued interest to the date fixed for redemption, provided, however, that no bonds of the Fifth Series may be redeemed pursuant to this subdivision (I) prior to February 1, 1964 as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having an interest rate or cost (calculated in accordance with acceptable financial practice) lower than five and one-eighth per centum (5 $\frac{1}{8}$ %) per annum.

(II) Bonds of the Fifth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in

subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the special redemption price of the principal amount of the bonds to be redeemed, without premium, in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the holder, any coupon bonds of the Fifth Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the Fifth Series, upon surrender thereof, for cancellation, at said office or agency of the Company, together with a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the Fifth Series may have the ownership thereof registered as to principal at the office or agency of

the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney and similarly noted on such bond; but (subject to the provisions of Section 12 of the Mortgage) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the Fifth Series shall also be transferable (subject to the provisions of Section 12 of the Mortgage) at said office or agency of the Company.

ARTICLE II.

Sinking Fund for Bonds of the Fifth Series.

SECTION 2. The Company covenants that, unless all bonds of the Fifth Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Fifth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Fifth Series, on February 1 of each year, beginning with the year 1964 to and including the year 1983, equivalent to two per centum (2%) of (A) the greatest principal amount of all bonds of the Fifth Series prior to January 1 of such year at any one time Outstanding, less (B) the aggregate principal amount of all bonds of the Fifth Series, prior to the date of such delivery or transfer, retired pursuant to the provisions of subdivision (3) or subdivision (4) of Section 61 of the Mortgage by use or application of the proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property, or pursuant to the provisions of Section 64 of the Mortgage, and less (C) the aggregate principal amount of bonds the right to the authentication and delivery of which (on the basis of the retirement of bonds of the Fifth Series) shall have been waived prior to such delivery of cash or bonds pursuant to the provisions of clause (c) of subdivision (4) of Section 59 of the Mortgage as the basis of the release of property or pursuant to the provisions of subdivision (2) of Section 61 of the Mortgage as the basis of the withdrawal of cash representing proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property.

For the purpose of the first paragraph of this Section the term "Outstanding" shall not include bonds of the Fifth Series pledged to secure indebtedness of the Company and not at any time otherwise issued by the Company.

The Company, at its option (as evidenced by a written order of its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Fifth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and canceled or for the purchase or redemption of which moneys in the necessary

amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Fourth Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the requirements of this Section becoming due on February 1 of the then current year or any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Fifth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on February 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee from time to time, as the Company may request,

(1) so long as any bond of the Fifth Series is in bearer form not registered as to principal, to the purchase of bonds of the Fifth Series, at the price or prices most favorable to the Company in the judgment of the Corporate Trustee, at public or private sale and with or without advertising in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, provided, however, that no bonds shall be purchased at such price (including accrued interest and brokerage) that the cost thereof to the Company will exceed the cost of redeeming such bonds on a date

forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost),

(2) so long as all bonds of the Fifth Series are in fully registered form, or in bearer form registered as to principal, to the purchase of bonds of the Fifth Series, at private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as provided in this clause (2), shall by mail notify all registered owners of bonds of the Fifth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices most favorable to the Company but not exceeding the maximum price specified above and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of Bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Fifth Series registered in the names of the owners offering bonds at such price, or

(3) to the redemption of bonds of the Fifth Series;

provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Fifth Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Fifth Series Outstanding at the time of such consent, the Company may not deposit cash prior to February 1, 1964, in anticipation of the requirements of this Section, if the cash so deposited represents a part of a refunding operation, involving, directly

or indirectly, the incurring of indebtedness by the Company having an interest rate or cost (calculated in accordance with acceptable financial practice) lower than five and one-eighth per centum ($5\frac{1}{8}\%$) per annum.

For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Fifth Series remain Outstanding, as defined in Section 2 of the Mortgage:

(I) any cash deposited under the provisions of this Section shall be deemed to be Funded Cash;

(II) any bonds of the Fifth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall, after such delivery, be deemed to have been retired by the use of Funded Cash; and

(III) with respect to all credits taken under this Section on the basis of the purchase or redemption of bonds of the Fifth Series, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Fifth Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section;

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3. Subject to the amendments provided for in this Fourth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Fourth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 4. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Section 2 of the Fourth Supplemental Indenture dated as of February 1, 1959", after the words "April 1, 1956".

SECTION 5. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Fourth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Fourth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Fourth Supplemental Indenture.

SECTION 6. Whenever in this Fourth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Fourth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 7. Nothing in this Fourth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon,

or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Fourth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Fourth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 8. This Fourth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 2nd day of February, 1959, as of February 1, 1959.

[CORPORATE SEAL]

NORTHWEST NATURAL GAS COMPANY,

By C. H. GUEFFROY
President.

Attest:

L. M. GANNON
Assistant Secretary.

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

ROBERT GEORGE SCHUUR

JOHN M. STUART

19

[CORPORATE SEAL]

BANKERS TRUST COMPANY, as Trustee,
By W. McKINLEY
Vice President.

Attest:

A. P. SULLIVAN
Assistant Secretary.

Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

W. M. McLAUGHLIN

T. L. KESSELMAN

J. C. KENNEDY (L. S.)

J. C. KENNEDY, as Trustee.

Executed, sealed and delivered by J. C.
KENNEDY in the presence of:

W. M. McLAUGHLIN

T. L. KESSELMAN

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

February 2nd, A. D. 1959.

Before me personally appeared C. H. GUEFFROY, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 2nd day of February, 1959, before me personally appeared C. H. GUEFFROY, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARY'S SEAL]

MORTON BARAD
Notary Public
MORTON BARAD
Notary Public, State of New York
No. 24-5170980
Qualified in Kings County
Certs. filed in Bronx, Queens, Nassau,
New York and Westchester Cos.
Term Expires March 30, 1960
Residing at Brooklyn, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

February 2nd, A. D. 1959.

Before me personally appeared W. McKINLEY, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 2nd day of February, 1959, before me personally appeared W. McKINLEY, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARY'S SEAL]

JOHN E. GALLIGAN, JR.
Notary Public
JOHN E. GALLIGAN, JR.
Notary Public, State of New York
No. 41-1364550
Qualified in Queens County
Certificate filed in New York County
Commission expires March 30, 1959
Residing at Flushing, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

February 2nd, A. D. 1959.

Before me personally appeared the above-named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 2nd day of February, 1959.

[NOTARY'S SEAL]

JOHN E. GALLIGAN, JR.
Notary Public
JOHN E. GALLIGAN, JR.
Notary Public, State of New York
No. 41-1364550
Qualified in Queens County
Certificate filed in New York County
Commission expires March 30, 1959
Residing at Flushing, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

C. H. GUEFFROY, being duly sworn, deposes and says that he is President of NORTHWEST NATURAL GAS COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

C. H. GUEFFROY

Subscribed and sworn to before me }
this 2nd day of February, 1959. }

MORTON BARAD
Notary Public

MORTON BARAD
Notary Public, State of New York
No. 24-5170980

Qualified in Kings County
Certs. filed in Bronx, Queens, Nassau,
New York and Westchester Cos.
Term Expires March 30, 1960

[NOTARY'S SEAL]

Residing at Brooklyn, N. Y.

SUMMARY OF RECORDING DATA

OREGON

<u>County</u>	<u>Date Filed for Record</u>	<u>Real Property Mortgage Records</u>		<u>Instrument Number</u>	<u>Chattel Mortgage Records</u>
		<u>Book or Reel</u>	<u>Page</u>		
Benton	February 13, 1959	127	465	25399	Indexed
Clackamas	February 13, 1959	497	671	2360	Indexed
Lane	February 13, 1959	126	'59M	59833	Indexed
Linn	February 13, 1959	211	637	162333	Indexed
Marion	February 13, 1959	475	749	584734	Indexed
Multnomah	February 16, 1959	2007	298	6261	Indexed
Polk	February 13, 1959	115	649	117625	Indexed
Wasco	February 13, 1959	91	585	4824	Indexed
Washington	February 13, 1959	384	645	4538	Indexed
Yamhill	February 13, 1959	3	632	56484	Indexed

WASHINGTON

<u>County</u>	<u>Date Filed for Record</u>	<u>Real Property Mortgage Record</u>		<u>Chattel Mortgage Record Auditor's File No.</u>
		<u>Book or Volume</u>	<u>Page</u>	
Clark	February 18, 1959	M 67	179A	G256396

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

**As Trustees under the Mortgage and Deed
of Trust, Dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)**

Fifth Supplemental Indenture

Dated as of July 1, 1961

FIFTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of July, 1961, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is 735 S. W. Morrison Street, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is 16 Wall Street, New York 15, New York (hereinafter sometimes called the Corporate Trustee) and J. C. KENNEDY (successor to R. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Fifth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fifth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture) and its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture); and

WHEREAS said First, Second and Third Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fifth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Fourth Supplemental Indenture, dated as of February 1, 1959 (herein-after called its Fourth Supplemental Indenture); and

WHEREAS said Fourth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, in the official records of the several counties in the States of Oregon and Washington listed below, as follows:

OREGON

County	Date Filed for Record	Real Property Mortgage Records		Instrument Number	Chattel Mortgage Records
		Book or Reel	Page		
Benton	February 13, 1959	127	465	25399	Indexed
Clackamas	February 13, 1959	497	671	2360	Indexed
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WASHINGTON

County	Date Filed for Record	Real Property Mortgage Records		Chattel Mortgage Record Auditor's File No.
		Book or Volume	Page	
Clark	February 18, 1959	M 67	179A	G256396;

and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession

to said R. G. Page, resigned, under said Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, bonds of a series entitled and designated First Mortgage Bonds, $3\frac{1}{8}\%$ Series due 1976 (hereinafter called the bonds of the First Series), of which Ten Million Dollars (\$10,000,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $3\frac{7}{8}\%$ Series due 1974 (hereinafter called the bonds of the Second Series), of which Two Million Eight Hundred Thousand Dollars (\$2,800,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, 4% Series due 1974 (hereinafter called the bonds of the Third Series), none of which bonds of the Third Series are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $4\frac{3}{8}\%$ Series due 1976 (hereinafter called the bonds of the Fourth Series), of which Three Million Two Hundred Forty-nine Thousand Dollars (\$3,249,000) in aggregate principal amount are now Outstanding; and bonds of a series entitled and designated First Mortgage Bonds, $5\frac{1}{8}\%$ Series due 1984 (hereinafter called the bonds of the Fifth Series), of which Seven Million Dollars (\$7,000,000) in aggregate principal amount are now Outstanding; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or

referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Fifth Supplemental Indenture, and the terms of the bonds of the Sixth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged,

and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements,

apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Fifth Supplemental Indenture and from the lien and operation

of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Fifth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Fifth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Sixth Series of Bonds.

SECTION 1. There shall be a series of bonds designated "5 $\frac{1}{8}$ % Series due 1986" (herein sometimes referred to as the "Sixth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Sixth Series shall mature on July 1, 1986, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registrable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and Ten Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof);

they shall bear interest at the rate of five and one-eighth per centum ($5\frac{1}{8}\%$) per annum, payable semi-annually on January 1 and July 1 of each year; and the principal of and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the Sixth Series shall be dated as of July 1, 1961, and fully registered bonds of the Sixth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Sixth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice published as provided in Section 52 of the Mortgage once on at least four different days before the date fixed for redemption, unless notice by publication shall not be required as provided in Section 52 of the Mortgage, in which event notice shall be given by mailing, the first publication or mailing, as the case may be, to be at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending June 30,

1962.....	104.13%	1975.....	101.90%
1963.....	103.96%	1976.....	101.72%
1964.....	103.79%	1977.....	101.55%
1965.....	103.61%	1978.....	101.38%
1966.....	103.44%	1979.....	101.21%
1967.....	103.27%	1980.....	101.04%
1968.....	103.10%	1981.....	100.86%
1969.....	102.93%	1982.....	100.69%
1970.....	102.75%	1983.....	100.52%
1971.....	102.58%	1984.....	100.35%
1972.....	102.41%	1985.....	100.18%
1973.....	102.24%	1986.....	100.00%
1974.....	102.07%		

in each case, together with accrued interest to the date fixed for redemption, provided, however, that no bonds of the Sixth Series may be redeemed pursuant to this subdivision (I) prior to July 1, 1966 as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than five and two-tenths per centum (5.2%) per annum.

(II) Bonds of the Sixth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the special redemption price of the principal amount of the bonds to be redeemed, without premium, in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the holder, any coupon bonds of the Sixth Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the Sixth Series, upon surrender thereof, for cancellation, at said office or agency of the Company, together with a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the Sixth Series may have the ownership thereof registered as to principal at the office or agency of the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney and similarly noted on such bond; but (subject to the provisions of Section 12 of the Mortgage) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the Sixth Series shall also be transferable (subject to the provisions of Section 12 of the Mortgage) at said office or agency of the Company.

ARTICLE II.

Sinking Fund for Bonds of the Sixth Series.

SECTION 2. The Company covenants that, unless all bonds of the Sixth Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Sixth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Sixth Series, on July 1 of each year, beginning with the year 1966 to and including the year 1985, equivalent to two per centum (2%) of (A) the greatest principal amount of all bonds of the Sixth Series prior to January 1 of such year at any one time Outstanding, less (B) the aggregate principal amount of all bonds of the Sixth Series, prior to the date of such delivery or transfer, retired pursuant to the provisions of subdivision (3) or subdivision (4) of Section 61 of the Mortgage by use or application of the proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property, or pursuant to the provisions of Section 64 of the Mortgage, and less (C) the aggregate principal amount of bonds the right to the authentication and delivery of which (on the basis of the retirement of bonds of the Sixth Series) shall have been waived prior to such delivery of cash or bonds pursuant to the provisions of clause (c) of subdivision (4) of Section 59 of the Mortgage as the basis of the release of property or pursuant to the provisions of subdivision (2) of Section 61 of the Mortgage as the basis of the withdrawal of cash representing proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property.

For the purpose of the first paragraph of this Section the term "Outstanding" shall not include bonds of the Sixth Series pledged to secure indebtedness of the Company and not at any time otherwise issued by the Company.

The Company, at its option (as evidenced by a written order of its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Sixth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this

Section, (b) which have been purchased or redeemed and canceled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Fifth Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the requirements of this Section becoming due on July 1 of the then current year or any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Sixth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on July 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee from time to time, as the Company may request,

(1) so long as any bond of the Sixth Series is in bearer form not registered as to principal, to the purchase of bonds of the Sixth Series, at the price or prices most favorable to the Company in the judgment of the Corporate Trustee, at public or private sale and with or without advertising in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, provided, however, that no bonds shall be purchased at such price (includ-

ing accrued interest and brokerage) that the cost thereof to the Company will exceed the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost),

(2) so long as all bonds of the Sixth Series are in fully registered form, or in bearer form registered as to principal, to the purchase of bonds of the Sixth Series, at private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as provided in this clause (2), shall by mail notify all registered owners of bonds of the Sixth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices most favorable to the Company but not exceeding the maximum price specified above and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of Bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Sixth Series registered in the names of the owners offering bonds at such price, or

(3) to the redemption of bonds of the Sixth Series;

provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Sixth Series; and provided further that, unless consented to by the holders of a majority in principal

amount of bonds of the Sixth Series Outstanding at the time of such consent, the Company may not deposit cash prior to July 1, 1966, in anticipation of the requirements of this Section, if the cash so deposited represents a part of a refunding operation, involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than five and two-tenths per centum (5.2%) per annum.

For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Sixth Series remain Outstanding, as defined in Section 2 of the Mortgage:

(I) any cash deposited under the provisions of this Section shall be deemed to be Funded Cash;

(II) any bonds of the Sixth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall, after such delivery, be deemed to have been retired by the use of Funded Cash; and

(III) with respect to all credits taken under this Section on the basis of the purchase or redemption of bonds of the Sixth Series, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Sixth Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section;

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3. Subject to the amendments provided for in this Fifth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Fifth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 4. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Section 2 of the Fifth Supplemental Indenture dated as of July 1, 1961", after the words "February 1, 1959".

SECTION 5. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Fifth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Fifth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Fifth Supplemental Indenture.

SECTION 6. Whenever in this Fifth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Fifth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 7. Nothing in this Fifth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Fifth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Fifth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 8. This Fifth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 26th day of July, 1961, as of July 1, 1961; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one

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of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 21st day of July, 1961, as of July 1, 1961.

NORTHWEST NATURAL GAS COMPANY,

[CORPORATE SEAL]

C. H. GUEFFROY
President.

Attest:

L. M. GANNON
Assistant Secretary.

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

R. G. SCHUUR

JOHN M. STUART

BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By W. McKINLEY
Vice President.

Attest:

G. E. MAIER
Assistant Secretary.

Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

J. H. KITTROSS

J. R. WATSON

J. C. KENNEDY (L. S.)
J. C. KENNEDY, as Trustee.

Executed, sealed and delivered by J. C.
KENNEDY in the presence of:

J. H. KITTROSS

J. R. WATSON

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 26th, A. D. 1961.

Before me personally appeared C. H. GUEFFROY, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 26th day of July, 1961, before me personally appeared C. H. GUEFFROY, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARY'S SEAL]

MARGARET A. JANSSEN
Notary Public

MARGARET A. JANSSEN
Notary Public, State of New York
No. 51-7073980
Qualified in New York County
Commission Expires March 30, 1962

Residing at New York, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 21st, A. D. 1961.

Before me personally appeared W. McKINLEY, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 21st day of July, 1961, before me personally appeared W. McKINLEY, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARY'S SEAL]

BERNARD A. FEENEY
Notary Public

BERNARD A. FEENEY
Notary Public, State of New York
No. 41-6251825
Qualified in Queens County
Certificate filed in New York County
Commission Expires March 30, 1962
Residing at Flushing, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 21st, A. D. 1961.

Before me personally appeared the above-named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 21st day of July, 1961.

[NOTARY'S SEAL]

BERNARD A. FEENEY
Notary Public

BERNARD A. FEENEY
Notary Public, State of New York
No. 41-6251325
Qualified in Queens County
Certificate filed in New York County
Commission Expires March 30, 1962

Residing at Flushing, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } SS.:

C. H. GUEFFROY, being duly sworn, deposes and says that he is President of NORTHWEST NATURAL GAS COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

C. H. GUEFFROY

Subscribed and sworn to before me }
this 26th day of July, 1961. }

MARGARET A. JANSSEN
Notary Public

[NOTARY'S SEAL]

MARGARET A. JANSSEN
Notary Public, State of New York
No. 81-7073980
Qualified in New York County
Commission Expires March 30, 1962

Residing at New York, N. Y.

SUMMARY OF RECORDING DATA

Additional Recording of Mortgage and Deed of Trust
and First Through Fourth Supplemental Indentures in
Columbia County, State of Oregon, on August 8, 1961

<u>Instrument</u>	<u>Real Property Mortgage Records</u>			<u>Chattel Mortgage Record</u>
	<u>Book or Volume</u>	<u>Page</u>	<u>Instrument Number</u>	
Mortgage and Deed of Trust.....	87	461	3387	Indexed
First Supplemental Indenture.....	87	570	3338	Indexed
Instrument evidencing Succession of J. C. Kennedy as Co-Trustee.....	87	598	3339	Indexed
Second Supplemental Indenture....	87	594	3340	Indexed
Third Supplemental Indenture....	87	609	3341	Indexed
Fourth Supplemental Indenture....	87	625	3342	Indexed

Recording of Fifth Supplemental Indenture

OREGON

<u>County</u>	<u>Date Filed For Record</u>	<u>Real Property Mortgage Records</u>		<u>Instrument Number</u>	<u>Chattel Mortgage Record</u>
		<u>Book or Reel</u>	<u>Page</u>		
Benton	August 9, 1961	140	619	40923	Indexed
Clackamas	August 9, 1961	539	2	14678	Indexed
Columbia	August 8, 1961	87	639	3343	Indexed
Lane	August 9, 1961	179	61M	40327	Indexed
Linn	August 9, 1961	227	102	190596	Indexed
Marion	August 9, 1961	510	273	644377	Indexed
Multnomah	August 8, 1961	2151	342	31578	Indexed
Polk	August 9, 1961	122	433	132200	Indexed
Wasco	August 9, 1961	97	272	14748	Indexed
Washington	August 21, 1961	423	109	10507	Indexed
Yamhill	August 9, 1961	18	1	64695	Indexed

WASHINGTON

<u>County</u>	<u>Date Filed For Record</u>	<u>Real Property Mortgage Records</u>	<u>Chattel Mortgage Record Auditor's File No.</u>
Clark	August 8, 1961	Microfilm No. 534934	G313365

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

**As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)**

Sixth Supplemental Indenture

Dated as of January 1, 1964

SIXTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of January, 1964, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is 735 S. W. Morrison Street, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is 16 Wall Street, New York 15, New York (hereinafter sometimes called the Corporate Trustee) and J. C. KENNEDY (successor to B. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Sixth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Sixth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), and its Fourth Supplemental Indenture dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture); and

WHEREAS said First, Second, Third and Fourth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Sixth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture); and

WHEREAS said Fifth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, in the official records of the several counties in the States of Oregon and Washington listed below, as follows:

OREGON

County	Date Filed For Record	Real Property Mortgage Records		Instrument Number	Chattel Mortgage Record
		Book or Reel	Page		
Benton	August 9, 1961	140	619	40923	Indexed
Clackamas	August 9, 1961	539	2	14678	Indexed
Columbia	August 8, 1961	87	639	3343	Indexed
Coos	September 9, 1963	188	177	49472	Indexed
Hood River	July 31, 1963	52	517	109441	Indexed
Lane	August 9, 1961	179	61M	40327	Indexed
Linn	August 9, 1961	227	102	190596	Indexed
Marion	August 9, 1961	510	273	644377	Indexed
Multnomah	August 8, 1961	2151	342	31578	Indexed
Polk	August 9, 1961	122	433	132200	Indexed
Wasco	August 9, 1961	97	272	14748	Indexed
Washington	August 21, 1961	423	109	10507	Indexed
Yamhill	August 9, 1961	18	1	64695	Indexed

WASHINGTON

County	Date Filed For Record	Real Property Mortgage Records		Chattel Mortgage Record Auditor's File No.
		Book	Page	
Clark	August 8, 1961	Microfilm No. 534934		G313365;
Klickitat	September 27, 1963	95	184	Indexed

and
 WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession

to said R. G. Page, resigned, under said Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, bonds of a series entitled and designated First Mortgage Bonds, $3\frac{1}{8}\%$ Series due 1976 (hereinafter called the bonds of the First Series), of which Ten Million Dollars (\$10,000,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $3\frac{7}{8}\%$ Series due 1974 (hereinafter called the bonds of the Second Series), of which Two Million Five Hundred Ninety Thousand Dollars (\$2,590,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, 4% Series due 1974 (hereinafter called the bonds of the Third Series), none of which bonds of the Third Series are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $4\frac{3}{8}\%$ Series due 1976 (hereinafter called the bonds of the Fourth Series), of which Two Million Nine Hundred Forty-eight Thousand Dollars (\$2,948,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $5\frac{1}{8}\%$ Series due 1984 (hereinafter called the bonds of the Fifth Series), of which Seven Million Dollars (\$7,000,000) in aggregate principal amount are now Outstanding; and bonds of a series entitled and designated First Mortgage Bonds, $5\frac{1}{8}\%$ Series due 1986 (hereinafter called the bonds of the Sixth Series), of which Six Million Five Hundred Thousand Dollars (\$6,500,000) in aggregate principal amount are now Outstanding; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms

thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Sixth Supplemental Indenture, and the terms of the bonds of the Seventh Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and

delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and con-

nections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Sixth Supplemental Indenture and from the lien and operation

of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Sixth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Sixth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Seventh Series of Bonds.

SECTION 1. There shall be a series of bonds designated "4¾% Series due 1989" (herein sometimes referred to as the "Seventh Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Seventh Series shall mature on January 1, 1989, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registrable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and Ten Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of four and three-quarters per centum (4¾%) per annum, payable semi-annually on July 1 and January 1 of each year; and the principal of and interest on each said bond

shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the Seventh Series shall be dated as of January 1, 1964, and fully registered bonds of the Seventh Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Seventh Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice published as provided in Section 52 of the Mortgage once on at least four different days before the date fixed for redemption, unless notice by publication shall not be required as provided in Section 52 of the Mortgage, in which event notice shall be given by mailing, the first publication or mailing, as the case may be, to be at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending December 31,

1964.....	105.25%	1977.....	102.41%
1965.....	105.04%	1978.....	102.19%
1966.....	104.82%	1979.....	101.97%
1967.....	104.60%	1980.....	101.75%
1968.....	104.38%	1981.....	101.54%
1969.....	104.16%	1982.....	101.32%
1970.....	103.94%	1983.....	101.10%
1971.....	103.72%	1984.....	100.88%
1972.....	103.50%	1985.....	100.66%
1973.....	103.29%	1986.....	100.44%
1974.....	103.07%	1987.....	100.22%
1975.....	102.85%	1988.....	100.00%
1976.....	102.63%		

in each case, together with accrued interest to the date fixed for redemption, provided, however, that no bonds of the Seventh Series may be redeemed pursuant to this subdivision (I) prior to January 1, 1969 as part of any refunding operation involving, directly or indirectly,

the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than four and seventy-two hundredths per centum (4.72%) per annum.

(II) Bonds of the Seventh Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending December 31,

1964.....	100.50%	1968.....	100.46%
1965.....	100.49%	1969.....	100.45%
1966.....	100.48%	1970.....	100.43%
1967.....	100.47%	1971.....	100.42%

1972.....	100.40%	1981.....	100.23%
1973.....	100.39%	1982.....	100.21%
1974.....	100.37%	1983.....	100.18%
1975.....	100.35%	1984.....	100.16%
1976.....	100.34%	1985.....	100.13%
1977.....	100.32%	1986.....	100.10%
1978.....	100.30%	1987.....	100.07%
1979.....	100.28%	1988.....	100.00%
1980.....	100.25%		

in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the holder, any coupon bonds of the Seventh Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the Seventh Series, upon surrender thereof, for cancellation, at said office or agency of the Company, together with a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the Seventh Series may have the ownership thereof registered as to principal at the office or agency of the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney

and similarly noted on such bond; but (subject to the provisions of Section 12 of the Mortgage) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the Seventh Series shall also be transferable (subject to the provisions of Section 12 of the Mortgage) at said office or agency of the Company.

ARTICLE II.

Sinking Fund for Bonds of the Seventh Series.

SECTION 2. The Company covenants that, unless all bonds of the Seventh Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Seventh Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Seventh Series, on July 1 of each year, beginning with the year 1969 to and including the year 1988, equivalent to two per centum (2%) of (A) the greatest principal amount of all bonds of the Seventh Series prior to January 1 of such year at any one time Outstanding, less (B) the aggregate principal amount of all bonds of the Seventh Series, prior to the date of such delivery or transfer, retired pursuant to the provisions of subdivision (3) or subdivision (4) of Section 61 of the Mortgage by use or application of the proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property, or pursuant to the provisions of Section 64 of the Mortgage, and less (C) the aggregate principal amount of bonds the right to the authentication and delivery of which (on the basis of the retirement of bonds of the Seventh Series) shall have been waived prior to such delivery of cash or bonds pursuant to the provisions of clause (c) of subdivision (4) of Section 59 of the Mortgage as the basis of the release of property or pursuant to the provisions of subdivision (2) of Section 61 of the Mortgage as the basis of the withdrawal of cash representing proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property.

For the purpose of the first paragraph of this Section the term "Outstanding" shall not include bonds of the Seventh Series pledged to secure indebtedness of the Company and not at any time otherwise issued by the Company.

The Company, at its option (as evidenced by a written order of its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Seventh Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and canceled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Sixth Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the requirements of this Section becoming due on July 1 of the then current year or any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Seventh Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on July 1 of the then current year or of a subsequent

year, shall be applied by the Corporate Trustee from time to time, as the Company may request,

(1) so long as any bond of the Seventh Series is in bearer form not registered as to principal, to the purchase of bonds of the Seventh Series, at the price or prices most favorable to the Company in the judgment of the Corporate Trustee, at public or private sale and with or without advertising in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, provided, however, that no bonds shall be purchased at such price (including accrued interest and brokerage) that the cost thereof to the Company will exceed the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost),

(2) so long as all bonds of the Seventh Series are in fully registered form, or in bearer form registered as to principal, to the purchase of bonds of the Seventh Series, at private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as provided in this clause (2), shall by mail notify all registered owners of bonds of the Seventh Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices most favorable to the Company but not exceeding the maximum price specified above and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Seventh Series registered in the names of the owners offering bonds at such price, or

(3) to the redemption of bonds of the Seventh Series; provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant

to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Seventh Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Seventh Series Outstanding at the time of such consent, the Company may not deposit cash prior to January 1, 1969, in anticipation of the requirements of this Section, if the cash so deposited represents a part of a refunding operation, involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than four and seventy-two hundredths per centum (4.72%) per annum.

For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Seventh Series remain Outstanding, as defined in Section 2 of the Mortgage:

(I) any cash deposited under the provisions of this Section shall be deemed to be Funded Cash;

(II) any bonds of the Seventh Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall, after such delivery, be deemed to have been retired by the use of Funded Cash; and

(III) with respect to all credits taken under this Section on the basis of the purchase or redemption of bonds of the Seventh Series, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Seventh Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3. Subject to the amendments provided for in this Sixth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Sixth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 4. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Section 2 of the Sixth Supplemental Indenture dated as of January 1, 1964", after the words "July 1, 1961".

SECTION 5. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Sixth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Sixth Supplemental Indenture with the same force and effect as if the same were herein set forth

in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Sixth Supplemental Indenture.

SECTION 6. Whenever in this Sixth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Sixth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 7. Nothing in this Sixth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Sixth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Sixth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 8. This Sixth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 10th day of January, 1964, as of January 1, 1964; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second

part, has hereunto set his hand and affixed his seal, all in The City of
New York, on the 10th day of January, 1964, as of January 1, 1964.

NORTHWEST NATURAL GAS COMPANY

By
President.

Attest:

.....
Assistant Secretary.
Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

BANKERS TRUST COMPANY, as Trustee,

By
Assistant Vice President.

Attest:

.....
Assistant Secretary.
Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

.....(L.S.)
J. C. KENNEDY, as Trustee.

Executed, sealed and delivered by J. C.
KENNEDY in the presence of:

T

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

January 10th, A. D. 1964.

Before me personally appeared FRANCIS F. HILL, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 10th day of January, 1964, before me personally appeared FRANCIS F. HILL, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
Notary Public

MORTON BARAD
NOTARY PUBLIC, State of New York
No. 24-5170980
Qualified in Kings County
Certs. filed in Bronx, Queens, Nassau,
New York and Westchester Cos.
Term Expires March 30, 1964
Residing in Brooklyn, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

January 10th, A. D. 1964.

Before me personally appeared A. P. SULLIVAN, who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 10th day of January, 1964, before me personally appeared A. P. SULLIVAN, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
Notary Public

S. ARNOLD SMITH
Notary Public, State of New York
No. 24-3743800
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1965
Residing in Brooklyn, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

January 10th, A. D. 1964.

Before me personally appeared the above-named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 10th day of January, 1964.

.....
Notary Public

S. ARNOLD SMITH
Notary Public, State of New York
No. 24-3743800
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1965

Residing in Brooklyn, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

FRANCIS F. HILL, being duly sworn, deposes and says that he is President of NORTHWEST NATURAL GAS COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

.....
Subscribed and sworn to before me }
this 10th day of January, 1964. }

.....
Notary Public

MORTON BARAD
NOTARY PUBLIC, State of New York
No. 24-5170980
Qualified in Kings County
Certs. filed in Bronx, Queens, Nassau,
New York and Westchester Cos.
Term Expires March 30, 1964

Residing in Brooklyn, N. Y.

[Conformed Copy]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)

Seventh Supplemental Indenture

Dated as of March 1, 1966

SEVENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of March, 1966, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is 735 S. W. Morrison Street, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is 16 Wall Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and J. C. KENNEDY (successor to R. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Seventh Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Seventh Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), and its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture); and

WHEREAS said First, Second, Third, Fourth and Fifth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Seventh Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture); and

WHEREAS said Sixth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

<u>County/Office</u>	<u>Real Property Mortgage Records</u>			<u>Financing Statement</u>	
	<u>Date Filed For Record</u>	<u>Book or Reel</u>	<u>Page</u>	<u>Date Filed</u>	<u>File No.</u>
Benton	January 17, 1964	155 — 374		March 16, 1964	1095
Clackamas	January 17, 1964	587 — 456		March 16, 1964	B-1371
Columbia	July 1, 1964	95 — 624		March 16, 1964	B-293
Coos	January 17, 1964	190 — 339		March 16, 1964	A-2105
Hood River	January 17, 1964	53 — 667		March 16, 1964	B-123
Lane	January 17, 1964	248M		March 16, 1964	5890
Linn	January 17, 1964	244 — 607		March 16, 1964	A-2782
Marion	January 17, 1964	551 — 784		March 16, 1964	B-1747
Multnomah	January 17, 1964	2316 — 384		March 10, 1964	B-5329
Polk	January 17, 1964	131 — 305		March 16, 1964	A-1193
Wasco	January 17, 1964	Microfilm No.640130		March 23, 1964	A-0842
Washington	January 17, 1964	491 — 245		March 16, 1964	B-1039
Yamhill	January 17, 1964	34 — 954		March 16, 1964	A-1182
Secretary of State				March 16, 1964	A-17734
Clatsop	August 16, 1965	163 — 353		August 16, 1965	B-2098
Lincoln	August 25, 1965	129 — 140		August 25, 1965	C-895
Tillamook	October 18, 1965	88 — 413		October 18, 1965	1683
Douglas	October 29, 1965	360 — 354		October 29, 1965	S-9338

(An executed counterpart of the Sixth Supplemental Indenture was filed January 29, 1964 in the office of the Auditor of the City of Portland, Oregon.)

WASHINGTON

<u>County/Office</u>	<u>Real Property Mortgage Records</u>			<u>Chattel Mortgage Auditor's File No.</u>
	<u>Date Filed For Record</u>	<u>Book or Reel</u>	<u>Page</u>	
Clark	January 20, 1964	Microfilm No.587518		G375341
Klickitat	January 17, 1964	95 — 439		111920
Skamania	July 16, 1965	43 — 46		Filed and Indexed

and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page, resigned, under said Mortgage and by J. C.

Kennedy accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, bonds of a series entitled and designated First Mortgage Bonds, $3\frac{1}{8}\%$ Series due 1976 (hereinafter called the bonds of the First Series), of which Ten Million Dollars (\$10,000,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $3\frac{7}{8}\%$ Series due 1974 (hereinafter called the bonds of the Second Series), of which Two Million Four Hundred Fifty Thousand Dollars (\$2,450,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, 4% Series due 1974 (hereinafter called the bonds of the Third Series), none of which bonds of the Third Series are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $4\frac{3}{8}\%$ Series due 1976 (hereinafter called the bonds of the Fourth Series), of which Two Million Six Hundred Sixty Nine Thousand Dollars (\$2,669,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $5\frac{1}{8}\%$ Series due 1984 (hereinafter called the bonds of the Fifth Series), of which Six Million Five Hundred Eighty Thousand Dollars (\$6,580,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $5\frac{1}{8}\%$ Series due 1986 (hereinafter called the bonds of the Sixth Series), of which Six Million Five Hundred Thousand Dollars (\$6,500,000) in aggregate principal amount are now Outstanding; and bonds of a series entitled and designated First Mortgage Bonds, $4\frac{3}{4}\%$ Series due 1989 (hereinafter called the bonds of the Seventh Series), of which Seven Million Dollars (\$7,000,000) in aggregate principal amount are now Outstanding; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the cove-

nants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Seventh Supplemental Indenture, and the terms of the bonds of the Eighth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the

scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at

law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Seventh Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or

leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Seventh Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

To HAVE AND To HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Seventh Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and

the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Eighth Series of Bonds.

SECTION 1. There shall be a series of bonds designated "5¾% Series due 1991" (herein sometimes referred to as the "Eighth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Eighth Series shall mature on March 1, 1991, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registrable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of five and three-quarters per centum (5¾%) per annum, payable semi-annually on September 1 and March 1 of each year; and the principal of and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the Eighth Series shall be dated as of March 1, 1966, and fully registered bonds of the Eighth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Eighth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice published as provided in Section 52 of the Mortgage once on at least four different days before the date fixed for redemption, unless notice by publication shall not be required as provided in Section 52 of the Mortgage, in which event notice shall be given by mailing, the first publication or mailing, as the case may be, to be at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending the last day of February,

1967	104.25%	1980	101.95%
1968	104.08%	1981	101.78%
1969	103.90%	1982	101.60%
1970	103.72%	1983	101.42%
1971	103.55%	1984	101.24%
1972	103.37%	1985	101.07%
1973	103.19%	1986	100.89%
1974	103.02%	1987	100.71%
1975	102.84%	1988	100.54%
1976	102.66%	1989	100.36%
1977	102.48%	1990	100.18%
1978	102.31%	1991	100.00%
1979	102.13%		

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Eighth Series may be redeemed pursuant to this subdivision (I) prior to March 1, 1971 as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than five and ninety-four one-hundredths per centum (5.94%) per annum.

(II) Bonds of the Eighth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pur-

suant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the special redemption price of the principal amount of the bonds to be redeemed, without premium, together with accrued interest to the date fixed for redemption.

(III) At the option of the holder, any coupon bonds of the Eighth Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the Eighth Series, upon surrender thereof, for cancellation, at said office or agency of the Company, together with a

written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the Eighth Series may have the ownership thereof registered as to principal at the office or agency of the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney and similarly noted on such bond; but (subject to the provisions of Section 12 of the Mortgage) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the Eighth Series shall also be transferable (subject to the provisions of Section 12 of the Mortgage) at said office or agency of the Company.

ARTICLE II.

Sinking Fund for Bonds of the Eighth Series.

SECTION 2. The Company covenants that, unless all bonds of the Eighth Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Eighth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Eighth Series, on July 1 of each year, beginning with the year 1971 to and including the year 1990, equivalent to two per centum (2%) of (A) the greatest principal amount of all bonds of the

Eighth Series prior to January 1 of such year at any one time Outstanding, less (B) the aggregate principal amount of all bonds of the Eighth Series, prior to the date of such delivery or transfer, retired pursuant to the provisions of subdivision (3) or subdivision (4) of Section 61 of the Mortgage by use or application of the proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property, or pursuant to the provisions of Section 64 of the Mortgage, and less (C) the aggregate principal amount of bonds the right to the authentication and delivery of which (on the basis of the retirement of bonds of the Eighth Series) shall have been waived prior to such delivery of cash or bonds pursuant to the provisions of clause (c) of subdivision (4) of Section 59 of the Mortgage as the basis of the release of property or pursuant to the provisions of subdivision (2) of Section 61 of the Mortgage as the basis of the withdrawal of cash representing proceeds of insurance on, the release or other disposition of, or the taking by eminent domain of, property.

For the purpose of the first paragraph of this Section the term "Outstanding" shall not include bonds of the Eighth Series pledged to secure indebtedness of the Company and not at any time otherwise issued by the Company.

The Company, at its option (as evidenced by a written order of its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Eighth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and canceled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate

Trustee) and (e) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Seventh Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the requirements of this Section becoming due on July 1 of the then current year or any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Eighth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on July 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee from time to time, as the Company may request,

(1) so long as any bond of the Eighth Series is in bearer form not registered as to principal, to the purchase of bonds of the Eighth Series, at the price or prices most favorable to the Company in the judgment of the Corporate Trustee, at public or private sale and with or without advertising in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, provided, however, that no bonds shall be purchased at such price (including accrued interest and brokerage) that the cost thereof to the Company will exceed the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost),

(2) so long as all bonds of the Eighth Series are in fully registered form, or in bearer form registered as to principal, to the purchase of bonds of the Eighth Series, at private sale, provided, however, that the Corporate Trustee, before making any

purchases of bonds as provided in this clause (2), shall by mail notify all registered owners of bonds of the Eighth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices most favorable to the Company but not exceeding the maximum price specified above and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Eighth Series registered in the names of the owners offering bonds at such price, or

(3) to the redemption of bonds of the Eighth Series;

provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Eighth Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Eighth Series Outstanding at the time of such consent, the Company may not deposit cash prior to March 1, 1971 in anticipation of the requirements of this Section, if the cash so deposited represents a part of a refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than five and ninety-four one-hundredths per centum (5.94%) per annum.

For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Eighth Series remain Outstanding, as defined in Section 2 of the Mortgage:

(I) any cash deposited under the provisions of this Section shall be deemed to be Funded Cash;

(II) any bonds of the Eighth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall, after such delivery, be deemed to have been retired by the use of Funded Cash; and

(III) with respect to all credits taken under this Section on the basis of the purchase or redemption of bonds of the Eighth Series, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Eighth Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3. Subject to the amendments provided for in this Seventh Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Seventh

Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 4. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Section 2 of the Seventh Supplemental Indenture dated as of March 1, 1966", after the words "January 1, 1964".

SECTION 5. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Seventh Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Seventh Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Seventh Supplemental Indenture.

SECTION 6. Whenever in this Seventh Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Seventh Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 7. Nothing in this Seventh Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Seventh Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the

Company as set forth in this Seventh Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 8. This Seventh Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 16th day of March, 1966, as of March 1, 1966; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 16th day of March, 1966, as of March 1, 1966.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By FRANCIS F. HILL
President.

Attest:

R. G. SCHUUR
Assistant Secretary.

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

CARROLL D. FRENCH

RALPH M. McDERMID

BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By G. R. INCE
Vice President.

Attest:

R. I. LANDAU

Assistant Secretary.

Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

WARREN L. TISCHLER

T. J. MOSKIE

J. C. KENNEDY (L.S.)

J. C. KENNEDY, as Trustee.

Executed, sealed and delivered by J. C.
KENNEDY in the presence of:

WARREN L. TISCHLER

T. J. MOSKIE

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

March 16th, A. D. 1966.

Before me personally appeared FRANCIS F. HILL, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 16th day of March, 1966, before me personally appeared FRANCIS F. HILL, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

MORTON BARAD

Notary Public

MORTON BARAD
NOTARY PUBLIC, State of New York
No. 24-5170980
Qualified in Kings County
Certs. filed in Bronx, Queens, Nassau,
New York and Westchester Cos.
Term Expires March 30, 1966
Residing in Jamaica, N. Y.

[NOTARY'S SEAL]

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

March 16th, A. D. 1966.

Before me personally appeared G. R. INCE, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 16th day of March, 1966, before me personally appeared G. R. INCE, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

H. VICTOR EVANS

Notary Public

H. VICTOR EVANS

NOTARY PUBLIC, State of New York

No. 31-6211900

Qualified in New York County

Commission Expires March 30, 1966

Residing in New York County

[NOTARY'S SEAL]

SUMMARY OF RECORDING DATA

OREGON

County	Real Property Mortgage Records		Financing Statement	
	Date Filed For Record	Book or Reel Page	Date Filed	File No.
Benton	April 13, 1966	170 - 138	April 13, 1966	4565
Clackamas	April 13, 1966	632 - 336	April 13, 1966	D-1347
Clatsop	April 13, 1966	166 - 326	April 13, 1966	C-2709
Columbia	April 13, 1966	101 - 101	April 14, 1966	D-402
Coos	April 13, 1966	66-4 - 8072	April 13, 1966	C-1717
Douglas	April 13, 1966	370 - 256	April 13, 1966	D-914
Hood River	April 13, 1966	Microfilm No. 660706	April 13, 1966	D-183
Lane	April 13, 1966	316M	April 13, 1966	27571
Lincoln	April 15, 1966	133 - 587	April 15, 1966	D-339
Linn	April 13, 1966	262 - 377	April 13, 1966	B-978
Marion	April 13, 1966	593 - 249	April 13, 1966	D-1749
Multnomah	April 15, 1966	486 - 555	April 15, 1966	D-6840
Polk	April 13, 1966	140 - 162	April 13, 1966	C-429
Tillamook	April 13, 1966	90 - 1	April 13, 1966	1935
Wasco	April 13, 1966	Microfilm No. 660732	April 13, 1966	C-0311
Washington	April 13, 1966	596 - 491	April 13, 1966	D-896
Yamhill	April 13, 1966	52 - 1	April 13, 1966	A-4793
Secretary of State			April 15, 1966	A-78736

(An executed counterpart of the Seventh Supplemental Indenture was filed April 27, 1966 in the office of the Auditor of the City of Portland.)

WASHINGTON

County	Real Property Mortgage Records		Chattel Mortgage Auditor's File No.	
	Date Filed For Record	Book or Reel Page		
Clark	April 13, 1966	399 - 1		
Clark			April 13, 1966	G-448416
Klickitat	April 13, 1966	98 - 495		
Klickitat			April 13, 1966	122206
Skamania	April 13, 1966	44 - 465		
Skamania			April 13, 1966	666-99

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)

Eighth Supplemental Indenture

Dated as of December 1, 1969

EIGHTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of December, 1969, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is 735 S. W. Morrison Street, Portland, Oregon (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is 16 Wall Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and J. C. KENNEDY (successor to R. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Eighth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eighth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), and its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture); and

WHEREAS said First, Second, Third, Fourth, Fifth and Sixth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eighth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture); and

WHEREAS said Seventh Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

County or Secretary of State	Real Property Mortgage Records			Financing Statement	
	Date Filed For Record	Book or Reel	Page	Date Filed	File No.
Benton	April 13, 1966	170 — 138		April 13, 1966	4565
Clackamas	April 13, 1966	632 — 336		April 13, 1966	D-1347
Clatsop	April 13, 1966	168 — 326		April 13, 1966	C-2709
Columbia	April 13, 1966	101 — 101		April 14, 1966	D-402
Coos	April 13, 1966	66-4 — 8072		April 13, 1966	C-1717
Douglas	April 13, 1966	370 — 256		April 13, 1966	D-914
Hood River	April 13, 1966	Microfilm No. 660706		April 13, 1966	D-183
Lane	April 13, 1966	316M		April 13, 1966	27571
Lincoln	April 15, 1966	133 — 587		April 15, 1966	D-339
Linn	April 13, 1966	262 — 377		April 13, 1966	B-978
Marion	April 13, 1966	593 — 249		April 13, 1966	D-1749
Multnomah	April 15, 1966	486 — 555		April 15, 1966	D-6840
Polk	April 13, 1966	140 — 162		April 13, 1966	C-429
Tillamook	April 13, 1966	90 — 1		April 13, 1966	1935
Wasco	April 13, 1966	Microfilm No. 660732		April 13, 1966	C-0311
Washington	April 13, 1966	596 — 491		April 13, 1966	D-896
Yamhill	April 13, 1966	52 — 1		April 13, 1966	A-4793
Secretary of State				April 15, 1966	A-78736
Secretary of State				October 2, 1968	B-39060

(An executed counterpart of the Seventh Supplemental Indenture was filed April 27, 1966 in the office of the Auditor of the City of Portland.)

WASHINGTON

County or Secretary of State	Real Property Mortgage Records		Chattel Mortgage Records	Financing Statement	
	Date Filed For Record	Book or Reel	Auditors File No.	Date Filed	File No.
Clark	April 13, 1966	399 — 1	G-448418	October 4, 1967	A2236
Klickitat	April 13, 1966	98 — 495	122206	October 3, 1967	198
Skamania	April 13, 1966	44 — 465	666-99	October 5, 1967	63
Secretary of State				October 5, 1967	14484
Secretary of State				October 2, 1968	44512

and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession

to said R. G. Page, resigned, under said Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, bonds of a series entitled and designated First Mortgage Bonds, $3\frac{1}{8}\%$ Series due 1976 (hereinafter called the bonds of the First Series), of which Ten Million Dollars (\$10,000,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $3\frac{7}{8}\%$ Series due 1974 (hereinafter called the bonds of the Second Series), of which Two Million One Hundred Seventy Thousand Dollars (\$2,170,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, 4% Series due 1974 (hereinafter called the bonds of the Third Series), none of which bonds of the Third Series are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $4\frac{3}{8}\%$ Series due 1976 (hereinafter called the bonds of the Fourth Series), of which Two Million Two Hundred Twelve Thousand Dollars (\$2,212,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $5\frac{1}{8}\%$ Series due 1984 (hereinafter called the bonds of the Fifth Series), of which Six Million Eight Thousand Dollars (\$6,008,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $5\frac{1}{8}\%$ Series due 1986 (hereinafter called the bonds of the Sixth Series), of which Five Million Eight Hundred Forty Four Thousand Dollars (\$5,844,000) in aggregate principal amount are now Outstanding; bonds of a series entitled and designated First Mortgage Bonds, $4\frac{3}{4}\%$ Series due 1989 (hereinafter called the bonds of the Seventh Series), of which Six Million Seven Hundred Ninety Seven Thousand Dollars (\$6,797,000) in aggregate principal amount are now Outstanding; and bonds of a series entitled and designated First Mortgage Bonds, $5\frac{3}{4}\%$ Series due 1991 (hereinafter called the bonds of the

Eighth Series), of which Fifteen Million Nine Hundred Eighty Thousand Dollars (\$15,980,000) in aggregate principal amount are now Outstanding; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder and of the coupons to be attached to the coupon bonds of such series shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to

be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Eighth Supplemental Indenture, and the terms of the bonds of the Ninth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product

plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Eighth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of

the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Eighth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

To HAVE AND To HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Eighth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

NINTH SERIES OF BONDS.

SECTION 1. There shall be a series of bonds designated "9 $\frac{3}{8}$ % Series due 1974" (herein sometimes referred to as the "Ninth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof and of any appurtenant coupons, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Ninth Series shall be limited to \$15,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on December 1, 1974, and shall be issued as coupon bonds in the denomination of One Thousand Dollars, registrable as to principal, and as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of nine and three-eighths per centum (9 $\frac{3}{8}$ %) per annum, payable semi-annually on June 1 and December 1 of each year; and the principal of and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Coupon bonds of the Ninth Series shall be dated as of December 1, 1969, and fully registered bonds of the Ninth Series shall be dated as in Section 10 of the Mortgage provided.

At the option of the holder, any coupon bonds of the Ninth Series, upon surrender thereof with all unmatured coupons appertaining thereto at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of fully registered bonds of the same series of authorized denominations. All such coupon bonds to be exchanged as aforesaid shall be in bearer form or, if registered, accompanied by a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney. At the option of the registered owner, any fully registered bonds of the Ninth Series, upon surrender thereof, for

cancellation, at said office or agency of the Company, together with a written instrument of transfer, if required by the Company, duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of coupon bonds of the same series, with all unmatured coupons attached, or for a like aggregate principal amount of fully registered bonds of the same series of other authorized denominations.

The holder of any coupon bond of the Ninth Series may have the ownership thereof registered as to principal at the office or agency of the Company in the Borough of Manhattan, The City of New York, and such registration noted on such bond. After such registration no transfer of such bond shall be valid unless made at said office or agency by the registered owner in person or by his duly authorized attorney and similarly noted on such bond; but (subject to the provisions of Section 12 of the Mortgage) the same may be discharged from registration by being in like manner transferred to bearer and thereupon transferability by delivery shall be restored; but such bond may again from time to time be registered or transferred to bearer in accordance with the above procedure. Such registration, however, shall not affect the negotiability of the coupons appertaining to such bonds, but every such coupon shall continue to be transferable by delivery merely and shall remain payable to bearer. Fully registered bonds of the Ninth Series shall also be transferable (subject to the provisions of Section 12 of the Mortgage) at said office or agency of the Company.

ARTICLE II.

MISCELLANEOUS PROVISIONS.

SECTION 2. Subject to the amendments provided for in this Eighth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Eighth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Eighth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Eighth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Eighth Supplemental Indenture.

SECTION 4. Whenever in this Eighth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Eighth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 5. Nothing in this Eighth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Eighth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Eighth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 6. This Eighth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 9th day of December, 1969, as of December 1, 1969.

NORTHWEST NATURAL GAS COMPANY

By
President.

Attest:

.....
Assistant Secretary.

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

.....
.....

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BANKERS TRUST COMPANY, as Trustee,

By
Vice President.

Attest:

.....
Assistant Secretary.

Executed, sealed and delivered by BANKERS
TRUST COMPANY in the presence of:

.....
.....

.....(L.S.)
J. C. KENNEDY, as Trustee.

Executed, sealed and delivered by J. C.
KENNEDY in the presence of:

.....
.....

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss. :

December 9th, A. D. 1969.

Before me personally appeared FRANCIS F. HILL, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 9th day of December, 1969, before me personally appeared FRANCIS F. HILL, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
Notary Public

MORTON BARAD
Notary Public, State of New York
No. 24-5170980
Qualified in Kings County
Certs. filed in Bronx, Queens, Nassau,
New York and Westchester Cos.
Term Expires March 30, 1970
Residing in Jamaica, N. Y.

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss. :

December 9th, A. D. 1969.

Before me personally appeared J. B. PETERSON, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 9th day of December, 1969, before me personally appeared J. B. PETERSON, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
Notary Public

THOMAS A. CONKLIN
Notary Public, State of New York
No. 24-0728340
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1971

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

December 9th, A. D. 1969.

Before me personally appeared the above-named **J. C. KENNEDY** and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me **J. C. KENNEDY** to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 9th day of December, 1969.

.....
Notary Public

THOMAS A. CONKLIN
Notary Public, State of New York
No. 24-0726340
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1971

STATE OF NEW YORK }
COUNTY OF NEW YORK } SS.:

FRANCIS F. HILL, being duly sworn, deposes and says that he is President of NORTHWEST NATURAL GAS COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

.....
Subscribed and sworn to before me }
this 9th day of December, 1969. }

.....
Notary Public

MORTON BARAD
Notary Public, State of New York
No. 24-5170980
Qualified in Kings County
Certs. filed in Bronx, Queens, Nassau,
New York and Westchester Cos.
Term Expires March 30, 1970
Residing in Jamaica, N. Y.

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

J. C. KENNEDY

(SUCCESSOR TO R. G. PAGE),

AND

STANLEY BURG

(HEREIN BECOMING SUCCESSOR TO J. C. KENNEDY)

**As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)**

Ninth Supplemental Indenture

Dated as of April 1, 1971

NINTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of April, 1971, made and entered into by and between **NORTHWEST NATURAL GAS COMPANY** (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is 735 S. W. Morrison Street, Portland, Oregon 97205 (hereinafter sometimes called the Company), party of the first part, and **BANKERS TRUST COMPANY**, a corporation of the State of New York, whose post office address is P. O. Box 318, Church Street Station, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and **J. C. KENNEDY** (successor to R. G. Page), whose post office address is 73 Gates Avenue, Montclair, New Jersey who is hereby resigning as Co-Trustee effective at the close of business on April 27, 1971, and **STANLEY BURG** (successor hereby to R. G. PAGE and J. C. KENNEDY), whose post office address is 2347 Tiebout Avenue, Bronx, New York 10458 who is hereby appointed successor Co-Trustee effective at the close of business on April 27, 1971, parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Ninth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Ninth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), and its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture); and

WHEREAS said First through Seventh Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Ninth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture); and

WHEREAS said Eighth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Filed For Record</u>	<u>Book or Reel</u>	<u>Page</u>
Benton	December 22, 1969	16674	—
Clackamas	December 22, 1969	69-26338	—
Clatsop	December 22, 1969	329	242
Columbia	December 24, 1969	111	722/40
Coos	December 22, 1969	69-12-44746/64	—
Douglas	December 22, 1969	438	283
Hood River	December 22, 1969	691806	—
Lane	December 22, 1969	464R	—
Lincoln	December 22, 1969	16	821
Linn	December 22, 1969	286	493
Marion	December 22, 1969	648	84
Multnomah	December 22, 1969	712	546/64
Polk	December 22, 1969	153	147
Tillamook	December 22, 1969	217	954
Wasco	December 22, 1969	692184 (19)	—
Washington	December 23, 1969	767	57
Yamhill	December 22, 1969	78	36

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed</u>	<u>File Number</u>
Secretary of State	December 18, 1969	13-68031

(An executed counterpart of the Eighth Supplemental Indenture was filed December 18, 1969 in the office of the Auditor of the City of Portland.)

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Filed For Record</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	December 22, 1969	399	1
Klickitat	December 22, 1969	102	339-3
Skamania	December 22, 1969	48	53

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed</u>	<u>File Number</u>
Secretary of State	December 18, 1969	81256

and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page, resigned, under said Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under said Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3½ % Series due 1976.....	\$10,000,000
3½ % Series due 1974.....	\$ 2,100,000
4 % Series due 1974.....	None
4¾ % Series due 1976.....	\$ 2,190,000
5½ % Series due 1984.....	\$ 5,744,000
5½ % Series due 1986.....	\$ 5,677,000
4¾ % Series due 1989.....	\$ 6,580,000
5¾ % Series due 1991.....	\$15,569,000
9¾ % Series due 1974.....	\$15,000,000;

and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any

way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Ninth Supplemental Indenture, and the terms of the bonds of the Tenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That the undersigned J. C. Kennedy hereby gives written notice to the Company that he hereby resigns as Co-Trustee under the Mortgage, such resignation to take effect at the close of business on April 27, 1971, unless previously a successor Co-Trustee shall have been appointed as provided in the Mortgage, in which event such resignation shall take effect immediately on the appointment of such successor Co-Trustee.

That, pursuant to Section 102 of the Mortgage, and by order of its Board of Directors, the undersigned Northwest Natural Gas Company hereby appoints Stanley Burg as successor Co-Trustee under the Mortgage, subject to the conditions in Article XVII thereof expressed, effective at the close of business on April 27, 1971.

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That the undersigned Stanley Burg, a citizen of the United States of America, hereby accepts his said appointment by Northwest Natural Gas Company as successor Co-Trustee under the Mortgage and Deed of Trust.

That the undersigned J. C. Kennedy hereby acknowledges receipt of an executed counterpart of this instrument.

That the undersigned Northwest Natural Gas Company will proceed with the publication of the notice of resignation and notice of appointment as provided respectively in Sections 101 and 102 of the Mortgage and Deed of Trust, in substantially the forms provided in Exhibit A hereto annexed.

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto J. C. Kennedy (successor to R. G. Page, as Co-Trustee) who is hereby resigning as Co-Trustee effective at the close of business on April 27, 1971 and, effective at the close of business on April 27, 1971, to Stanley Burg (then successor to R. G. Page and J. C. Kennedy) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes;

all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly

excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Ninth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Ninth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto J. C. Kennedy who is hereby resigning as Co-Trustee effective at the close of business on April 27, 1971, and, effective at the close of business on April 27, 1971, to Stanley Burg (then successor to J. C. Kennedy) and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Ninth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Tenth Series of Bonds.

SECTION 1. There shall be a series of bonds designated "8 $\frac{5}{8}$ % Series due 1996" (herein sometimes referred to as the "Tenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Tenth Series shall be limited to \$18,000,000 in aggregate principal amount at any one time Outstanding

except as provided in Section 16 of the Mortgage and shall mature on April 1, 1996, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of eight and five-eighths per centum (8 $\frac{5}{8}$ %) per annum, payable semi-annually on October 1 and April 1 of each year; and the principal of and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Tenth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Tenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the eight year period ending March 31, 1979, 108.63%.

If redeemed during the 12 months period ending March 31,

1980	105.75%	1989	102.52%
1981	105.40%	1990	102.16%
1982	105.04%	1991	101.80%
1983	104.68%	1992	101.44%
1984	104.32%	1993	101.08%
1985	103.96%	1994	100.72%
1986	103.60%	1995	100.36%
1987	103.24%	1996	100.00%
1988	102.88%		

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Tenth Series may be redeemed pursuant to this subdivision (I) prior to April 1, 1976 as part of any

refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 8% per annum.

(II) Bonds of the Tenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due in accordance with the Total Sinking Fund Requirement for said calendar year, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending March 31,

1972	100.00%	1977	100.00%
1973	100.00%	1978	100.00%
1974	100.00%	1979	100.00%
1975	100.00%	1980	100.00%
1976	100.00%	1981	100.00%

1982	100.00%	1990	100.00%
1983	100.00%	1991	100.00%
1984	100.00%	1992	100.00%
1985	100.00%	1993	100.00%
1986	100.00%	1994	100.00%
1987	100.00%	1995	100.00%
1988	100.00%	1996	100.00%
1989	100.00%		

in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the registered owner, any bonds of the Tenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Tenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, the City of New York.

Upon any registration of transfer or exchange of bonds of the Tenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Tenth Series.

ARTICLE II.

Sinking Fund for Bonds of the Tenth Series.

SECTION 2. The Company covenants that, unless all bonds of the Tenth Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Tenth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Tenth Series, on July 1 of each year, beginning with the year 1976 to and including the year 1995, equal to the Total Sinking Fund Requirement for said calendar year. The term Total Sinking Fund Requirement shall mean for any calendar year \$360,000 in cash and/or principal amount of bonds of the Tenth Series

(herein called the "mandatory sinking fund requirement") plus the Optional Sinking Fund Payment, if any, for such calendar year. The term "Optional Sinking Fund Payment" shall mean, for any calendar year, any amount, not in excess of \$360,000 in cash and/or principal amount of bonds of the Tenth Series, that the Company elects to add to the Sinking Fund for such calendar year (herein called the "primary optional payment") provided that if the Company elects not to add any such amount pursuant to this option in any calendar year or shall add an amount less than \$360,000 (the amount by which, in any such calendar year, \$360,000 exceeds the amount so added being herein called the "reserved optional payment"), the Company shall have the right to also add all or any part of the reserved optional payment (to the extent not theretofore so added) to the primary optional payment (and to any other reserved optional payment then being made) in any of the next succeeding five calendar years. At the option of the Company, Optional Sinking Fund Payments may (at any time after they are made) be applied (to the extent not theretofore so applied) in whole or in part from time to time, to reduce mandatory sinking fund requirements for subsequent years upon written notice to the Corporate Trustee.

The Company, at its option (as evidenced by a written order of its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Tenth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and canceled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Ninth Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the Total Sinking Fund Requirement becoming due on July 1 of the then current year or the mandatory sinking fund requirement becoming due on July 1 of any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Tenth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on July 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee from time to time, as the Company may request, to the purchase of bonds of the Tenth Series, at public or private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as so provided shall by mail notify all registered owners of bonds of the Tenth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices (including accrued interest and brokerage, if any) most favorable to the Company but not exceeding the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost), and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Tenth Series registered in the names of the owners offering bonds at such price, or to the redemption of bonds of the Tenth Series; provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Tenth Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Tenth Series Outstanding at the time of such consent, the Company may not deposit cash prior to April 1, 1976 in anticipation of the requirements of this Section, if the cash so

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deposited represents a part of a refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 8 $\frac{3}{4}$ % per annum.

For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Tenth Series remain Outstanding, as defined in Section 2 of the Mortgage:

(I) any cash deposited under the provisions of this Section shall be deemed to be Funded Cash;

(II) any bonds of the Tenth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall, after such delivery, be deemed to have been retired by the use of Funded Cash; and

(III) with respect to all credits taken under this Section on the basis of the purchase or redemption of bonds of the Tenth Series, it shall be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Tenth Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

SECTION 3. Section 14 of the Mortgage is hereby amended to read as follows:

"SECTION 14. All bonds authenticated and delivered hereunder shall, from time to time, be executed on behalf of the Company by its President or one of its Vice-Presidents whose signature, except on bonds of the 3½ % Series due 1976 and 3¾ % Series due 1974, may be facsimile and its corporate seal shall be thereon impressed or imprinted and attested by its Secretary or one of its Assistant Secretaries, whose signature, except on bonds of the 3½ % Series due 1976, 3¾ % Series due 1974, 4¾ % Series due 1976, 5½ % Series due 1984, 5½ % Series due 1986, 4¾ % Series due 1989, 5¾ % Series due 1991 and 9¾ % Series due 1974, may also be facsimile. The coupons to be attached to coupon bonds shall bear the facsimile signature of the present or any future Treasurer of the Company. In case any of the officers who shall have signed any bonds or attested the seal thereon, or whose facsimile signature appears on any bond or coupon, shall cease to be such officers of the Company before the bonds so signed and/or sealed shall have been actually authenticated and delivered by the Corporate Trustee or issued by the Company, such bonds nevertheless may be authenticated, delivered and/or issued with the same force and effect as though the person or persons who signed such bonds and/or attested the seal thereon and/or whose facsimile signature appears on any bond or coupon had not ceased to be such officer or officers of the Company. Before authenticating any coupon bonds, the Corporate Trustee shall cut off and cancel all matured coupons thereto attached (except as otherwise provided or permitted in Sections 12 and 16 hereof)."

ARTICLE III.

Miscellaneous Provisions.

SECTION 4. Subject to the amendments provided for in this Ninth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Ninth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 5. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Section 2

of the Ninth Supplemental Indenture dated as of April 1, 1971," after the words "March 1, 1966".

SECTION 6. The Company reserves the right, without any consent or other action by holders of bonds of the Tenth Series or of any subsequently created series, to amend Article XIX of the Mortgage, as supplemented, to read as follows:

"ARTICLE XIX.

"MEETINGS AND CONSENTS OF BONDHOLDERS.

"SECTION 107. Modifications and alterations of this Indenture and/or of any indenture supplemental hereto and/or of the rights and obligations of the Company and/or of the rights of the holders of bonds and coupons issued hereunder may be made as provided in this Article XIX.

"SECTION 108. The Corporate Trustee may at any time call a meeting of the bondholders entitled to vote on the matters to be considered at such meeting and it shall call such a meeting on written request of the holders of not less than a majority in principal amount of the bonds Outstanding hereunder (determined as provided in Section 71 hereof) at the time of such request. The Company, pursuant to a Resolution of its Board of Directors, may also call a meeting of the bondholders at any time. In each case the purpose or purposes of such meeting shall be set forth in reasonable detail. In the event of the Corporate Trustee's failing for ten (10) days to call a meeting after being thereunto requested by the bondholders as above set forth, holders of Outstanding bonds in the amount above specified in this Section or the Company, pursuant to Resolution of its Board of Directors, may call such meeting. Every such meeting called by and at the instance of the Corporate Trustee shall be held in the Borough of Manhattan, The City of New York, or with the written approval of the Company, at any other place in the United States of America, and written notice thereof, stating the place and time thereof and in general terms the business to be submitted, shall be mailed by the Corporate Trustee not less than thirty (30) days before such meeting (a) to all holders of bonds the names and addresses of whom are then preserved as required by Section 43 hereof, and (b) to the Company

addressed to it at 735 S. W. Morrison Street, Portland, Oregon (or at such other address as may be designated by the Company from time to time), and, unless all Outstanding bonds entitled to vote are fully registered or are registered as to principal, shall be published by the Corporate Trustee once on at least four different days preceding the meeting, in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, the first publication to be not less than twenty (20) days prior to the date of such meeting; provided, however, that, if notice is given by publication as aforesaid, then the mailing of such notice to any bondholder shall in no case be a condition precedent to the validity of any action taken at such meeting. If such meeting is called by or at the instance either of the Company or of the bondholders, it shall be held at such place in the United States of America as may be specified in the notice calling such meeting and notice thereof shall be sufficient for all purposes hereof if given by newspaper publication as aforesaid stating the place and time of the meeting and in general terms the business to be submitted. Any meeting of bondholders shall be valid without notice if the holders of all bonds then Outstanding hereunder are present in person or by proxy and if the Company and the Corporate Trustee are present by duly authorized representatives, or if notice is waived in writing before or after the meeting by the Company, the holders of all bonds Outstanding hereunder and by the Corporate Trustee, or by such of them as are not present in person or by proxy.

"SECTION 109. Officers and nominees of the Corporate Trustee and of the Company and of the Co-Trustee or their or its nominees may attend such meeting, but shall not as such be entitled to vote thereat. Attendance by bondholders may be in person or by proxy. In order that the holder of any bond payable to bearer and his proxy may attend and vote without producing his bond, the Corporate Trustee, with respect to any such meeting, may make and from time to time vary such regulations as it shall think fit for deposit of bonds with, (i) any bank, or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) the United States of America, any Territory thereof, the District of Columbia, any State of the United

States, any municipality in any State or Territory of the United States or any public instrumentality of the United States, any State or Territory, or (iv) any other person or corporation satisfactory to the Corporate Trustee, and for the issue to the persons depositing the same of certificates by such depositaries entitling the holders thereof to be present and vote at any such meeting and to appoint proxies to represent them and vote for them at any such meeting in the same way as if the persons so present and voting, either personally or by proxy, were the actual bearers of the bonds in respect of which such certificates shall have been issued and any regulations so made shall be binding and effective. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf. In lieu of or in addition to providing for such deposit, the Corporate Trustee may, in its discretion, permit such institutions to issue certificates stating that bonds were exhibited to them, which certificates shall entitle the holders thereof to vote at any meeting only if the bonds with respect to which they are issued are not produced at the meeting by any other person and are not at the time of the meeting registered in the name of any other person. Each such certificate shall state the date on which the bond or bonds in respect of which such certificate shall have been issued were deposited with or exhibited to such institution and the series, maturities and serial numbers of such bonds. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf. In the event that two or more such certificates shall be issued with respect to any bond or bonds, the certificate bearing the latest date shall be recognized and be deemed to supersede any certificate or certificates previously issued with respect to such bond or bonds. If any such meeting shall have been called, under the provisions of Section 108 hereof, by bondholders or by the Company, regulations to like effect for such deposit or exhibition of bonds and the issue of certificates by (i) any bank or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) by the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State or Territory of the United States or any public instrumentality of the United States, any State or Territory shall be similarly binding and effective for all purposes hereof if adopted or approved by the bondholders calling such meeting or by the Board of Directors of the Company, if such meeting

shall have been called by the Company, provided that in either such case copies of such regulations shall be filed with the Corporate Trustee. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf.

"SECTION 110. Subject to the restrictions specified in Sections 109 and 113 hereof, any registered holder of bonds Outstanding hereunder and any holder of a certificate (not superseded) provided for in Section 109 hereof, shall be entitled in person or by proxy to attend and vote at such meeting as holder of the bonds registered or certified in the name of such holder without producing such bonds. All others seeking to attend or vote at such meeting in person or by proxy must, if required by any authorized representative of the Corporate Trustee or the Company or by any other bondholder, produce the bonds claimed to be owned or represented at such meeting, and everyone seeking to attend or vote shall, if required as aforesaid, produce such further proof of bond ownership or personal identity as shall be satisfactory to the authorized representative of the Corporate Trustee, or if none be present then to the Inspectors of Votes hereinafter provided for. Proxies shall be witnessed or in the alternative may (a) have the signature guaranteed by a bank or trust company or a registered dealer in securities, (b) be acknowledged before a Notary Public or other officer authorized to take acknowledgments, or (c) have their genuineness otherwise established to the satisfaction of the Inspectors of Votes. All proxies and certificates presented at any meeting shall be delivered to said Inspectors of Votes and filed with the Corporate Trustee.

"SECTION 111. Persons nominated by the Corporate Trustee, if it is represented at the meeting, shall act as temporary Chairman and Secretary, respectively, of the meeting, but if the Corporate Trustee shall not be represented or shall fail to nominate such persons or if any person so nominated shall not be present, the bondholders and proxies present shall by a majority vote, irrespective of the amount of their holdings, elect another person or other persons from those present to act as temporary Chairman and/or Secretary. A permanent Chairman and a permanent Secretary of such meeting shall be elected from those present by the bondholders and proxies present by a majority vote of bonds repre-

sented. The Corporate Trustee, if represented at the meeting, shall appoint two Inspectors of Votes who shall decide as to the right of anyone to vote and shall count all votes cast at such meeting, except votes on the election of a Chairman and Secretary, both temporary and permanent, as aforesaid, and who shall make and file with the permanent Secretary of the meeting their verified written report in duplicate of all such votes so cast at said meeting. If the Corporate Trustee shall not be represented at the meeting or shall fail to nominate such Inspectors of Votes or if either Inspector of Votes fails to attend the meeting, the vacancy shall be filled by appointment by the permanent Chairman of the meeting.

"SECTION 112. The holders of not less than sixty-six and two-thirds per centum ($66\frac{2}{3}\%$) in principal amount of the bonds Outstanding hereunder when such meeting is held must be present at such meeting in person or by proxy in order to constitute a quorum for the transaction of business, less than a quorum, however, having power to adjourn.

"SECTION 113. Subject to the provisions of Sections 71 and 80 hereof, any modification or alteration of this Indenture and/or of any indenture supplemental thereto and/or of the rights and obligations of the Company and/or the rights of the holders of bonds and/or coupons issued hereunder in any particular, may be made at a meeting of bondholders duly convened and held in accordance with the provisions of this Article, but only by resolution duly adopted by the affirmative vote of the holders of sixty-six and two-thirds per centum ($66\frac{2}{3}\%$) or more in principal amount of the bonds Outstanding hereunder, and, if the rights of one or more, but less than all, series of bonds then Outstanding are to be affected by action taken at such meeting, then also by affirmative vote of the holders of at least sixty-six and two-thirds per centum ($66\frac{2}{3}\%$) in principal amount of each series of bonds so to be affected and Outstanding hereunder, when such meeting is held, and in every case approved by Resolution of the Board of Directors of the Company as hereinafter specified; provided, however, that no such modification or alteration shall, without the consent of the holder of any bond issued hereunder affected thereby, (1) impair or affect the right of such holder to receive payment of the principal of (and premium, if any) and interest on such bond, on or after the respective due dates expressed in such bond, or to institute suit for the enforcement of any such payment

on or after such respective dates, or (2) permit the creation of any lien ranking prior to, or on a parity with, the Lien of this Indenture with respect to any of the Mortgaged and Pledged Property, or (3) permit the deprivation of any non-assenting bondholder of a lien upon the Mortgaged and Pledged Property for the security of his bonds (subject only to the lien of taxes, assessments or governmental charges not then delinquent and to any mortgage or other liens existing upon such property which are prior hereto at the date of the calling of any such bondholders' meeting), or (4) permit the reduction of the percentage required by the provisions of this Section for the taking of any action under this Section with respect to any bond Outstanding hereunder. For all purposes of this Article, the Trustees, subject to the provisions of Sections 88 and 89 hereof, shall be entitled to rely upon an Opinion of Counsel with respect to the extent, if any, as to which any action taken at such meeting affects the rights under this Indenture or under any indenture supplemental hereto of any holders of bonds then Outstanding hereunder.

"Except for the purpose of waiving any past Default, as defined in Section 65 hereof, of the Company and the consequences thereof, in which event the provisions of Section 71 hereof shall be applicable, bonds owned and/or held by and/or for account of and/or for the benefit or interest of the Company, or any corporation of which the Company shall own twenty-five per centum (25%) or more of the outstanding voting stock, shall not be deemed Outstanding for the purpose of any vote or of any calculation of bonds Outstanding in this Article XIX provided for, except that, subject to the provisions of Sections 88 and 89 hereof, for the purpose of determining whether the Trustees, or either of them, shall be protected in relying on any such vote or calculation, only bonds which the Trustees, or either of them, know are so owned and/or held, shall be excluded.

"SECTION 114. A record in duplicate of the proceedings of each meeting of bondholders shall be prepared by the permanent Secretary of the meeting and shall have attached thereto the original reports of the Inspectors of Votes, and affidavits by one or more persons having knowledge of the facts showing a copy of the notice of the meeting, and showing that said notice was mailed and published as provided

in Section 108 hereof. Such record shall be signed and verified by the affidavits of the permanent Chairman and the permanent Secretary of the meeting, and one duplicate thereof shall be delivered to the Company and the other to the Corporate Trustee for preservation by the Corporate Trustee. Any record so signed and verified shall be proof of the matters therein stated, and if such record shall also be signed and verified by the affidavit of a duly authorized representative of the Corporate Trustee, such meeting shall be deemed conclusively to have been duly convened and held and such record shall be conclusive, and any resolution or proceeding stated in such record to have been adopted or taken, shall be deemed conclusively to have been duly adopted or taken by such meeting. A true copy of any resolution adopted by such meeting shall be mailed by the Corporate Trustee to all holders of bonds Outstanding hereunder, the names and addresses of whom are then preserved by the Corporate Trustee pursuant to the provisions of Section 43 hereof, and proof of such mailing by the affidavit of some person having knowledge of the fact shall be filed with the Corporate Trustee, but failure to mail copies of such resolution as aforesaid shall not affect the validity thereof. No such resolution shall be binding until and unless such resolution is approved by Resolution of the Board of Directors of the Company, and it shall be the duty of the Company to file a copy of such Resolution of approval, if any, certified by the Secretary or an Assistant Secretary of the Company with the Corporate Trustee, but if such Resolution of the Board of Directors of the Company is adopted and a certified copy thereof is filed with the Corporate Trustee, the resolution so adopted by such meeting shall (to the extent permitted by law) be deemed conclusively to be binding upon the Company, the Trustees and the holders of all bonds and coupons issued hereunder, at the expiration of sixty (60) days after such filing, except in the event of a final decree of a court of competent jurisdiction setting aside such resolution, or annulling the action taken thereby in a legal action or equitable proceeding for such purposes commenced within such sixty (60) day period; provided, however, that no such resolution of the bondholders, or Resolution of the Company, shall in any manner change or modify or be so construed as to change or modify any of the rights, immunities, or obligations of the Trustees or either of them without their, its or his written assent thereto.

"SECTION 115. Bonds authenticated and delivered after the date of any bondholders' meeting may bear a notation in form approved by the Corporate Trustee as to the action taken at meetings of bondholders theretofore held, and upon demand of the holder of any bond Outstanding at the date of any such meeting and presentation of his bond for the purpose at the principal office of the Corporate Trustee, the Company shall cause suitable notation to be made on such bond by endorsement or otherwise as to any action taken at any meeting of bondholders theretofore held. If the Company or the Corporate Trustee shall so determine, new bonds so modified as in the opinion of the Corporate Trustee and the Board of Directors of the Company to conform to such bondholders' resolution shall be prepared, authenticated and delivered, and upon demand of the holder of any bond then Outstanding and affected thereby shall be exchanged without cost to such bondholder for bonds then Outstanding hereunder upon surrender of such bonds with all unmaturing coupons, if any, appertaining thereto. The Company or the Corporate Trustee may require bonds Outstanding to be presented for notation or exchange as aforesaid if either shall see fit to do so. Instruments supplemental to this Indenture embodying any modification or alteration of this Indenture or of any indenture supplemental hereto made at any bondholders' meeting, and approved by Resolution of the Board of Directors of the Company, as aforesaid, may be executed by the Trustees and the Company and upon demand of the Corporate Trustee, or if so specified in any resolution adopted by any such bondholders' meeting, shall be executed by the Company and the Trustees.

"Any instrument supplemental to this Indenture executed pursuant to the provisions of this Section, shall comply with all applicable provisions of the Trust Indenture Act of 1939 as in force on the date of the execution of such supplemental indenture.

"SECTION 116. (A) Anything in this Article contained to the contrary notwithstanding, the Corporate Trustee shall receive the written consent (in any number of instruments of similar tenor executed by bondholders or by their attorneys appointed in writing) of the holders of sixty-six and two-thirds per centum (66 $\frac{2}{3}$ %) or more in principal amount of the bonds Outstanding hereunder, and, if the rights of one or more, but less than all, series of bonds then Outstanding are to be affected by action taken pursuant to such consent, then also the written

consent of the holders of at least sixty-six and two-thirds per centum (66 $\frac{2}{3}$ %) in principal amount of each series of bonds so to be affected and Outstanding hereunder (at the time the last such needed consent is delivered to the Corporate Trustee) in lieu of the holding of a meeting pursuant to this Article and in lieu of all action at such a meeting and with the same force and effect as a resolution duly adopted in accordance with the provisions of Section 113 hereof.

“(B) Instruments of consent shall be witnessed or in the alternative may (a) have the signature guaranteed by a bank or trust company or a registered dealer in securities, (b) be acknowledged before a Notary Public or other officer authorized to take acknowledgments, or (c) have their genuineness otherwise established to the satisfaction of the Corporate Trustee.

“The amount of bonds payable to bearer, and the series and serial numbers thereof, held by a person executing an instrument of consent (or whose attorney has executed an instrument of consent in his behalf), and the date of his holding the same, may be proved either by exhibiting the bonds themselves to the Corporate Trustee or by a certificate executed (i) by any bank or trust or insurance company, (ii) by any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization or similar fund, (iii) by the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State or Territory of the United States or any public instrumentality of the United States, any State or Territory, or (iv) by any other person or corporation satisfactory to the Corporate Trustee. A bondholder in any of the foregoing categories may sign a certificate in his own behalf.

“Each such certificate shall be dated and shall state in effect that as of the date thereof a coupon bond or bonds of a specified series and bearing a specified serial number or numbers was deposited with or exhibited to the signer of such certificate. The holding by the person named in any such certificate of any bond specified therein shall be presumed to continue unless (1) any certificate bearing a later date issued in respect of the same bond shall be produced, (2) the bond specified in such certificate (or any bond or bonds issued in exchange or substitution for such bond) shall be produced by another holder, or (3) the bond specified in such certificate shall be registered as to princi-

pal or shall have been surrendered in exchange for a fully registered bond registered in the name of another holder. The Corporate Trustee may nevertheless in its discretion require further proof in cases where it deems further proof desirable. The ownership of registered bonds shall be proved by the registry books.

“(C) Until such time as the Corporate Trustee shall receive the written consent of the necessary percentum in principal amount of the bonds required by the provisions of subsection (A) above for action contemplated by such consent, any holder of a bond, the serial number of which is shown by the evidence to be included in the bonds the holders of which have consented to such action, may, by filing written notice with the Corporate Trustee at its principal office and upon proof of holding as provided in subsection (B) above, revoke such consent so far as it concerns such bond. Except as aforesaid, any such consent shall be conclusive and binding upon such holder and upon all future holders of such bond (and any bond issued in lieu thereof or exchanged therefor), irrespective of whether or not any notation of such consent is made upon such bond, and in any event any action taken by the holders of the percentage in aggregate principal amount of the bonds specified in subsection (A) above in connection with such action shall, subject to the provisions of the last sentence of Section 114 hereof, be conclusively binding upon the Company, the Trustees and the holders of all the bonds.”

SECTION 6. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Ninth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Ninth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and

insertions, if any, as may be appropriate to make the same conform to the provisions of the Ninth Supplemental Indenture.

SECTION 7. Whenever in this Ninth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Ninth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 8. Nothing in this Ninth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Ninth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Ninth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 9. This Ninth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 23rd day of April, 1971, as of April 1, 1971 in the City of Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second part (who is resigning as Co-Trustee effective at the close of business on April 27, 1971), has hereunto set his hand and affixed his seal, and Stanley Burg, one of the parties

hereto of the second part (who is appointed as successor Co-Trustee effective at the close of business on April 27, 1971), has hereunto set his hand and affixed his seal, all in The City of New York, on the 26th day of April, 1971, as of April 1, 1971.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By FRANCIS F. HILL
President.

Attest:

W. E. RADFORD
Secretary.

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

W. A. COOK
KATHLEEN SKINNER

BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By G. E. MAIER
Vice President.

Attest:

W. L. TISCHLER
Assistant Secretary.

J. C. KENNEDY (L.S.)
J. C. KENNEDY

STANLEY BURG (L.S.)
STANLEY BURG

Executed, sealed and delivered by BANKERS
TRUST COMPANY, J. C. KENNEDY and STANLEY
BURG in the presence of:

IRA M. BRATT
M. E. SECHEHAY, JR.

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

April 23rd, A. D. 1971.

Before me personally appeared FRANCIS F. HILL, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 23rd day of April, 1971, before me personally appeared FRANCIS F. HILL, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

H. W. PIERCE
Notary Public for Oregon
My Commission Expires January 25, 1974

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

April 26th, A. D. 1971.

Before me personally appeared G. E. MAIER, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 26th day of April, 1971, before me personally appeared G. E. MAIER, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

CHRISTINE GERACE
Notary Public

CHRISTINE GERACE
Notary Public, State of New York
No. 24-1407147
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1973

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

April 26th, A. D. 1971.

Before me personally appeared the above-named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 26th day of April, 1971.

[NOTARIAL SEAL]

CHRISTINE GERACE
Notary Public

CHRISTINE GERACE
Notary Public, State of New York
No. 24-1407147
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1973

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

April 26th, A. D. 1971.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 26th day of April, 1971.

[NOTARIAL SEAL]

CHRISTINE GERACE
Notary Public

CHRISTINE GERACE
Notary Public, State of New York
No. 24-1407147
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1973

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

FRANCIS F. HILL, being duly sworn, deposes and says that he is President of NORTHWEST NATURAL GAS COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

FRANCIS F. HILL

Subscribed and sworn to before me }
this 23rd day of April, 1971. }

[NOTARIAL SEAL]

H. W. PIERCE
Notary Public for Oregon

My Commission Expires January 25, 1974

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(EXHIBIT A)

NOTICE OF RESIGNATION OF CO-TRUSTEE

NOTICE IS HEREBY GIVEN that the undersigned J. C. Kennedy has resigned as successor Co-Trustee under the Mortgage and Deed of Trust dated as of July 1, 1946, as amended, of Portland Gas & Coke Company (now Northwest Natural Gas Company) to Bankers Trust Company and R. G. Page (J. C. Kennedy, successor), as Trustees, such resignation having taken effect at the close of business on April 27, 1971.

Dated, April 28, 1971.

J. C. KENNEDY

NOTICE OF APPOINTMENT OF SUCCESSOR CO-TRUSTEE

NOTICE IS HEREBY GIVEN that the undersigned Northwest Natural Gas Company has received notice of and accepted the foregoing resignation of J. C. Kennedy as Co-Trustee under its said Mortgage and Deed of Trust dated as of July 1, 1946, as amended, and that as provided in said Mortgage and Deed of Trust the undersigned has appointed Stanley Burg as successor Co-Trustee thereunder, effective at the close of business on April 27, 1971.

Dated, April 28, 1971.

NORTHWEST NATURAL GAS COMPANY

SUMMARY OF RECORDING DATA

IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
11	Benton	May 11, 1971	24409	—
12	Clackamas	May 11, 1971	71-10026	—
13	Clatsop	May 11, 1971	347	503
14	Columbia	May 11, 1971	115	864
15	Coos	May 11, 1971	71-5-58818/52	—
16	Douglas	May 11, 1971	466	219
17	Hood River	May 11, 1971	710790	—
18	Lane	May 11, 1971	531R	—
19	Lincoln	May 11, 1971	25	760
20	Linn	May 11, 1971	MF14	877
21	Marion	May 11, 1971	670	171
22	Multnomah	May 11, 1971	786	1449
23	Polk	May 11, 1971	16	351
24	Tillamook	May 11, 1971	223	72
25	Wasco	May 11, 1971	710749	—
26	Washington	May 11, 1971	816	680
27	Yamhill	May 11, 1971	83	1952

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
9	Secretary of State.....	May 11, 1971	C-02566

(An executed counterpart of the Ninth Supplemental Indenture was filed on May 7, 1971 in the office of the Auditor of the City of Portland.)

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
29	Clark	May 11, 1971	780758	—
30	Klickitat	May 11, 1971	104	263A
31	Skamania	May 11, 1971	48	969

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
28	Secretary of State	May 11, 1971	0124352

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG

(SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)

Tenth Supplemental Indenture

providing among other things for
First Mortgage Bonds, 12% Series due 1984

Dated as of January 1, 1975

TENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of January, 1975, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is Suite 300, 200 S.W. Market Street, Portland, Oregon, 97201 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Sixteen Wall Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Tenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Tenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), and its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture); and

WHEREAS said First through Eighth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Tenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture); and

WHEREAS said Ninth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	May 11, 1971	24409	—
Clackamas	May 11, 1971	71-10026	—
Clatsop	May 11, 1971	347	503
Columbia	May 11, 1971	115	864
Cook	May 11, 1971	71-5-58818/52	—
Douglas	May 11, 1971	466	219
Hood River	May 11, 1971	710790	—
Lane	May 11, 1971	531R	—
Lincoln	May 11, 1971	25	760
Linn	May 11, 1971	MF14	877
Marion	May 11, 1971	670	171
Multnomah	May 11, 1971	786	1449
Polk	May 11, 1971	16	351
Tillamook	May 11, 1971	223	72
Wasco	May 11, 1971	710749	—
Washington	May 11, 1971	816	680
Yamhill	May 11, 1971	83	1952

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	May 11, 1971	C-02566

(An executed counterpart of the Ninth Supplemental Indenture was filed on May 7, 1971 in the office of the Auditor of the City of Portland.)

WASHINGTON
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	May 11, 1971	780758	—
Klickitat	May 11, 1971	104	263A
Skamania	May 11, 1971	48	969

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	May 11, 1971	0124352

and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3½ % Series due 1976.....	\$10,000,000
3¾ % Series due 1974.....	None
4 % Series due 1974.....	None
4¾ % Series due 1976.....	\$ 1,744,000
5½ % Series due 1984.....	\$ 4,972,000
5½ % Series due 1986.....	\$ 5,062,000
4¾ % Series due 1989.....	\$ 5,855,000
5¾ % Series due 1991.....	\$14,075,000
9¾ % Series due 1974.....	None
8¾ % Series due 1996.....	\$18,000,000;

and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause

to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the Company wishes to secure the repayment of \$30,000,000 aggregate principal amount of its 12% Secured Notes Due 1984 (the "Secured Notes") issued pursuant to several Note Purchase Agreements dated December 31, 1974 (the "Note Purchase Agreements"), between the Company and the several purchasers named therein, by the issuance and pledge of \$30,000,000 aggregate principal amount of such new series of bonds to be created and issued pursuant to the Mortgage, as heretofore supplemented, and as supplemented by this Tenth Supplemental Indenture; and

WHEREAS the execution and delivery by the Company of this Tenth Supplemental Indenture, and the terms of the bonds of the Eleventh Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole

and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Tenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held

under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Tenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Tenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Eleventh Series of Bonds.

SECTION 1.01. *Amount, Interest and Maturity.* There shall be a series of bonds designated "12% Series due 1984" (herein sometimes referred to as the "Eleventh Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Eleventh Series shall be limited to \$30,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on December 1, 1984, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest from January 21, 1975 at the rate of 12% per annum (computed on the basis of a 360-day year of twelve 30-day months), payable, subject to Section 1.03 hereof, semi-annually on June 1 and December 1 of each year, commencing June 1, 1975; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, the City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, and, at the option of the Company, may be paid by check mailed to the registered holder thereof. Bonds of the Eleventh Series shall be dated as in Section 10 of the Mortgage provided.

SECTION 1.02. Redemption. Bonds of the Eleventh Series shall be redeemable at the option of the Company on any date on or after December 1, 1979 in accordance with the requirements of the Mortgage in whole at any time, or in part from time to time (if in part, in multiples of \$100,000 but in amounts not less than \$1,000,000 in aggregate principal amount of such bonds), prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption at the following redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

<u>If redeemed during the twelve-month period beginning December 1,</u>	<u>Percentage</u>
1979	105.00%
1980	103.75
1981	102.50
1982	101.25
1983 and thereafter	100.00

in each case, together with accrued interest to the date fixed for redemption; *provided, however,* that prior to June 1, 1984, no bonds of the Eleventh Series may be redeemed pursuant to this Section prior to maturity as part of or in anticipation of any refinancing operation involving, directly or indirectly, the incurring of indebtedness by the Company or any subsidiary or affiliate thereof for borrowed funds having an interest rate or cost (calculated in accordance with generally accepted financial practice) of less than 12% per annum. The term "affiliate" means a person directly or indirectly controlling, controlled by, or under direct or indirect common control with, the Company. A person shall be deemed to control a corporation or other person, for the purpose of this definition, if such person possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of such corporation or other person, whether through the ownership of voting securities, by contract, or otherwise. The term "subsidiary" means any corporation at least a majority of whose outstanding voting stock shall at the time be owned by the Company and/or by one or more subsidiaries of the Company.

Bonds of the Eleventh Series shall be redeemable by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property; *provided, however,* that no bonds of the Eleventh Series shall be redeemable pursuant to any Section of the Mortgage (other than pursuant to the first paragraph of this Section 1.02) which permits the Com-

pany to designate one or more series from which redemption is to be made without the prior written consent of the holders of not less than 70% of the principal amount of the bonds of the Eleventh Series then Outstanding, which consent shall be requested by the Company. Any such redemption, if consented to, shall be made at a redemption price equal to 100% of the principal amount thereof, together with accrued interest to the date fixed for redemption.

Subject to the provisions of Section 1.03 hereof, Bonds of the Eleventh Series shall be redeemed through the annual operation of the sinking fund pursuant to Article II hereof at a sinking fund redemption price equal to 100% of the principal amount thereof, in each case together with accrued interest to the date fixed for redemption.

SECTION 1.03. *Effect of Payment of Secured Notes; Covenant to Pay.* The obligation of the Company to pay the principal of, premium, if any, and interest on the bonds of the Eleventh Series on any date fixed for the payment of such amounts pursuant to this Tenth Supplemental Indenture shall be discharged by (i) the payment of all of the corresponding amounts when due and payable in respect of the principal of, premium, if any, and interest on the Secured Notes to be issued pursuant to Note Purchase Agreements, each dated December 31, 1974, between the Company and the purchasers named therein; and (ii) in the case of payments of principal and premium, if any, the presentation and surrender for cancellation or exchange, or the presentation for notation, of the bonds of the Eleventh Series to the Corporate Trustee as provided in Section 54 of the Mortgage. Without limiting the effect of the foregoing, prepayment of the Secured Notes pursuant to Section 2.01 or 2.02 of the Note Purchase Agreements shall, upon presentation and surrender for cancellation or exchange, or presentation for notation, of the bonds of the Eleventh Series as provided in the preceding sentence, discharge the obligation hereunder to make an Eleventh Series Sinking Fund Payment or redemption pursuant to Section 2.01, 2.02 or 1.02 hereof for the corresponding date. If any amounts payable in respect of the Secured Notes on a date fixed for the payment thereof pursuant to the Note Purchase Agreements shall not be paid on such date, the corresponding amount payable in respect of the bonds of the Eleventh Series on such date, or the portion thereof which is equal to that portion of the amounts then payable in respect of the Secured Notes and remaining unpaid, shall be paid to the registered owners of the bonds of the Eleventh Series.

The Company covenants that it will duly and punctually pay the principal of, premium, if any, and interest on the Secured Notes as and when the same shall become due and payable whether at maturity, upon redemption,

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whether mandatory or optional, by declaration or otherwise. The Company covenants that it will promptly notify the Corporate Trustee of any Event of Default under the Note Purchase Agreements.

SECTION 1.04. *Payment Certificates.* The Company shall, if it is the case, deliver to the Corporate Trustee on each date on which any amounts would otherwise be required to be paid in respect of bonds of the Eleventh Series pursuant to the provisions hereof and of the Mortgage, an Officers' Certificate (the "Payment Certificate") that it has duly and punctually made the corresponding payments in respect of the Secured Notes, in which event the Company shall not, unless default is made in the making of any such payment on the Secured Notes, be required to pay any such amounts in respect of bonds of the Eleventh Series. The Corporate Trustee shall be entitled to rely conclusively upon any Payment Certificate delivered by the Company unless and until it shall have received written notice from the holder of any bond of the Eleventh Series that any such amounts so payable in respect of the Secured Notes have not been duly paid.

SECTION 1.05. *Exchange and Registration.* At the option of the registered owner, any bonds of the Eleventh Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, the City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Eleventh Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, the City of New York.

Upon any registration of transfer or exchange of bonds of the Eleventh Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Eleventh Series.

ARTICLE II.

Sinking Fund for Bonds of the Eleventh Series.

SECTION 2.01. *Regular Sinking Fund and Dates.* Subject to the provisions of Section 1.03 hereof, the Company covenants that, unless all bonds

of the Eleventh Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Eleventh Series, pay to the Corporate Trustee an amount in cash not later than December 1 in each of the years 1979 to and including 1983 (subject to acceleration pursuant to Section 2.02 hereof) sufficient to redeem \$4,500,000 principal amount of such bonds (subject to adjustment pursuant to Section 2.02 hereof) at the sinking fund redemption price, together with accrued interest thereon to the date fixed for redemption. The dates upon which such payments are to be made are herein called "Eleventh Series Sinking Fund Payment Dates". The amount to be paid to the Corporate Trustee on an Eleventh Series Sinking Fund Payment Date is herein called an "Eleventh Series Sinking Fund Payment".

The Company shall not be entitled to increase, or to anticipate, any payment in satisfaction of its obligations in respect of the Sinking Fund for the Eleventh Series, except as specifically provided in Section 2.02 below. The Company will not, and will not permit any subsidiary to, acquire directly or indirectly by purchase or otherwise any of the outstanding bonds of the Eleventh Series except by way of payment or redemption in accordance with the provisions of this Tenth Supplemental Indenture.

SECTION 2.02. Adjusted Sinking Fund Payments and Accelerated Sinking Fund Payment Dates. The terms used in this Section 2.02 shall have the meanings defined in Section 2.03. On or before March 31 of each year beginning with the year 1975, the Company covenants that it shall file a Certificate of Firm Gas Supply with the Trustee and, so long as any original holder of bonds of the Eleventh Series continues to hold any of such bonds, deliver a copy of such Certificate to such original holder. If the Date of Exhaustion of Firm Gas Supply shown by the Certificate of Firm Gas Supply so filed shall be a date earlier than December 1, 1984, then the dates of the Eleventh Series Sinking Fund Payment Dates and the amounts of the Eleventh Series Sinking Fund Payments shall be redetermined as follows: The aggregate principal amount of bonds of the Eleventh Series outstanding on the date on which such certificate was filed shall be divided by the number of December 1sts subsequent to the date on which such certificate is filed and prior to such Date of Exhaustion. The resulting quotient (rounded to the next higher integral multiple of \$1,000 if the quotient is not an integral multiple of \$1,000) shall thereupon become the adjusted Eleventh Series Sinking Fund Payment. Each December 1st subsequent to the

date on which such certificate is filed and prior to such Date of Exhaustion that is also prior to December 1, 1979 shall thereupon become an accelerated Eleventh Series Sinking Fund Payment Date. Such adjusted Eleventh Series Sinking Fund Payment shall then be paid to the Corporate Trustee not later than each Eleventh Series Sinking Fund Payment Date, including any accelerated Eleventh Series Sinking Fund Payment Date.

If any Certificate of Firm Gas Supply filed in any year after the Company's Eleventh Series Sinking Fund Payment has been adjusted as hereinabove provided shall show a Date of Exhaustion of Firm Gas Supply that is both different from the Date of Exhaustion shown in the most recent previous Certificate of Firm Gas Supply and prior to December 1, 1984, the amount of the Company's remaining adjusted Eleventh Series Sinking Fund Payments shall again be adjusted in the same manner as provided above. If any such subsequently filed Certificate of Firm Gas Supply shall show a Date of Exhaustion later than November 30, 1984, then (until such time as a further subsequent Certificate of Firm Gas Supply shall be filed showing a Date of Exhaustion prior to December 1, 1984) no further payments on accelerated Eleventh Series Sinking Fund Payment Dates shall be required to be made and the remaining Eleventh Series Sinking Fund Payments shall be made as provided, exclusive of any adjustment, in the first paragraph of Section 2.01, except that (1) if less than \$22,500,000 shall then have been paid, each such remaining Eleventh Series Sinking Fund Payment shall be reduced by a fraction computed by dividing (i) the sum of (x) any Eleventh Series Sinking Fund Payments theretofore made on accelerated Eleventh Series Sinking Fund Payment Dates plus (y) the aggregate amount of any excess of an adjusted Eleventh Series Sinking Fund Payment over \$4,500,000 for all such payments theretofore made on the Eleventh Series Sinking Fund Payment Dates after December 1, 1978, by (ii) \$4,500,000 multiplied by the number of December 1sts which are subsequent to both December 1, 1978 and the date such Certificate is filed and which are prior to December 1, 1984, or (2) if \$22,500,000 or more shall then have been paid, no further payments shall be required to be made on any remaining Eleventh Series Sinking Fund Payment Dates.

Nothing contained in this Section 2.02 shall affect the obligation of the Company to repay the unpaid principal amount of bonds of the Eleventh Series at maturity on December 1, 1984.

SECTION 2.03. *Certain Definitions.* For purposes of this Article II, the following terms shall have the following meanings:

The term "*Certificate of Firm Gas Supply*" shall mean an Officers' Certificate which shall state:

- (a) The Company's Firm Gas Supply as at January 1 of the year in which such Certificate is filed;

- (b) The Company's Annual Gas Requirements;
- (c) The Company's Firm Gas Supply Life as at January 1 of the year in which such Certificate is filed; and
- (d) The Date of Exhaustion of Firm Gas Supply.

The terms "*Date of Exhaustion of Firm Gas Supply*" or "*Date of Exhaustion*" shall mean the first day of the calendar month next following the end of the period commencing on January 1 of the year in which a Certificate of Firm Gas Supply is filed and extending for the Firm Gas Supply Life shown in such Certificate.

The term "*Firm Gas Supply Life*" shall mean a period of years, stated to the nearest 1/10 of a year, computed by dividing the Company's Firm Gas Supply by the Company's Annual Gas Requirements, each stated in a Certificate of Firm Gas Supply.

The term "*Annual Gas Requirements*" shall mean, for the purposes of any Certificate of Firm Gas Supply, the average of the aggregate annual amount in Therms of all gas sold and of all gas used by the Company during the three calendar years next preceding the date of such Certificate, including gas unaccounted for but excluding the excess, if any, in Therms, of the average aggregate annual amount of gas sold on an interruptible basis during the same period over 35% of the average aggregate annual amount of all gas sold and used.

The term "*Firm Gas Supply*" shall mean, for the purposes of any Certificate of Firm Gas Supply, the sum, without duplication, of

(a) the aggregate amount in Therms of proven (as evidenced by an independent geologist's certificate dated January 1st or later of the then current year) recoverable natural gas reserves of Distribution Quality (including gas in solution or in a common reservoir with oil or distillate and to be produced with such oil or distillate in the form of casing-head gas) controlled by the Company by virtue of leaseholds owned by the Company or by virtue of contracts or other legal entitlements under which the Company is entitled to purchase natural gas produced from such reserves, which, after taking into account the current availability of transportation facilities and all other pertinent factors relative to such reserves, the Company can reasonably expect to produce, at economically practicable prices, and have delivered to it and to transport to its markets to meet requirements in the future for sales to its customers, after exclud-

ing from such aggregate any amounts to be utilized in connection with the production of Liquefied Natural Gas included under (c) or (e); *provided*, however, that no amounts shall be taken into account hereunder from any reserve unless on or prior to the date of such Certificate, (i) all necessary regulatory approvals required for the commencement and continuation of withdrawals from such reserves and deliveries to the Company's markets have been obtained and are still in full force and effect and (ii) construction of any facilities required for the withdrawal of such gas is in progress and is reasonably expected by the Company to be completed within a period of eighteen months from the date of such Certificate;

(b) to the extent not included in (a) above, the aggregate amount in Therms of gas of Distribution Quality owned or controlled by the Company in storage reservoirs, excluding non-recoverable cushion gas;

(c) the aggregate amount in Therms of Distribution Quality gas which the Company is entitled to purchase or otherwise acquire from interstate, intrastate or Canadian gas pipeline companies under any contract or other legal entitlement providing for the delivery of such gas to, or for the account of, the Company, *provided* that on or prior to the date of such Certificate, all necessary regulatory approvals required for the commencement and continuation of deliveries to the Company of such gas have been obtained and are still in full force and effect, and *provided further* that such aggregate amount shall be diminished by the excess, if any, of (i) that portion which, in light of the circumstances existing on the date of such Certificate, can reasonably be expected will not be delivered to the Company because (x) the Company has received notice or has reason to believe that such pipeline supplier does not intend to or cannot deliver such portion, or (y) the Company has not reasonably assured itself to the extent feasible that such pipeline supplier has itself a sufficient gas supply to perform its contract or other legal obligation for delivery of such portion to, or for the account of, the Company over (ii) the aggregate amount, if any, of Synthetic Gas of Distribution Quality and/or Liquefied Natural Gas of Distribution Quality meeting the requirements of subsections (d) and (e) below (except for the dates set forth in clauses (iii) of such subsections) available to the Company by reason of arrangements made in response to reduction of pipeline supply resulting from the events referred to in (i) above;

(d) the aggregate amount in Therms of Synthetic Gas of Distribution Quality controlled by the Company by virtue of an interest held by the Company in, or under contracts or other legal entitlements to purchase or otherwise acquire production from, any facilities for the production of Synthetic Gas, *provided* that (i) all regulatory approvals required to be obtained on or prior to the date of such Certificate for the construction or operation of such facilities and the purchase or other acquisition of such gas have been obtained and are still in full force and effect, and that construction of such facilities (if not completed) is in progress and is reasonably expected by the Company to be completed within a period of eighteen months from the date of such Certificate, (ii) no event or circumstance has occurred which would prevent the completion and operation of any project of which such facilities are a part, and (iii) any such amount of Synthetic Gas shall as of the date of such Certificate be available to the Company for a remaining term ending not earlier than December 1, 1984; and

(e) the aggregate amount in Therms of Liquefied Natural Gas of Distribution Quality controlled by the Company by virtue of an interest held by the Company in, or under contracts or other legal entitlements to purchase or otherwise acquire production from, any facilities for the liquefaction of natural gas, *provided* that (i) all regulatory approvals required to be obtained on or prior to the date of such Certificate for the construction or operation of such facilities and the purchase or other acquisition of such gas have been obtained and are still in full force and effect, and that construction of such facilities (if not completed) is in progress and is reasonably expected by the Company to be completed within a period of eighteen months from the date of such Certificate, (ii) no event or circumstance has occurred which would prevent the completion and operation of any project of which such facilities are a part, and (iii) any such amount of Liquefied Natural Gas shall as of the date of such Certificate be available to the Company for a remaining term ending not earlier than June 1, 1984;

provided, however, that in the case of (c), the signers of any Certificate of Firm Gas Supply may, if they shall consider such information reliable and of sufficiently recent date and so state in such Certificate, rely on any figures relating to the gas supply of any pipeline supplier contained in the certificate of gas supply most recently filed with a trustee under any indenture securing

bonds or other obligations of said pipeline supplier if (i) such certificate was signed by a person who would qualify as an independent geologist under such indenture and (ii) pursuant to the terms of said indenture, the signer of such certificate of gas supply, in rendering the opinion set forth therein, shall be required to consider substantially the same factors in a substantially similar manner in determining the amount of such gas supply as are required to be considered by the signers of a Certificate of Firm Gas Supply under this Section 2.03 in determining the Firm Gas Supply of the Company, and such certificate of gas supply of the supplier shall be submitted, in conjunction with the Company's Certificate of Firm Gas Supply, to the Trustee and to the original holders of the bonds of the Eleventh Series so long as such original holder continues to hold any such Series; *provided, further*, that in the case of (d) and (e), the aggregate amounts will be included only to the extent that, in the express written opinion of the signers of the Certificate of Firm Gas Supply hereunder, (i) the design, capacity and useful life of such facilities will permit the production of such amount; (ii) raw materials to be consumed in the production of Synthetic Gas by any facilities referred to in (d) have been acquired or contracted for in quantities sufficient to permit the production of such amount; (iii) the natural gas required to be consumed or used in the production of Liquefied Natural Gas by any facilities referred to in (e) has been acquired or contracted for in quantities sufficient to permit the production of such amount; and (iv) the nature and extent of the Company's interest in such facilities, or the contracts or other legal entitlements by virtue of which the Company has rights to purchase or otherwise acquire production therefrom, and the Company's ability to procure the transportation thereof, are such as to permit the Company to obtain the delivery of such amount; *and provided, further*, in computing Firm Gas Supply, any gas, including Liquefied Natural Gas and Synthetic Gas, available to the Company from sources not located in the United States of America, whether owned by the Company, its supplier or any supplier of such supplier, shall be included only to the extent that the amount thereof (i) can reasonably be expected to be transported into the United States, over the life of any applicable contract to which the Company is a party, by the Company or its supplier or for delivery to such supplier for sale to the Company, (ii) can be exported from the foreign sources without violating any law, regulation or embargo of any country other than the United States having jurisdiction thereof relating to the export of such gas, and (iii) can be imported into the United States by the Company or its supplier or for delivery to such supplier for sale to the Company without violating any law, regulation or embargo of the United States relating to the import of such gas.

The term "*Distribution Quality*", when used in reference to any gas, shall mean gas which upon delivery to the Company or after further treatment or processing by available and feasible means, or after blending with other gas available to the Company, is of a quality susceptible for sale or use by the Company in satisfying its gas requirements.

The term "*Liquefied Natural Gas*" shall mean natural gas converted to a liquid form and which is subject to regasification.

The term "*Synthetic Gas*" shall mean gas produced by the conversion of coal, oil, naphtha, oil shale or any other substance from a solid or a liquid to a gaseous state, but shall not include gas produced by the regasification of Liquefied Natural Gas.

The term "*Therms*" shall mean 100,000 British thermal units.

SECTION 2.04. *Treatment of Certain Amounts.* For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Eleventh Series remain Outstanding, as defined in Section 2 of the Mortgage:

- (i) any cash deposited under the provisions of this Article shall be deemed to be Funded Cash; and
- (ii) any bonds of the Eleventh Series delivered to the Corporate Trustee pursuant to the provisions of this Article shall, after such delivery, be deemed to have been retired by the use of Funded Cash.

Any bonds issued under the Mortgage, delivered to or deposited with the Corporate Trustee by the Company pursuant to the provisions of this Section, shall forthwith be canceled by the Corporate Trustee.

SECTION 2.05. *Waivers.* Any provision of this Article II may be waived with, and only with, the consent of the holders of 100% of the aggregate unpaid principal amount of the bonds of the Eleventh Series.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Tenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore

supplemented, shall, for all purposes of this Tenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Article II of the Tenth Supplemental Indenture dated as of January 1, 1975," after the words "April 1, 1971".

SECTION 3.03. So long as any bonds of the Eleventh Series remain Outstanding, subdivision (c) of Section 65 of the Mortgage is hereby amended to read as follows:

"(c) (1) Failure to pay interest upon or principal (whether at maturity as therein expressed or by declaration, or otherwise) of any Outstanding Qualified Lien Bonds continued beyond the period of grace, if any, specified in the Qualified Lien securing the same; or (2) failure to pay the principal of, or premium, if any, or interest on (whether at maturity or any prepayment or interest payment date as therein expressed, or by acceleration or otherwise) any of the Company's Secured Notes due 1984 issued under its Note Purchase Agreements dated December 31, 1974, when any such payment is due and such failure shall have continued beyond any applicable period of grace specified in such Agreements."

SECTION 3.04. If for purposes of Section 113 of the Mortgage, the bonds of the Eleventh Series otherwise Outstanding within the meaning of Section 2 of the Mortgage shall at any time be deemed not to be Outstanding, the Company covenants that it will not (i) consent to any amendment or modification of the Mortgage, or of any indenture supplemental thereto (if, in such case, the consent of holders of such bonds of the Eleventh Series would be required if such bonds had been deemed to be Outstanding for purposes of such Section), unless prior thereto the Company, treating the bonds of the Eleventh Series as Outstanding for this purpose, has obtained the consent of the holders of the requisite percentage in aggregate principal amount of First Mortgage Bonds then Outstanding, or (ii) without the prior written consent of holders of not less than 66 $\frac{2}{3}$ % of the aggregate principal amount of Bonds of the Eleventh Series then Outstanding within the meaning of Section 2 of the Mortgage, consent to any amendment or modification of this Tenth Supplemental Indenture.

SECTION 3.05. The Trustees hereby accept the trusts hereby declared provided, created or supplemented, and agree to perform the same upon the

terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Tenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Tenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Tenth Supplemental Indenture.

SECTION 3.06. To the extent permitted by Sections 88 and 89 of the Mortgage, the Trustees or either of them may rely and shall be protected in acting upon any certificate delivered under Article I or Article II and believed by them, it or him to be genuine and to have been signed or presented by the proper party or parties.

SECTION 3.07. Whenever in this Tenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Tenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.08. Nothing in this Tenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Tenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Tenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.09. This Tenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this

instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 13th day of January, 1975, as of January 1, 1975 in the City of Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 16th day of January, 1975, as of January 1, 1975.

NORTHWEST NATURAL GAS COMPANY

By FRANCIS F. HILL
President.

Attest:

W. E. RADFORD
Secretary.

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

[CORPORATE SEAL]

JOSEPH S. LONG
KATHLEEN SKINNER

BANKERS TRUST COMPANY, as Trustee,

By W. L. TISCHLER
Assistant Vice President.

Attest:

JUNE A. GRABER
Assistant Secretary.

STANLEY BURG (L.S.)
STANLEY BURG, *as Trustee.*

Executed, sealed and delivered by BANKERS
TRUST COMPANY and STANLEY BURG in
the presence of:

[CORPORATE SEAL]

S. D. MINEO
K. MCGRAW

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

January 13, A. D. 1975.

Before me personally appeared FRANCIS F. HILL, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 13th day of January, 1975, before me personally appeared FRANCIS F. HILL, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

H. W. PIERCE
Notary Public for Oregon

My commission expires January 25, 1984

[NOTARIAL SEAL]

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

January 16, A. D. 1975.

Before me personally appeared W. L. TISCHLER, who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 16th day of January, 1975, before me personally appeared W. L. TISCHLER, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

CHRISTINE GERACE
CHRISTINE GERACE
Notary Public, State of New York
No. 43-1407147
Qualified in Richmond County
Certificate filed in New York County
Commission Expires March 30, 1975

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

January 16, A. D. 1975.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 16th day of January, 1975.

[NOTARIAL SEAL]

CHRISTINE GERACE
CHRISTINE GERACE
Notary Public, State of New York
No. 43-1407147
Qualified in Richmond County
Certificate filed in New York County
Commission Expires March 30, 1975

SUMMARY OF RECORDING DATA

IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
16	Benton	January 27, 1975	53450	—
17	Clackamas	January 27, 1975	75-2101	—
18	Clatsop	January 27, 1975	406	698
19	Columbia	January 27, 1975	131	162
20	Coos	January 27, 1975	75 1-109240/65	—
21	Douglas	January 27, 1975	562	540
22	Hood River	January 27, 1975	750137	—
23	Lane	January 27, 1975	727 R	—
24	Lincoln	January 28, 1975	54	970
25	Linn	January 27, 1975	MF 101	828
26	Marion	January 27, 1975	7	1849
13	Multnomah	January 21, 1975	1024	1415
27	Polk	January 27, 1975	67	212
28	Tillamook	January 27, 1975	239	329
29	Wasco	January 27, 1975	750186	26
30	Washington	January 28, 1975	1009	141
31	Yamhill	January 27, 1975	104	150

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
14	Secretary of State	January 28, 1975	D-05654

(An executed counterpart of the Tenth Supplemental Indenture was filed on February 12, 1975, in the office of the Auditor of the City of Portland.)

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
33	Clark	January 27, 1975	G 681197	943795
34	Klickitat	January 27, 1975	112	9
35	Skamania	January 27, 1975	52	420

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
32	Secretary of State	January 27, 1975	0282357

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG

(SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)

Eleventh Supplemental Indenture

providing among other things for
First Mortgage Bonds, 10½% Series due 1986

Dated as of December 1, 1975

ELEVENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of December, 1975, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is Suite 300, 200 S.W. Market Street, Portland, Oregon 97201 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Eleventh Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eleventh Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture) and its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture); and

WHEREAS said First through Ninth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eleventh Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture); and

WHEREAS said Tenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	January 27, 1975	53450	—
Clackamas	January 27, 1975	75-2101	—
Clatsop	January 27, 1975	406	698
Columbia	January 27, 1975	131	162
Coos	January 27, 1975	75 1-109240/65	—
Douglas	January 27, 1975	562	540
Hood River	January 27, 1975	750137	—
Lane	January 27, 1975	727 R	—
Lincoln	January 28, 1975	54	970
Linn	January 27, 1975	MF 101	828
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Multnomah	January 21, 1975	1024	1415
Polk	January 27, 1975	67	212
Tillamook	January 27, 1975	239	329
Wasco	January 27, 1975	750186	26
Washington	January 28, 1975	1009	141
Yamhill	January 27, 1975	104	150

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	January 28, 1975	D-05654

(An executed counterpart of the Tenth Supplemental Indenture was filed on February 12, 1975, in the office of the Auditor of the City of Portland.)

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	January 27, 1975	G 681197	943795
Klickitat	January 27, 1975	112	9
Skamania	January 27, 1975	52	420

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State ; and	January 27, 1975	0282357

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3½ % Series due 1976.....	\$10,000,000
3⅞ % Series due 1974.....	None
4 % Series due 1974.....	None
4⅜ % Series due 1976.....	\$ 1,742,000
5⅛ % Series due 1984.....	\$ 4,941,000
5½ % Series due 1986.....	\$ 5,045,000
4¾ % Series due 1989.....	\$ 5,854,000
5¾ % Series due 1991.....	\$13,849,000
9⅜ % Series due 1974.....	None
8⅝ % Series due 1996.....	\$17,283,000
12 % Series due 1984.....	\$30,000,000;

and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the pro-

visions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Eleventh Supplemental Indenture, and the terms of the bonds of the Twelfth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and

premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the

occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Eleventh Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and

materials and supplies held for the purpose of repairing or replacing (in whole or part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Eleventh Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Eleventh Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the

same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Twelfth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "10½ % Series due 1986" (herein sometimes referred to as the "Twelfth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Twelfth Series shall be limited to \$20,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on January 1, 1986, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of 10½ % per annum, the first interest payment to be made on July 1, 1976, for the period from December 11, 1975, to July 1, 1976, with subsequent interest payments to be made semi-annually on July 1 and January 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twelfth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Twelfth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior

to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed prior to January 1, 1977, 110.50% and if redeemed during the 12 months period ending December 31,

1977	109.19%	1982	102.63%
1978	107.88%	1983	101.31%
1979	106.56%	1984	100.00%
1980	105.25%	1985	100.00%
1981	103.94%		

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Twelfth Series may be redeemed pursuant to this subdivision (I) prior to December 1, 1983, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 10.50% per annum.

(II) Bonds of the Twelfth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or (so long as any bonds of the First, Fourth, Fifth, Sixth, Seventh, Eighth, Tenth or Eleventh Series remain Outstanding) Section 64 of the Mortgage or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed prior to January 1, 1977, 100.00% and if redeemed during the 12 months period ending December 31,

1977	100.00%	1982	100.00%
1978	100.00%	1983	100.00%
1979	100.00%	1984	100.00%
1980	100.00%	1985	100.00%
1981	100.00%		

in each case, together with accrued interest to the date fixed for redemption.

ARTICLE II.

Exchanges and Transfers of Bonds of the Twelfth Series.

SECTION 2.01. At the option of the registered owner, any bonds of the Twelfth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Twelfth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York or such other locations as the Company may designate from time to time.

Upon any registration of transfer or exchange of bonds of the Twelfth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Twelfth Series.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. The Corporate Trustee may, from time to time, appoint an authenticating agent or agents to act on its behalf and subject to its direction in connection with the authentication of bonds issued from time to time in fully registered form under the Mortgage as heretofore or hereafter amended or supplemented. Any such authenticating agent shall, so long as it so acts hereunder, be a bank or trust company and be a corporation organized and doing business under the laws of the United States or of any State or Territory or of the District of Columbia, with a combined capital and surplus of at least Five Million Dollars (\$5,000,000), and be authorized under such laws to act as authenticating agent and be subject to supervision or examination by Federal, State, Territorial, or District of Columbia authority. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

Any corporation into which any authenticating agent may be merged or converted or with which it may be consolidated, of any corporation resulting from any merger, conversion or consolidation to which any authenticating agent shall be a party, or any corporation succeeding to the corporate agency business of any authenticating agent, shall, if otherwise eligible under the provisions of this Section, continue to be an authenticating agent without the execution or filing of any paper or any further act on the part of the Corporate Trustee or the predecessor authenticating agent.

Any authenticating agent may at any time resign by giving written notice of resignation to the Corporate Trustee and to the Company. The Corporate Trustee may at any time terminate the agency of any authenticating agent by giving written notice of termination to such authenticating agent and to the Company. Any successor authenticating agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers, duties and responsibilities of its predecessor hereunder, with like effect as if originally named as an authenticating agent herein. No successor authenticating agent shall be appointed unless eligible under the provisions of this Section.

The Corporate Trustee agrees to pay to any authenticating agent from time to time reasonable compensation for its services, and the Corporate Trustee shall be entitled to be reimbursed for such payments, and be entitled to the benefits of Section 96 of the Mortgage, with respect thereto.

SECTION 3.02. When all bonds of the First, Fourth, Fifth, Sixth, Seventh, Eighth, Tenth and Eleventh Series are no longer Outstanding, Section 64 shall be excised from the Mortgage.

SECTION 3.03. Subject to the amendments provided for in this Eleventh Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Eleventh Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.04. The Trustees hereby accept the trusts hereby declared provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Eleventh Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals

are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Eleventh Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Eleventh Supplemental Indenture.

SECTION 3.05. Whenever in this Eleventh Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Eleventh Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.06. Nothing in this Eleventh Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Eleventh Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Eleventh Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.07. This Eleventh Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 3rd day of December, 1975, as of December 1, 1975, in The City of New York; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its

corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 3rd day of December, 1975, as of December 1, 1975.

NORTHWEST NATURAL GAS COMPANY

By
President.

Attest:

.....
Secretary.

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

.....
.....

BANKERS TRUST COMPANY, as Trustee,

By
Assistant Vice President.

Attest:

.....
Assistant Secretary.

.....
STANLEY BURG, as Trustee.

Executed, sealed and delivered by BANKERS
TRUST COMPANY and STANLEY BURG in
the presence of:

.....
.....

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

December 3, A.D. 1975.

Before me personally appeared RONALD T. MILLER, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of December, 1975, before me personally appeared RONALD T. MILLER, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
MORTON BARAD
Notary Public, State of New York
No. 41-5170980
Certs. filed in Bronx, Kings, Nassau,
New York, and Westchester Cos.
Qualified in Queens County
Commission Expires March 30, 1976

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

December 3, A. D. 1975.

Before me personally appeared ROMANO I. PELUSO, who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of December, 1975, before me personally appeared ROMANO I. PELUSO, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
LYLE TEMPLE
Notary Public, State of New York
No. 30-3948960
Qualified in Nassau County
Certificate filed in New York County
Commission Expires March 30, 1977

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

December 3, A. D. 1975.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 3rd day of December, 1975.

.....

LYLE TEMPLE
Notary Public, State of New York
No. 30-3948960
Qualified in Nassau County
Certificate filed in New York County
Commission Expires March 30, 1977

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG

(SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

**As Trustees under the Mortgage and Deed of
Trust, dated as of July 1, 1946, of Portland
Gas & Coke Company (now Northwest Natu-
ral Gas Company)**

TWELFTH SUPPLEMENTAL INDENTURE

**providing among other things for
First Mortgage Bonds, 14¾% Series due 1989**

Dated as of July 1, 1981

TWELFTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of July, 1981, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is Suite 1900, 200 S.W. Market Street, Portland, Oregon 97201 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twelfth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twelfth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental

Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture) and its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture); and

WHEREAS said First through Tenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twelfth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture); and

WHEREAS said Eleventh Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

Oregon			
Real Property Mortgage Records			
<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	December 12, 1975	61642	—
Clackamas	December 12, 1975	75-36719	—
Clatsop	December 12, 1975	421	724
Columbia	December 12, 1975	135	384
Coos	December 15, 1975	75-12	444
Douglas	December 15, 1975	588	45
Hood River.....	December 12, 1975	752480	—

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Lane.....	December 15, 1975	R-773	—
Lincoln	December 16, 1975	61	804
Linn	December 12, 1975	123	657
Marion.....	December 12, 1975	R-31	1714
Multnomah.....	December 12, 1975	1077	803
Polk.....	December 12, 1975	80	675
Tillamook	December 12, 1975	243	227
Wasco	December 12, 1975	752912	—
Washington	December 12, 1975	1058	710
Yamhill.....	December 12, 1975	109	1101

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 15, 1975	D-30958

Washington

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	December 12, 1975	G 708683	985932
Klickitat	December 15, 1975	113	461
Skamania	December 12, 1975	53	31

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 15, 1975	0321966

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture

STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>	
3¼% Series due 1976	None	
3¾% Series due 1974	None	
4 % Series due 1974	None	
4¾% Series due 1976	None	
5¼% Series due 1984	\$ 4,941,000	4,279,000
5¾% Series due 1986	\$ 5,045,000	4,233,000
4¾% Series due 1989	\$ 5,854,000	4,970,000
5¾% Series due 1991	\$12,849,000	11,828,000
9¾% Series due 1974	None	
8¾% Series due 1996	\$17,283,000	15,049,000
12 % Series due 1984	\$21,000,000	
10½% Series due 1986	\$20,000,000	

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any

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way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twelfth Supplemental Indenture, and the terms of the bonds of the Thirteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases,

conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may

hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Twelfth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and

choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Twelfth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Twelfth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and

had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Thirteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "14 $\frac{1}{4}$ % Series due 1989" (herein sometimes referred to as the "Thirteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Thirteenth Series shall be limited to \$30,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on July 1, 1989, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Thirteenth Series shall bear interest at the rate of 14 $\frac{1}{4}$ % per annum, the first interest payment to be made on January 1, 1982 for the period from the date of first authentication by the Corporate Trustee of Bonds of the Thirteenth Series to January 1, 1982, with subsequent interest payments to be made semi-annually on January 1 and July 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Thirteenth Series shall be dated as in Section 10 of the Mortgage provided.

Bonds of the Thirteenth Series shall not be redeemable prior to July 1, 1986. On and after July 1, 1986, bonds of the Thirteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the

Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

If redeemed on or after July 1, 1986 and on or before July 1, 1987.....
104.22%

If redeemed after July 1, 1987 and on or before July 1, 1988.....
102.11%

If redeemed after July 1, 1988..... 100.00%
; in each case together with accrued interest to the date fixed for redemption.

ARTICLE II.

Exchanges and Transfers of Bonds of the Thirteenth Series.

SECTION 2.01. At the option of the registered owner, any bonds of the Thirteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Thirteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York or such other locations as the Company may designate from time to time.

Upon any registration of transfer or exchange of bonds of the Thirteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes required to be paid solely by virtue of such transfer by the Company, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Thirteenth Series.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Twelfth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Twelfth Supplemental In-

denture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Twelfth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Twelfth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Twelfth Supplemental Indenture.

SECTION 3.03. Whenever in this Twelfth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Twelfth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.04. Nothing in this Twelfth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Twelfth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twelfth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.05. This Twelfth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 6th day of July 1981, as of July 1, 1981, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 3rd day of July 1981, as of July 1, 1981.

NORTHWEST NATURAL GAS
COMPANY

By *Ronald W. Miller*
President

Attest:

Mike Rapson
Secretary

Executed, sealed and delivered by NORTHWEST
NATURAL GAS COMPANY in the presence of:

Quintin R. Williams
C. J. Lee

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BANKERS TRUST COMPANY,
as Trustee,

By Carl H. Davis
Assistant Vice President

Attest:

[Signature]
Assistant Secretary

STANLEY BURG, as Trustee

By BANKERS TRUST COMPANY
Attorney-in-fact

By [Signature]
Assistant Secretary

Executed, sealed and delivered by BANKERS TRUST
COMPANY for itself and on behalf of STANLEY BURG
in the presence of:

K.M. Decker
P.A. Schuyman

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

July 6, A.D. 1981.

Before me personally appeared RONALD T. MILLER, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 6th day of July, 1981, before me personally appeared RONALD T. MILLER, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



.....
H. W. PIERCE
Notary Public, State of Oregon
My Commission Expires 11/24/81

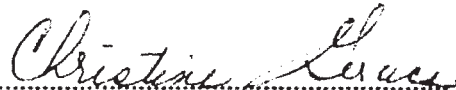
STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 3, A.D. 1981.

Before me personally appeared **CARL H. NASIB**, who, being duly sworn, did say that he is an Assistant Vice President of **BANKERS TRUST COMPANY** and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of July, 1981, before me personally appeared **CARL H. NASIB**, to me known to be an Assistant Vice President of **BANKERS TRUST COMPANY**, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



CHRISTINE GERACE
Notary Public, State of New York
No. 450497187
Qualified in Westchester County
Commission Expires March 22, 1983

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 3, A.D. 1981.

Before me personally appeared S.D. MINEO, who, being duly sworn, did say that he is an Assistant Secretary of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of July, 1981, before me personally appeared S.D. MINEO, to me known to be an Assistant Secretary of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Christine Lewis

CUSTOMER SERVICE
Notary Public in the State of New York
No. 42-1497147
Qualified in Richmond County
Certificate filed in New York County
Commission Expires March 30, 1983


KNOW ALL MEN BY THESE PRESENTS, that I, the undersigned, STANLEY BURG, as Co-Trustee, do hereby make, constitute and appoint Bankers Trust Company my true and lawful attorney-in-fact with full power and authority to execute, deliver and acknowledge on my behalf, as Co-Trustee, the Twelfth Supplemental Indenture of Northwest Natural Gas Company and any acknowledgments, oaths, representations or certificates attached thereto or in connection therewith and to do and perform all and every act and thing whatsoever requisite, necessary or desirable and proper to be done, as fully and to all intents and purposes as I might or could do if personally present, in connection with said execution, delivery or acknowledgment of such Indenture, acknowledgements, oaths, representations or certificates, hereby ratifying and confirming all that my said attorney-in-fact shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, I have hereunto set my hand on this 2nd day of July, 1981.


STANLEY BURG as Co-Trustee

STATE OF NEW YORK)
COUNTY OF NEW YORK) ss:

On this 2nd day of July, 1981, before me, a Notary Public within and for said County, personally appeared STANLEY BURG, to me known to be the person described in and who executed the foregoing power of attorney and acknowledged that he executed the same as his free act and deed.



LORRAINE KAPUZYSKI
Notary Public, State of New York
No. 43-4030783
Qualified in Richmond County
Commission Expires in New York County
Commission expires March 30, 1982

[Conformed Copy]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

THIRTEENTH SUPPLEMENTAL INDENTURE

providing among other things for
First Mortgage Bonds, 10 1/8% Series due 1995

Dated as of June 1, 1985

THIRTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the first day of June, 1985, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Thirteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Thirteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

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mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture); and

WHEREAS said First through Eleventh Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Thirteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture); and

WHEREAS said Twelfth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

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Oregon
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	July 7, 1981	M-30015-81	--
Clackamas	July 6, 1981	81 23737	--
Clatsop	July 7, 1981	556	477
Columbia	July 7, 1981	170	663
Coos	July 7, 1981	81 3 1370	--
Douglas	July 7, 1981	793	409
Hood River	July 7, 1981	811211	--
Lane	July 7, 1981	8129229	--
Lincoln	July 7, 1981	125	1053
Linn	July 7, 1981	292	461
Marion	July 6, 1981	254	1835
Multnomah	July 6, 1981	1535	1455
Polk	July 6, 1981	158	1137
Tillamook	July 7, 1981	276	963
Wasco	July 7, 1981	811 735	--
Washington	July 7, 1981	81023623	--
Yamhill	July 7, 1981	162	0861

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 6, 1981	G 49291

Washington
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	July 7, 1981	81-07070027	--
Klickitat	July 7, 1981	126	511
Skamania	July 7, 1981	57	957

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 6, 1981	81188012

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3-1/8% Series due 1976.....	None
3-7/8% Series due 1974.....	None
4 % Series due 1974.....	None
4-3/8% Series due 1976.....	None
5-1/8% Series due 1984.....	None
5-1/8% Series due 1986.....	\$ 3,898,000
4-3/4% Series due 1989.....	\$ 4,255,000
5-3/4% Series due 1991.....	\$10,330,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$13,697,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	\$20,000,000
14-3/4% Series due 1989.....	\$30,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Di-

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rectors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Thirteenth Supplemental Indenture, and the terms of the bonds of the Fourteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid

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by the Trustees at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the trans-

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mission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Thirteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus,

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materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Thirteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Thirteenth Supplemental Indenture being supplemental thereto.

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AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Fourteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "10 1/8% Series due 1995" (herein sometimes referred to as the "Fourteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Fourteenth Series shall be limited to \$15,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on June 1, 1995, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Fourteenth Series shall bear interest at the rate of 10 1/8% per annum, payable semi-annually on December 1 and June 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the

Fourteenth Series shall be dated as in Section 10 of the Mortgage provided.

Bonds of the Fourteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending May 31,

1986.....	109.50%	1991.....	104.23%
1987.....	108.45%	1992.....	103.17%
1988.....	107.39%	1993.....	102.12%
1989.....	106.34%	1994.....	101.06%
1990.....	105.28%	1995.....	100.00%

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Fourteenth Series may be redeemed at said general redemption prices prior to June 1, 1990, as part of any re-funding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 10.289% per annum.

Bonds of the Fourteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Sixth, Seventh, Eighth or Tenth Series remain Outstanding) or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending May 31,

1986.....	100.00%	1991.....	100.00%
1987.....	100.00%	1992.....	100.00%
1988.....	100.00%	1993.....	100.00%
1989.....	100.00%	1994.....	100.00%
1990.....	100.00%	1995.....	100.00%

in each case, together with accrued interest to the date fixed for redemption.

ARTICLE II.

Exchanges and Transfers of Bonds of the Fourteenth Series.

SECTION 2.01. At the option of the registered owner, any bonds of the Fourteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Fourteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York or such other locations as the Company may designate from time to time.

Upon any registration of transfer or exchange of bonds of the Fourteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes required to be paid solely by virtue of such transfer by the Company, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Fourteenth Series.

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ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Thirteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Thirteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The third paragraph of Section 106 of the Mortgage is amended to read in its entirety as follows, such amendment to take effect immediately for the Fourteenth Series of bonds and all future series of bonds to be issued under the Mortgage:

"Bonds and interest obligations for the payment of which and bonds for the redemption of which either (i) moneys in the necessary amount or (ii) (a) direct obligations of the government of the United States of America or (b) obligations guaranteed by the government of the United States of America or (c) securities that are backed by obligations of the government of the United States of America as collateral under an arrangement by which the interest and principal payments on the collateral generally flow immediately through to the holder of the security, which in any case are not subject to redemption prior to maturity by anyone other than the holders the principal of and the interest on which when due, and without any regard to reinvestment thereof, in the opinion of an independent accountant, and, in the opinion of the officers of the Company executing an Officers' Certificate to that effect, will provide moneys which, together with the moneys, if any, deposited with or held by the Corporate Trustee, shall be sufficient to pay when due the principal of, premium, if any, and interest due and to become due on said bonds or portions thereof on the redemption date or maturity date thereof, as the case may be, shall have been set apart by or deposited with the Corporate Trustee, with irrevocable direction so to apply the same, subject to the provisions of Section 119 hereof (with or without any additional right given to the holders to surrender their bonds or obtain therefrom payment therefor prior to the redemption date) shall for purposes of satisfying the Lien of this Indenture be deemed to have been paid and for any other purpose under this Indenture be deemed not to be Outstanding; provided that in case of redemption the notice requisite to the validity of such redemption shall have been given or arrangements shall have been made in-

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suring to the satisfaction of the Corporate Trustee that the same will be given."

SECTION 3.03. When all bonds of the Sixth through Thirteenth Series are no longer Outstanding, the first paragraph of Section 99 of the Mortgage is amended to read as follows:

"Section 99. (a) If any Trustee has or acquires any conflicting interest, as defined by subdivision (d) of this Section, such Trustee shall within ninety (90) days after ascertaining that it has such conflicting interest, either eliminate such conflicting interest or resign by giving written notice to the Company, but such resignation shall not become effective until the appointment of a successor trustee and such successor's acceptance of such appointment. The Company covenants to take prompt steps to have a successor appointed in the manner hereinafter provided in Section 102 hereof. Upon giving such notice of resignation, the resigning Trustee shall publish notice thereof, once in one newspaper printed in the English language and of general circulation in the Borough of Manhattan, The City of New York, on any business day of the week. If the resigning Trustee fails to publish such notice within ten (10) days after giving written notice of resignation to the Company, the Company shall publish such notice."

SECTION 3.04. When all bonds of the Sixth through Thirteenth Series are no longer Outstanding, the first paragraph of Section 101 of the Mortgage is amended to read as follows:

"Section 101. Any Trustee may at any time resign and be discharged of the trusts hereby created by giving written notice to the Company specifying the day upon which such resignation shall take effect and thereafter publishing notice thereof, once in one newspaper printed in the English language and of general circulation in the Borough of Manhattan, The City of New York, on any business day of the week, and such resignation shall take effect upon the day specified in such notice unless previously a successor trustee shall have been appointed by the bondholders or the Company in the manner hereinafter provided in Section 102 and in such event such resignation shall take effect immediately on the appointment of such successor trustee. This Section shall not be

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applicable to resignations pursuant to Section 99 hereof."

Section 3.05. All bonds of the First through Third Series being no longer Outstanding, Section 5 of the Mortgage is amended to add the following proviso at the end of clause (4) thereof:

"provided, however, that when no bonds of the First, Second or Third Series remain Outstanding, Property Additions of a Cost not in excess of \$1,100,000 so substituted at any time under subdivision (B) of subsection (II) of Section 4 hereof for Funded Property used primarily and principally in the handling and processing of carbon owned at April 1, 1956 and retired subsequent to April 1, 1956 shall cease to be or to be deemed to have been Funded Property;"

SECTION 3.06. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Thirteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Thirteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Thirteenth Supplemental Indenture.

SECTION 3.07. Whenever in this Thirteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Thirteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.08. Nothing in this Thirteenth Supplemental Indenture, expressed or implied, is intended, or

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shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Thirteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Thirteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.09. This Thirteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 7th day of June 1985, as of June 1, 1985 in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second

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part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 11th day of June, 1985, as of June 1, 1985.

NORTHWEST NATURAL GAS COMPANY

[Corporate Seal]

By Robert L. Ridgley
President

Attest:

C. J. Rue
Secretary

Executed, sealed and delivered by NORTHWEST NATURAL GAS COMPANY in the presence of:

W. E. Radford

Leslie K. Alldrin

BANKERS TRUST COMPANY, as Trustee,

[Corporate Seal]

By T. J. Moskie
Vice President

Attest:

Robert Cascone
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and delivered by BANKERS TRUST COMPANY and STANLEY BURG in the presence of:

Marie A. Colas

Alfred C. Vinton

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

June 7, A.D. 1985.

Before me personally appeared ROBERT L. RIDGLEY, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 7th day of June, before me personally appeared ROBERT L. RIDGLEY, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

R. L. Hordichok
R. L. HORDICHOK
Notary Public, State of Oregon
My Commission Expires 10/9/88

[Notarial Seal]

STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 11, A.D. 1985.

Before me personally appeared T. J. MOSKIE, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 11th day of June, 1985, before me personally appeared T. J. MOSKIE, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Helmut F. Leuffen
HELMUT F. LEUFFEN
Notary Public, State of New York
No. 31-4657770
Qualified in New York County
Commission Expires March 30, 1987

[Notarial Seal]

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 11th, A.D. 1985.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 11th day of June, 1985.

Helmut F. Leuffen
HELMUT F. LEUFFEN
Notary Public, State of New York
No. 31-4657770
Qualified in New York County
Commission Expires March 30, 1987

[Notarial Seal]

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SUMMARY OF RECORDING DATA

In the State of Oregon

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
10	Benton	June 19, 1985	M-68069-85	-
11	Clackamas	June 19, 1985	85 21105	-
12	Clatsop	June 19, 1985	638	554
13	Columbia	June 19, 1985	191	127
14	Coos	June 19, 1985	85 3 0443	-
15	Douglas	June 19, 1985	917	169
16	Hood River	June 19, 1985	851100	-
17	Lane	June 19, 1985	8521471	-
18	Lincoln	June 19, 1985	161	2312
19	Linn	June 19, 1985	387	224
20	Marion	June 19, 1985	398	117
21	Multnomah	June 19, 1985	1831	1136
22	Polk	June 19, 1985	187	1346
23	Tillamook	June 19, 1985	299	176
24	Wasco	June 19, 1985	851312	-
25	Washington	June 19, 1985	85022638	-
26	Yamhill	June 19, 1985	195	747

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
8	Secretary of State	June 19, 1985	J 94033

In the State of Washington

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
28	Clark	June 19, 1985	85-06190126	-
29	Klickitat	June 19, 1985	135	474
30	Skamania	June 19, 1985	61	583

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
27	Secretary of State	June 19, 1985	85-171-0052

[Conformed Copy]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

FOURTEENTH SUPPLEMENTAL INDENTURE

providing among other things for

First Mortgage Bonds, 10.35% Series due November 1, 1997

Dated as of November 1, 1985

FOURTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the first day of November, 1985, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Fourteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fourteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

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February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture) and its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture); and

WHEREAS said First through Twelfth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fourteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture); and

WHEREAS said Thirteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

Oregon
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	June 19, 1985	M-68069-85	-
Clackamas	June 19, 1985	85-21105	-
Clatsop	June 19, 1985	638	554
Columbia	June 19, 1985	191	127
Coos	June 19, 1985	85 3 0443	-
Douglas	June 19, 1985	917	169
Hood River	June 19, 1985	851100	-
Lane	June 19, 1985	8521471	-
Lincoln	June 19, 1985	161	2312
Linn	June 19, 1985	387	224
Marion	June 19, 1985	398	117
Multnomah	June 19, 1985	1831	1136
Polk	June 19, 1985	187	1346
Tillamook	June 19, 1985	299	176
Wasco	June 19, 1985	851312	-
Washington	June 19, 1985	85022638	-
Yamhill	June 19, 1985	195	747

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	June 19, 1985	J 94033

Washington
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	June 19, 1985	85-06190126	-
Klickitat	June 19, 1985	135	474
Skamania	June 19, 1985	61	583

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State ; and	June 19, 1985	85-171-0052

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3-1/8% Series due 1976.....	None
3-7/8% Series due 1974.....	None
4 % Series due 1974.....	None
4-3/8% Series due 1976.....	None
5-1/8% Series due 1984.....	None
5-1/8% Series due 1986.....	\$ 3,898,000
4-3/4% Series due 1989.....	\$ 4,255,000
5-3/4% Series due 1991.....	\$10,330,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$13,508,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	\$30,000,000
10-1/8% Series due 1995.....	\$15,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the

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form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Fourteenth Supplemental Indenture, and the terms of the bonds of the Fifteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

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NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat

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or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Fourteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and

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other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Fourteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth

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in the Mortgage, as heretofore supplemented, this Fourteenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Fifteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "10.35% Series due November 1, 1997" (herein sometimes referred to as the "Fifteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Fifteenth Series shall be limited to \$15,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on November 1, 1997, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Fifteenth Series shall bear interest at the rate of 10.35% per annum, payable semi-annually on May 1 and November 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts.

Bonds of the Fifteenth Series shall be dated as in Section 10 of the Mortgage provided.

Bonds of the Fifteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending October 31,

1986.....	109.35%	1992.....	103.74%
1987.....	108.42%	1993.....	102.81%
1988.....	107.48%	1994.....	101.87%
1989.....	106.55%	1995.....	100.94%
1990.....	105.61%	1996.....	100.00%
1991.....	104.68%	1997.....	100.00%

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Fifteenth Series may be redeemed at said general redemption prices prior to November 1, 1990, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 10.60% per annum.

Bonds of the Fifteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Sixth, Seventh, Eighth or Tenth Series remain Outstanding) or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending
October 31,

1986.....	100.00%	1992.....	100.00%
1987.....	100.00%	1993.....	100.00%
1988.....	100.00%	1994.....	100.00%
1989.....	100.00%	1995.....	100.00%
1990.....	100.00%	1996.....	100.00%
1991.....	100.00%	1997.....	100.00%

in each case, together with accrued interest to the date
fixed for redemption.

ARTICLE II.

Exchanges and Transfers of Bonds of the Fifteenth Series.

SECTION 2.01. At the option of the registered
owner, any bonds of the Fifteenth Series, upon surrender
thereof, for cancellation, at the office or agency of the
Company in the Borough of Manhattan, The City of New York,
shall (subject to the provisions of Section 12 of the
Mortgage) be exchangeable for a like aggregate principal
amount of bonds of the same series of other authorized
denominations.

Transfers of bonds of the Fifteenth Series may
be registered (subject to the provisions of Section 12 of
the Mortgage) at the office or agency of the Company in
the Borough of Manhattan, The City of New York or such
other locations as the Company may designate from time to
time.

Upon any registration of transfer or exchange of
bonds of the Fifteenth Series, the Company may make a
charge therefor sufficient to reimburse it for any tax or
taxes required to be paid solely by virtue of such trans-
fer by the Company, as provided in Section 12 of the Mort-
gage, but the Company hereby waives any right to make a
charge in addition thereto for any registration or ex-
change or transfer of bonds of the Fifteenth Series.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Fourteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Fourteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Fourteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Fourteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Fourteenth Supplemental Indenture.

SECTION 3.03. Whenever in this Fourteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Fourteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.04. Nothing in this Fourteenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Fourteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as

set forth in this Fourteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.05. This Fourteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 22nd day of November 1985, as of November 1, 1985, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 26th day of November 1985, as of November 1, 1985.

NORTHWEST NATURAL GAS COMPANY

[Corporate Seal]

By Robert L. Ridgley
President

Attest:

C. J. Rue
Secretary

Executed, sealed and delivered
by NORTHWEST NATURAL GAS COM-
PANY in the presence of:

W. E. Radford

Leslie K. Alldrin

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BANKERS TRUST COMPANY, as Trustee,

[Corporate Seal]

By Joan M. Morgan
Vice President

Attest:

Lloyd McKenzie
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and delivered
by BANKERS TRUST COMPANY and
STANLEY BURG in the presence
of:

Gail Violick Boylan

Shirley R. West

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STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

November 22, A.D. 1985.

Before me personally appeared ROBERT L. RIDGLEY, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 22nd day of November 1985, before me personally appeared ROBERT L. RIDGLEY, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Virginia M. Vance
Notary Public, State of Oregon
My Commission Expires 3/24/87

[Notarial Seal]

STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

November 26, A.D. 1985.

Before me personally appeared JOAN M. MORGAN, who, being duly sworn, did say that she is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 26th day of November 1985, before me personally appeared JOAN M. MORGAN, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 30, 1987

[Notarial Seal]

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

November 26, A.D. 1985.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 26th day of November, 1985.

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 31, 1987

[Notarial Seal]

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SUMMARY OF RECORDING DATA
IN THE STATE OF OREGON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
10	Benton	December 10, 1985	M-72799-85	-
11	Clackamas	December 10, 1985	8543580	-
12	Clatsop	December 10, 1985	648	268
13	Columbia	December 10, 1985	193	990
14	Coos	December 10, 1985	85-5-6578	-
15	Douglas	December 10, 1985	933	243
16	Hood River	December 10, 1985	852267	-
31	Lane	January 31, 1986	1386R	-
18	Lincoln	December 10, 1985	166	2385
19	Linn	December 10, 1985	399	500
20	Marion	December 10, 1985	431	294
21	Multnomah	December 10, 1985	1870	308
22	Polk	December 11, 1985	191	472
23	Tillamook	December 10, 1985	301	588
24	Wasco	December 10, 1985	852802	-
25	Washington	December 10, 1985	85048868	-
26	Yamhill	December 11, 1985	199	1339

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Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
8	Secretary of State	December 10, 1985	K 20799

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
28	Clark	December 11, 1985	85-12110068	-
29	Klickitat	December 10, 1985	136	660
30	Skamania	December 11, 1985	62	284

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
27	Secretary of State	December 10, 1985	85-345-0000

[Conformed Copy]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

FIFTEENTH SUPPLEMENTAL INDENTURE
providing among other things for
First Mortgage Bonds, 9 3/8% Series due 2011

Dated as of July 1, 1986

FIFTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of July, 1986, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Fifteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fifteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

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mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture) and its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture); and

WHEREAS said First through Thirteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fifteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture); and

WHEREAS said Fourteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

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OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	December 10, 1985	M-72799-85	-
Clackamas	December 10, 1985	8543580	-
Clatsop	December 10, 1985	648	268
Columbia	December 10, 1985	193	990
Coos	December 10, 1985	85-5-6578	-
Douglas	December 10, 1985	933	243
Hood River	December 10, 1985	852267	-
Lane	January 31, 1986	1386R	-
Lincoln	December 10, 1985	166	2385
Linn	December 10, 1985	399	500
Marion	December 10, 1985	431	294
Multnomah	December 10, 1985	1870	308
Polk	December 11, 1985	191	472
Tillamook	December 10, 1985	301	588
Wasco	December 10, 1985	852802	-
Washington	December 10, 1985	85048868	-
Yamhill	December 11, 1985	199	1339

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	December 10, 1985	K 20799

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	December 11, 1985	85-12110068	-
Klickitat	December 10, 1985	136	660
Skamania	December 11, 1985	62	284

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 10, 1985	85-345-0000

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding at the Close of Business July 1, 1986</u>
3-1/8% Series due 1976.....	None
3-7/8% Series due 1974.....	None
4 % Series due 1974.....	None
4-3/8% Series due 1976.....	None
5-1/8% Series due 1984.....	None
5-1/8% Series due 1986.....	None
4-3/4% Series due 1989.....	\$ 4,230,000
5-3/4% Series due 1991.....	\$10,330,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$13,400,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	None
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000

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; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Fifteenth Supplemental Indenture, and the terms of the bonds of the Sixteenth Series hereinafter referred to, have been duly authorized by the Board of

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Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas,

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electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation

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of this Fifteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Fifteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

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IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Fifteenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Sixteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9 3/8% Series due 2011" (herein sometimes referred to as the "Sixteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Sixteenth Series shall be limited to \$50,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on July 1, 2011, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Sixteenth Series shall bear interest at the rate of 9 3/8% per annum, payable semi-annually on January 1 and July 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of

Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Sixteenth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Sixteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending
 June 30,

1987.....	108.63%	2000.....	103.02%
1988.....	108.19%	2001.....	102.59%
1989.....	107.76%	2002.....	102.16%
1990.....	107.33%	2003.....	101.72%
1991.....	106.90%	2004.....	101.29%
1992.....	106.47%	2005.....	100.86%
1993.....	106.04%	2006.....	100.43%
1994.....	105.61%	2007.....	100.00%
1995.....	105.17%	2008.....	100.00%
1996.....	104.74%	2009.....	100.00%
1997.....	104.31%	2010.....	100.00%
1998.....	103.88%	2011.....	100.00%
1999.....	103.45%		

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Sixteenth Series may be redeemed pursuant to this subdivision (I) prior to July 1, 1991 as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 9.531% per annum.

(II) Bonds of the Sixteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the

provisions of Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due in accordance with the Total Special Redemption Fund Requirement for said calendar year, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending
 June 30,

1987.....	100.00%	2000.....	100.00%
1988.....	100.00%	2001.....	100.00%
1989.....	100.00%	2002.....	100.00%
1990.....	100.00%	2003.....	100.00%
1991.....	100.00%	2004.....	100.00%
1992.....	100.00%	2005.....	100.00%
1993.....	100.00%	2006.....	100.00%
1994.....	100.00%	2007.....	100.00%
1995.....	100.00%	2008.....	100.00%
1996.....	100.00%	2009.....	100.00%
1997.....	100.00%	2010.....	100.00%
1998.....	100.00%	2011.....	100.00%
1999.....	100.00%		

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in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the registered owner, any bonds of the Sixteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Sixteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Sixteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Sixteenth Series.

ARTICLE II.

Special Redemption Fund for Bonds of the Sixteenth Series

Section 2. The Company covenants that, unless all bonds of the Sixteenth Series shall have ceased to be Outstanding, it will, as a Special Redemption Fund for the retirement of bonds of the Sixteenth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Sixteenth Series, on July 1 of each year, beginning with the year 1991 to and including the year 2010, equal to the Total Special Redemption Fund Requirement for said calendar year. The term "Total Special Redemption Fund Requirement" shall mean for any calendar year \$2,000,000 in cash and/or principal amount of bonds of the Sixteenth Series (herein called the "Mandatory Special Redemption Fund Requirement") plus the Optional Special Redemption Fund Payment, if any, for such calendar year. The term "Optional Special Redemption Fund Payment" shall mean, for any calendar year, any amount, not in excess of \$2,000,000 in cash and/or principal amount of bonds of the Sixteenth Series, that the Company elects to add to the Special Redemption Fund for such calendar year. At the option of the Company, Optional Special Redemption

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Fund Payments may (at any time after they are made) be applied (to the extent not theretofore so applied) in whole or in part from time to time, to reduce Mandatory Special Redemption Fund Requirements for subsequent years upon written notice to the Corporate Trustee.

The Company, at its option (as evidenced by a written order of its Vice President-Finance, its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Sixteenth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and cancelled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Fifteenth Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the Total Special Redemption Fund Requirement becoming due on July 1 of the then current year or the mandatory sinking fund requirement becoming due on July 1 of any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Sixteenth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on July 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee

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from time to time, as the Company may request, to the purchase of bonds of the Sixteenth Series, at public or private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as so provided shall by mail notify all registered owners of bonds of the Sixteenth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices (including accrued interest and brokerage, if any) most favorable to the Company but not exceeding the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost), and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Sixteenth Series registered in the names of the owners offering bonds at such price, or to the redemption of bonds of the Sixteenth Series; provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Sixteenth Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Sixteenth Series Outstanding at the time of such consent, the Company may not deposit cash prior to July 1, 1991 in anticipation of the requirements of this Section, if the cash so deposited represents a part of a refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 9.531% per annum.

Any cash deposited under the provisions of this Section shall not be deemed to be Funded Cash; any bonds of the Sixteenth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall not be deemed to have been retired by the use of Funded Cash; and with respect to all credits taken under this Section on

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the basis of the purchase or redemption of bonds of the Sixteenth Series, it shall not be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Corporate Trustee pursuant to the provisions of this Section, shall forthwith be cancelled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Sixteenth Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Fifteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Fifteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

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The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Fifteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Fifteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Fifteenth Supplemental Indenture.

SECTION 3.03. Whenever in this Fifteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Fifteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.04. Nothing in this Fifteenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Fifteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Fifteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.05. This Fifteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 26th day of June, 1986, as of July

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1, 1986, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 27th day of June, 1986, as of July 1, 1986.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By W. E. Radford
Vice President, Finance
and Treasurer

Attest:

C. J. Rue
Secretary

Executed, sealed and delivered
by NORTHWEST NATURAL GAS COM-
PANY in the presence of:

Virginia M. Vance

Leslie K. Alldrin

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BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By Joan M. Morgan
Vice President

Attest:

Louise A. Buckley
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and
delivered by BANKERS TRUST
COMPANY and STANLEY BURG
in the presence of:

Shirley R. West

Andrew A. Steckler

STATE OF OREGON)
): ss.:
COUNTY OF MULTNOMAH)

June 26, A.D. 1986.

Before me personally appeared W. E. RADFORD, who, being duly sworn, did say that he is Vice President, Finance and Treasurer of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 26th day of June 1986, before me personally appeared W. E. RADFORD, to me known to be Vice President, Finance and Treasurer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

Barbara Trautman
Barbara Trautman
Notary Public, State of Oregon
My Commission Expires March 30, 1989

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 27, A.D. 1986.

Before me personally appeared JOAN M. MORGAN, who, being duly sworn, did say that she is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 27th day of June 1986, before me personally appeared JOAN M. MORGAN, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 31, 1987

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 27, A.D. 1986.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 27th day of June, 1986.

[NOTARIAL SEAL]

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 31, 1987

SUMMARY OF RECORDING DATA
 IN THE STATE OF OREGON
 Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
11	Benton	July 3, 1986	M-78662-86	-
12	Clackamas	July 7, 1986	86 24733	-
13	Clatsop	July 3, 1986	658	288
14	Columbia	July 3, 1986	197	114
15	Coos	July 7, 1986	86-3-2413	-
16	Douglas	July 3, 1986	951	551
17	Hood River	July 3, 1986	861198	-
18	Lane	July 21, 1986	1411R (#8627177)	-
19	Lincoln	July 7, 1986	172	809
20	Linn	July 3, 1986	414	743
21	Marion	July 3, 1986	472	468
22	Multnomah	July 3, 1986	1918	305
23	Polk	July 3, 1986	195	722
24	Tillamook	July 3, 1986	304	5
25	Wasco	July 3, 1986	861538	-
26	Washington	July 3, 1986	86028953	-
27	Yamhill	July 7, 1986	204	1510

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Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
9	Secretary of State	July 3, 1986	K 52983

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
29	Clark	July 3, 1986	399	1
30	Klickitat	July 3, 1986	138	112
31	Skamania	July 3, 1986	101	752

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
28	Secretary of State	July 3, 1986	86-188-0036

NORTHWEST NATURAL GAS COMPANY

AND

Centerre Trust Company of St. Louis,
Trustee

INDENTURE

Dated as of January 15, 1987

\$15,000,000

7-1/4% Convertible Debentures
due March 1, 2012

CROSS-REFERENCE TABLE

<u>TIA</u> <u>Section</u>	<u>Indenture</u> <u>Section</u>
310 (a)(1)	8.10
(a)(2)	8.10
(a)(3)	N.A.
(a)(4)	N.A.
(b)	8.08; 8.10; 12.02
(c)	N.A.
311 (a)	8.11
(b)	8.11
(c)	N.A.
312 (a)	2.05
(b)	12.03
(c)	12.03
313 (a)	8.06
(b)(1)	N.A.
(b)(2)	8.06
(c)	12.02
(d)	8.06
314 (a)	5.02; 12.02
(b)	N.A.
(c)(1)	12.04
(c)(2)	12.04
(c)(3)	N.A.
(d)	N.A.
(e)	12.05
(f)	N.A.
315 (a)	8.01(b)
(b)	8.05; 12.02
(c)	8.01(a)
(d)	8.01(c)
(e)	7.11
316 (a)(last sentence)	2.09
(a)(1)(A)	7.05
(a)(1)(B)	7.04
(a)(2)	N.A.
(b)	7.07

<u>TIA Section</u>	<u>Indenture Section</u>
317 (a)(1)	7.08
(a)(2)	7.09
(b)	2.04
318 (a)	12.01

N.A. means Not Applicable.

NOTE: This Cross-Reference Table shall not, for any purpose, be deemed to be a part of the Indenture.

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	EXHIBIT A -- FORM OF DEBENTURE.	A-1

INDENTURE dated as of January 15, 1987, between NORTHWEST NATURAL GAS COMPANY, an Oregon corporation ("Corporation"), and CENTERRE TRUST COMPANY OF ST. LOUIS, a Missouri corporation ("Trustee").

Each party agrees as follows for the benefit of the other party and for the equal and ratable benefit of the Holders of the Corporation's 7-1/4% Convertible Debentures due 2012 ("Debentures"):

ARTICLE 1 DEFINITIONS AND INCORPORATION BY REFERENCE

Section 1.01. Definitions.

"Affiliate" means any person directly or indirectly controlling or controlled by or under direct or indirect common control with the Corporation.

"Agent" means any Registrar, Paying Agent, Conversion Agent, or co-registrar or agent for service of notices and demands. See Section 2.03.

"Board of Directors" means the Board of Directors of the Corporation or any authorized committee of the Board.

"Board Resolution" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Corporation to have been duly adopted by the Board of Directors and to be in full force and effect.

"Capital Stock" means any and all shares, interests, participations or other equivalents (however designated) of corporate stock.

"Common Stock" means the common stock, \$3 1/6 par value, of the Corporation as the same exists at the date of this Indenture or as such stock shall be constituted from time to time.

"Corporate Trust Office" means the office of the Trustee located in St. Louis, Missouri, at which at any time its corporate trust business shall be principally administered, which office at the date of execution of this Indenture is located at 510 Locust Street, St. Louis, Missouri 63101, Attention: Corporate Trust Division.

"Corporation" means the party named as such above until a successor replaces it pursuant to the applicable provisions of the Indenture and thereafter means the successor.

"Debenture" means any one of the Debentures described above issued under this Indenture.

"Default" means any event which is, or after notice or passage of time would be, an Event of Default.

"Exchange Act" means the Securities Exchange Act of 1934, as from time to time amended.

"Holder" or "Debentureholder" means a person in whose name a Debenture is registered.

"Indenture" means this Indenture as amended from time to time.

"Officers" means the President, any Vice President, the Treasurer, the Controller, the Secretary, any Assistant Treasurer or any Assistant Secretary of the Corporation.

"Officers' Certificate" means a certificate signed by two Officers, one of whom must be President or a Vice President of the Corporation. See Sections 12.04 and 12.05.

"Opinion of Counsel" means a written opinion from legal counsel who may be an employee of or counsel to the Corporation or the Trustee and who is acceptable to the Trustee. See Sections 12.04 and 12.05.

"Person" means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof.

"Principal" of the Debenture means the principal amount of the Debenture plus the premium, if any, on the Debenture.

"Qualified Institution" means a member firm of a registered national securities exchange or of the National Association of Securities Dealers, Inc., or a commercial bank or trust company located in the United States.

"Quoted Price" means the last transaction price of the Common Stock as reported on a national securities exchange or a national interdealer automated securities quotation system.

"Redemption Date" when used with respect to any Debenture to be redeemed means the date fixed for such redemption pursuant to this Indenture.

"Redemption Price" when used with respect to any Debenture to be redeemed means the price at which it is to be redeemed pursuant to this Indenture and the Debenture.

"SEC" means the Securities and Exchange Commission.

"Subsidiary" means a corporation at least the majority of whose voting stock is owned by the Corporation or a Subsidiary.

"TIA" means the Trust Indenture Act of 1939 (15 U.S.C. §§77aaa-77bbb) as in effect on the date shown above except as provided in Section 10.03.

"Trustee" means the party named as such above until a successor replaces it pursuant to the applicable provisions of the Indenture and thereafter means the successor.

"Trust Officer" means the Chairman of the Board, the President or any other officer or assistant officer of the Trustee assigned by the Trustee to administer its corporate trust matters.

"United States" means the United States of America.

Section 1.02. Other Definitions.

<u>Term</u>	<u>Defined in Section</u>
"Bankruptcy Law"	7.01
"Called Debenture"	3.08
"Conversion Agent"	2.03
"Conversion Date"	11.02
"Conversion Price"	11.01
"Custodian"	7.01
"Defaulted Interest"	2.12
"Event of Default"	7.01
"Legal Holiday"	12.07
"Paying Agent"	2.03
"Registrar"	2.03
"U.S. Government Obligations"	9.01

Section 1.03. Incorporation by Reference of Trust Indenture Act.

Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture.

The following TIA terms used in this Indenture have the following meanings:

"indenture securities" means the Debentures.

"indenture securityholder" means a Debentureholder.

"indenture to be qualified" means this Indenture.

"indenture trustee" or "institutional trustee" means the Trustee.

"obligor" on the indenture securities means the Corporation.

All other terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA have the meanings assigned to them.

Section 1.04. Rules of Construction.

Unless the context otherwise requires:

- (1) a term has the meaning assigned to it;
- (2) an accounting term not otherwise defined has the meaning assigned to it in accordance with generally accepted accounting principles;
- (3) "or" is not exclusive;
- (4) words in the singular include the plural, and in the plural include the singular;
- (5) provisions apply to successive events and transactions; and
- (6) "Section" shall refer to a Section of this Indenture.

ARTICLE 2 THE DEBENTURES

Section 2.01. Creation of the Debentures.

There is hereby authorized and created under this Indenture an issue of Debentures, entitled to the benefit of this Indenture, limited in aggregate principal amount to \$15,000,000. The Debentures shall be designated by the title "7-1/4% Convertible Debentures Due 2012." The Debentures shall bear interest, computed on the basis of a 360-day year consisting of twelve 30-day months, from the date of their original issuance, payable semi-annually on March 1 and September 1 of

each year commencing September 1, 1987. The Debentures shall mature, subject to prior redemption, upon the terms and conditions hereinafter set forth, on March 1, 2012.

The Debentures issued hereunder shall be substantially in the form of Exhibit A, which is part of this Indenture. The Debentures may have notations, legends or endorsements required by law, stock exchange rule or usage. Each Debenture shall be dated the date of its authentication.

Section 2.02. Execution and Authentication.

Two Officers shall sign the Debentures for the Corporation by manual or facsimile signature. The Corporation's seal shall be reproduced on the Debenture.

If an Officer whose signature is on a Debenture no longer holds that office at the time the Debenture is authenticated, the Debenture shall nevertheless be valid.

A Debenture shall not be valid until authenticated by the manual signature of the Trustee. The signature shall be conclusive evidence that the Debenture has been authenticated under this Indenture.

The Trustee shall authenticate Debentures for original issue up to the aggregate principal amount of \$15,000,000 upon a written order of the Corporation signed by two Officers. The aggregate principal amount of Debentures outstanding at any time may not exceed that amount except as provided in Section 2.07.

The Trustee may appoint an authenticating agent acceptable to the Corporation to authenticate Debentures. An authenticating agent may authenticate Debentures whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with the Corporation or an Affiliate.

Section 2.03. Registrar, Paying Agent and Conversion Agent.

The Corporation shall maintain an office or agency where Debentures may be presented for registration of transfer or for exchange ("Registrar"), an office or agency where Debentures may be presented for payment ("Paying Agent"), an office or agency where Debentures may be presented for conversion ("Conversion Agent") and an office or agency where notices and demands to or upon the Corporation in respect of the Debentures and this Indenture may be served. The Registrar shall keep a register of the Debentures and of their transfer and exchange. The Corporation may appoint one or more co-registrars, one or more additional paying agents and one or more additional

conversion agents. The Corporation or any Subsidiary may act as Registrar, Paying Agent or Conversion Agent. The term "Paying Agent" includes any additional paying agent and the term "Conversion Agent" includes any additional conversion agent.

The Corporation shall notify the Trustee of the name and address of any Agent not a party to this Indenture. If the Corporation fails to maintain a Registrar, Paying Agent, Conversion Agent or agent for service of notices and demands or fails to give the foregoing notice, the Trustee shall act as such Agent.

The Corporation initially appoints the Centerre Trust Company of St. Louis as Registrar, Paying Agent, Conversion Agent and agent for service of notices and demands.

Section 2.04. Paying Agent to Hold Money in Trust.

The Corporation shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust for the benefit of Debentureholders or the Trustee all money held by the Paying Agent for the payment of principal or interest on the Debentures, and will notify the Trustee of any Default by the Corporation in making any such payment. While any such Default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Corporation at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent shall have no further liability for the money. If the Corporation (or any Subsidiary) acts as Paying Agent, it shall segregate and hold as a separate trust fund all money held by it as Paying Agent.

Section 2.05. Debentureholder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Debentureholders. If the Trustee is not the Registrar, the Corporation shall furnish to the Trustee on or before each interest payment date and at such other times as the Trustee may request in writing a list of the names and addresses of Debentureholders in such form and as of such date as the Trustee may reasonably require.

Section 2.06. Transfer and Exchange.

When Debentures are presented to the Registrar or a co-registrar with a request to register the transfer or to exchange them for an equal principal amount of Debentures of other denominations, the Registrar shall register the transfer or make the exchange, provided that every Debenture presented or surrendered for registration of transfer or exchange shall

be duly endorsed or be accompanied by a written instrument of transfer in form satisfactory to the Corporation and the Registrar duly executed by the Holder thereof or by his attorney duly authorized in writing. To permit registrations of transfer and exchanges, the Trustee shall authenticate Debentures at the Registrar's request. No service charge shall be made for any registration of transfer or exchange of Debentures, but the Corporation may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto, other than exchanges pursuant to Sections 2.10, 3.07, 4.02, 10.05 or 11.02.

Section 2.07. Replacement Debentures.

If the Holder of a Debenture claims that the Debenture has been lost, destroyed or wrongfully taken, the Corporation shall issue and the Trustee shall authenticate a replacement Debenture if the Trustee's requirements are met. If required by the Trustee or the Corporation, an indemnity bond must be obtained and be sufficient in the judgment of both to protect the Corporation, the Trustee, any Agent or any authenticating agent from any loss which any of them may suffer if a Debenture is replaced. The Corporation may charge for its expenses in replacing a Debenture.

Every replacement Debenture is an additional obligation of the Corporation.

Section 2.08. Outstanding Debentures.

The Debentures outstanding at any time are all the Debentures authenticated by the Trustee except for those cancelled by it, those delivered to it for cancellation, and those described in this Section as not outstanding.

If a Debenture is replaced pursuant to Section 2.07, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Debenture is held by a bona fide purchaser.

If Debentures are considered paid under Section 5.01, they cease to be outstanding and interest on them ceases to accrue.

A Debenture does not cease to be outstanding because the Corporation or an Affiliate holds the Debenture.

Section 2.09. Treasury Debentures.

In determining whether the Holders of the required principal amount of Debentures have concurred in any direction, waiver or consent, Debentures owned by the Corporation or an

Affiliate shall be disregarded, except for purposes of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent. Only Debentures which the Trustee knows are so owned shall be disregarded.

Section 2.10. Temporary Debentures.

Until definitive Debentures are ready for delivery, the Corporation may prepare and the Trustee shall authenticate temporary Debentures. Temporary Debentures shall be substantially in the form of definitive Debentures but may have variations that the Corporation considers appropriate for temporary Debentures. Without unreasonable delay, the Corporation shall prepare and the Trustee shall authenticate definitive Debentures in exchange for temporary Debentures.

Section 2.11. Cancellation.

The Corporation at any time may deliver Debentures to the Trustee for cancellation. The Registrar, the Paying Agent and the Conversion Agent shall forward to the Trustee any Debentures surrendered to them for registration of transfer, exchange, payment or conversion. The Trustee shall cancel all Debentures surrendered for registration of transfer, exchange, payment, conversion or cancellation and shall dispose of cancelled Debentures as the Corporation directs. The Corporation may not issue new Debentures to replace Debentures that it has paid or delivered to the Trustee for cancellation or that any Debentureholder has converted pursuant to Article 11.

Section 2.12. Defaulted Interest.

Any interest on any Debenture which is payable, but is not punctually paid, on any interest payment date (herein called "Defaulted Interest") shall forthwith cease to be payable to the Debentureholder on the relevant record date solely by virtue of such Debentureholder having been a Debentureholder; and such Defaulted Interest may be paid by the Corporation, at its election in each case, as provided in subsection (a) or (b) below:

(a) The Corporation may elect to make payment of any Defaulted Interest on the Debentures to the persons in whose names such Debentures (or their respective predecessor Debentures) are registered at the close of business on a special record date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Corporation shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Debenture and the date of the proposed payment (which date shall be such as will enable the Corporation to comply with the next sentence hereof), and at the same time the Corporation shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be

paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this subsection provided. Thereupon the Corporation shall fix a special record date for the payment of such Defaulted Interest which shall not be more than 15 nor less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Corporation, at its expense, shall cause notice of the proposed payment of such Defaulted Interest and the special record date therefor to be mailed, first-class postage prepaid, to each Holder of a Debenture at his address as it appears in the Debenture register not less than 10 days prior to such special record date. Notice of the proposed payment of such Defaulted Interest and the special record date therefore having been mailed as aforesaid, such Defaulted Interest shall be paid to the persons in whose names the Debentures (or their respective predecessor Debentures) are registered on such special record date and shall no longer be payable pursuant to the following subsection (b).

(b) The Corporation may make payment of any Defaulted Interest on the Debentures in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Debentures may be listed and upon such notice as may be required by such exchange if, after notice given by the Corporation to the Trustee of the proposed payment pursuant to this subsection, such payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section, each Debenture delivered under this Indenture upon transfer of or in exchange for or in lieu of any other Debenture shall carry all the rights to interest accrued and unpaid, and to accrue, which were carried by such other Debenture and each such Debenture shall bear interest from such date that neither gain nor loss in interest shall result from such transfer, exchange or substitution.

ARTICLE 3 REDEMPTION OF DEBENTURES AT CORPORATION'S OPTION

Section 3.01. Redemption Right at Corporation's Option.

The Corporation has the right to redeem the Debentures at its sole option, in whole or in part, at any time and from time to time on or after March 1, 1988, at the following Redemption Prices (expressed in percentages of principal amount of the Debentures), plus unpaid accrued interest to the Redemption Date, subject to the terms and conditions set forth in this Article 3.

If redeemed during the 12-month period beginning
 March 1:

<u>Year</u>	<u>Percentage</u>	<u>Year</u>	<u>Percentage</u>
1988	106.0	1995	102.5
1989	105.5	1996	102.0
1990	105.0	1997	101.5
1991	104.5	1998	101.0
1992	104.0	1999	100.5
1993	103.5	2000 until	100.0
1994	103.0	stated maturity	

The election of the Corporation to redeem any Debenture shall be evidenced by a Board Resolution.

Section 3.02. Notices to Trustee.

If the Corporation wishes to redeem Debentures pursuant to this Article, it shall notify the Trustee of the Redemption Date and the principal amount of Debentures to be redeemed. The Corporation shall give the notice provided for in this Section not less than 45 days prior to the Redemption Date.

Section 3.03. Selection of Debentures to be Redeemed.

If less than all the Debentures are to be redeemed, the Trustee shall select the Debentures to be redeemed by lot. The Trustee shall make the selection not more than 60 days before the Redemption Date from Debentures then outstanding that have not been previously called for redemption. The Trustee may select for redemption portions of the principal of Debentures that have denominations larger than \$1,000. Debentures and portions of Debentures that the Trustee selects shall be in amounts of \$1,000 or integral multiples of \$1,000. Provisions of this Indenture that apply to Debentures called for redemption also apply to portions of Debentures called for redemption.

Section 3.04. Notice of Redemption.

At least 30 days but not more than 60 days before a Redemption Date, the Corporation shall mail notice of redemption to each Holder whose Debentures are to be redeemed.

The notice shall state:

- (1) the Redemption Date;
- (2) the Redemption Price;
- (3) the Conversion Price;

- (4) the name and address of the Paying Agent and Conversion Agent;
- (5) that Debentures called for redemption may be converted at any time prior to the close of business on the Redemption Date;
- (6) that Holders who wish to convert must satisfy the requirements of Section 11.02 hereof;
- (7) that Debentures called for redemption must be surrendered to the Paying Agent to collect the Redemption Price;
- (8) that interest on Debentures called for redemption ceases to accrue on and after the Redemption Date (unless the Corporation shall default in the payment of the Redemption Price); and
- (9) if less than all of the Debentures outstanding are to be redeemed, the identification (and, in the case of partial redemption, the respective principal amounts) of the Debentures to be redeemed.

At the Corporation's request, the Trustee shall give notice of redemption in the Corporation's name and at its expense.

Section 3.05. Effect of Notice of Redemption.

Once notice of redemption is mailed, Debentures called for redemption become due and payable on the Redemption Date at the Redemption Price.

Section 3.06. Deposit of Redemption Price.

On or before the Redemption Date, the Corporation shall deposit with the Paying Agent cash sufficient to pay the Redemption Price and accrued interest on all Debentures to be redeemed. The Paying Agent shall return to the Corporation any money not required due to the conversion of Debentures called for redemption.

Section 3.07. Debentures Redeemed in Part.

Upon surrender of a Debenture that is redeemed in part, the Trustee shall authenticate for the Holder a new Debenture equal in principal amount to the unredeemed portion of the Debenture surrendered.

Section 3.08. Conversion Arrangements on Call for Redemption.

Notwithstanding anything to the contrary contained in this Indenture, in connection with any redemption of Debentures pursuant to this Article 3, the Corporation, by an agreement with one or more investment bankers or other purchasers, may arrange for such purchasers to purchase all Debentures called for redemption (the "Called Debentures") which are either (i) surrendered for redemption or (ii) not duly surrendered for redemption or conversion prior to the close of business on the Redemption Date, and to convert the same into shares of Common Stock, by the purchasers' depositing with the Trustee (acting as Paying Agent with respect to the deposit of such amount and as Conversion Agent with respect to the conversion of such Called Debentures), in trust for the Holders of the Called Debentures, on or prior to the Redemption Date in the manner agreed to by the Corporation and such purchasers, an amount sufficient to pay the Redemption Price, payable by the Corporation on redemption of such Called Debentures. In connection with any such arrangement for purchase and conversion, the Trustee as Paying Agent shall pay on or after the Redemption Date such amounts so deposited by the purchasers in exchange for Called Debentures surrendered for redemption prior to the close of business on the Redemption Date and for all Called Debentures surrendered after such Redemption Date. Notwithstanding anything to the contrary contained in this Article 3, the obligation of the Corporation to pay the Redemption Price of such Called Debentures shall be satisfied and discharged to the extent such amount is so paid by such purchasers, provided, however, that nothing in this Section 3.08 shall in any way relieve the Corporation of the obligation to pay such Redemption Price on all Called Debentures to the extent such amount is not so paid by said purchasers. For all purposes of this Indenture, any Called Debentures surrendered by the Holders for redemption, and any Called Debentures not duly surrendered for redemption or conversion prior to the close of business on the Redemption Date, shall be deemed acquired by such purchasers from such Holders and surrendered by such purchasers for conversion and shall in all respects be deemed to have been converted, all as of immediately prior to the close of business on the Redemption Date, subject to the deposit by the purchasers of the above amount as aforesaid. Nothing in this Section 3.08 shall in any way limit the right of any Holder of a Debenture to convert such Debenture pursuant to the terms of this Indenture any time prior to the close of business on the Redemption Date.

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ARTICLE 4 REDEMPTION OF DEBENTURES UPON DEATH OF
THE DEBENTUREHOLDER OR BENEFICIAL OWNER

Section 4.01. Redemption Right.

The Corporation will redeem a Debenture, or a portion of a Debenture (in the principal amount of \$1,000 or integral multiples thereof) within 60 days following receipt by the Trustee of a request in accordance with Section 4.02 therefor from a Qualified Institution holding such Debenture for a deceased beneficial owner or from a deceased Debentureholder's personal representative, or surviving joint tenant, tenant by the entirety or tenant in common, subject to the limitations that the Corporation will not be obligated to redeem during any twelve-month period ending on any March 1: (i) the portion of a Debenture or Debentures presented on behalf of a deceased beneficial owner or deceased Debentureholder exceeding an aggregate principal amount of \$25,000 or (ii) Debentures presented on behalf of all deceased beneficial owners and deceased Debentureholders exceeding \$600,000 in aggregate principal amount. If the Corporation, although not obligated to do so, chooses to redeem Debentures of any deceased beneficial owner or deceased Debentureholder in any such twelve-month period in excess of the \$25,000 limitation, such redemption, to the extent that it exceeds the \$25,000 limitation for any deceased beneficial owner or deceased Debentureholder, shall not be included in the computation of the \$600,000 limitation for such period or any succeeding period.

Section 4.02. Redemption Procedure.

Debentures will be redeemed in the order of their receipt by the Trustee, except as hereinafter provided. Debentures not redeemed in any such twelve-month period because of the \$25,000 or \$600,000 limitations will be held for redemption during the following twelve-month period(s) until redeemed unless sooner withdrawn by the person presenting the Debenture for redemption.

Debentures may be presented on behalf of a deceased beneficial owner or a deceased Debentureholder for redemption by delivering to the Trustee: (1) a written request for redemption signed by an authorized officer of a Qualified Institution or by the deceased Debentureholder's personal representative or surviving joint tenant, tenant by the entirety, or tenant in common, (2) the Debenture(s) to be redeemed and (3) appropriate evidence of death of the Debentureholder and appropriate evidence of authority in the case of a request by a personal representative. No particular forms of request for redemption or evidence of death or authority to request redemption are required but each must be in a form satisfactory to the Trustee. The price to be paid by the Corporation for all Debentures presented to it pursuant to the

provisions described in this Section is 100% of the principal amount thereof plus unpaid accrued interest to the date of payment. Any acquisition of Debentures by the Corporation or its Subsidiaries other than by redemption upon the death of a Debentureholder pursuant to this Section shall not be included in the computation of either the \$25,000 or \$600,000 limitations for any period.

For purposes of this Section 4.02, a Debenture held in joint tenancy, tenancy by the entirety, or tenancy in common will be deemed to be held by a single Debentureholder and the death of any joint tenant, tenant by the entirety or tenant in common will be deemed the death of a Debentureholder. The death of a person, who, during his lifetime, was entitled to substantially all of the beneficial ownership interest of a Debenture will be deemed the death of the Debentureholder, regardless of the registered Debentureholder, if such beneficial interest can be established to the satisfaction of the Trustee. Such beneficial interest shall be deemed to exist in typical cases of street name or nominee ownership, ownership under the Uniform Gifts to Minors Act, community property or other joint ownership arrangements between a husband and wife (including individual retirement account or Keogh [H.R. 10] plans maintained solely by or for the decedent, or by or for the decedent and his spouse), and trust and certain other arrangements where one person has substantially all of the beneficial ownership interest in the Debenture during his lifetime. Beneficial interest shall include the power to sell, transfer or otherwise dispose of a Debenture and the right to receive the proceeds therefrom, as well as interest and principal payable with respect thereto.

In the case of a Debenture presented for redemption by a Qualified Institution on behalf of a deceased beneficial owner, the \$25,000 limitation shall apply to each such beneficial owner and the death of such beneficial owner shall entitle a Qualified Institution to seek redemption of such Debentures as if the deceased beneficial owner were the registered Debentureholder. A Qualified Institution, in its request for redemption on behalf of a deceased beneficial owner, must submit evidence, satisfactory to the Trustee, that it holds the Debenture on behalf of such beneficial owner and must certify that the aggregate requests for redemption tendered by such Qualified Institution on behalf of each such beneficial owner in any such twelve-month period does not exceed \$25,000. In addition, any request for redemption made by a Qualified Institution on behalf of a deceased beneficial owner must be delivered to the Trustee by registered mail, return receipt requested.

In the case of any Debenture which is presented for redemption in part only, upon such partial redemption, the Corporation shall execute and the Trustee shall authenticate

and deliver to, or on the order of, the presenting person a new Debenture in the principal amount equal to the unredeemed portion of the principal of the Debenture so presented.

In the case of any Debenture or portion thereof which is presented for redemption pursuant to this Article 4 and which has not been redeemed at the time the Corporation gives notice of its election to redeem Debentures pursuant to Article 3, such Debenture or portion thereof shall first be subject to redemption pursuant to Article 3 and if any such Debenture is not redeemed pursuant to Article 3 it shall then be subject to redemption pursuant to Article 4.

Nothing herein shall prohibit the Corporation from redeeming, in acceptance of tenders made pursuant hereto, Debentures in excess of the principal amount that the Corporation is obligated to redeem, nor from purchasing any Debentures in the open market. However, the Corporation may not use any Debentures purchased in excess of its obligation to redeem or in the open market as a credit against its redemption obligation hereunder.

Section 4.03. Withdrawal.

Any Debentures presented for redemption upon the death of the Debentureholder or the beneficial owner thereof may be withdrawn by the person presenting the same upon delivery of a written request for such withdrawal given to the Trustee prior to the issuance of a check in payment thereof.

Section 4.04. Redemption Register.

The Trustee shall maintain at its corporate trust office a register (the "Redemption Register") in which it shall record, in order of receipt, all presentations for redemption received by the Trustee in accordance with Section 4.02. Unless withdrawn, all such requests shall remain in effect, during the period in which they are received and thereafter from period to period, until the Debentures which are the subject of such request have been redeemed.

ARTICLE 5 COVENANTS

Section 5.01. Payment of Debentures.

The Corporation shall pay the principal of and interest on the Debentures on the dates and in the manner provided herein. Principal and interest shall be considered paid on the date due if the Trustee or any Paying Agent holds on that date money sufficient to pay all principal and interest then due, provided that if the Debentures are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made.

The Corporation shall pay interest on overdue principal at the rate borne by the Debentures; it shall pay interest on overdue installments of interest at the same rate to the extent lawful.

Section 5.02. Reporting.

The Corporation shall file with the Trustee within 15 days after it files them with the SEC copies of the annual reports and of such information, documents, and other reports (or copies of such portions of any of the foregoing as the SEC may by rules and regulations prescribe) which the Corporation is required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act. The Corporation also shall comply with the other provisions of TIA §314(a). The Corporation shall furnish to the Holder of Debentures upon request of such Holder, annual financial statements and quarterly reports containing unaudited financial statements.

Section 5.03. Corporate Existence.

Subject to Article 6, the Corporation will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence and the rights (charter and statutory) of the Corporation; provided, however, that the Corporation shall not be required to preserve any such right, if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Corporation and its Subsidiaries taken as a whole and that the loss thereof is not, and will not be, adverse in any material respect to the Holders.

Section 5.04. Compliance Certificate.

The Corporation shall deliver to the Trustee within 120 days after the end of each fiscal year of the Corporation an Officers' Certificate stating whether or not the signers know of any Default that occurred during the fiscal year. If they do, the certificate shall describe the Default and its status. The certificate need not comply with Section 12.05.

ARTICLE 6 SUCCESSORS

Section 6.01 When Corporation May Merge, etc.

The Corporation shall not consolidate or merge into, or transfer or lease all or substantially all of its assets to any person unless:

- (1) the person is a corporation organized and existing under the laws of the United States, or any State thereof or the District of Columbia;

- (2) the person assumes by supplemental indenture all the obligations of the Corporation under the Debentures and this Indenture, except that it need not assume the obligations of the Corporation as to conversion of the Debentures, if pursuant to Section 11.15, an Affiliate of the surviving, transferee or lessee corporation obligates itself by supplemental indenture to deliver securities, cash or other assets upon conversion of the Debentures;
- (3) immediately after the transaction no Default exists; and
- (4) the Corporation has delivered to the Trustee an Officers' Certificate and Opinion of Counsel, each stating that the transaction and supplemental indenture comply with this Article and Section 11.15.

The surviving, transferee or lessee corporation shall be the successor Corporation, but the predecessor Corporation in the case of a transfer or lease shall not be released from the obligation to pay the principal of and interest on the Debentures.

ARTICLE 7 DEFAULTS AND REMEDIES

Section 7.01. Events of Default.

An "Event of Default" occurs if:

- (1) the Corporation defaults in the payment of interest on any Debenture when the same becomes due and payable and the Default continues for a period of 30 days;
- (2) the Corporation defaults in the payment of the principal of any Debenture when the same becomes due and payable at maturity, upon redemption or otherwise;
- (3) the Corporation fails to comply with any of its other agreements in the Debenture or this Indenture and the Default continues for the period and after the notice specified below;
- (4) the Corporation defaults in the payment of any indebtedness having an outstanding principal balance of \$10,000,000 or more, whether such indebtedness now exists or shall hereafter be created, and any period of grace with respect thereto shall have expired, which default shall

result in such indebtedness being declared due and payable prior to the date on which it would otherwise become due and payable, and such default in payment is not cured, or such acceleration shall not be rescinded, annulled or obviated through payment, within thirty days after written notice to the Corporation from the Trustee or to the Corporation and to the Trustee from the Holders of not less than 25% in principal amount of the Debentures then outstanding under the Indenture, provided that no default shall occur hereunder if there shall have been delivered to the Trustee an Officers' Certificate stating that the Corporation is contesting in good faith the existence of such default in payment or event of default;

- (5) the Corporation pursuant to or within the meaning of any Bankruptcy Law:
 - (A) commences a voluntary case,
 - (B) consents to the entry of an order for relief against it in an involuntary case,
 - (C) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
 - (D) makes a general assignment for the benefit of its creditors; or
- (6) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law, and the order or decree remains unstayed and in effect for 60 days, that:
 - (A) is for relief against the Corporation in an involuntary case,
 - (B) appoints a Custodian of the Corporation or for all or substantially all of its property, or
 - (C) orders the liquidation of the Corporation.

The term "Bankruptcy Law" means title 11, U.S. Code, or any similar Federal or State law for the relief of debtors. The term "Custodian" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

A Default under clause (3) is not an Event of Default until the Trustee or the Holders of at least 25% in principal

amount of the Debentures then outstanding notify the Corporation of the Default and the Corporation does not cure the Default within 90 days after receipt of the notice. The notice must specify the Default, demand that it be remedied and state that the notice is a "Notice of Default." The Trustee shall, if requested to do so by the Holders of 25% in principal amount of the Debentures, notify the Corporation of the Default pursuant to this Section.

Subject to the provisions of Sections 8.01 and 8.02, the Trustee shall not be charged with knowledge of any Event of Default unless written notice thereof shall have been given to a Trust Officer of the Trustee at the Corporate Trust Office by the Corporation, the Paying Agent, the Holder of a Debenture or an agent of such Holder.

Section 7.02. Acceleration.

If an Event of Default occurs, and is continuing, the Trustee, by notice to the Corporation, or the Holders of at least 25% in principal amount of the Debentures then outstanding, by notice to the Corporation and the Trustee, may declare the principal of, and accrued interest on, all the Debentures to be due and payable. Upon such declaration the principal and interest shall be due and payable immediately.

The Holders of a majority in principal amount of the Debentures then outstanding, by notice to the Trustee, may rescind an acceleration of all the Debentures and its consequences if (i) all existing Events of Default have been cured or waived except nonpayment of the principal and interest that has become due solely because of the acceleration and (ii) if the rescission would not conflict with any judgment or decree of a court of competent jurisdiction. No such rescission shall affect any subsequent Default or impair any right consequent thereon.

Section 7.03. Other Remedies.

If an Event of Default occurs and is continuing, the Trustee may pursue any available remedy to collect the payment of principal or interest on the Debentures or to enforce the performance of any provision of the Debenture or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Debentures or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Debentureholder in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in such Event of Default. All remedies are cumulative to the extent permitted by law.

Section 7.04. Waiver of Past Defaults.

The Holders of a majority in principal amount of the Debentures, by notice to the Trustee, may waive an existing Default and its consequences, except a Default in the payment of the principal of or interest on any Debenture or a Default under Article 11 hereof, an uncured failure to make any redemption payment or an uncured default with respect to a provision which cannot be modified under the terms of this Indenture without the consent of each Holder affected.

Section 7.05. Control by Majority.

The Holders of a majority in principal amount of the Debentures then outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on it. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture, is unduly prejudicial to the rights of other Debentureholders, or would involve the Trustee in personal liability; provided, that the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

Section 7.06. Limitation on Suits.

A Debentureholder may pursue a remedy with respect to this Indenture or the Debenture only if:

- (1) the Holder gives to the Trustee notice of a continuing Event of Default;
- (2) the Holders of at least 25% in principal amount of the Debentures then outstanding make a written request to the Trustee to pursue the remedy;
- (3) such Holder or Holders offer to the Trustee indemnity satisfactory to the Trustee against any loss, liability or expense;
- (4) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and
- (5) during such 60-day period the Holders of a majority in principal amount of the Debentures then outstanding do not give the Trustee a direction inconsistent with the request.

A Debentureholder may not use this Indenture to prejudice the rights of another Debentureholder or to obtain a preference or priority over another Debentureholder.

Section 7.07. Rights of Holders to Receive Payment.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Debenture to receive payment of principal and interest on the Debenture, on or after the respective due dates expressed in the Debenture, or to bring suit for the enforcement of any such payment on or after such respective dates, is absolute and unconditional and shall not be impaired or affected without the consent of the Holder.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Debenture to bring suit for the enforcement of the right to convert the Debenture shall not be impaired or affected without the consent of the Holder.

Section 7.08. Collection Suit by Trustee.

If an Event of Default in payment of interest or principal specified in Section 7.01(1) or (2) occurs and is continuing, the Trustee may recover judgment in its own name and as trustee of an express trust against the Corporation for the whole amount of unpaid principal and accrued interest remaining unpaid. The Trustee may file such action to recover judgment based upon an Event of Default in the payment of interest or principal in a court of competent jurisdiction located in the State of Missouri. The Corporation hereby consents to subject itself to the jurisdiction of such courts located in the State of Missouri and hereby agrees to enter an appearance in such proceeding, provided the Trustee shall notify the Corporation of the commencement of such proceeding as herein provided generally with respect to the giving of notices.

Section 7.09. Trustee May File Proofs of Claim.

The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Debentureholders allowed in any judicial proceedings relative to the Corporation, its creditors or its property, and shall be entitled and empowered to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same, and any Custodian in any such judicial proceeding is hereby authorized by each Debentureholder to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Debentureholders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses and disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 8.07.

Section 7.10. Priorities.

If the Trustee collects any money pursuant to this Article, it shall pay out the money in the following order:

First: to the Trustee for amounts due under Section 8.07;

Second: to Debentureholders for amounts due and unpaid on the Debentures for principal and interest, ratably, without preference or priority of any kind, according to the amounts due and payable on the Debentures for principal and interest, respectively; and

Third: to the Corporation.

The Trustee may fix a record date and payment date for any payment to Debentureholders pursuant to this Article.

Section 7.11. Undertaking for Costs.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section does not apply to a suit by the Trustee, a suit by a Holder pursuant to Section 7.07 or a suit by Holders of more than 10% in principal amount of the Debentures.

Section 7.12. Waiver of Stay or Extension Laws.

The Corporation covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of the Indenture; and the Corporation (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

Section 7.13. Restoration of Rights and Remedies.

If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under the Indenture

and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case the Corporation, the Trustee and the Holders shall, subject to any determination in such proceeding, be restored severally and respectively to their former positions hereunder, and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

ARTICLE 8 TRUSTEE

Section 8.01. Duties of Trustee.

- (a) If an Event of Default has occurred and is continuing, the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.
- (b) Except during the continuance of an Event of Default:
 - (1) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others.
 - (2) In the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. However, the Trustee shall examine the certificates and opinions to determine whether or not they conform to the requirements of this Indenture.
- (c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:
 - (1) This paragraph does not limit the effect of paragraph (b) of this Section;
 - (2) The Trustee shall not be liable for any error of judgment made in good faith by a Trust Officer, unless it is proved

that the Trustee was negligent in ascertaining the pertinent facts; and

- (3) The Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 7.05.
- (d) Every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b) and (c) of this Section.
- (e) The Trustee may refuse to perform any duty or exercise any right or power unless it receives indemnity satisfactory to it against any loss, liability or expense.
- (f) The Trustee shall not be liable for interest on any money received by it except as otherwise agreed with the Corporation. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

Section 8.02. Rights of Trustee.

Except as otherwise provided in Section 8.01:

- (a) The Trustee may rely on any document believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.
- (b) Before the Trustee acts or refrains from acting, it may require an Officers' Certificate or an Opinion of Counsel. The Trustee shall not be liable for any action it takes or omits to take in good faith in reliance on an Officers' Certificate or Opinion of Counsel.
- (c) The Trustee may act through agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care.
- (d) The Trustee shall not be liable for any action it takes or omits to take in good faith which it believes to be authorized or within its rights or powers.

Section 8.03. Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Debentures and may otherwise deal with the Corporation or an Affiliate with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights. However, the Trustee is subject to Sections 8.10 and 8.11.

Section 8.04. Trustee's Disclaimer.

The Trustee makes no representation as to the validity or adequacy of this Indenture or the Debenture, it shall not be accountable for the Corporation's use of the proceeds from the Debentures, and it shall not be responsible for any statement in the Debenture other than its authentication.

Section 8.05. Notice of Events of Defaults.

If an Event of Default occurs and is continuing and if it is known to the Trustee, the Trustee shall mail to Debentureholders a notice of the Event of Default within 90 days after it occurs. Except in the case of a Event of Default in payment on any Debenture, the Trustee may withhold the notice if and so long as a committee of its Trust Officers in good faith determines that withholding the notice is in the interests of Debentureholders.

Section 8.06. Reports by Trustee to Holders.

Within 60 days after each March 1 following the date of this Indenture, the Trustee shall mail to Debentureholders a brief report dated as of such reporting date that complies with TIA §313(a). The Trustee also shall comply with TIA §313(b)(2).

A copy of each report at the time of its mailing to Debentureholders shall be filed with the SEC and each stock exchange on which the Debentures are listed. The Corporation shall notify the Trustee when the Debentures are listed on any stock exchange.

Section 8.07. Compensation and Indemnity.

The Corporation shall pay to the Trustee from time to time reasonable compensation for its services. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Corporation shall reimburse the Trustee upon request for all reasonable out-of-pocket expenses incurred by it. Such expenses shall include the reasonable compensation and out-of-pocket expenses of the Trustee's agents and counsel.

The Corporation shall indemnify the Trustee against any loss or liability incurred by it. The Trustee shall notify the Corporation promptly of any claim for which it may seek indemnity. The Corporation shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have separate counsel and the Corporation shall pay the reasonable fees and expenses of such counsel. The Corporation need not pay for any settlement made without its consent which shall not be unreasonably withheld.

The Corporation need not reimburse any expense or indemnify against any loss or liability incurred by the Trustee through negligence or bad faith.

To secure the Corporation's payment obligations in this Section, the Trustee shall have a lien prior to the Debentures on all money or property held or collected by the Trustee, except that held in trust to pay principal and interest on particular Debentures.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 7.01(4) or (5) occurs, the expenses and the compensation for the services are intended to constitute expenses of administration under any Bankruptcy Law.

Section 8.08. Replacement of Trustee.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment as provided in this Section.

The Trustee may resign by so notifying the Corporation. The Holders of a majority in principal amount of the Debentures may remove the Trustee by so notifying the Trustee and the Corporation. The Corporation may remove the Trustee if:

- (1) the Trustee fails to comply with Section 8.10;
- (2) the Trustee is adjudged a bankrupt or an insolvent;
- (3) a receiver or public officer takes charge of the Trustee or its property; or
- (4) the Trustee become incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Corporation shall promptly appoint a successor Trustee. Within one year after the successor Trustee assumes office, the Holders of a majority in principal amount of the Debentures may appoint a

successor Trustee to replace the successor Trustee appointed by the Corporation.

If a successor Trustee does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Corporation or the Holders of at least 10% in principal amount of the Debentures then outstanding may petition any court of competent jurisdiction for the appointment of a successor Trustee.

If the Trustee fails to comply with Section 8.10, any Debentureholder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Corporation. Thereupon the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall mail a notice of its succession to Debentureholders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, subject to the lien provided for in Section 8.07.

Section 8.09. Successor Trustee by Merger, etc.

If the Trustee consolidates, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the surviving or transferee corporation without any further act shall be the successor Trustee.

Section 8.10. Eligibility; Disqualification.

This Indenture shall always have a Trustee who satisfies the requirements of TIA §310(a)(1). The Trustee shall always have a combined capital and surplus of at least \$10,000,000 as set forth in its most recent published annual report of condition. The Trustee is subject to TIA §310(b), including the optional provision permitted by the second sentence of TIA §310(b)(9).

Section 8.11. Preferential Collection of Claims Against Corporation.

The Trustee is subject to TIA §311(a), excluding any creditor relationship listed in TIA §311(b). A Trustee who has resigned or been removed is subject to TIA §311(a) to the extent indicated.

Section 8.12. Appointment of Co-Trustee.

It is the purpose of this Indenture that there shall be no violation of any law of any jurisdiction denying or restricting the right of banking corporations or associations to transact business as trustee in such jurisdiction. It is recognized that in case of litigation under this Indenture, and in particular in case of the enforcement on an Event of Default, or in case the Trustee deems that by reason of any present or future law of any jurisdiction it may not exercise any of the powers, rights or remedies herein granted to the Trustee in trust, as herein granted, or take any other action which may be desirable or necessary in connection therewith, it may be necessary that the Trustee appoint an additional individual or institution as a separate or Co-Trustee.

The Trustee may appoint an additional individual or institution as a separate or Co-Trustee, in which event each and every remedy, power, right, claim, demand, cause of action, immunity, estate, title, interest and lien expressed or intended by this Indenture, to be exercised by or vested in or conveyed to the Trustee with respect thereto shall be exercisable by and vest in such separate or Co-Trustee but only to the extent necessary to enable such separate or Co-Trustee to exercise such powers, rights and remedies, and every covenant and obligation necessary to the exercise thereof by such separate or Co-Trustee shall run to and be enforceable by either of them.

Should any deed, conveyance or instrument in writing from the Corporation be required by the separate or Co-Trustee so appointed by the Trustee for more fully and certainly vesting in and confirming to it such properties, rights, powers, trusts, duties and obligations, including particularly the right to be paid its fees and expenses for services rendered, any and all such deeds, conveyances and instruments in writing shall, on request, be executed, acknowledged and delivered by the Corporation. In case any separate or Co-Trustee, or a successor to either, shall die, become incapable of acting, resign or be removed, all the estates, properties, rights, powers, trusts, duties and obligations of such separate or Co-Trustee, so far as permitted by law, shall vest in and be exercised by the Trustee until the appointment of a new Trustee or successor to such separate or Co-Trustee.

ARTICLE 9 DISCHARGE OF INDENTURE

Section 9.01. Termination of Corporation's Obligations.

The Corporation may at any time terminate all of its obligations under this Indenture if:

- (1) the Corporation irrevocably deposits in trust with the Trustee money or U. S. Government Obligations sufficient to pay principal and interest on the Debentures at maturity or on redemption, as the case may be; and
- (2) if such deposit shall be sufficient to pay principal, premium, if any, and interest on the Debentures only to a specified redemption date, the Corporation shall have given to the Trustee irrevocable instructions to call the Debentures for redemption on such date.

However, the Corporation's obligations in Sections 2.03, 2.04, 2.05, 2.06, 2.07, 5.01, 8.07, 8.08 and 9.03 and in Article 11, shall survive until the Debentures are no longer outstanding. Thereafter, the Corporation's obligations in Sections 8.07 and 9.03 shall survive.

After a deposit, the Trustee upon request shall acknowledge in writing the discharge of the Corporation's obligations under this Indenture except for those surviving obligations specified above.

In order to have money available on a payment date to pay principal or interest on the Debentures, the U. S. Government Obligations shall be payable as to principal or interest on or before such payment date in such amounts as will provide the necessary money. The U. S. Government Obligations shall not be callable at the issuer's option.

"U. S. Government Obligations" means direct obligations of the United States or those obligations for the payment of which the full faith and credit of the United States is pledged.

Section 9.02. Application of Trust Money.

The Trustee shall hold in trust money or U. S. Government Obligations deposited with it pursuant to Section 9.01. It shall apply the deposited money and the money from the U. S. Government Obligations through the Paying Agent and in accordance with this Indenture to the payment of principal and interest on the Debentures.

Section 9.03. Repayment to Corporation.

The Trustee and the Paying Agent shall promptly pay to the Corporation upon request any excess money or securities held by them at any time. The obligation of the Trustee and the Paying Agent to pay such excess money or securities to the Corporation shall survive the payment, conversion and/or cancellation of all the Debentures until all such excess money and securities have been so paid.

The Trustee and the Paying Agent shall pay to the Corporation upon request any money held by them for the payment of principal or interest that remains unclaimed for two years. After payment to the Corporation, Debentureholders entitled to the money must look to the Corporation for payment as general creditors unless an applicable abandoned property law designates another person.

ARTICLE 10 AMENDMENTS, SUPPLEMENTS AND WAIVERS

Section 10.01. Without Consent of Holders.

The Corporation and the Trustee may amend or supplement this Indenture or the Debenture without the consent of any Debentureholder:

- (1) to cure any ambiguity, omission, defect or inconsistency;
- (2) to comply with Section 6.01 and Section 11.15;
- (3) to provide for uncertificated Debentures in addition to certificated Debentures; or
- (4) to make any change that does not adversely affect the rights of any Debentureholder.

Section 10.02. With Consent of Holders.

The Corporation and the Trustee may amend or supplement this Indenture or the Debentures with the written consent of the Holders of at least a majority in principal amount of the Debentures then outstanding. Without the consent of each Debentureholder affected, however, an amendment under this Section may not:

- (1) reduce the amount of Debentures whose Holders must consent to an amendment or waiver;
- (2) reduce the rate of or change the time for payment of interest on any Debenture;
- (3) reduce the principal of or change the maturity of any Debenture;
- (4) waive a Default in the payment of the principal of or interest on any Debenture;
- (5) make any Debenture payable in money other than that stated in the Debenture; or
- (6) modify the provisions of Sections 7.04, 7.07 and 10.02 (second sentence).

After an amendment or supplement under this Section becomes effective, the Corporation shall mail to Debenture-holders a notice briefly describing the amendment.

Section 10.03. Compliance with Trust Indenture Act.

Every amendment or supplement to this Indenture or the Debenture shall be set forth in a supplemental indenture that complies with the TIA as then in effect.

Section 10.04. Revocation and Effect of Consents.

Until an amendment, supplement or waiver becomes effective, a consent to it by a Holder of a Debenture is a continuing consent by the Holder and every subsequent Holder of a Debenture or portion of a Debenture that evidences the same debt as the consenting Holder's Debenture, even if notation of the consent is not made on any Debenture. However, any such Holder or subsequent Holder may revoke the consent as to his Debenture or portion of a Debenture if the Trustee receives the notice of revocation before the date the amendment, supplement or waiver becomes effective.

Section 10.05. Notation on or Exchange of Debentures.

The Trustee may place an appropriate notation about an amendment, supplement or waiver on any Debenture thereafter authenticated. The Corporation in exchange for all Debentures may issue and the Trustee shall authenticate new Debentures that reflect the amendment, supplement or waiver.

Section 10.06. Trustee Protected.

The Trustee need not sign any supplemental indenture that adversely affects its rights.

ARTICLE 11 CONVERSION

Section 11.01. Conversion Privilege; Conversion Price.

A Holder of a Debenture, at his sole option, may convert such Debenture into Common Stock at any time prior to the close of business on March 1, 2012. If a Debenture is called for redemption by the Corporation, the Holder thereof may convert such Debenture into Common Stock at any time prior to the close of business on the Redemption Date. The number of shares of Common Stock issuable upon conversion of a Debenture is determined by dividing the principal amount to be converted by the Conversion Price in effect on the Conversion Date.

The initial Conversion Price is \$29.85 per share. The Conversion Price is subject to adjustment as described in this Article 11.

A Holder may convert a portion of a Debenture if the portion to be converted is \$1,000 or an integral multiple thereof. Provisions in this Indenture which apply to the conversion of all of a Debenture also apply to a portion of such Debenture.

Section 11.02. Conversion Procedure.

To convert a Debenture, a Holder must:

- (i) complete and sign the conversion notice on the back of the Debenture;
- (ii) surrender the Debenture to the Conversion Agent;
- (iii) furnish appropriate endorsements and transfer documents if required by the Registrar or the Conversion Agent; and
- (iv) pay any transfer or similar tax required by Section 11.04.

The date on which the Holder satisfies all such requirements is the Conversion Date. As soon as practicable thereafter, the Corporation shall deliver through the Conversion Agent a certificate for the number of full shares of Common Stock issuable upon the conversion and a check for any fractional share. The person in whose name the certificate is registered shall be treated as a stockholder of record of the Corporation on and after the Conversion Date.

No payment or adjustment will be made for accrued interest on a converted Debenture.

If a Holder converts more than one Debenture at the same time, the number of full shares issuable upon the conversion shall be based on the total principal amount of the Debentures converted.

Upon surrender of a Debenture that is converted in part, the Trustee shall authenticate for the Holder a new Debenture equal in principal amount to the unconverted portion of the Debenture surrendered.

If the last day on which a Debenture may be converted is a Legal Holiday in a place where a Conversion Agent is located, the Debenture may be surrendered to that Conversion Agent on the next succeeding day that is not a Legal Holiday.

Section 11.03. Fractional Shares.

The Corporation will not issue a fractional share of Common Stock upon conversion of a Debenture. Instead the

Corporation will deliver its check for the current market value of the fractional share. The current market value of a fraction of a share is determined by multiplying the current market price of a full share by the fraction and rounding the result to the nearest cent.

The current market price of a share of Common Stock is the Quoted Price of the Common Stock on the last trading day prior to the Conversion Date. In the absence of such a quotation, the Corporation shall determine the current market price on the basis of such quotations as it considers appropriate.

Section 11.04. Taxes on Conversion.

If a Holder of a Debenture converts it, the Corporation shall pay any documentary, stamp or similar issue or transfer tax due on the issue of shares of Common Stock upon the conversion. However, the Holder shall pay any such tax which is due because the shares are issued in a name other than the Holder's name.

Section 11.05. Corporation to Provide Stock.

The Corporation shall at all times reserve and have available, free from preemptive rights out of its authorized but unissued Common Stock or its Common Stock held in treasury, enough shares of Common Stock to permit the conversion of the Debentures.

All shares of Common Stock which may be issued upon conversion of the Debentures shall be fully paid and nonassessable.

Before taking any action that would cause an adjustment reducing the Conversion Price below the then par value (if any) of the shares of Common Stock issuable upon conversion of the Debentures, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of such Common Stock at such Conversion Price.

The Corporation will endeavor to comply with all securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Debentures and will endeavor to list such shares on each national securities exchange, if any, on which its Common Stock is then listed.

Section 11.06. Adjustment for Change in Capital Stock.

If the Corporation:

- (1) pays a dividend or makes a distribution on its Common Stock in shares of its Common Stock;

- (2) subdivides its outstanding shares of Common Stock into a greater number of shares;
- (3) combines its outstanding shares of Common Stock into a smaller number of shares;
- (4) makes a distribution on its Common Stock in shares of its Capital Stock other than Common Stock; or
- (5) issues by reclassification of its Common Stock any shares of its Capital Stock,

then the conversion privilege and the Conversion Price in effect immediately prior to such action shall be adjusted so that the Holder of a Debenture thereafter converted may receive the number of shares of Capital Stock of the Corporation which he would have owned immediately following such action if he had converted the Debenture immediately prior to such action.

Subject to Section 11.10, the adjustment shall become effective immediately after the record date in the case of a dividend or distribution and immediately after the effective date in the case of a subdivision, combination or reclassification.

If, after an adjustment, a Holder of a Debenture, upon conversion of such Debenture may receive shares of two or more classes of Capital Stock of the Corporation, the Board of Directors shall determine the allocation of the adjusted Conversion Price between the classes of Capital Stock. After such allocation, the conversion privilege and the Conversion Price with respect to each class of Capital Stock shall thereafter be subject to adjustment on terms comparable to those with respect to Common Stock in this Article.

Section 11.07. Adjustment for Rights Issue.

If the Corporation distributes any rights or warrants to all holders of its Common Stock entitling them for a period expiring within 60 days after the record date mentioned below to purchase shares of Common Stock at a price per share less than the current market price per share on that record date, the Conversion Price shall be adjusted in accordance with the formula:

$$C' = C \times \frac{0 + \frac{(N \times P)}{M}}{0 + N}$$

where:

C' = the adjusted Conversion Price.

- C = the current Conversion Price.
- O = the number of shares of Common Stock outstanding on the record date.
- N = the number of additional shares of Common Stock offered.
- P = the offering price per share of the additional shares.
- M = the current market price per share of Common Stock on the record date.

Subject to Section 11.10, the adjustment shall become effective immediately after the record date for the determination of stockholders entitled to receive the rights or warrants.

Section 11.08. Adjustment for Other Distributions.

If the Corporation distributes to all holders of its Common Stock any of its assets or debt securities or any rights or warrants to purchase securities of the Corporation, the Conversion Price shall be adjusted in accordance with the formula:

$$C' = C \times \frac{M - F}{M}$$

where:

- C' = the adjusted Conversion Price.
- C = the current Conversion Price.
- M = the current market price per share of Common Stock on the record date mentioned below.
- F = the fair market value on the record date of the assets, securities, rights or warrants applicable to one share of Common Stock. The Corporation shall determine the fair market value.

Subject to Section 11.10, the adjustment shall become effective immediately after the record date for the determination of stockholders entitled to receive the distribution.

This Section does not apply to cash dividends or cash distributions paid out of consolidated current or retained earnings as shown on the books of the Corporation. Also, this Section does not apply to rights or warrants referred to in Section 11.07.

Section 11.09. Current Market Price.

In Sections 11.07 and 11.08, the current market price per share of Common Stock on any date is the average of the Quoted Prices of the Common Stock for 30 consecutive trading days commencing 45 trading days before the date in question. In the absence of one or more such quotations, the Board of Directors shall determine the current market price on the basis of such quotations as it considers appropriate.

Section 11.10. When Adjustment May Be Deferred.

No adjustment in the Conversion Price need be made pursuant to Section 11.06 unless the adjustment would require an increase or decrease of at least 1% in the Conversion Price. No adjustment in the Conversion Price need be made pursuant to Sections 11.07 or 11.08 unless the adjustment would require an increase or decrease of at least 5% in the Conversion Price. Any adjustments that are not made pursuant to Section 11.06 shall be carried forward and taken into account in the calculation of any subsequent adjustment pursuant to Section 11.06. Any adjustments that are not made pursuant to either Section 11.07 or 11.08 shall be carried forward and taken into account in the calculation of any subsequent adjustment pursuant to Section 11.07 or 11.08.

All calculations under this Article shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be.

Section 11.11. When No Adjustment Required.

No adjustment need be made for a transaction referred to in Section 11.06, 11.07 or 11.08 if Debentureholders are to participate in the transaction on a basis and with notice that the Board of Directors determines to be fair and appropriate in light of the basis and notice on which holders of Common Stock participate in the transaction.

No adjustment need be made for rights to purchase Common Stock pursuant to a Corporation plan for reinvestment of dividends or interest or pursuant to an employees' stock purchase or stock option plan.

No adjustment need be made for a change in the par value of the Common Stock or from par value Common Stock to no par value Common Stock.

To the extent the Debentures become convertible into cash, no adjustment need be made thereafter as to the cash. Interest will not accrue on the cash.

Section 11.12. Notice of Adjustment.

Whenever the Conversion Price is adjusted, the Corporation shall promptly mail to Debentureholders a notice of the adjustment. The Corporation shall file with the Trustee a certificate from the Corporation's independent public accountants briefly stating the facts requiring the adjustment and the manner of computing it. The certificate shall be conclusive evidence that the adjustment is correct.

Section 11.13. Voluntary Reduction.

The Corporation, at its option, from time to time may reduce the Conversion Price by any amount for any period of time if the period is at least 20 days and if the reduction is irrevocable during the period.

Whenever the Conversion Price is reduced, the Corporation shall mail to Debentureholders a notice of the reduction. The Corporation shall mail the notice at least 15 days before the date that the reduced Conversion Price takes effect. The notice shall state the reduced Conversion Price and the period it will be in effect.

A reduction of the Conversion Price does not change or adjust the Conversion Price otherwise in effect for purposes of Sections 11.06 through 11.08.

Section 11.14. Notice of Certain Transactions.

If:

- (1) the Corporation takes any action that would require an adjustment in the Conversion Price pursuant to Section 11.06, 11.07 or 11.08 and if the Corporation does not allow Debentureholders to participate pursuant to Section 11.11;
- (2) the Corporation takes any action that would require a supplemental indenture pursuant to Section 11.15; or
- (3) there is a liquidation or dissolution of the Corporation,

the Corporation shall cause to be filed with the Trustee and Conversion Agent and shall mail to Debentureholders a notice stating the proposed record date (or other applicable determination date) for a dividend or distribution or the proposed effective date of a subdivision, combination, reclassification, consolidation, merger, transfer, lease, liquidation or dissolution and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange

their shares of Common Stock for securities or other property deliverable in connection with such transaction. The Corporation shall mail the notice at least 20 days before such date. Failure to mail the notice or any defect in it shall not affect the validity of the transaction.

Section 11.15. Reorganization of Corporation.

If the Corporation is a party to a transaction subject to Section 6.01 or a merger which reclassifies or changes its outstanding Common Stock, the person obligated to deliver securities, cash or other assets upon conversion of Debentures shall enter into a supplemental indenture. If the issuer of securities deliverable upon conversion of Debentures is an Affiliate of the surviving, transferee or lessee corporation, that issuer shall join in the supplemental indenture.

The supplemental indenture shall provide that the Holder of a Debenture may convert it into the kind and amount of securities, cash or other assets which he would have owned immediately after the consolidation, merger, transfer or lease if he had converted the Debenture immediately before the effective date of the transaction. The supplemental indenture shall provide for adjustments which shall be as nearly equivalent as may be practical to the adjustments provided for in this Article. The surviving transferee or lessee Corporation shall mail to Debentureholders a notice briefly describing the supplemental indenture.

If this Section applies, Section 11.06 does not apply.

Section 11.16. Corporation Determination Final.

Any determination that the Corporation or the Board of Directors must make pursuant to Section 11.03, 11.06, 11.07, 11.08, 11.09 or 11.11 is conclusive.

Section 11.17. Trustee's Disclaimer.

The Trustee has no duty to determine when an adjustment under this Article should be made, how it should be made or what it should be. The Trustee has no duty to determine whether any provisions of a supplemental indenture under Section 11.15 are correct. The Trustee makes no representation as to the validity or value of any securities or assets issued upon conversion of Debentures. The Trustee shall not be responsible for the Corporation's failure to comply with this Article. Each Conversion Agent other than the Corporation shall have the same protection under this Section as the Trustee.

ARTICLE 12 MISCELLANEOUS

Section 12.01. Trust Indenture Act Controls.

If any provision of this Indenture limits, qualifies, or conflicts with another provision which is required to be included in this Indenture by the TIA, the required provision shall control.

Section 12.02. Notice.

Any notice or communication by the Corporation or the Trustee to the other is duly given if in writing and delivered in person or mailed by first-class mail addressed as follows:

if to the Corporation:

NORTHWEST NATURAL GAS COMPANY
One Pacific Square
220 N.W. Second Avenue
Portland, Oregon 97209
Attn: Secretary

if to the Trustee:

CENTERRE TRUST COMPANY OF ST. LOUIS
510 Locust Street
St. Louis, Missouri 63101
Attn: Corporate Trust Division

The Corporation or the Trustee by notice to the other may designate additional or different addresses for subsequent notices or communications.

Any notice or communication to a Debentureholder shall be mailed by first-class mail to his address shown on the register kept by the Registrar. Failure to mail a notice or communication to a Debentureholder or any defect in it shall not affect its sufficiency with respect to other Debentureholders.

If a notice or communication is mailed in the manner provided above within the time prescribed, it is duly given, whether or not the addressee receives it.

If the Corporation mails a notice or communication to Debentureholders, it shall mail a copy to the Trustee and each Agent at the same time.

All notices or communications shall be in writing except as set forth below.

In case by reason of the suspension of regular mail service, or by reason of any other cause, it shall be impossible to mail any notice required by this Indenture, then such method of notification as shall be made with the approval of the Trustee shall constitute a sufficient mailing of such notice.

Section 12.03. Communication by Holders with Other Holders.

Debentureholders may communicate pursuant to TIA §312(b) with other Debentureholders with respect to their rights under this Indenture or the Debenture. The Corporation, the Trustee, the Registrar and anyone else shall have the protection of TIA §312(c).

Section 12.04. Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Corporation to the Trustee to take any action under this Indenture, the Corporation shall furnish to the Trustee:

- (1) an Officers' Certificate stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and
- (2) an Opinion of Counsel stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

Section 12.05. Statements Required in Certificate or Opinion.

Each Officers' Certificate or Opinion of Counsel with respect to compliance with a condition or covenant provided for in this Indenture shall include:

- (1) a statement that the person making such Officers' Certificate or Opinion of Counsel has read such covenant or condition;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such Officers' Certificate or Opinion of Counsel are based;
- (3) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and

- (4) a statement as to whether or not, in the opinion of such person, such condition or covenant has been complied with.

Section 12.06. Rules by Trustee and Agents.

The Trustee may make reasonable rules for action by or a meeting of Debentureholders. The Registrar, Paying Agent or Conversion Agent may make reasonable rules and set reasonable requirements for its functions.

Section 12.07. Legal Holidays.

A "Legal Holiday" is a Saturday, a Sunday, or a day on which banking institutions in the relevant jurisdiction are not required to be open. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period.

Section 12.08. No Recourse Against Others.

No liability under the Debentures shall inure to any director, officer, employee or stockholders, as such, of the Corporation and each Debentureholder, by accepting the Debenture, waives and releases all such liability.

Section 12.09. Duplicate Originals.

The parties may sign any number of copies of this Indenture. One signed copy is enough to prove this Indenture.

Section 12.10. Governing Law.

The laws of the State of Oregon shall govern this Indenture and the Debenture.

Section 12.11. Table of Contents, Headings, etc.

The table of contents, cross-reference sheet and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be

considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

SIGNATURES

Dated: January 15, 1987

NORTHWEST NATURAL GAS COMPANY
("Corporation")

(SEAL)

By: Wesley E. Radford
Its Vice President & Treasurer

Attest: C. J. Rue
Its Secretary

Dated: January 15, 1987

CENTERRE TRUST COMPANY OF ST. LOUIS
("Trustee")

(SEAL)

By: J. Rector
Its Assistant Treasurer

Attest: H. Whelan
Its Assistant Secretary

EXHIBIT A
(Face of Debenture)

NORTHWEST NATURAL GAS COMPANY

7-1/4% Convertible Debenture due 2012

No. _____ \$ _____

NORTHWEST NATURAL GAS COMPANY, an Oregon corporation for value received, hereby promises to pay to _____, or registered assigns the principal sum of _____ DOLLARS on March 1, 2012, and to pay interest on said principal sum at the rate of 7-1/4% per annum calculated on the basis of a 360-day year of twelve 30-day months.

The interest so payable on any interest payment date will, subject to certain exceptions provided in the Indenture hereafter referred to, be paid to the person in whose name this Debenture is registered at the close of business (whether or not a business day) on the following respective record date, as the case may be, next preceding such interest payment date.

Interest Payment Dates: March 1 and September 1.

Record Dates: February 15 and August 15.

ADDITIONAL PROVISIONS OF THIS DEBENTURE ARE SET FORTH ON THE REVERSE HEREOF.

Dated:

NORTHWEST NATURAL GAS COMPANY

By: _____
Its President

(SEAL)

ATTEST:

By: _____
Its Secretary

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This Debenture is one of the Debentures provided for
in the within-mentioned Indenture.

CENTERRE TRUST COMPANY OF
ST. LOUIS, as Trustee

By: _____
Authorized Signature

(Back of Debenture)

NORTHWEST NATURAL GAS COMPANY
7-1/4% Convertible Debenture due 2012

1. Interest.

NORTHWEST NATURAL GAS COMPANY ("Corporation"), an Oregon corporation, promises to pay interest on the principal amount of this Debenture at the rate per annum shown above. The Corporation will pay interest semi-annually on March 1 and September 1, of each year, commencing September 1, 1987. Interest on this Debenture will accrue from the most recent date to which interest has been paid, or, if no interest has been paid previously, from the date of original issuance of this Debenture; provided that, if there is no existing default in the payment of interest, and if this Debenture is authenticated between a record date referred to on the face hereof and the next succeeding interest payment date, interest shall accrue from the next interest payment date.

2. Method of Payment.

The Corporation will pay interest on the Debentures (except defaulted interest) to the persons who are registered holders of Debentures at the close of business on the record date next preceding the interest payment date. The Corporation will pay interest to such holders on the next interest payment date even though Debentures are cancelled after the record date but on or before the interest payment date. Holders must surrender Debentures to a Paying Agent to collect principal payments. The Corporation will pay principal and interest in money of the United States that at the time of payment is legal tender for payment of public and private debts. However, the Corporation may pay principal and interest by check payable in such money. Payment of principal will be made at the offices of the Trustee. The Corporation may mail an interest check to a holder's registered address.

3. Paying Agent, Registrar, Conversion Agent.

Initially, Centerre Trust Company of St. Louis ("Trustee"), 510 Locust Street, St. Louis, Missouri, 63101, will act as Paying Agent, Registrar and Conversion Agent. The Corporation may change any Paying Agent, Registrar, Conversion Agent or Co-Registrar without notice. The Corporation or any of its Subsidiaries may act in any such capacity.

4. Indenture.

The Corporation issued the Debentures under an Indenture dated as of January 15, 1987 ("Indenture"), between the

Corporation and the Trustee. The terms of the Debenture include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939 (15 U.S.C. §§77aaa-77bbb) as in effect on the date of the Indenture. The Debentures are subject to all such terms, and Debentureholders are referred to the Indenture and the Act for a statement of such terms. The Debentures are unsecured general obligations of the Corporation limited to \$15,000,000 in the aggregate principal amount.

5. Redemption at Corporation's Option.

The Corporation may, at its option, at any time on or after March 1, 1988, redeem all the Debentures or some of them from time to time after issuance at the following redemption prices (expressed in percentages of principal amount of the Debenture) plus unpaid accrued interest to the redemption date.

If redeemed during the 12-month period beginning March 1:

<u>Year</u>	<u>Percentage</u>	<u>Year</u>	<u>Percentage</u>
1988	106.0	1995	102.5
1989	105.5	1996	102.0
1990	105.0	1997	101.5
1991	104.5	1998	101.0
1992	104.0	1999	100.5
1993	103.5	2000 until	100.0
1994	103.0	stated maturity	

6. Notice of Redemption.

Notice of redemption at the Corporation's option will be mailed at least 30 days but not more than 60 days before the redemption date to each holder of Debentures to be redeemed at his registered address as set forth in the register. Debentures in denominations larger than \$1,000 may be redeemed in part but only in integral multiples of \$1,000. On and after the redemption date (if there is no default in the payment of the redemption price by the Corporation), interest ceases to accrue on Debentures or portions thereof called for redemption.

7. Redemption Upon Death of Debentureholder or Beneficial Owner.

The Corporation will redeem a Debenture or a portion of a Debenture (in the principal amount of \$1,000 or integral multiples thereof) within 60 days following receipt by the Trustee of a request therefor from a Qualified Institution on behalf of a deceased beneficial owner or a deceased Debentureholder's personal representative, or surviving joint tenant, tenant by the entirety or tenant in common, subject to the limitations that the Corporation will not be obligated to redeem during any twelve-month period ending on any March 1:

(1) Debentures presented on behalf of any deceased beneficial owner or deceased Debentureholder exceeding an aggregate principal amount of \$25,000 or (2) Debentures presented by all deceased beneficial owners and deceased Debentureholders exceeding \$600,000 in aggregate principal amount. If the Corporation, although not obligated to do so, chooses to redeem Debentures of any deceased beneficial owner or deceased Debentureholder in any such twelve-month period in excess of the \$25,000 limitation, such redemption, to the extent that it exceeds the \$25,000 limitation for any deceased beneficial owner or deceased Debentureholder shall not be included in the computation of the \$600,000 limitation for such period or any succeeding period.

Debentures presented on behalf of a deceased beneficial owner or a deceased Debentureholder will be redeemed in the order of their receipt by the Trustee. Debentures presented on behalf of a deceased beneficial owner or a deceased Debentureholder not redeemed in a period because of the \$25,000 or \$600,000 limitations will be held for redemption during the following twelve-month period(s) until redeemed, unless sooner withdrawn by the person presenting the Debenture for redemption.

8. Redemption Procedure.

Debentures may be presented for redemption on behalf of a deceased beneficial owner or a deceased Debentureholder by delivering to the Trustee: (1) a written request for redemption signed by an authorized officer of a Qualified Institution holding such Debenture on behalf of such deceased Debentureholder or by such deceased Debentureholder's personal representatives or surviving joint tenant, or tenant by the entirety, or tenant in common, (2) the Debenture to be redeemed, and (3) appropriate evidence of death and, if the request is made by a personal representative of a deceased Debentureholder, appropriate evidence of authority. No particular forms of request for redemption or evidence of death or authority to request redemption are required but each must be in a form satisfactory to the Trustee. The price to be paid by the Corporation for all Debentures presented to it pursuant to the provisions described in this paragraph is 100% of the principal amount thereof plus accrued unpaid interest to the date of payment. Any acquisition of Debentures by the Corporation or its Subsidiaries in excess of the limitations described herein or made on the open market shall not be included in the computation of either the \$25,000 or \$600,000 limitations for any period.

For purposes of this paragraph, a Debenture held in joint tenancy, tenancy by the entirety, or tenancy in common will be deemed to be held by a single Debentureholder and the death of a joint tenant, tenant by the entirety or tenant in common will be deemed to be the death of a Debentureholder. The death of a person, who, during his lifetime, was entitled

to substantially all of the beneficial ownership interest of a Debenture will be deemed the death of the Debentureholder, regardless of the registered Debentureholder, if such beneficial interest can be established to the satisfaction of the Trustee. Such beneficial interest shall be deemed to exist in typical cases of street name or nominee ownership, ownership under the Uniform Gifts to Minors Act, community property or other joint ownership arrangements between a husband and wife (including individual retirement accounts or Keogh [H.R. 10] plans maintained solely by or for the decedent, or by or for the decedent and his or her spouse), and trust and certain other arrangements where one person has substantially all of the beneficial ownership interest in the Debenture during his lifetime. Beneficial interest shall include the power to sell, transfer or otherwise dispose of a Debenture and the right to receive the proceeds therefrom, as well as interest and principal payable with respect thereto.

In the case of a Debenture presented for redemption by a Qualified Institution (as such term is defined in the Indenture), on behalf of deceased beneficial owners, the \$25,000 limitation shall apply to each such beneficial owner and the death of such beneficial owner shall entitle a Qualified Institution to seek redemption of such Debentures as if the deceased beneficial owner were the Debentureholder. A Qualified Institution, in its request for redemption on behalf of such beneficial owners, must submit evidence, satisfactory to the Trustee, that it holds Debentures on behalf of such beneficial owners and must certify that the aggregate requests for redemption tendered by such Qualified Institution on behalf of each such beneficial owner in any such twelve-month period does not exceed \$25,000. In addition, any request for redemption made by a Qualified Institution on behalf of a beneficial owner must be delivered to the Trustee by registered mail, return receipt requested.

In the case of a Debenture which is presented for redemption in part only, upon such redemption, the Corporation shall execute and the Trustee shall authenticate and deliver to, or on order of, the presenting person a new Debenture in the principal amount equal to the unredeemed portion of the principal of the Debenture so presented.

In the case of any Debenture which is presented for redemption pursuant to this paragraph and which has not been redeemed at the time the Corporation gives notice of its election to redeem Debentures pursuant to paragraph 5, such Debenture shall first be subject to redemption pursuant to paragraph 5 and if any such Debenture or portion thereof is not redeemed pursuant to paragraph 5 it shall remain subject to redemption pursuant to this paragraph.

Any Debenture presented for redemption upon the death of the Debentureholder or beneficial owner thereof may be withdrawn by the person presenting the same upon delivery of a written request for such withdrawal given to the Trustee prior to issuance of the check in redemption of the Debenture.

9. Conversion.

A holder of a Debenture may convert it into Common Stock of the Corporation at any time before the close of business on March 1, 2012. If the Debenture is called for redemption, the holder may convert the Debenture at any time before the close of business on the redemption date. The initial conversion price is \$29.85 per share, subject to adjustments due to certain events set forth in the Indenture. The number of shares of Common Stock issuable upon conversion of a Debenture is determined by dividing the principal amount to be converted by the conversion price in effect on the conversion date. On conversion, no payment or adjustment for interest will be made. The Corporation will issue a check in lieu of the issuance of a fraction of a share.

To convert a Debenture, a holder must (1) complete and sign the conversion notice on the back of the Debenture, (2) surrender the Debenture to the Conversion Agent, (3) furnish appropriate endorsements and transfer documents if required by the Registrar and the Conversion Agent, and (4) pay any transfer or similar tax if required. A holder may convert a portion of a Debenture if the portion is \$1,000 or an integral multiple thereof.

The conversion price will be adjusted for dividends or distributions on Common Stock payable in the Corporation's stock; subdivisions, combinations and certain reclassifications of Common Stock; distributions to all holders of Common Stock of certain rights to purchase Common Stock at less than the then current market value; and distributions to such holders of assets or debt securities of the Corporation or certain rights to purchase securities of the Corporation (excluding cash dividends or distributions from current or retained earnings). However, (1) no adjustment will be made unless the cumulative effect on the conversion price of all such dividends, distributions, subdivisions, combinations and reclassifications shall exceed 1% or the cumulative effect of all such distributions shall exceed 5%, and (2) no adjustment need be made if holders may participate in the transaction or in certain other cases set forth in the Indenture. The Corporation may, from time to time, voluntarily reduce the conversion price for a period of time.

If the Corporation is a party to a consolidation or merger or a transfer or lease of all or substantially all of its assets, the right to convert a Debenture into Common Stock

may be changed into a right to convert the Debenture into securities, cash or other assets of the Corporation or another corporation.

10. Denominations, Transfer, Exchange.

The Debentures are in registered form without coupons in denominations of \$1,000 and integral multiples thereof. The transfer of Debentures may be registered and Debentures may be exchanged as provided in the Indenture. The Registrar may require a holder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Indenture. The Registrar need not exchange or register the transfer of any Debenture or portion of a Debenture selected for redemption. Also, it need not exchange or register the transfer of any Debentures for a period of 15 days before a selection of Debentures to be redeemed.

11. Persons Deemed Owners.

The registered holder of a Debenture may be treated as its owner for all purposes.

12. Amendments, Supplements and Waivers.

Subject to certain exceptions, the Indenture or the Debenture may be amended or supplemented, and any existing default may be waived, with the consent of holders of a majority in principal amount of the Debentures then outstanding. Without the consent of any Debentureholder, the Indenture or the Debentures may be amended to cure any ambiguity, defect or inconsistency, to provide for assumption of the Corporation's obligations to Debentureholders or to make any change that does not adversely affect the rights of any Debentureholder.

13. Defaults and Remedies.

The principal hereof may be declared due prior to the maturity date hereinbefore named upon the occurrence of an Event of Default as the Indenture provides.

An Event of Default is: default for 30 days in payment of interest on the Debentures; default in payment of principal on the Debentures; failure by the Corporation for 90 days after notice to it to comply with any of its other agreements in the Indenture or the Debentures; default in the payment of indebtedness having an outstanding principal balance of \$10,000,000 or more under certain circumstances; and certain events of bankruptcy or insolvency. If an Event of Default occurs and is continuing, the Trustee or the holders of at least 25% in principal amount of the Debentures may declare all

the Debentures to be due and payable immediately. Debentureholders may not enforce the Indenture or the Debentures except as provided in the Indenture. The Trustee may require indemnity satisfactory to it before it enforces the Indenture or the Debenture. Subject to certain limitations, holders of a majority in principal amount of the Debentures may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Debentureholders notice of any continuing default (except a default in payment of principal or interest) if it determines that withholding notice is in their interests. The Corporation must furnish an annual compliance certificate to the Trustee.

14. Trustee Dealings with Corporation.

Centerre Trust Company of St. Louis, the Trustee under the Indenture, in its individual or any other capacity, may make loans to, accept deposits from, and perform services for the Corporation or its Affiliates, and may otherwise deal with the Corporation or its Affiliates, as if it were not the Trustee.

15. No Recourse Against Others.

A director, officer, employee or stockholder, as such, of the Corporation shall not have any liability for any obligations of the Corporation under the Debenture or the Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. Each Debentureholder by accepting a Debenture waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Debentures.

16. Authentication.

This Debenture shall not be valid until authenticated by the manual signature of the Trustee or an authenticating agent.

17. Abbreviations.

Customary abbreviations may be used in the name of a Debentureholder or an assignee, such as TEN COM (= tenants in common), TEN ENT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= Custodian), and U/G/M/A (= Uniform Gifts to Minors Act).

The Corporation will furnish to any Debentureholder upon written request and without charge a copy of the Indenture, which has in it the text of this Debenture in larger type. Requests may be made to: Corporate Secretary, NORTHWEST NATURAL GAS COMPANY, One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209.

ASSIGNMENT FORM

I/We assign and transfer this Debenture to
[]
(Insert assignee's social security or tax I.D. number)

(Print or type name, address and zip code of assignee)

and irrevocably appoint _____ agent to transfer this Debenture on the books of the Corporation. The agent may substitute another to act for him.

Date: _____ Signature _____
(Sign exactly as your name appears on the other side of this Debenture)

CONVERSION NOTICE

I/We convert \$ _____ in principal amount of the Debenture(s) into Common Stock of the Corporation at the current conversion price.

I/We request that the stock certificate be prepared in the same manner as is this Debenture or, alternatively, in the name of the person specified below:

[]
(Insert other person's social security or tax I. D. number)

(Print or type name, address and zip code of other person)

Date: _____ Signature _____
(Sign exactly as your name appears on the front side of this Debenture)

EXECUTED IN 40 COUNTERPARTS OF
WHICH THIS IS COUNTERPART NO. 36

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

SIXTEENTH SUPPLEMENTAL INDENTURE
providing among other things for
First Mortgage Bonds, 9.80% Series due 2018

Dated as of November 1, 1988

SIXTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of November, 1988, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Sixteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Sixteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

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February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture) and its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture); and

WHEREAS said First through Fourteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Sixteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture); and

WHEREAS said Fifteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	July 3, 1986	M-78662-86	-
Clackamas	July 7, 1986	86 24733	-
Clatsop	July 3, 1986	658	288
Columbia	July 3, 1986	197	114
Coos	July 7, 1986	86-3-2413	-
Douglas	July 3, 1986	951	551
Hood River	July 3, 1986	861198	-
Lane	July 21, 1986	1411R (#8627177)	-
Lincoln	July 7, 1986	172	809
Linn	July 3, 1986	414	743
Marion	July 3, 1986	472	468
Multnomah	July 3, 1986	1918	305
Polk	July 3, 1986	195	731
Tillamook	July 3, 1986	304	575
Wasco	July 3, 1986	861538	-
Washington	July 3, 1986	86028953	-
Yamhill	July 7, 1986	204	1510

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	July 3, 1986	K 52983

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	July 3, 1986	399	1
Klickitat	July 3, 1986	138	112
Skamania	July 3, 1986	101	752

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 3, 1986	86-188-0036

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
4-3/4% Series due 1989.....	\$ 4,200,000
5-3/4% Series due 1991.....	\$ 9,765,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$12,951,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	None
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$50,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First

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Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Sixteenth Supplemental Indenture, and the terms of the bonds of the Seventeenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

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NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat

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or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Sixteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other

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obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Sixteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth

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in the Mortgage, as heretofore supplemented, this Sixteenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Seventeenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9.80% Series due 2018" (herein sometimes referred to as the "Seventeenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Article I and in Articles II and III specified. Bonds of the Seventeenth Series shall be limited to \$25,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on November 1, 2018, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Seventeenth Series shall bear interest at the rate of 9.80% per annum, the first interest payment to be made May 1, 1989 for the period from the date of first authentication by the Corporate Trustee of bonds of the Seventeenth Series to May 1, 1989, with subsequent interest payments to be made semi-annually on November 1 and May 1 of each year; and the principal of, premium, if any, and interest on each

said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Seventeenth Series shall be dated as in Section 10 of the Mortgage provided.

Interest on bonds of the Seventeenth Series will also be payable on any interest payment date by electronic funds transfer to the account of any holder of bonds of said series in the aggregate principal amount of \$1,000,000 or more at a commercial bank located in the United States; provided that such bondholder requests electronic funds transfer and provides the Corporate Trustee with wire transfer instructions no later than ten days prior to such interest payment date.

Notice shall be given by or on behalf of the Company by first class mail, not less than thirty (30) days nor more than forty-five (45) days before the maturity date of the bonds of the Seventeenth Series, of such maturity date. Such notice shall be sent to each bondholder at his address appearing upon the registry books.

Bonds of the Seventeenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending October 31,

1989.....105.00%	1999.....102.00%	2009.....100.00%
1990.....105.00%	2000.....101.50%	2010.....100.00%
1991.....105.00%	2001.....101.00%	2011.....100.00%
1992.....105.00%	2002.....100.50%	2012.....100.00%
1993.....105.00%	2003.....100.50%	2013.....100.00%
1994.....104.50%	2004.....100.00%	2014.....100.00%
1995.....104.00%	2005.....100.00%	2015.....100.00%
1996.....103.50%	2006.....100.00%	2016.....100.00%
1997.....103.00%	2007.....100.00%	2017.....100.00%
1998.....102.50%	2008.....100.00%	2018.....100.00%

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in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Seventeenth Series may be redeemed at said general redemption prices prior to November 1, 1993, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 10.29% per annum.

Bonds of the Seventeenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Seventh, Eighth or Tenth Series remain Outstanding) or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending October 31,

1989.....100.00%	1999.....100.00%	2009.....100.00%
1990.....100.00%	2000.....100.00%	2010.....100.00%
1991.....100.00%	2001.....100.00%	2011.....100.00%
1992.....100.00%	2002.....100.00%	2012.....100.00%
1993.....100.00%	2003.....100.00%	2013.....100.00%
1994.....100.00%	2004.....100.00%	2014.....100.00%
1995.....100.00%	2005.....100.00%	2015.....100.00%
1996.....100.00%	2006.....100.00%	2016.....100.00%
1997.....100.00%	2007.....100.00%	2017.....100.00%
1998.....100.00%	2008.....100.00%	2018.....100.00%

in each case, together with accrued interest to the date fixed for redemption.

ARTICLE II.

Redemption of Bonds of the Seventeenth Series upon Death of the Bondholder or Beneficial Owner.

SECTION 2.01. The Company shall redeem any bond of the Seventeenth Series, or a portion of a bond (in the principal amount of \$1,000 or integral multiples thereof), within sixty (60) days following receipt by the Corporate

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Trustee of a request therefor, in accordance with Section 2.02, (A) from a bank, trust company or broker-dealer, which represents in writing that it is a member of a national securities exchange or the National Association of Securities Dealers, Inc. (each hereinafter referred to as a "Qualified Institution"), holding such bond for a deceased beneficial owner, (B) from a registered holder of a bond (other than a Qualified Institution) holding such bond for a deceased beneficial owner or (C) from a deceased bondholder's personal representative, surviving joint tenant, tenant by the entirety or tenant in common, subject to the limitations that the Company shall not be obligated to redeem during any twelve-month period ending on any October 31: (i) the portion of a bond or bonds presented on behalf of a deceased beneficial owner or deceased bondholder exceeding an aggregate principal amount of \$25,000 or (ii) bonds presented on behalf of all deceased beneficial owners and deceased bondholders exceeding \$1,000,000 in aggregate principal amount. If the Company, although not obligated to do so, chooses to redeem a portion of a bond or bonds of any deceased beneficial owner or deceased bondholder in any such twelve-month period in excess of the \$25,000 limitation, such redemption, to the extent that it exceeds such \$25,000 limitation, shall not be included in the computation of the \$1,000,000 limitation for such period or any succeeding period or the \$25,000 limitation for any succeeding period. Any acquisition of bonds by the Company, other than by redemption upon the death of a beneficial owner or bondholder pursuant to this Article II, shall not be included in the computation of either the \$25,000 or the \$1,000,000 limitation for any period.

SECTION 2.02. Bonds of the Seventeenth Series which are to be redeemed pursuant to this Article II shall be redeemed in accordance with the provisions set forth in this Article II, notwithstanding anything to the contrary in the Mortgage; provided, however, that the provisions of Section 56 of the Mortgage shall apply to bonds redeemed pursuant to this Article II. Bonds shall be redeemed in the order of their receipt by the Corporate Trustee, except as hereinafter provided. Any bond or portion thereof not redeemed in any such twelve-month period because of the \$25,000 or \$1,000,000 limitation shall be held in order of receipt for redemption during the following twelve-month period(s) until redeemed unless sooner withdrawn in accordance with Section 2.03.

Bonds may be presented on behalf of a deceased beneficial owner or a deceased bondholder for redemption by delivering to the Corporate Trustee: (1) a written

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request for redemption signed by an authorized officer of a Qualified Institution or by the registered holder of a bond (other than a Qualified Institution) holding such bond for a deceased beneficial owner or by the deceased bondholder's personal representative, surviving joint tenant, tenant by the entirety or tenant in common, (2) the bond(s) to be redeemed and (3) a certificate evidencing the death of the beneficial owner or bondholder and appropriate evidence of authority in the case of a request by a personal representative. No particular forms of request for redemption or evidence of authority to request redemption shall be required, but each must be in a form satisfactory to the Corporate Trustee. The redemption price to be paid by the Company for all bonds presented to it pursuant to this Article II shall be 100% of the principal amount of the bonds to be redeemed, together with accrued interest to the date of redemption.

For purposes of this Article II, a bond held in joint tenancy, tenancy by the entirety or tenancy in common shall be deemed to be held by a single bondholder and the death of any such joint tenant, tenant by the entirety or tenant in common shall be deemed to be the death of such bondholder. The death of a person, who, during his lifetime, was entitled to substantially all of the beneficial ownership interest of a bond shall be deemed to be the death of the bondholder, regardless of the registered bondholder, if such beneficial interest shall be established by a certificate evidencing the same which is delivered to the Corporate Trustee. Such beneficial interest shall be deemed to exist in cases of street name or nominee ownership, ownership under the Uniform Gifts to Minors Act of any jurisdiction, community property or other joint ownership arrangements between a husband and wife (including, without limitation, individual retirement accounts or Keogh [H.R. 10] plans maintained solely by or for the decedent or by or for the decedent and his spouse), and trust and other arrangements where one person has substantially all of the beneficial ownership interest in the bond during his lifetime. Beneficial interest shall include the power to sell, transfer or otherwise dispose of a bond and the right to receive the proceeds therefrom, as well as interest and principal payable with respect thereto.

In the case of a bond or bonds presented for redemption by a Qualified Institution on behalf of a deceased beneficial owner, the \$25,000 limitation shall apply to each such beneficial owner. A Qualified Institution, in its request for redemption on behalf of a deceased beneficial owner, must submit evidence, satis-

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factory to the Corporate Trustee, that it holds the bond(s) on behalf of such beneficial owner and must certify as to the aggregate principal amount of bonds theretofore presented for redemption by such Qualified Institution on behalf of such beneficial owner and the date of each such presentation and the principal amount of bonds presented on each such date. In addition, any request for redemption made by a Qualified Institution on behalf of a deceased beneficial owner must be delivered to the Corporate Trustee by registered mail, return receipt requested.

On and after the date of redemption, except as hereinafter provided, bonds redeemed shall cease to bear interest and shall cease to be entitled to the benefit of the Lien of the Mortgage.

In the case of any bond which is redeemed in part only, upon such partial redemption, the Company shall execute and the Corporate Trustee shall authenticate and deliver without charge therefor to, or on the order of, the person presenting such bond for redemption a new bond or bonds in an aggregate principal amount equal to the unredeemed portion of the principal of the bond so presented. On and after the date of redemption, interest shall be payable only on the portion of each such bond not so redeemed and only such portion shall continue to be entitled to the benefit of the Lien of the Mortgage. Any such new bond or bonds representing a portion of a bond not redeemed in any twelve-month period because of the \$25,000 or \$1,000,000 limitation shall be held by the Corporate Trustee in accordance with the third sentence of the first paragraph of this Section 2.02.

In the case of any bond or portion thereof which is presented for redemption and which has not been redeemed at the time the Company mails notice of redemption of bonds pursuant to Article I, such bond or portion thereof shall first be subject to redemption pursuant to Article I and all or any part of such bond or portion thereof not called for redemption pursuant to Article I upon such notice shall then be subject to redemption pursuant to this Article II.

SECTION 2.03. Any bonds presented for redemption upon the death of the bondholder or the beneficial owner thereof may be withdrawn by the person presenting the same by written request for such withdrawal delivered to the Corporate Trustee prior to the issuance of a check in payment thereof.

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SECTION 2.04. The Corporate Trustee shall maintain at its corporate trust office a register in which it shall record, in order of receipt, all presentations for redemption received by the Corporate Trustee in accordance with this Article II. Unless withdrawn, all such requests shall remain in effect during the 12-month period in which they are received and thereafter from period to period, until the bonds which are the subject of such request have been redeemed.

ARTICLE III.

Exchanges and Transfers of Bonds of the Seventeenth Series.

SECTION 3.01. At the option of the registered owner, any bonds of the Seventeenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Seventeenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Seventeenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Seventeenth Series.

ARTICLE IV.

Miscellaneous Provisions.

SECTION 4.01. Subject to the amendments provided for in this Sixteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Sixteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

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SECTION 4.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Sixteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Sixteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Sixteenth Supplemental Indenture.

SECTION 4.03. Whenever in this Sixteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Sixteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 4.04. Nothing in this Sixteenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Sixteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Sixteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 4.05. This Sixteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

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IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 23rd day of November, 1988, as of November 1, 1988, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 28th day of November, 1988, as of November 1, 1988.

NORTHWEST NATURAL GAS COMPANY

By *Bruce R. DeBarr*
Senior Vice President,
Finance and Administration

Attest:

Virginia Maloney
Assistant Secretary

Executed, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY in
the presence of:

Susan R. Beauchamp

Leslie K. Aldrin

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BANKERS TRUST COMPANY, as Trustee,

By *Barbara A. Green*
Assistant Vice President

Attest:

V. Alan Fisher
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and
delivered by BANKERS TRUST
COMPANY and STANLEY BURG
in the presence of:

E. Richard Contant
Eric M. Hawner

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

November 23, A.D. 1988.

Before me personally appeared ^{Senior} BRUCE R. DEBOLT, who, being duly sworn, did say that he is Vice President, Finance and Administration, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

^{Senior} On this 23rd day of November, 1988, before me personally appeared BRUCE R. DEBOLT, to me known to be Vice President, Finance and Administration of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Delores J. Thrasher
DELORES J. THRASHER
Notary Public, State of Oregon
My Commission Expires October 8, 1989

STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

November 28, A.D. 1988.

Before me personally appeared BARBARA A. JOINER, who, being duly sworn, did say that she is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 28th day of November, 1988, before me personally appeared BARBARA A. JOINER, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



DESIREE MARSHALL

Notary Public, State of New York

No. 24-4885294

Qualified in Kings County

Certificate Filed in New York County

Commission Expires February 17, 1989

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

November 28, A.D. 1988.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 28th day of November, 1988.



DESIREE MARSHALL

Notary Public, State of New York
No. 24-4885294

Qualified in Kings County
Certificate Filed in New York County
Commission Expires February 17, 1989

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

SEVENTEENTH SUPPLEMENTAL INDENTURE

providing among other things for
First Mortgage Bonds, 9 1/8% Series due 2019

Dated as of October 1, 1989

SEVENTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of October, 1989, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Seventeenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Seventeenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

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February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), and its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture); and

WHEREAS said First through Fifteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Seventeenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture); and

WHEREAS said Sixteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	December 1, 1988	M-106910-88	-
Clackamas	December 1, 1988	88 50344	-
Clatsop	December 1, 1988	707	470
Columbia	December 1, 1988	88-6204	-
Coos	December 2, 1988	88-12-0109	-
Douglas	December 2, 1988	1042	119
Hood River	December 2, 1988	882808	-
Lane	December 1, 1988	1546R (8850420)	-
Lincoln	December 1, 1988	199	0823
Linn	December 1, 1988	487	472
Marion	December 2, 1988	659	370
Multnomah	December 2, 1988	2160	667
Polk	December 1, 1988	218	448
Tillamook	December 1, 1988	318	943
Wasco	December 1, 1988	883474	-
Washington	December 2, 1988	88-53799	-
Yamhill	December 1, 1988	F228PO068	-

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	December 2, 1988	N 01045

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	December 2, 1988	8812020080	-
Klickitat	December 1, 1988	250	294
Skamania	December 2, 1988	112	95

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 2, 1988	88-337-0063

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
4-3/4% Series due 1989.....	None
5-3/4% Series due 1991.....	\$ 9,518,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$11,739,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	None
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$48,000,000
9.80% Series due 2018.....	\$24,989,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First

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Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Seventeenth Supplemental Indenture, and the terms of the bonds of the Eighteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

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NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat

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or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Seventeenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and

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other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Seventeenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth

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in the Mortgage, as heretofore supplemented, this Seventeenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Eighteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9 1/8% Series due 2019" (herein sometimes referred to as the "Eighteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Article I and in Article II specified. Bonds of the Eighteenth Series shall be limited to \$25,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on October 1, 2019, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Eighteenth Series shall bear interest at the rate of 9 1/8% per annum, payable semi-annually on April 1 and October 1 of each year; and the principal of, and premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for

public and private debts. Bonds of the Eighteenth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Eighteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending September 30,

1990.....108.43%	2000.....104.22%	2010..... 100.00%
1991.....108.01%	2001.....103.80%	2011..... 100.00%
1992.....107.59%	2002.....103.37%	2012..... 100.00%
1993.....107.17%	2003.....102.95%	2013..... 100.00%
1994.....106.74%	2004.....102.53%	2014..... 100.00%
1995.....106.32%	2005.....102.11%	2015..... 100.00%
1996.....105.90%	2006.....101.69%	2016..... 100.00%
1997.....105.48%	2007.....101.27%	2017..... 100.00%
1998.....105.06%	2008.....100.85%	2018..... 100.00%
1999.....104.64%	2009.....100.43%	2019..... 100.00%

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Eighteenth Series may be redeemed at said general redemption prices prior to October 1, 1996, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 9.24% per annum.

(II) Bonds of the Eighteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Seventh, Eighth or Tenth Series remain Outstanding), or of Section 2 hereof, or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calen-

dar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due in accordance with the Total Special Redemption Fund Requirement for said calendar year, or

(2) in the case of redemption by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage or with the Proceeds of Released Property,

they shall be redeemable at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending September 30,

1990.....100.00%	2000.....100.00%	2010.....100.00%
1991.....100.00%	2001.....100.00%	2011.....100.00%
1992.....100.00%	2002.....100.00%	2012.....100.00%
1993.....100.00%	2003.....100.00%	2013.....100.00%
1994.....100.00%	2004.....100.00%	2014.....100.00%
1995.....100.00%	2005.....100.00%	2015.....100.00%
1996.....100.00%	2006.....100.00%	2016.....100.00%
1997.....100.00%	2007.....100.00%	2017.....100.00%
1998.....100.00%	2008.....100.00%	2018.....100.00%
1999.....100.00%	2009.....100.00%	2019.....100.00%

in each case, together with accrued interest to the date fixed for redemption.

(III) At the option of the registered owner, any bonds of the Eighteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of

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bonds of the same series of other authorized denominations.

Transfers of bonds of the Eighteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Eighteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Eighteenth Series.

ARTICLE II.

Special Redemption Fund for Bonds of the Eighteenth Series

Section 2. The Company covenants that, unless all bonds of the Eighteenth Series shall have ceased to be Outstanding, it will, as a Special Redemption Fund for the retirement of bonds of the Eighteenth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Eighteenth Series, on October 1 of each year, beginning with the year 1995, to and including the year 2018, equal to the Total Special Redemption Fund Requirement for said calendar year. The term "Total Special Redemption Fund Requirement" shall mean for any calendar year \$1,000,000 in cash and/or principal amount of bonds of the Eighteenth Series (herein called the "Mandatory Special Redemption Fund Requirement") plus the Optional Special Redemption Fund Payment, if any, for such calendar year. The term "Optional Special Redemption Fund Payment" shall mean, for any calendar year, any amount, not in excess of \$1,000,000 in cash and/or principal amount of bonds of the Eighteenth Series, that the Company elects to add to the Special Redemption Fund for such calendar year. At the option of the Company, Optional Special Redemption Fund Payments may (at any time after they are made) be applied (to the extent not theretofore so applied) in whole or in part from time to time, to reduce Mandatory Special Redemption Fund Requirements for subsequent years upon written notice to the Corporate Trustee.

The Company, at its option (as evidenced by a written order of any Vice President, its Treasurer or an

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Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Eighteenth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and cancelled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Seventeenth Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the Total Special Redemption Fund Requirement becoming due on October 1 of the then current year or the Mandatory Special Redemption Fund Requirement becoming due on October 1 of any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Eighteenth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on October 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee from time to time, as the Company may request, to the purchase of bonds of the Eighteenth Series, at public or private sale; provided, however, that the Corporate Trustee, before making any purchases of bonds as so provided shall by mail notify all registered owners of bonds of the Eighteenth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date

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the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices (including accrued interest and brokerage, if any) most favorable to the Company but not exceeding the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost), and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Eighteenth Series registered in the names of the owners offering bonds at such price, or to the redemption of bonds of the Eighteenth Series; provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Eighteenth Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Eighteenth Series Outstanding at the time of such consent, the Company may not deposit cash prior to October 1, 1996 in anticipation of the requirements of this Section, if the cash so deposited represents a part of a refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 9.24% per annum.

Any cash deposited under the provisions of this Section shall not be deemed to be Funded Cash; any bonds of the Eighteenth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall not be deemed to have been retired by the use of Funded Cash; and with respect to all credits taken under this Section on the basis of the purchase or redemption of bonds of the Eighteenth Series, it shall not be deemed that a credit has been taken under the Mortgage on the basis thereof.

Any bonds issued under the Mortgage, delivered to, deposited with or purchased or redeemed by, the Cor-

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porate Trustee pursuant to the provisions of this Section, shall forthwith be cancelled by the Corporate Trustee.

The Company shall forthwith from time to time on demand of the Corporate Trustee make further payments pursuant to the provisions of this Section on account of accrued interest, brokerage and premium, if any, on bonds of the Eighteenth Series purchased or redeemed or then to be purchased or redeemed but not in excess of

(AA) the aggregate cost for principal, interest, brokerage and premium, if any, on all bonds theretofore, or then to be, purchased and/or redeemed pursuant to the provisions of this Section

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Seventeenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Seventeenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Seventeenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Seventeenth Supplemental Indenture with the same force and

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effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Seventeenth Supplemental Indenture.

SECTION 3.03. Whenever in this Seventeenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Seventeenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.04. Nothing in this Seventeenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Seventeenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Seventeenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.05. This Seventeenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

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IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 19th day of October, 1989, as of October 1, 1989, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 23rd day of October, 1989, as of October 1, 1989.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By Bruce R. DeBolt
Senior Vice President,
Finance and Administration

Attest:

C.J. Rue
Secretary

Executed, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY in
the presence of:

Lou-Wayne Steiger

Leslie K. Alldrin

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BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By Barbara A. Joiner
Vice President

Attest:

Y. Petras Blue
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and
delivered by BANKERS TRUST
COMPANY and STANLEY BURG
in the presence of:

Todd A. Gasper

Eric M. Hawner

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STATE OF NEW YORK)
 : SS.:
COUNTY OF NEW YORK)

October 23, A.D. 1989.

Before me personally appeared BARBARA A. JOINER, who, being duly sworn, did say that she is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 23rd day of October, 1989, before me personally appeared BARBARA A. JOINER, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

Barbara A. Sheridan
BARBARA A. SHERIDAN
Notary Public, State of New York
No. 03-4802445
Qualified in Bronx County
Certificate Filed in New York County
Commission Expires February 28, 1991

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

October 23, A.D. 1989.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 23rd day of October, 1989.

[NOTARIAL SEAL]

Barbara A. Sheridan
BARBARA A. SHERIDAN
Notary Public, State of New York
No. 03-4802445
Qualified in Bronx County
Certificate Filed in New York County
Commission Expires February 28, 1991

SUMMARY OF RECORDING DATA
 IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
12	Benton	October 27, 1989	M-116844-89	-
13	Clackamas	October 30, 1989	89 48562	-
14	Clatsop	October 30, 1989	726	580
15	Columbia	October 27, 1989	89-6310	-
16	Coos	October 31, 1989	89-10-1993	-
17	Douglas	October 27, 1989	1079	129
18	Hood River	October 30, 1989	892994	-
19	Lane	October 27, 1989	8948696	-
20	Lincoln	October 27, 1989	210	0933
21	Linn	October 27, 1989	514	812
22	Marion	October 27, 1989	726	415
23	Multnomah	October 30, 1989	2248	1890
24	Polk	October 27, 1989	227	957
25	Tillamook	October 30, 1989	324	615
26	Wasco	October 27, 1989	893143	-
27	Washington	October 30, 1989	89-52457	-
28	Yamhill	October 31, 1989	F237P1391	-

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
10	Secretary of State	October 27, 1989	N 59689

IN THE STATE OF WASHINGTON
 Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
30	Clark	October 27, 1989	399	1
31	Klickitat	October 27, 1989	258	214
32	Skamania	October 30, 1989	116	503

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
29	Secretary of State	October 30, 1989	89-303-0651

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

EIGHTEENTH SUPPLEMENTAL INDENTURE

providing among other things for
First Mortgage Bonds, 9 3/4% Series due 2015

Dated as of July 1, 1990

EIGHTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of July, 1990, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Eighteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eighteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

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February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), and its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture); and

WHEREAS said First through Sixteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eighteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture); and

WHEREAS said Seventeenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	October 27, 1989	M-116844-89	-
Clackamas	October 30, 1989	89 48562	-
Clatsop	October 30, 1989	726	580
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Wasco	October 27, 1989	893143	-
Washington	October 30, 1989	89-52457	-
Yamhill	October 31, 1989	F237P1391	-

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	October 27, 1989	N 59689

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	October 27, 1989	399	1
Klickitat	October 27, 1989	258	214
Skamania	October 30, 1989	116	503

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	October 30, 1989	89-303-0651

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
5-3/4% Series due 1991.....	\$ 9,368,000
8-5/8% Series due 1996.....	\$11,668,000
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$48,000,000
9.80% Series due 2018.....	\$24,989,000
9-1/8% Series due 2019.....	\$25,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Di-

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rectors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Eighteenth Supplemental Indenture, and the terms of the bonds of the Nineteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid

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by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the trans-

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mission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Eighteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus,

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materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Eighteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Eighteenth Supplemental Indenture being supplemental thereto.

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AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Nineteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9 3/4% Series due 2015" (herein sometimes referred to as the "Nineteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Article I specified. Bonds of the Nineteenth Series shall be limited to \$50,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on July 1, 2015, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Nineteenth Series shall bear interest at the rate of 9 3/4% per annum, payable semi-annually on January 1 and July 1 of each year; and the principal of, and premium, if any, and interest on, each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Nineteenth Series shall be dated as in Section 10 of the Mortgage provided.

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(I) Bonds of the Nineteenth Series shall be redeemable on and after July 1, 2000, either at the option of the Company or pursuant to the requirements of the Mortgage including Section 64 thereof, in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

REDEMPTION PRICES

If redeemed during the 12 months period ending June 30,

2001.....104.63%	2009.....100.93%
2002.....104.17%	2010.....100.47%
2003.....103.70%	2011.....100.00%
2004.....103.24%	2012.....100.00%
2005.....102.78%	2013.....100.00%
2006.....102.32%	2014.....100.00%
2007.....101.85%	2015.....100.00%
2008.....101.39%	

in each case, together with accrued interest to the date fixed for redemption.

(II) At the option of the registered owner, any bonds of the Nineteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Nineteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Nineteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Nineteenth Series.

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ARTICLE II.

Miscellaneous Provisions.

SECTION 2.01. The Company reserves the right, without any consent or other action by holders of bonds of the Nineteenth Series or of any subsequently created series, to amend the Mortgage, as heretofore amended and supplemented, as follows:

To amend subdivision (B) of Section 7 and the first paragraph following such subdivision (B) to read as follows:

"(B) the Annual Interest Requirements, being the interest requirements, if any, at the stated rate or rates therefor for twelve (12) months upon:

(i) all bonds Outstanding hereunder at the date of such certificate, except any for the payment of which the bonds applied for in all pending applications included under (ii) below are to be issued; provided that, if any such series of Outstanding bonds bears interest at varying rates, then the interest on such series of bonds shall be computed at the average annual rate in effect for such series during the period of twelve (12) consecutive calendar months (or any portion thereof in which bonds of such series are Outstanding) being used for the calculation of Adjusted Net Earnings; and if such Outstanding bonds have been issued after the end of such twelve (12) consecutive calendar months, then computed at the initial rate upon issuance;

(ii) all bonds then applied for in pending applications, including the application in connection with which such certificate is made, computed at the initial rate upon issuance;

(iii) all Qualified Lien Bonds which will be Outstanding immediately after the authentication of the bonds then applied for in pending applications, including the application in connection with which such certificate is made; provided that, if any Qualified Lien Bonds bear interest at varying rates, then the interest on such Qualified Lien Bonds shall be computed at the average annual rate in effect for such Qualified Lien Bonds during the period

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of twelve (12) consecutive calendar months (or any portion thereof in which such Qualified Lien Bonds are Outstanding) being used for the calculation of Adjusted Net Earnings; and if such Qualified Lien Bonds have been issued after the end of such last month, then computed at the initial rate upon issuance;

(iv) the principal amount of all other indebtedness (except indebtedness for the payment of which the bonds applied for in all pending applications included under (ii) above are to be issued and indebtedness for the purchase, payment or redemption of which moneys in the necessary amount shall have been deposited with or be held by the Corporate Trustee or the trustee or other holder of a Qualified Lien or lien prior to the Lien of this Indenture upon property subject to the Lien of this Indenture with irrevocable direction so to apply the same; provided that, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee), outstanding in the hands of the public on the date of such certificate and secured by lien prior to the Lien of this Indenture upon property subject to the Lien of this Indenture, if said indebtedness has been assumed by the Company or if the Company customarily pays the interest upon the principal thereof; provided further that, if any such indebtedness bears interest at varying rates, then the interest on such indebtedness shall be computed at the average annual rate in effect for such indebtedness during the period of twelve (12) consecutive calendar months (or any portion thereof in which such indebtedness is outstanding) being used for the calculation of Adjusted Net Earnings; and if such indebtedness has been issued after the end of such twelve (12) consecutive calendar months, then computed at the initial rate upon issuance.

In calculating such Adjusted Net Earnings, all the Company's expenses for taxes (other than income, profits and other taxes measured by, or dependent on, net income), assessments, rentals and insurance shall be included in its operating expenses, or otherwise deducted from its revenues and income; provided, however, that no expenses or provisions for interest

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on any of its indebtedness or for the amortization of debt discount, premium and expense, or loss on reacquired debt, amortization of property (other than depreciation or other similar provisions for property retirement), or for other amortization, or for any other extraordinary charge to income of whatever kind or nature, or for refunds of revenues previously collected by the Company subject to possible refund, or for any improvement or sinking fund or other device for the retirement of any indebtedness, shall be required to be included in operating expenses to be deducted from or shall be otherwise required to be deducted from, its revenues or its other income and no extraordinary items of any kind or nature shall be included in calculating such Adjusted Net Earnings."

SECTION 2.02. The Company reserves the right, without any consent or other action by holders of bonds of the Nineteenth Series or of any subsequently created series, to amend the Mortgage, as heretofore amended and supplemented, as follows:

To amend the provisions of Sections 25, 26, 59 and 61 of the Mortgage by substituting the phrase "seventy per centum (70%)" for the phrase "sixty per centum (60%)" and substituting the phrase "ten-sevenths (10/7ths)" for the phrase "ten-sixths (10/6ths)" each time such phrase or phrases occur in said Sections.

SECTION 2.03. The Company reserves the right, without any consent or other action by holders of bonds of the Nineteenth Series or of any subsequently created series, to amend the Mortgage, as heretofore amended and supplemented, as follows:

To amend subdivision (1) of Section 59 of the Mortgage to read as follows:

"(i) an Officers' Certificate describing in reasonable detail the property to be released and requesting such release";

To amend subdivisions (3)(b) and (c) of Section 59 of the Mortgage to read as follows:

"(b) the fair value, and the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost), in the opinion of the signers, of the property (or securities) to be released; (c) the Cost

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(or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost), in the opinion of the signers, of any portion thereof that is Funded Property;"

To amend the first six lines of subdivision (4) of Section 59 of the Mortgage to read as follows:

"(4) an amount in cash, to be held by the Corporate Trustee as part of the Mortgaged and Pledged Property, equivalent to the amount, if any, by which the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost) of the property to be released, as specified in the Engineer's Certificate provided for in subdivision (3) above, exceeds the aggregate of the following items:"

To amend Section 60 of the Mortgage by inserting "(I)" before the word "Unless" in the first line thereof, and by adding the following Subsection (II) after Section 60 (I).

"(II) Unless the Company is in default in the payment of the interest on any bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, the Company may obtain the release of any of the Mortgaged and Pledged Property which is not Funded Property, except cash then held by the Corporate Trustee (provided, however, that Qualified Lien Bonds deposited with the Corporate Trustee shall not be released except as provided in Article IX hereof and obligations secured by purchase money mortgage deposited with the Corporate Trustee shall not be released except as provided in Section 61 hereof), and the Trustees or the Corporate Trustee shall release all the right, title and interest of the Trustees in and to the same from the Lien hereof upon the application of the Company and receipt by the Corporate Trustee of the following (in lieu of complying with the requirements of Section 59 hereof):

(1) an Officers' Certificate complying with the requirements of Section 121 hereof and describing in reasonable detail the property to be released and requesting such release, and stating:

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(a) that the Company is not in default in the payment of interest on any bonds then Outstanding hereunder and that none of the Defaults defined in Section 65 hereof has occurred and is continuing;

(b) that the Company has sold, leased, granted an interest in property, exchanged, dedicated or disposed of, or intends or has agreed to sell, lease, grant an interest in property, exchange, dedicate or dispose of, or that a governmental body or agency has exercised a right to order the Company to divest itself of, the property to be released;

(c) that the property to be released is not Funded Property;

(d) that (except in any case where a governmental body or agency has exercised a right to order the Company to divest itself of such property) such release is in the opinion of the signers desirable in the conduct of the business of the Company; and

(e) the amount of cash and/or principal amount of obligations secured by purchase money mortgage received or to be received for any portion of said property sold to any Federal, State, County, Municipal or other governmental bodies or agencies or public or semi-public corporations, districts, or authorities;

(2) an Engineer's Certificate, complying with the requirements of Section 121 hereof, made and dated not more than ninety (90) days prior to the date of such application, stating:

(a) the fair value, in the opinion of the signers, of the property (or securities) to be released;

(b) that in the opinion of the signers such release will not impair the security under this Indenture in contravention of the provisions hereof; and

(c) that the Company has Property Additions constituting property which is

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not Funded Property (not including the Property Additions then being released) of a Cost or fair value to the Company (whichever is less) of not less than one dollar (\$1) (after making any deductions and any additions pursuant to the provisions of Section 4 hereof) and after deducting the Cost of the property then being released;

(3) an Opinion of Counsel complying with the requirements of Section 121 hereof and stating that all conditions precedent provided for in this Indenture relating to the release of the property in question have been complied with; and

(4) in case the Trustees or the Corporate Trustee shall be requested to release any franchise, an Opinion of Counsel complying with the requirements of Section 121 hereof and stating that in his or their opinion such release will not impair to any material extent the right of the Company to operate any of its remaining properties."

To amend the fourth paragraph of Section 3 of the Mortgage to read as follows:

"The term "Engineer's Certificate" shall mean a certificate signed by the President or a Vice-President of the Company and by an Engineer (who may be an employee of the Company) appointed by the Board of Directors of the Company, provided, however, if any property or securities are to be released from the Lien of this Indenture, the Engineer's Certificate as to the fair value of such property or securities and as to matters referred to in clause (f) of subdivision (3) of Section 59 hereof or in clause (b) of subdivision (2) of Section 60 (II) hereof shall be made by an independent Engineer, appraiser, or other expert, if the fair value of such property or securities and of all other property or securities released since the commencement of the then current calendar year, as set forth in the certificates required by this Indenture, is ten per centum (10%) or more of the aggregate principal amount of the bonds at the time Outstanding; but such a certificate of an independent Engineer, appraiser, or other expert shall not be required in the case of any release of property or securities, if the fair value thereof as set forth in the certificates required by this Indenture is less than Twenty-five

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Thousand Dollars (\$25,000) or less than one per centum (1%) of the aggregate principal amount of the bonds at the time Outstanding. If and to the extent required by the provisions of Section 121 hereof, each such certificate shall include the statements provided for in said Section."

SECTION 2.04. Subject to the amendments provided for in this Eighteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Eighteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 2.05. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Eighteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Eighteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Eighteenth Supplemental Indenture.

SECTION 2.06. Whenever in this Eighteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Eighteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 2.07. Nothing in this Eighteenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Eighteenth Supplemental Indenture or any

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covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Eighteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 2.08. This Eighteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

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IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 28th day of June, 1990, as of July 1, 1990, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries on the 29th day of June, 1990, as of July 1, 1990, in The City of New York; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, in The City of New York, on the 2nd day of July, 1990, as of July 1, 1990.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By Bruce R. DeBolt
Senior Vice President and
Chief Financial Officer

Attest:

C. J. Rue
Secretary

Executed, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY in
the presence of:

Susana M. Jordan

Sharon A. Khormooji

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BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By Barbara A. Joiner
Vice President

Attest:

Rosemary Melendez
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and
delivered by BANKERS TRUST
COMPANY and STANLEY BURG
in the presence of:

John M. Stuart

Maria Ross

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STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

June 28, A.D. 1990.

Before me personally appeared BRUCE R. DEBOLT, who, being duly sworn, did say that he is Senior Vice President and Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 28th day of June, 1990, before me personally appeared BRUCE R. DEBOLT, to me known to be Senior Vice President and Chief Financial Officer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

Virginia M. Vance

VIRGINIA M. VANCE
Notary Public, State of Oregon
My Commission Expires March 24, 1991

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 29, A.D. 1990.

Before me personally appeared BARBARA A. JOINER, who, being duly sworn, did say that she is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 29th day of June, 1990, before me personally appeared BARBARA A. JOINER, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

Desiree Marshall

DESIREE MARSHALL
Notary Public, State of New York
No. 24-4885294
Qualified in Kings County
Certificate Filed in New York County
Commission Expires February 17, 1991

SUMMARY OF RECORDING DATA
IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
12	Benton	July 5, 1990	M-124638-90	-
13	Clackamas	July 5, 1990	90 32191	-
14	Clatsop	July 5, 1990	740	116
15	Columbia	July 6, 1990	90-3628	-
16	Coos	July 5, 1990	90-7-0187	-
17	Douglas	July 5, 1990	1103	916
18	Hood River	July 5, 1990	901847	-
19	Lane	July 5, 1990	9031527	-
20	Lincoln	July 5, 1990	218	2391
21	Linn	July 5, 1990	535	950
22	Marion	July 9, 1990	783	40
23	Multnomah	July 5, 1990	2320	0466
24	Polk	July 6, 1990	233	1777
25	Tillamook	July 5, 1990	329	220
26	Wasco	July 5, 1990	902494	-
27	Washington	July 5, 1990	90-35190	-
28	Yamhill	July 6, 1990	F245P0613	-

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
10	Secretary of State	July 10, 1990	P03266

IN THE STATE OF WASHINGTON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
30	Clark	July 5, 1990	9007050038	
31	Klickitat	July 5, 1990	264	877
32	Skamania	July 5, 1990	119	651

File as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
29	Secretary of State	July 19, 1990	90-200-0195

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

NINETEENTH SUPPLEMENTAL INDENTURE
providing among other things for
First Mortgage Bonds, designated
Secured Medium-Term Notes, Series A

Dated as of June 1, 1991

NINETEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of June, 1991, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Nineteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Nineteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

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February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), and its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture); and

WHEREAS said First through Seventeenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Nineteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Eighteenth Supplemental Indenture, dated as of July 1, 1990 (hereinafter called its Eighteenth Supplemental Indenture); and

WHEREAS said Eighteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	July 5, 1990	M-124638-90	--
Clackamas	July 5, 1990	90 32191	--
Clatsop	July 5, 1990	740	116
Columbia	July 6, 1990	90-3628	--
Coos	July 5, 1990	90-7-0187	--
Douglas	July 5, 1990	1103	916
Hood River	July 5, 1990	901847	--
Lane	July 5, 1990	9031527	--
Lincoln	July 5, 1990	218	2391
Linn	July 5, 1990	535	950
Marion	July 9, 1990	783	40
Multnomah	July 5, 1990	2320	0466
Polk	July 6, 1990	233	1777
Tillamook	July 5, 1990	329	220
Wasco	July 5, 1990	902494	--
Washington	July 5, 1990	90-35190	--
Yamhill	July 6, 1990	F245P0613	--

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	July 10, 1990	P03266

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	July 5, 1990	9007050038	
Klickitat	July 5, 1990	264	877
Skamania	July 5, 1990	119	651

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 19, 1990	90-200-0195

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
8-5/8% Series due 1996.....	\$11,658,000
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$46,000,000
9.80% Series due 2018.....	\$24,938,000
9-1/8% Series due 2019.....	\$25,000,000
9-3/4% Series due 2015.....	\$50,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Di-

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rectors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Nineteenth Supplemental Indenture, and the terms of the bonds of the Twentieth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid

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by the Trustees at or before the en sealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the trans-

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mission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Nineteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus,

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materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Nineteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Nineteenth Supplemental Indenture being supplemental thereto.

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AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Twentieth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "Secured Medium-Term Notes, Series A" (herein sometimes referred to as the "Twentieth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Article I specified. Bonds of the Twentieth Series shall be issued from time to time in an aggregate principal amount not to exceed \$100,000,000 at any one time Outstanding except as provided in Section 16 of the Mortgage and shall be issued as fully registered bonds in denominations of One Hundred Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars in excess of One Hundred Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); each bond of the Twentieth Series shall mature on such date not less than nine months nor more than thirty years from its date of issue, shall bear interest at such rate or rates (which may be either fixed or variable) and have such other terms and provisions not inconsistent with the Mortgage as the Board of Directors may determine in accordance with a Resolution filed with the Corporate Trustee referring to this Nineteenth Supplemental Indenture; interest on bonds of the Twentieth Series which bear interest at a fixed rate shall be payable semi-annually on June 1 and December

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1 of each year and at maturity (each an interest payment date); and interest on bonds of the Twentieth Series which bear interest at a variable rate shall be payable on the dates which shall be established on the Issue Date with respect to such bonds and set forth in such bonds (each also an interest payment date). Notwithstanding the foregoing, so long as there is no existing default in the payment of interest on the bonds of the Twentieth Series, all bonds of the Twentieth Series authenticated by the Corporate Trustee after the Record Date hereinafter specified for any interest payment date, and prior to such interest payment date (unless the Issue Date is after such Record Date), shall be dated the date of authentication, but shall bear interest from such interest payment date, and the person in whose name any bond of the Twentieth Series is registered at the close of business on any Record Date with respect to any interest payment date shall be entitled to receive the interest payable on such interest payment date, notwithstanding the cancellation of such bond of the Twentieth Series, upon any transfer or exchange thereof subsequent to the Record Date and on or prior to such interest payment date; provided, that, (i) if the Issue Date of bonds of the Twentieth Series of a designated interest rate and maturity is after a Record Date and prior to the corresponding interest payment date, such bonds shall bear interest from the Issue Date but payment of interest shall commence on the second interest payment date succeeding the Issue Date, and (ii) interest payable on the maturity date will be payable to the person to whom the principal thereof shall be payable. "Record Date" for bonds of the Twentieth Series which bear interest at a fixed rate shall mean May 15 for interest payable June 1 and November 15 for interest payable December 1, and for bonds of the Twentieth Series which bear interest at a variable rate, the date 15 calendar days prior to any interest payment date. "Issue Date" with respect to bonds of the Twentieth Series of a designated interest rate and maturity shall mean the date of first authentication of bonds of such designated interest rate and maturity. The principal of, and premium, if any, and interest on, each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twentieth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Twentieth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage, in whole at any time, or, if specified on the face of any bond of the Twentieth

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Series, in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, as the Board of Directors may determine in accordance with a Resolution filed with the Corporate Trustee referring to this Nineteenth Supplemental Indenture; provided, however, that bonds of the Twentieth Series shall not be redeemable pursuant to Section 64 of the Mortgage.

(II) At the option of the registered owner, any bonds of the Twentieth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations which have the same Issue Date, maturity date, and redemption provisions, if any, and which bear interest at the same rate.

Transfers of bonds of the Twentieth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Twentieth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Twentieth Series.

ARTICLE II.

Miscellaneous Provisions.

SECTION 2.01. Subject to the amendments provided for in this Nineteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Nineteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 2.02. The holders of bonds of the Twentieth Series consent that the Company may, but shall not be obligated to, fix a record date for the purpose of determining the holders of bonds of the Twentieth Series

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entitled to consent to any amendment, supplement or waiver. If a record date is fixed, those persons who were holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to consent to such amendment, supplement or waiver or to revoke any consent previously given, whether or not such persons continue to be holders after such record date. No such consent shall be valid or effective for more than 90 days after such record date.

SECTION 2.03. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Nineteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Nineteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Nineteenth Supplemental Indenture.

SECTION 2.04. Whenever in this Nineteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Nineteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 2.05. Nothing in this Nineteenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Nineteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Nineteenth Supplemental Indenture shall

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be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 2.06. Except to the extent specifically provided herein, no provision of this Nineteenth Supplemental Indenture is intended to reinstate any provisions in the Mortgage which were amended and superseded by the amendments to the Trust Indenture Act of 1939 effective as of November 15, 1990.

SECTION 2.07. This Nineteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 10th day of June, 1991, as of June 1, 1991, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries on the 7th day of June, 1991, as of June 1, 1991, in The City of New York; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, in The City of New York, on the 7th day of June, 1991, as of June 1, 1991.

NORTHWEST NATURAL GAS COMPANY

By Bruce R. DeBolt
Senior Vice President and
Chief Financial Officer

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Attest:

C.J. Rue
Secretary

Executed, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY in
the presence of:

Susana M. Jordan

Lou-Wayne Steiger

BANKERS TRUST COMPANY, as Trustee,

By Jerry Olivo, Jr.
Assistant Vice President

Attest:

Nancy L. Wilson
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and
delivered by BANKERS TRUST
COMPANY and STANLEY BURG
in the presence of:

Eric Hawner

Shikha Dombek

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

June 10, A.D. 1991.

Before me personally appeared BRUCE R. DEBOLT, who, being duly sworn, did say that he is Senior Vice President and Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 10th day of June, 1991, before me personally appeared BRUCE R. DEBOLT, to me known to be Senior Vice President and Chief Financial Officer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

C.J. Rue
C.J. Rue
Notary Public, State of Oregon
My Commission Expires January 11, 1992

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STATE OF NEW YORK)
 : SS.:
COUNTY OF NEW YORK)

June 7, A.D. 1991.

Before me personally appeared JERRY OLIVO, JR., who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 7th day of June, 1991, before me personally appeared JERRY OLIVO, JR., to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Sandra Shirley
Notary Public, State of New York
No. 41-4847807
My Commission Expires May 31, 1993

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STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 7, A.D. 1991.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 7th day of June, 1991.

Sandra Shirley
Sandra Shirley
Notary Public, State of New York
No. 41-4847807
My Commission Expires May 31, 1993

IN THE STATE OF OREGON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
5	Benton	June 14, 1991	M-135990-91	--
6	Clackamas	June 14, 1991	91-28344	--
7	Clatsop	June 14, 1991	760	836
8	Columbia	June 14, 1991	91-3499	--
9	Coos	June 14, 1991	91-06-0532	--
10	Douglas	June 14, 1991	1140	373
11	Hood River	June 18, 1991	911493	--
12	Lane	June 17, 1991	9127918	--
13	Lincoln	June 14, 1991	230	2261
14	Linn	June 14, 1991	566	2
15	Marion	June 14, 1991	861	37
16	Multnomah	June 14, 1991	2424	970
17	Polk	June 14, 1991	242	1891
18	Tillamook	June 14, 1991	335	496
19	Wasco	June 14, 1991	912001	--
20	Washington	June 14, 1991	91030895	--
21	Yamhill	June 14, 1991	F255P2185	--

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
3	Secretary of State	June 14, 1991	P56754

IN THE STATE OF WASHINGTON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
23	Clark	June 14, 1991	9106140143	--
24	Klickitat	June 14, 1991	273	904
25	Skamania	June 18, 1991	123	757

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
22	Secretary of State	June 17, 1991	91-168-0134

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

TWENTIETH SUPPLEMENTAL INDENTURE
providing, among other things, for
First Mortgage Bonds, designated
Secured Medium-Term Notes, Series B

Dated as of June 1, 1993

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TWENTIETH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of June, 1993, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twentieth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twentieth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter

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called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture), and its Eighteenth Supplemental Indenture, dated as of July 1, 1990 (hereinafter called its Eighteenth Supplemental Indenture); and

WHEREAS said First through Eighteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twentieth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Nineteenth Supplemental Indenture, dated as of June 1, 1991 (hereinafter called its Nineteenth Supplemental Indenture); and

WHEREAS said Nineteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	June 14, 1991	M-135990-91	--
Clackamas	June 14, 1991	91-28344	--
Clatsop	June 14, 1991	760	836
Columbia	June 14, 1991	91-3499	--
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Tillamook	June 14, 1991	335	496
Wasco	June 14, 1991	912001	--
Washington	June 14, 1991	91030895	--
Yamhill	June 14, 1991	F255P2185	--

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	June 14, 1991	P56754

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WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	June 14, 1991	9106140143	--
Klickitat	June 14, 1991	273	904
Skamania	June 18, 1991	123	757

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	June 17, 1991	91-168-0134

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, and on the date hereof there remain outstanding, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
8-5/8% Series due 1996.....	\$11,658,000
9-3/8% Series due 2011.....	\$46,000,000
9.80% Series due 2018.....	\$24,938,000
9-1/8% Series due 2019.....	\$25,000,000
9-3/4% Series due 2015.....	\$50,000,000
Secured Medium-Term Notes, Series A.....	\$50,000,000
; and	

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

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WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twentieth Supplemental Indenture, and the terms of the bonds of the Twenty-First Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the

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extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income,

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product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Twentieth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Twentieth Supplemental Indenture and from the lien and operation of the

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Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Twentieth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Twenty-First Series of Bonds.

SECTION 1.0.1. There shall be a series of bonds designated "Secured Medium-Term Notes, Series B" (herein sometimes referred to as the "Twenty-first Series"), each of which shall also bear the descriptive title "First Mortgage Bond", and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with

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respect to the matters hereinafter in this Article I specified. Bonds of the Twenty-first Series shall be issued from time to time as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); each bond of the Twenty-first Series shall mature on such date, shall bear interest at such rate or rates (which may be either fixed or variable) and have such other terms and provisions not inconsistent with the Mortgage as the Board of Directors may determine in accordance with a Resolution filed with the Corporate Trustee referring to this Twentieth Supplemental Indenture; interest on each bond of the Twenty-first Series which bears interest at either a fixed rate or a variable rate shall be payable on the dates which shall be established prior to the date of first authentication of such bond and set forth in such bond and at maturity (each an interest payment date). Notwithstanding the foregoing, so long as there shall be no existing default in the payment of interest on the bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity, each of such bonds authenticated by the Corporate Trustee after the Record Date for any interest payment date for such bonds, and prior to such interest payment date (unless the Issue Date is after such Record Date), shall be dated the date of authentication, but shall bear interest from such interest payment date, and the person in whose name such bond shall have been registered at the close of business on such Record Date shall be entitled to receive the interest payable on such interest payment date, notwithstanding the cancellation of such bond upon any transfer or exchange thereof subsequent to such Record Date and on or prior to such interest payment date; provided, that, (i) if the Issue Date of bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity shall be after a Record Date and prior to the corresponding interest payment date, such bonds shall bear interest from the Issue Date, but payment of interest shall commence on the second interest payment date succeeding the Issue Date, and (ii) interest payable on the maturity date will be payable to the person to whom the principal thereof shall be payable. "Record Date" for bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity shall mean (A) the date which shall be established prior to the date of first authentication of such bonds and set forth in such bonds, or (B) if no such date shall be established with respect to such bonds, the date 15 calendar days prior to any interest payment date for such bonds. "Issue Date" with respect to bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity shall mean (a) the date which shall be established prior to the date of first authentication of such bonds and set forth in such bonds, or (b) if no such date shall be established with respect to such bonds, the

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date of first authentication of such bonds. The principal of, and premium, if any, and interest on, each bond of the Twenty-first Series shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twenty-first Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Twenty-first Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage, in whole at any time, or, if specified on the face of any bond of the Twenty-first Series, in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, as the Board of Directors may determine in accordance with a Resolution filed with the Corporate Trustee referring to this Twentieth Supplemental Indenture; provided, however, that bonds of the Twenty-first Series shall not be redeemable pursuant to Section 64 of the Mortgage.

(II) At the option of the registered owner, any bonds of the Twenty-first Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations which have the same Issue Date, maturity date, and redemption provisions, if any, and which bear interest at the same rate.

Transfers of bonds of the Twenty-first Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Twenty-first Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Twenty-first Series.

ARTICLE II.

Miscellaneous Provisions.

SECTION 2.0.1. Subject to the amendments provided for in this Twentieth Supplemental Indenture, the terms defined in the

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Mortgage, as heretofore supplemented, shall, for all purposes of this Twentieth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 2.0.2. The holders of bonds of the Twenty-first Series consent that the Company may, but shall not be obligated to, fix a record date for the purpose of determining the holders of bonds of the Twenty-first Series entitled to consent to any amendment, supplement or waiver. If a record date is fixed, those persons who were holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to consent to such amendment, supplement or waiver or to revoke any consent previously given, whether or not such persons continue to be holders after such record date. No such consent shall be valid or effective for more than 90 days after such record date.

SECTION 2.0.3. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Twentieth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Twentieth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Twentieth Supplemental Indenture.

SECTION 2.0.4. Whenever in this Twentieth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Twentieth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 2.0.5. Nothing in this Twentieth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Twentieth Supplemental

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Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twentieth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 2.0.6. Except to the extent specifically provided herein, no provision of this Twentieth Supplemental Indenture is intended to reinstate any provisions in the Mortgage which were amended and superseded by the amendments to the Trust Indenture Act of 1939 effective as of November 15, 1990.

SECTION 2.0.7. This Twentieth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 14th day of June, 1993, as of June 1, 1993, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries on the 14th day of June, 1993, as of June 1, 1993, in The City of New York; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, in The City of New York, on the 14th day of June, 1993, as of June 1, 1993.

NORTHWEST NATURAL GAS COMPANY

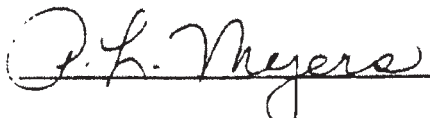
By *Bruce R. Williams*
Senior Vice President and
Chief Financial Officer

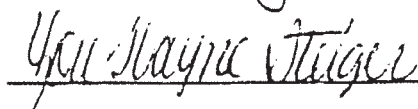
Attest:



Secretary

Executed, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY in
the presence of:





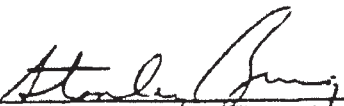
-15-

BANKERS TRUST COMPANY, as Trustee,

By 
Assistant Vice President

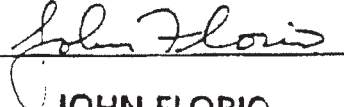
Attest:


Assistant Secretary


STANLEY BURG, as Trustee

Executed, sealed and
delivered by BANKERS TRUST
COMPANY and STANLEY BURG in
the presence of:


KENWYN HACKSHAW


JOHN FLORIO

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

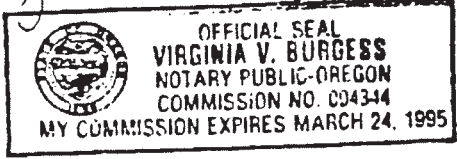
June 14, A.D. 1993.

Before me personally appeared BRUCE R. DEBOLT, who, being duly sworn, did say that he is Senior Vice President and Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 14th day of June, 1993, before me personally appeared BRUCE R. DEBOLT, to me known to be Senior Vice President and Chief Financial Officer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Virginia V. Burgess



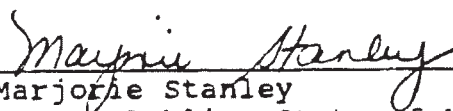
STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 14, A.D. 1993.

Before me personally appeared SAMIR PANDIRI, who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 14th day of June, 1993, before me personally appeared SAMIR PANDIRI, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



Marjorie Stanley
Notary Public, State of New York
No. 41-4986405
My Commission Expires 9/16/93

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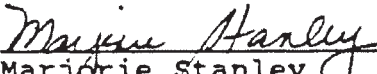
STATE OF NEW YORK)
 : SS.:
COUNTY OF NEW YORK)

June 14, A.D. 1993.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 14th day of June, 1993.



Marjorie Stanley
Notary Public, State of New York
No. 41-4986405
My Commission Expires 9/16/93

UG-
EX-4.1 2 d431686dex41.htm TWENTY -FIRST SUPPLEMENTAL INDENTURE

Exhibit 4.1

NORTHWEST NATURAL GAS COMPANY

TO

DEUTSCHE BANK TRUST COMPANY AMERICAS
(FORMERLY KNOWN AS BANKERS TRUST COMPANY)

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and Deed of Trust, dated
as of July 1, 1946, of Portland Gas & Coke
Company (now Northwest Natural Gas Company)

TWENTY-FIRST SUPPLEMENTAL INDENTURE
PROVIDING, AMONG OTHER THINGS, FOR
FIRST MORTGAGE BONDS, 4.00% SERIES DUE 2042

DATED AS OF OCTOBER 15, 2012

TWENTY-FIRST SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 15th day of October, 2012, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), an Oregon corporation, with offices at One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), and DEUTSCHE BANK TRUST COMPANY AMERICAS (formerly known as BANKERS TRUST COMPANY), a New York corporation, with offices at 60 Wall Street, 27th Floor, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), with offices at c/o Deutsche Bank Trust Company Americas, 60 Wall Street, New York, New York 10005 (hereinafter sometimes called the Co-Trustee) (the Corporate Trustee and the Co-Trustee together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twenty-first Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twenty-first Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth

Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture), its Eighteenth Supplemental Indenture, dated as of July 1, 1990 (hereinafter called its Eighteenth Supplemental Indenture), and its Nineteenth Supplemental Indenture, dated as of June 1, 1991 (hereinafter called its Nineteenth Supplemental Indenture); and

WHEREAS the First through Nineteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twenty-first Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Twentieth Supplemental Indenture, dated as of June 1, 1993 (hereinafter called its Twentieth Supplemental Indenture); and

WHEREAS said Twentieth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

IN THE STATE OF OREGON

Real Property Mortgage Records

<u>No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
11	Benton	June 23, 1993	M-166017-93	-
		June 29, 1993 (re-recorded)	M-166297-93	-
12	Clackamas	June 22, 1993	93-43287	-
13	Clatsop	June 23, 1993	816	534
14	Columbia	June 23, 1993	93-5185	-
15	Coos	June 30, 1993	93061396	-
32	Douglas	June 24, 1993	1241	840
17	Hood River	June 23, 1993	932082	-
18	Lane	June 23, 1993	9338274	-
19	Lincoln	June 23, 1993	263	1293
20	Linn	June 23, 1993	645	804
21	Marion	June 24, 1993	1074	290
22	Multnomah	June 23, 1993	2711	1885
23	Polk	June 25, 1993	270	245
24	Tillamook	June 23, 1993	351	718
25	Wasco	June 23, 1993	932338	-
26	Washington	June 23, 1993	93049394	-
27	Yamhill	June 23, 1993	F288P1700	-

Filed as a Financing Statement

<u>No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
9	Secretary of State	June 23, 1993	R61325

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
29	Clark	June 24, 1993	399	1
30	Klickitat	June 23, 1993	297	650
31	Skamania	June 24, 1993	136	172

Filed as a Financing Statement

<u>No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
28	Secretary of State	June 25, 1993	93-176-0202

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, and on the date hereof there remain outstanding, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
Secured Medium-Term Notes, Series A	\$ 10,000,000
Secured Medium-Term Notes, Series B	\$ 591,700,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by the Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the

Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twenty-first Supplemental Indenture, and the terms of the bonds of the Twenty-second Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of the Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the above premises and such other valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Deutsche Bank Trust Company Americas, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and

equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Twenty-first Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies

consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Twenty-first Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Deutsche Bank Trust Company Americas, as Trustees, and their successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Twenty-first Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Twenty-second Series of Bonds.

SECTION 1.01 There shall be a series of bonds designated "4.00% Series due 2042" (herein sometimes referred to as the "Twenty-second Series"), each of which shall also bear the descriptive title "First Mortgage Bond", and the form thereof attached hereto as Exhibit A, as established by Resolution of the Board of Directors of the Company and shall contain suitable provisions with respect to the matters hereinafter in this Article I specified. Bonds of the Twenty-second Series shall be issued from time to time as fully registered bonds in denominations of One Hundred Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Twenty-second Series shall mature on October 31, 2042 (the "Stated Maturity") and bear interest at the rate of 4.00% per annum, payable semi-annually on February 1 and August 1 of each year, commencing February 1, 2013; and the principal of, and premium, if any, and, unless otherwise agreed between the Company and the registered owner of any bonds of the Twenty-second Series registered in the name of such registered owner, interest on, each such bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York or as otherwise provided in the form of bond of the Twenty-second Series, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twenty-second Series shall be dated as in Section 10 of the Mortgage provided.

The bonds of the Twenty-second Series shall be payable and have and be subject to such other terms as provided in the form of bond of the Twenty-second Series established by the Board of Directors in a Resolution filed with the Corporate Trustee referring to the Twenty-second Series and shall have and be subject to such other terms as are provided in the Mortgage.

All references in the Mortgage to the principal amount of bonds shall, when used with respect to the bonds of the Twenty-second Series, mean the unpaid principal amount thereof, except that, (a) for the purposes of transfers of fully registered bonds under Section 13 of the Mortgage, the term "like principal amount" shall, when used with respect to the bonds of the Twenty-second Series, mean "like aggregate unpaid principal amount", and (b) for the purposes of exchanges of temporary bonds under Section 15 of the Mortgage, the term "like aggregate principal amount" shall, when used with respect to the bonds of the Twenty-second Series, mean "like aggregate unpaid principal amount".

(I) Optional Redemption. At any time prior to April 30, 2042 (six months prior to the Stated Maturity), the Company may, at its option, upon notice as provided below, redeem at any time all, or from time to time any part of, the bonds of the Twenty-second Series at 100% of the principal amount so redeemed, and the Make-Whole Amount determined for the Settlement Date specified by the Company in such notice with respect to such principal amount. The Company will give each registered owner of bonds of the Twenty-second Series written notice (by first class mail or such other method as may be agreed upon by the Company and such registered owner) of each optional redemption under this subsection (I) mailed or otherwise given not less than 30 days and not more than 60 days prior to the date fixed for such redemption, to each such registered owner at his, her or its last address appearing on the bond register. Each such notice shall specify the Settlement Date (which shall be a Business Day), the aggregate principal amount of the bonds of the Twenty-second Series to be redeemed on such date, the principal amount of each bond held by such registered owner to be redeemed (determined in accordance with subsection (II) of this section), and the interest to be paid on the Settlement Date with respect to such principal amount being redeemed, and shall be accompanied by a certificate signed by a Senior Financial Officer as to the estimated Make-Whole Amount due in connection with such redemption (calculated as if the date of such notice were the date of the redemption), setting forth the details of such computation. Two Business Days prior to such Settlement Date, the Company shall send to each registered owner of bonds of the Twenty-second Series (by first class mail or by such other method as may be agreed upon by the Company and such registered owner) a certificate signed by a Senior Financial Officer specifying the calculation of such Make-Whole Amount as of the specified Settlement Date. As promptly as practicable after the giving of the notice and the sending of the certificates provided in this subsection, the Company shall provide a copy of each to the Corporate Trustee. The Trustees shall be under no duty to inquire into, may conclusively presume the correctness of, and shall be fully protected in relying upon the information set forth in any such notice or certificate.

At any time on or after April 30, 2042, the bonds of the Twenty-second Series will be redeemable at the option of the Company, in whole or in part, on not less than 30 nor more than 60 days' notice prior to the Settlement Date, at a redemption price equal to 100% of the principal amount of the bonds of the Twenty-second Series to be redeemed, plus accrued and unpaid interest thereon to the Settlement Date. The bonds of the Twenty-second Series are not otherwise subject to voluntary or optional redemption.

(II) Allocation of Partial Redemptions. In the case of each partial redemption of the bonds of the Twenty-second Series, the principal amount of the bonds of the Twenty-second Series to be redeemed shall be allocated by the Company among all of the bonds of the Twenty-second Series at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof not theretofore called for redemption.

(III) Maturity; Surrender, Etc. In the case of each notice of redemption of bonds of the Twenty-second Series pursuant to this section, if cash sufficient to pay the principal amount to be redeemed on the Settlement Date (which shall be a Business Day), together with interest on such principal amount accrued to such date and the applicable Make-Whole Amount, if any, is not paid as agreed upon by the Company and each registered owner of the affected bonds, or, to the extent that there is no such agreement entered into with one or more such owners, deposited with the Corporate Trustee on or before the Settlement Date, then such notice of redemption shall be of no effect. If such cash is so paid or deposited, such principal amount of the bonds of the Twenty-second Series shall be deemed paid for all purposes and interest on such principal amount shall cease to accrue. In case the Company pays any registered owner pursuant to an agreement with that registered owner, whether in the case of redemption or at maturity or otherwise, the Company shall notify the Corporate Trustee as promptly as practicable of such agreement and payment, and shall furnish the Corporate Trustee with a copy of such agreement and evidence of such payment, which may include a confirmation of wire transfer or other credit to an account designated by the registered owner, cancelled check or a receipt signed by the registered owner; in case the Company deposits any cash with the Corporate Trustee, the Company shall provide therewith a list of the registered owners and the amount of such cash each registered owner is to receive. The Trustees shall be under no duty to inquire into, may conclusively presume the correctness of, and shall be fully protected in relying upon the information set forth in any such notice, evidence of payment, list or agreement, and shall not be chargeable with knowledge of any of the contents of any such agreement. Any bond redeemed in full shall be surrendered to the Company or the Corporate Trustee for cancellation on or before the Settlement Date (unless otherwise agreed between the Company and the registered owner) or, with respect to cash deposited with the Corporate Trustee, before payment of such cash by the Corporate Trustee; any bond redeemed in part shall be surrendered to the Company or the Corporate Trustee on or before the Settlement Date (unless otherwise agreed between the Company and the registered owner) or, with respect to cash deposited with the Corporate Trustee before payment of such cash by the Corporate Trustee, for a substitute bond in the principal amount remaining unpaid.

(IV) Make-Whole Amount.

“Make-Whole Amount” means, with respect to any bond of the Twenty-second Series, an amount equal to the excess, if any, of the Discounted Value of the Remaining Scheduled Payments with respect to the Called Principal of such bond of the Twenty-second Series over the amount of such Called Principal, provided that the Make-Whole Amount may in no event be less than zero. For the purposes of determining the Make-Whole Amount, the following terms have the following meanings:

“Business Day” means any day other than a Saturday, a Sunday or a day on which commercial banks in New York City are required or authorized to be closed.

“Called Principal” means, with respect to any bond of the Twenty-second Series, the principal of such bond that is to be redeemed pursuant to subsection (I) of this section.

“Discounted Value” means, with respect to the Called Principal of any bond of the Twenty-second Series, the amount obtained by discounting all Remaining Scheduled Payments with respect to such Called Principal from their respective scheduled due dates to the Settlement Date with respect to such Called Principal, in accordance with accepted financial practice and at a discount factor (applied on the same periodic basis as that on which interest on the bonds of the Twenty-second Series is payable) equal to the Reinvestment Yield with respect to such Called Principal.

“Reinvestment Yield” means, with respect to the Called Principal of any bond of the Twenty-second Series, 0.50% (50 basis points) over the yield to maturity implied by (i) the yields reported as of 10:00 a.m. (New York City time) on the second Business Day preceding the Settlement Date with respect to such Called Principal, on the display designated as “Page PX1” on the Bloomberg Financial Markets Service (or such other display on the Bloomberg Financial Markets Service having the same information as PX1 if PX1 is replaced by the Bloomberg Financial Markets Service) for the most recently issued actively traded on-the-run benchmark U.S. Treasury securities having a maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date, or (ii) if such yields are not reported as of such time or the yields reported as of such time are not ascertainable (including by way of interpolation), the treasury constant maturity series yields reported, for the latest day for which such yields have been so reported as of the second Business Day preceding the Settlement Date with respect to such Called Principal, in Federal Reserve Statistical Release H.15 (519) (or any comparable successor publication) for actively traded U.S. Treasury securities having a constant maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date. Such implied yield will be determined, if necessary, by (a) converting U.S. Treasury bill quotations to bond equivalent yields in accordance with accepted financial practice and (b) interpolating linearly between (1) the most recently issued, actively traded on-the-run benchmark U.S. Treasury security with the maturity closest to and greater than such Remaining Average Life and (2) the most recently issued, actively traded on-the-run benchmark U.S. Treasury security with the maturity closest to and less than such Remaining Average Life. The Reinvestment Yield shall be rounded to the number of decimal places as appears in the interest rate of the applicable bond of the Twenty-second Series.

“Remaining Average Life” means, with respect to any Called Principal, the number of years (calculated to the nearest one-twelfth year) obtained by dividing (i) such Called Principal into (ii) the sum of the products obtained by multiplying (a) the principal component of each Remaining Scheduled Payment with respect to such Called Principal by (b) the number of years (calculated to the nearest one-twelfth year) that will elapse between the Settlement Date with respect to such Called Principal and the scheduled due date of such Remaining Scheduled Payment.

“Remaining Scheduled Payments” means, with respect to the Called Principal of any bond of the Twenty-second Series, all payments of such Called Principal and interest thereon that would be due after the Settlement Date with respect to such Called Principal if no payment of such Called Principal were made prior to its scheduled due date, provided that if such Settlement Date is not a date on which interest payments are due to be made under the terms of the bonds of the Twenty-second Series, then the amount of the next succeeding scheduled interest payment will be reduced by the amount of interest accrued to such Settlement Date and required to be paid on such Settlement Date pursuant to subsection (I) of this section.

“Settlement Date” means, with respect to the Called Principal of any bond of the Twenty-second Series, the date on which such Called Principal is to be redeemed pursuant to subsection (I) of this section.

“Senior Financial Officer” means the chief financial officer, principal accounting officer, treasurer or controller of the Company.

(V) Exchanges and Transfers. At the option of the registered owner, any bonds of the Twenty-second Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, together with a written instrument of transfer whenever required by the Company duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate unpaid principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Twenty-second Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Twenty-second Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Twenty-second Series.

ARTICLE II.

Miscellaneous Provisions.

SECTION 2.01 Subject to the amendments provided for in this Twenty-first Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Twenty-first Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 2.02 The holders of bonds of the Twenty-second Series consent that the Company may, but shall not be obligated to, fix a record date for the purpose of determining the holders of bonds of the Twenty-second Series entitled to consent to any amendment, supplement or waiver. If a record date is fixed, those persons who were holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to consent to such amendment, supplement or waiver or to revoke any consent previously given, whether or not such persons continue to be holders after such record date. No such consent shall be valid or effective for more than 90 days after such record date.

SECTION 2.03 The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Twenty-first Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Twenty-first Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Twenty-first Supplemental Indenture.

SECTION 2.04 Whenever in this Twenty-first Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Twenty-first Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 2.05 Nothing in this Twenty-first Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and

coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Twenty-first Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twenty-first Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 2.06 Except to the extent specifically provided herein, no provision of this Twenty-first Supplemental Indenture is intended to reinstate any provisions in the Mortgage which were amended and superseded by the amendments to the Trust Indenture Act of 1939 effective as of November 15, 1990.

SECTION 2.07 This Twenty-first Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 24th day of October, 2012, as of October 15, 2012, in Portland, Oregon; Deutsche Bank Trust Company Americas, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its Vice Presidents or its Assistant Vice Presidents and its corporate seal to be attested by one of its Vice Presidents, Assistant Vice Presidents, one of its Assistant Secretaries or one of its Associates on the 25th day of October, 2012, as of October 15, 2012, in The City of New York; and Stanley Burg has hereunto set his hand and affixed his seal, in The City of New York, on the 24th day of October, 2012, as of October 15, 2012.

NORTHWEST NATURAL GAS COMPANY

By /s/ David H. Anderson
David H. Anderson
Senior Vice President and Chief
Financial Officer

Attest:

 /s/ MardiLyn Saathoff

MardiLyn Saathoff
Corporate Secretary

Executed, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY
in the presence of:

 /s/ Shawn M. Filippi

Shawn M. Filippi

 /s/ Stephen P. Feltz

Stephen P. Feltz

DEUTSCHE BANK TRUST COMPANY
AMERICAS, as Trustee,

By /s/ Carol Ng
Carol Ng
Vice President

By /s/ David Contino
David Contino
Vice President

Attest:

 /s/ Renee Cummins
Renee Cummins
Associate

 /s/ Stanley Burg
STANLEY BURG, as Trustee

Executed, sealed and delivered by
DEUTSCHE BANK TRUST COMPANY AMERICAS and
STANLEY BURG in the presence of:

 /s/ Jeffrey Schoenfeld
Jeffrey Schoenfeld
Associate

 /s/ Chris Niesz
Chris Niesz
Associate

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

October 24, A.D. 2012.

Before me personally appeared David H. Anderson, who, being duly sworn, did say that he is the Senior Vice President and Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 24th day of October, 2012, before me personally appeared David H. Anderson, to me known to be the Senior Vice President and Chief Financial Officer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

/s/ Pamela L. Villaloboz
Notary Public—Oregon
Commission No. 453759
My Commission Expires 12/23/14

STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

October 25th, A.D. 2012.

Before me personally appeared Carol Ng, who, being duly sworn, did say that [he/she] is a Vice President of DEUTSCHE BANK TRUST COMPANY AMERICAS and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and [he/she] acknowledged said instrument to be its voluntary act and deed.

On this 25th day of October, 2012, before me personally appeared Carol Ng, David Contino and Renee Cummins, to me known to be, respectively, a Vice President, a Vice President and Associate of DEUTSCHE BANK TRUST COMPANY AMERICAS, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

/s/ Teddy Banica

Teddy Banica
Notary Public, State of New York
No. 01BA6266801
Qualified in New York County
Commission Expires August 6, 2016

STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

October 24, 2012

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 24 day of October, 2012.

/a/ Annie V. Jaghatspanyan
Annie V. Jaghatspanyan
Notary Public, State of New Jersey
I.D. #2421080
My Commission Expires 5/21/2017

EXHIBIT A TO SUPPLEMENTAL INDENTURE

THIS BOND HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES OR "BLUE SKY" LAWS OF ANY OTHER JURISDICTION, AND MAY BE TRANSFERRED ONLY IN COMPLIANCE WITH SUCH REGISTRATION REQUIREMENTS OR UNDER AN EXEMPTION THEREFROM.

IF AGREED BETWEEN THE COMPANY AND THE REGISTERED OWNER OF THIS BOND, THE PRINCIPAL OF THIS BOND MAY BE REDEEMED IN WHOLE OR IN PART WITHOUT SURRENDER OF THIS BOND OR NOTATION ON THIS BOND OF SUCH REDEMPTION. ANY PURCHASER OF THIS BOND, BY ACCEPTANCE HEREOF, AGREES THAT THE UNPAID PRINCIPAL AMOUNT AS OF ANY DATE MAY BE LESS THAN THE PRINCIPAL AMOUNT SHOWN ON THIS BOND. CONFIRMATION OF THE UNPAID PRINCIPAL AMOUNT OF THIS BOND MAY BE OBTAINED FROM THE COMPANY OR THE CORPORATE TRUSTEE.

Registered No.

FORM OF TEMPORARY REGISTERED BOND

NORTHWEST NATURAL GAS COMPANY
First Mortgage Bond
4.00% Series due 2042

CUSIP: 667655 B*4

Interest Payment Dates: February 1 and August 1

Interest Rate: 4.00%

Maturity Date: October 31, 2042

Principal Amount:

Registered Holder:

NORTHWEST NATURAL GAS COMPANY, a corporation of the State of Oregon (hereinafter called the "Company"), for value received, hereby promises to pay to the Registered Holder named above, or assigns in whose name this bond is registered in the bond register, the unpaid portion of the Principal Amount specified above on the Maturity Date specified above, at the office or agency of the Company in the Borough of Manhattan, The City of New York (unless otherwise agreed by the Company and the registered owner), in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, and to pay to the registered owner hereof interest on the principal amount

remaining unpaid from time to time from _____, 2012 [Date of initial authentication and delivery of bonds of this series] or from the most recent interest payment date to which interest has been paid, at the Interest Rate specified above in like coin or currency on each interest payment date specified above of each year, commencing February 1, 2013, until the Company's obligation with respect to the payment of such principal shall have been discharged.

This bond is a temporary bond and one of an issue of bonds of the Company issuable in series and is one of a series known as its First Mortgage Bonds, 4.00% Series due 2042, all bonds of all series issued and to be issued under and equally secured (except in so far as any sinking or other fund, established in accordance with the provisions of the Mortgage hereinafter mentioned, may afford additional security for the bonds of any particular series) by a Mortgage and Deed of Trust (herein, together with any indenture supplemental thereto, including the Twenty-first Supplemental Indenture dated as of October 15, 2012, called the Mortgage) dated as of July 1, 1946, executed by Portland Gas & Coke Company (now Northwest Natural Gas Company) to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) and R.G. Page (Stanley Burg, successor), as Trustees. Reference is made to the Mortgage for a description of the property mortgaged and pledged, the nature and extent of the security, the rights of the holders of the bonds and of the Trustees in respect thereof, the duties and immunities of the Trustees, the terms and conditions upon which the bonds are and are to be secured, the circumstances under which additional bonds may be issued and the rights of the Company to amend the Mortgage without any consent or other action by the holders of any series of bonds (including this series). With the consent of the Company and to the extent permitted by and as provided in the Mortgage, the rights and obligations of the Company and/or the rights of the holders of the bonds and/or coupons and/or the terms and provisions of the Mortgage may be modified or altered by the affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding under the Mortgage and, if the rights of the holders of one or more, but less than all, series of bonds then outstanding are to be affected, then also by the affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding of each series of bonds so to be affected (excluding in any case bonds disqualified from voting by reason of the Company's interest therein as provided in the Mortgage); provided that, without the consent of the holder hereof, no such modification or alteration shall, among other things, impair or affect the right of the holder to receive payment of the principal of (and premium, if any) and interest on this bond, on or after the respective due dates expressed herein, or permit the creation of any lien equal or prior to the lien of the Mortgage or deprive the holder of the benefit of a lien on the mortgaged and pledged property. The Company has the right, without any consent or other action by the holders of any series of bonds (including this series), to amend the Mortgage so as to change seventy per centum (70%) in the foregoing sentence to sixty-six and two-thirds per centum (66-2/3%).

Capitalized terms used in this bond which are not otherwise defined herein shall have the meanings ascribed thereto in the Mortgage.

The unpaid principal hereof may be declared or may become due prior to the Maturity Date hereinbefore named on the conditions, in the manner and at the time set forth in the Mortgage, upon the occurrence of a default as in the Mortgage provided.

Except as otherwise agreed between the Company and the registered owner of this bond, payment of the unpaid principal of this bond and interest payable on the Maturity Date will be made when due upon presentation and surrender hereof at the office of the Corporate Trustee or at such other office specified pursuant to Section 35 of the Mortgage and payments of interest (other than that payable on the Maturity Date hereof) shall be made, without presentation or surrender hereof, by check mailed to the registered address of the registered owner of this bond as such address shall appear on the bond register maintained pursuant to the Mortgage.

The transfer of this bond may be registered as prescribed in the Mortgage by the registered owner hereof in person, or by his duly authorized attorney, at the office or agency of the Company in the Borough of Manhattan, The City of New York, upon surrender for cancellation of this bond, together with a written instrument of transfer wherever required by the Company duly executed by the registered owner or by his duly authorized attorney, and, thereupon, a new fully registered bond of the same series for a like unpaid principal amount will be issued to the transferee in exchange herefor as provided in the Mortgage. The Company and the Trustees may deem and treat the person in whose name this bond is registered as the absolute owner hereof for the purpose of receiving payment and for all other purposes and neither the Company nor the Trustees shall be affected by any notice to the contrary.

In the manner prescribed in the Mortgage, any bonds of this series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, are exchangeable for a like aggregate unpaid principal amount of bonds of the same series of other authorized denominations.

At any time prior to April 30, 2042 (six months prior to the Maturity Date), the Company may, at its option, upon notice as provided in the Twenty-first Supplemental Indenture to the Mortgage, redeem at any time all, or from time to time any part of, this bond at 100% of the principal amount so redeemed, and the Make-Whole Amount determined for the Settlement Date specified by the Company with respect to such principal amount, together with accrued and unpaid interest thereon. Reference is made to the Twenty-first Supplemental Indenture for the terms and conditions of such redemption and the definitions of Make-Whole Amount and Settlement Date.

At any time on or after April 30, 2042, this bond will be redeemable at the option of the Company, in whole or in part, on not less than 30 nor more than 60 days' notice prior to the Settlement Date, at a redemption price equal to 100% of the principal amount of this bonds to be redeemed, plus accrued and unpaid interest thereon to the Settlement Date. This bond is not otherwise subject to voluntary or option redemption.

As provided in the Mortgage, the Company shall not be required to register transfers or make exchanges of bonds of any series for a period of ten days next preceding any interest payment date for bonds of such series, or next preceding any designation of bonds of such series to be redeemed, and the Company shall not be required to make transfers or exchanges of any bonds designated in whole or in part for redemption.

The Lien of the Mortgage is subject to being legally discharged prior to the Maturity Date of this bond upon the deposit with the Corporate Trustee of money or certain

obligations of, guaranteed by or backed by securities of, the government of the United States of America sufficient to pay the unpaid principal of, premium (if any) and interest on this bond when due, all in accordance with the terms and conditions of the Mortgage.

No recourse shall be had for the payment of the principal or Make-Whole Amount, if any, of or interest on this bond against any incorporator or any past, present or future subscriber to the capital stock, stockholder, officer or director of the Company or of any predecessor or successor corporation, as such, either directly or through the Company or any predecessor or successor corporation, under any rule of law, statute or constitution or by the enforcement of any assessment or otherwise, all such liability of incorporators, subscribers, stockholders, officers and directors being released by the holder or owner hereof by the acceptance of this bond and being likewise waived and released by the terms of the Mortgage.

This bond shall not become obligatory until Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company), the Corporate Trustee under the Mortgage, or its successor thereunder, shall have signed the form of authentication certificate endorsed hereon.

IN WITNESS WHEREOF, NORTHWEST NATURAL GAS COMPANY has caused this bond to be signed in its corporate name by its President or one of its Vice Presidents by his signature or a facsimile thereof, and its corporate seal to be impressed or imprinted hereon and attested by its Secretary or one of its Assistant Secretaries by his signature or a facsimile thereof.

Dated:

NORTHWEST NATURAL GAS COMPANY

Attest:

[SEAL]

By _____
[Title]

[Title]

This bond is one of the bonds, of the series herein designated, described or provided for in the within-mentioned Mortgage.

DEUTSCHE BANK TRUST COMPANY AMERICAS,
(New York)

Corporate Trustee

By _____
Authorized Officer

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto

[please insert social security
or other identifying
number of assignee]

[name and address of
transferee must be printed
or typewritten]

the within bond of NORTHWEST NATURAL GAS COMPANY and does hereby irrevocably constitute and appoint

attorney, to transfer said bond on the books of the within-mentioned Company, with full power of substitution in the premises.

Dated: _____

EX-4.1 3 ex41q32016.htm EXHIBIT 4.1 TWENTY-SECOND SUPPLEMENTAL INDENTURE

NORTHWEST NATURAL GAS COMPANY

TO

DEUTSCHE BANK TRUST COMPANY AMERICAS
(FORMERLY KNOWN AS BANKERS TRUST COMPANY),

As Corporate Trustee under the Mortgage and Deed of Trust,
dated as of July 1, 1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

TWENTY-SECOND SUPPLEMENTAL INDENTURE
PROVIDING, AMONG OTHER THINGS, FOR
AMENDMENTS TO THE MORTGAGE

DATED AS OF NOVEMBER 1, 2016

TWENTY-SECOND SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of November, 2016, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), an Oregon corporation, with offices at One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), and DEUTSCHE BANK TRUST COMPANY AMERICAS (formerly known as BANKERS TRUST COMPANY), a New York banking corporation, with offices at 60 Wall Street, 27th Floor, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee or the Trustee), as Trustee under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twenty-second Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twenty-second Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustee its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture), its Eighteenth Supplemental Indenture, dated as of July 1, 1990

(hereinafter called its Eighteenth Supplemental Indenture), its Nineteenth Supplemental Indenture, dated as of June 1, 1991 (hereinafter called its Nineteenth Supplemental Indenture), and its Twentieth Supplemental Indenture, dated as of June 1, 1993 (hereinafter called its Twentieth Supplemental Indenture); and

WHEREAS the First through Twentieth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twenty-second Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustee its Twenty-first Supplemental Indenture, dated as of October 15, 2012 (hereinafter called its Twenty-first Supplemental Indenture); and

WHEREAS said Twenty-first Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

IN THE STATE OF OREGON

Real Property Mortgage Records

	County	Recordation Date	Document No.
1	Benton	10/29/12	2012-498581
2	Clackamas	10/29/12	2012-070543
3	Clatsop	10/30/12	2012-08835
4	Columbia	10/30/12	2012-008408
5	Coos	10/30/12	2012-9310
6	Douglas	10/29/12	2012-017139
7	Hood River	10/30/12	2012-03785
8	Lane	10/29/12	2012-055545
9	Lincoln	10/30/12	2012-10566
10	Linn	10/30/12	2012-16819
11	Marion	10/30/12	Reel 3439, Page 71
12	Multnomah	10/29/12	2012-138566
13	Polk	10/29/12	2012-011086
14	Tillamook	10/30/12	2012-006117
15	Wasco	10/30/12	2012-004085
16	Washington	10/29/12	2012-091133
17	Yamhill	10/30/12	2012-15633

Filed as a Financing Statement

	Office	Date Filed	File No.
18	Secretary of State	6/23/1993	R61325

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

	County	Recordation Date	Document No.
19	Clark	10/29/12	4906220
20	Klickitat	10/30/12	1100058
21	Skamania	10/30/12	2012181913

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to J. C. KENNEDY; and

WHEREAS, Section 103 of the Mortgage provides, among other things, that if for any reason it shall not be necessary, in the opinion of counsel, that there shall be a Co-Trustee and the Company shall file with the Corporate Trustee and also with the Co-Trustee, an Opinion of Counsel to that effect and a written request for the removal of the Co-Trustee, the Co-Trustee shall forthwith cease to be a Trustee under the Mortgage, and all powers of the Co-Trustee shall forthwith terminate, as shall his right, title or interest in and to the trust estate and, unless and until there shall be appointed a new Trustee or successor to the Co-Trustee, all the right, title and powers of the Trustees shall devolve upon the Corporate Trustee and its successors alone; and

WHEREAS, the Company having filed with the Corporate Trustee and the Co-Trustee such Opinion of Counsel and such written request; and

WHEREAS, pursuant to Sections 103 of the Mortgage, the Company and the Corporate Trustee have agreed that Stanley Burg has ceased to be a Trustee under the Mortgage, and all powers of the Co-Trustee have terminated, as has his right, title or interest in and to the trust estate; and, unless and until there shall be appointed a new Trustee or successor to the Co-Trustee, all the right, title and powers of the Trustees has devolved upon the Corporate Trustee and its successors alone; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, and on the date hereof there remain outstanding, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
Secured Medium-Term Notes, Series A	\$ 10,000,000
Secured Medium-Term Notes, Series B (bonds of the Twenty-first Series)	\$541,700,000
4.00% Series due 2042 (bonds of the Twenty-second Series)	\$ 50,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by the Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it, to cure certain ambiguities contained in the Mortgage or in certain supplemental indentures, and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twenty-second Supplemental Indenture, and the terms of the bonds of the Twenty-first Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of the Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the above premises and such other valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustee, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their

tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) to Deutsche Bank Trust Company Americas, as Trustee under the Mortgage, and to its successor or successors in said trust, and to said Trustee and its successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

TOGETHER WITH all and singular the tenements, hereditaments, prescriptions, servitudes and appurtenances belonging or in anywise appertaining to the aforementioned property or any part thereof, with the reversion and reversions, remainder and remainders and (subject to the provisions of Section 57 of the Mortgage) the tolls, rents, revenues, issues, earnings, income, product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof (other than any Excepted Property) shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were

specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby.

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, to Deutsche Bank Trust Company Americas, as Trustee, and its successors and assigns forever.

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Twenty-second Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustee and the beneficiaries of the trust with respect to said property, and to the Trustee and its successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustee by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustee and its successors in said trust under the Mortgage, as follows:

ARTICLE I.

AMENDMENTS OF CERTAIN PROVISIONS OF THE MORTGAGE

SECTION 1.01 *Meetings and Consents of Bondholders.*

Pursuant to the reservation of right in Section 6 of Article III of the Ninth Supplemental Indenture, the Company hereby amends Article XIX of the Mortgage to read as set forth in Section 6 of Article III of the Ninth Supplemental Indenture.

SECTION 1.02 *Release and Substitution of Property.*

Pursuant to the reservation of right in Section 2.03 of Article II of the Eighteenth Supplemental Indenture, the Company hereby

(A) amends subdivision (1) of Section 59 of the Mortgage to read as follows:

“(1) an Officers’ Certificate describing in reasonable detail the property to be released and requesting such release;”

(B) amends subdivisions (3)(b) and (c) of Section 59 of the Mortgage to read as follows:

“(b) the fair value, and the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost), in the opinion of the signers, of the property (or securities) to be released; (c) the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost), in the opinion of the signers, of any portion thereof that is Funded Property;”

and

- (C) amends the first six lines of subdivision (4) of Section 59 of the Mortgage to read as follows:
-

“(4) an amount in cash, to be held by the Corporate Trustee as part of the Mortgaged and Pledged Property, equivalent to the amount, if any, by which the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost) of the property to be released, as specified in the Engineer’s Certificate provided for in subdivision (3) above, exceeds the aggregate of the following items:”

SECTION 1.03 *Net Earning Certificate.*

Annual Interest Requirements for Variable Rate Bonds. Pursuant to the reservation of right in Section 2.01 of Article II of the Eighteenth Supplemental Indenture, the Company hereby amends subdivision (B) of Section 7 of the Mortgage and the first paragraph following such subdivision (B) to read as set forth in such Section 2.01.

SECTION 1.04 *Bonding Ratio.*

Pursuant to the reservation of right in Section 2.02 of Article II of the Eighteenth Supplemental Indenture, the Company hereby amends Sections 25, 26, 59 and 61 of the Mortgage by substituting the phrase “seventy per centum (70%)” for the phrase “sixty per centum (60%)” and substituting the phrase “ten-sevenths (10/7ths)” for the phrase “ten-sixths (10/6ths)” each time such phrase or phrases occur in said Sections.

SECTION 1.05 *Deductions for Retired Automotive Equipment.*

Pursuant to the reservation of right in Section 3 of the Third Supplemental Indenture, the Company hereby amends the Mortgage, as amended and supplemented, to delete clause (ii) of Section 4(II)(A) of the Mortgage, as amended and supplemented.

SECTION 1.06 *Releases of Unfunded Property.*

Pursuant to the reservation of right in Section 2.03 of Article II of the Eighteenth Supplemental Indenture, the Company hereby amends (A) Section 60 of the Mortgage as provided in such Section 2.03 and (B) the definition of “Engineer’s Certificate” in Section 3 of the Mortgage to read as provided in such Section 2.03.

SECTION 1.07 *Excepted Property.*

The term “Excepted Property” shall mean the property described in clauses (1) through (6) of the paragraph on pages 10-11 of the Mortgage, as amended and supplemented from time to time (and the corresponding provision in each supplemental indenture thereto).

Clause (1) of the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) is hereby amended to read:

“(1) all cash on hand or in banks or other financial institutions, deposit accounts, securities accounts, shares of stock, interests in business trusts, general or limited partnerships or limited liability companies, bonds, notes, mortgages, other evidences of indebtedness and other securities, security entitlements, commodities accounts and other investment property of

whatsoever kind and nature, not hereafter specifically pledged, paid, deposited, delivered or held hereunder or covenanted so to be;”

Clause (3) of the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) is hereby amended to read:

“(3) bills, notes and accounts receivable, judgments, demands and choses in action (including payment intangibles, commercial tort claims and tax credits), and all contracts, leases and operating agreements (including policies of insurance, chattel paper, cooperative interests, warehouse receipts, and contract rights granted by statute or governmental action, including rights to bill and collect revenues or other amounts from customers or others) not specifically pledged hereunder or hereinafter covenanted so to be;

Clause (6) of the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) is hereby amended to read:

“(6) the Company’s franchise to be a corporation; and all properties, real, personal and mixed, which subsequent to November 1, 2016 have been released from the Lien of this Indenture, and any improvements, extensions and additions to such properties and renewals, replacements and substitutions of or for any parts thereof;”

SECTION 1.08 *Additional Definitions.*

Section 3 of the Mortgage is hereby amended to add the following definitions:

“The term “Authorized Officer” means the President, any Vice President, the Treasurer, any Assistant Treasurer, or any other officer, manager or agent of the Company duly authorized pursuant to a Resolution to act in respect of matters relating to this Indenture.

The term “Bonding Ratio” shall mean the percentage stated in Section 25 of the Mortgage, as amended and supplemented, and the term “Reciprocal of the Bonding Ratio” shall mean the reciprocal of such percentage.

The term “Business Day”, when used with respect to a place of payment for the bonds or any other particular location specified in the bonds or this Indenture, means any day, other than a Saturday or Sunday, which is not a day on which banking institutions or trust companies in such place of payment or other location are required by law, regulation or executive order to remain closed, or a day on which the corporate trust office of the Corporate Trustee is closed for business.

The term “Company Order” means a written order or request signed in the name of the Company by an Authorized Officer of the Company and delivered to the Corporate Trustee.

The term “corporation” means a corporation, association, company, limited liability company, partnership, limited partnership, joint stock company or business trust, and references to “corporate” and other derivations of “corporation” herein shall be deemed to include appropriate derivations of such entities.

The term “Fair Value”, with respect to property, means the fair value of such property as determined in the reasonable judgment of the Person certifying to such value, such

determination to be based on any one or more factors deemed relevant by such Person, including, without limitation, (a) the amount which would be likely to be obtained in an arm's-length transaction with respect to such property between an informed and willing buyer and an informed and willing seller, under no

compulsion, respectively, to buy or sell, (b) the amount of investment with respect to such property which, together with a reasonable return thereon, would be likely to be recovered through ordinary business operations or otherwise, (c) the Cost, accumulated depreciation, and replacement cost with respect to such property and/or (d) any other relevant factors; provided, however, that (x) the Fair Value of property shall be determined without deduction for any Liens on such property prior to the Lien of this Indenture (except that the Fair Value of property to be released from the Lien of this Indenture shall be determined with deduction for any Liens on such property prior to the Lien of this Indenture) and (y) the Fair Value to the Company of Property Additions may be of less value to a Person which is not the owner or operator of the Mortgaged and Pledged Property or any portion thereof than to a Person which is such owner or operator. Fair Value may be determined, without physical inspection, by the use of accounting and engineering records and other data maintained by the Company or otherwise available to the Engineer certifying the same.

The term "Governmental Authority" means the government of the United States or of any State or Territory thereof or of the District of Columbia or of any county, municipality or other political subdivision of any thereof, or any department, agency, authority or other instrumentality of any of the foregoing.

The term "Holder" means a Person in whose name a bond is registered pursuant to Section 13 of the Mortgage, as amended and supplemented.

The term "Issue Date", when used with respect to the bonds of the Twenty-first Series, shall have the meaning specified in the Twentieth Supplemental Indenture.

The term "Lien" means any mortgage, deed of trust, pledge, security interest, encumbrance, easement, lease, reservation, restriction, servitude, charge or similar right and any other lien of any kind, including, without limitation, any conditional sale or other title retention agreement, any lease in the nature thereof, and any defect, irregularity, exception or limitation in record title.

The term "Person" means any individual, corporation, joint venture, trust or unincorporated organization or any Governmental Authority.

The term "Permitted Liens" shall mean as of any particular time, any of the following:

(a) Liens for taxes, assessments and other governmental charges or requirements which are not delinquent or which are being contested in good faith by appropriate proceedings or of which at least ten (10) Business Days notice has not been given to the general counsel of the Company or to such other Person designated by the Company to receive such notices;

(b) mechanics', workmen's, repairmen's, materialmen's, warehousemen's, and carriers' Liens, other Liens incident to construction, Liens or privileges of any employees of the Company for salary or wages earned, but not yet payable, and other Liens, including without limitation Liens for worker's compensation awards, arising in the ordinary course of business for charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at

least ten (10) Business Days notice has not been given to the general counsel of the Company or to such other Person designated by the Company to receive such notices;

(c) Liens in respect of attachments, judgments or awards arising out of judicial or administrative proceedings (i) in an amount not exceeding the greater of (A) Ten Million Dollars (\$10,000,000) and (B) three percent (3%) of the principal amount of the bonds then Outstanding or (ii) with respect to which the Company shall (X) in good faith be prosecuting an appeal or other proceeding for review and with respect to which the Company shall have secured a stay of execution pending such appeal or other proceeding or (Y) have the right to prosecute an appeal or other proceeding for review or (Z) have not received at least ten (10) Business Days notice given to the general counsel of the Company or to such other Person designated by the Company to receive such notices;

(d) easements, leases, reservations or other rights of others in, on, over and/or across, and laws, regulations and restrictions affecting, and defects, irregularities, exceptions and limitations in title to, the Mortgaged and Pledged Property or any part thereof; provided, however, that such easements, leases, reservations, rights, laws, regulations, restrictions, defects, irregularities, exceptions and limitations do not in the aggregate materially impair the use by the Company of the Mortgaged and Pledged Property considered as a whole for the purposes for which it is held by the Company;

(e) Liens, defects, irregularities, exceptions and limitations in (i) title to real property subject to rights-of-way in favor of the Company or otherwise or used or to be used by the Company primarily for right-of-way purposes; (ii) real property held under lease, easement, license or similar right; or (iii) the rights-of-way, leases, easements, licenses or similar rights in favor of the Company; provided, however, that (A) the Company shall have obtained from the apparent owner or owners of such real property a sufficient right, by the terms of the instrument granting such right-of-way, lease, easement, license or similar right, to the use thereof for the purposes for which the Company acquired the same; (B) the Company has power under eminent domain or similar statutes to remove or subordinate such Liens, defects, irregularities, exceptions or limitations or (C) such defects, irregularities, exceptions and limitations may be otherwise remedied without undue effort or expense; and defects, irregularities, exceptions and limitations in title to flood lands, flooding rights and/or water rights;

(f) Liens securing indebtedness or other obligations neither created, assumed nor guaranteed by the Company nor on account of which it customarily pays interest upon real property or rights in or relating to real property acquired by the Company for the purpose of the transmission or distribution of electric energy, gas or water, for the purpose of telephonic, telegraphic, radio, wireless or other electronic communication or otherwise for the purpose of obtaining rights-of-way;

(g) leases existing on November 1, 2016 affecting properties owned by the Company at said date and renewals and extensions thereof; and leases affecting such properties entered into after such date or affecting properties acquired by the Company after such date which, in either case, (i) have respective terms of not more than ten (10) years (including extensions or

renewals at the option of the tenant) or (ii) do not materially impair the use by the Company of such properties for the respective purposes for which they are held by the Company;

(h) Liens vested in lessors, licensors, franchisors or permittees for rent or other amounts to become due or for other obligations or acts to be performed, the payment of which rent or the performance of which other obligations or acts is required under leases, subleases, licenses, franchises or permits, so long as the payment of such rent or other amounts or the performance of such other obligations or acts is not delinquent or is being contested in good faith and by appropriate proceedings;

(i) controls, restrictions, obligations, duties and/or other burdens imposed by federal, state, municipal or other law, or by rules, regulations or orders of Governmental Authorities, upon the Mortgaged and Pledged Property or any part thereof or the operation or use thereof or upon the Company with respect to the Mortgaged and Pledged Property or any part thereof or the operation or use thereof or with respect to any franchise, grant, license, permit or public purpose requirement, or any rights reserved to or otherwise vested in Governmental Authorities to impose any such controls, restrictions, obligations, duties and/or other burdens;

(j) rights which Governmental Authorities may have by virtue of franchises, grants, licenses, permits or contracts, or by virtue of law, to purchase, recapture or designate a purchaser of or order the sale of the Mortgaged and Pledged Property or any part thereof, to terminate franchises, grants, licenses, permits, contracts or other rights or to regulate the property and business of the Company; and any and all obligations of the Company correlative to any such rights;

(k) Liens required by law or governmental regulations (i) as a condition to the transaction of any business or the exercise of any privilege or license, (ii) to enable the Company to maintain self-insurance or to participate in any funds established to cover any insurance risks, (iii) in connection with workmen's compensation, unemployment insurance, social security, any pension or welfare benefit plan or (iv) to share in the privileges or benefits required for companies participating in one or more of the arrangements described in clauses (ii) and (iii) above;

(l) Liens on the Mortgaged and Pledged Property or any part thereof which are granted by the Company to secure duties or public or statutory obligations or to secure, or serve in lieu of, surety, stay or appeal bonds;

(m) rights reserved to or vested in others to take or receive any part of any coal, ore, gas, oil and other minerals, any timber and/or any electric capacity or energy, gas, water, steam and any other products, developed, produced, manufactured, generated, purchased or otherwise acquired by the Company or by others on property of the Company;

(n) (i) rights and interests of Persons other than the Company arising out of contracts, agreements and other instruments to which the Company is a party and which relate to the common ownership or joint use of property; and (ii) all Liens on the interests of Persons other than the Company in property owned in common by such Persons and the Company if and to the extent that the enforcement of such Liens would not adversely affect the interests of the Company in such property in any material respect;

(o) any restrictions on assignment and/or requirements of any assignee to qualify as a permitted assignee and/or public utility or public service corporation;

(p) any Liens which have been bonded for the full amount in dispute or for the payment of which other adequate security arrangements have been made;

(q) any controls, liens, restrictions, regulations, easements, exceptions or reservations of any public authority or unit applying particularly to any form of space satellites (including but not limited to solar power satellites), space stations and other analogous facilities whether or not in the earth's atmosphere;

(r) easements, ground leases or rights-of-way in, upon, over and/or across the property or rights-of-way of the Company for the purpose of roads, pipe lines, transmission lines, distribution lines, communication lines, railways, removal or transportation of coal, lignite, gas, oil or other minerals or timber, and other like purposes, or for the joint or common use of real property, rights-of-way, facilities and/or equipment; provided, however, that such grant shall not materially impair the use of the property or rights-of-way for the purposes for which such property or rights-of-way are held by the Company;

(s) any Lien of the Trustees granted pursuant to Section 96 of this Indenture; and

(t) any Lien securing indebtedness for the payment of which money in the necessary amount shall have been irrevocably deposited in trust with the trustee or other holder of such Lien; provided, however, that if such indebtedness is to be redeemed or otherwise prepaid prior to the stated maturity thereof, any notice requisite to such redemption or prepayment shall have been given in accordance with the mortgage or other instrument creating such Lien or irrevocable instructions to give such notice shall have been given to such trustee or other holder."

SECTION 1.09 *Governing Law*. The Mortgage, as amended and supplemented, shall be governed by and construed in accordance with the law of the State of New York (including without limitation Section 5-1401 of the New York General Obligations Law or any successor to such statute), without giving effect to its conflicts-of-law principles, except to the extent that the Trust Indenture Act shall be applicable and except to the extent that the law of any jurisdiction wherein any portion of the Mortgaged and Pledged Property is

located shall mandatorily govern the creation of a mortgage lien on or security interest in, or perfection, priority or enforcement of the Lien of this Indenture or exercise of remedies with respect to, such portion of the Mortgaged and Pledged Property.

SECTION 1.10 *Effective Date*. Each of the amendments set forth in this Article I shall be effective as of November 1, 2016.

ARTICLE II.

THE COMPANY RESERVES THE RIGHT TO AMEND CERTAIN PROVISIONS OF THE MORTGAGE

SECTION 2.01. *Delete Earnings Test*. The Company reserves the right, without any consent, vote or other action by holders of bonds of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend the Mortgage, as amended and supplemented, to delete all provisions in the Mortgage, as amended and supplemented, which require a Net Earning Certificate, whether as a condition precedent to the authentication and delivery of bonds or otherwise, including Section 27, Section 28(6), the penultimate paragraph of Section 29, and Section 30(3) of the Mortgage, as amended and supplemented.

SECTION 2.02. *Delete Requirement for Disposition of Released Property*. The Company reserves the right, without any consent, vote or other action by holders of bonds of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend the Mortgage, as amended and supplemented, (A) to delete clause (a) of subdivision (3) of Section 59 of the Mortgage, as amended and supplemented, and (B) to delete clause (b) of subdivision (1) of Section 60(II) of the Mortgage, as amended and supplemented.

SECTION 2.03. *Redefine Funded Property*. The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 5 of the Mortgage, as amended and supplemented, to replace the first two paragraphs thereof with three paragraphs reading substantially as follows:

“The term “Funded Property Certificate” shall mean an Independent Engineer’s Certificate delivered to the Corporate Trustee, within ninety days after the date thereof,

(A) stating the aggregate principal amount of bonds then Outstanding under this Indenture;

(B) stating the aggregate principal amount of bonds which the Company is then entitled to have authenticated and delivered by compliance with the provisions of Section 29 hereof;

(C) stating an amount equal to the sum of the amounts stated in clauses (A) and (B) above divided by the Bonding Ratio;

(D) describing all or any portion of the Mortgaged and Pledged Property which, in the opinion of the signers, has an aggregate Fair Value not less than the amount stated in clause (C) above.

The term "Funded Property" shall mean:

(1) all Mortgaged and Pledged Property described in the most recent Funded Property Certificate delivered to the Corporate Trustee;

(2) all Property Additions to the extent that the same shall have been made the basis of the authentication and delivery of bonds under this Indenture after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee;

(3) all Property Additions to the extent that the same shall have been made the basis of the release of property from the Lien of this Indenture after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee, subject, however, to the provisions of Section 59 hereof;

(4) all Property Additions to the extent that the same shall have been substituted (otherwise than under the release or cash withdrawal provisions hereof) for Funded Property retired after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee; and

(5) all Property Additions to the extent that the same shall have been made the basis of the withdrawal of any Funded Cash as hereinafter defined after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee, except to the extent that any such Property Additions shall no longer be deemed to be Funded Property in accordance with the provisions of other Sections of this Indenture.

In the event that in any certificate filed with the Corporate Trustee in connection with any of the transactions referred to in clauses (2), (3) and (5) of this Section only a part of the Cost or fair value of the Property Additions described in such certificate shall be required for the purposes of such certificate, then such Property Additions shall be deemed to be Funded Property only to the extent so required for the purpose of such certificate.”

The foregoing amendment shall not become effective unless and until the Company elects to deliver, and shall have delivered, a Funded Property Certificate to the Corporate Trustee.

SECTION 2.04. *Insurance.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 37 of the Mortgage, as amended and supplemented, to read substantially as follows:

“Section 37. (a) The Company shall (i) keep or cause to be kept all the Mortgaged and Pledged Property insured against loss by fire, to the extent that property of similar character is usually so insured by companies similarly situated and operating like properties, to a reasonable amount, by reputable insurance companies, the proceeds of such insurance (except as to any loss of Excepted Property and except as to any particular loss less than the greater of (A) Twenty Million Dollars (\$20,000,000) and (B) three percent (3%) of the principal amount of bonds Outstanding on the date of such particular loss) to be made payable, subject to applicable law, to the Corporate Trustee as the interest of the Corporate Trustee may appear, or to the trustee or other holder of any Lien prior hereto upon property subject to the Lien hereof, if the terms thereof require such payment, or to the agent or representative of the owners of jointly-owned property if the terms of such joint ownership require such payment or

(ii) in lieu of or supplementing such insurance in whole or in part, adopt some other method or plan of protection against loss by fire at least equal in protection to the method or plan of protection against loss by fire of companies similarly situated and operating properties subject to

similar fire hazards or properties on which an equal primary fire insurance rate has been set by reputable insurance companies; and if the Company shall adopt such other method or plan of protection, it shall, subject to applicable law (and except as to any loss of Excepted Property and except as to any particular loss less than the greater of (X) Twenty Million Dollars (\$20,000,000) and (Y) three percent (3%) of the principal amount of bonds Outstanding on the date of such particular loss) pay to the Corporate Trustee on account of any loss covered by such method or plan an amount in cash equal to the amount of such loss less any amounts otherwise paid to the Corporate Trustee in respect of such loss or paid to the trustee or other holder of any Lien prior hereto upon property subject to the Lien hereof in respect of such loss if the terms thereof require such payment or paid to the agent or representative of the owners of jointly-owned property if the terms of such joint ownership require such payment. Any cash so required to be paid by the Company pursuant to any such method or plan shall for the purposes of this Indenture be deemed to be proceeds of insurance. In case of the adoption of such other method or plan of protection, the Company shall furnish to the Corporate Trustee a certificate of an actuary or other qualified person appointed by the Company with respect to the adequacy of such method or plan.

Anything herein to the contrary notwithstanding, the Company may have fire insurance policies with (i) a deductible provision in a dollar amount per occurrence not exceeding the greater of (A) Twenty Million Dollars (\$20,000,000) and (B) three percent (3%) of the principal amount of the bonds Outstanding on the date such policy goes into effect, and/or (ii) co-insurance or self insurance provisions with a dollar amount per occurrence not exceeding thirty percent (30%) of the loss proceeds otherwise payable; provided, however, that the dollar amount described in clause (i) above may be exceeded to the extent such dollar amount per occurrence is below the deductible amount in effect as to fire insurance (X) on property of similar character insured by companies similarly situated and operating like property or (Y) on property as to which an equal primary fire insurance rate has been set by reputable insurance companies.

(b) All moneys paid to the Corporate Trustee by the Company in accordance with this Section or received by the Corporate Trustee as proceeds of any insurance, in either case on account of a loss on or with respect to Funded Property, shall, subject to any Lien prior hereto upon property subject to the Lien hereof, be held by the Corporate Trustee and, subject as aforesaid, shall be paid by it to the Company to reimburse the Company for an equal amount expended or committed for expenditure in the rebuilding, renewal and/or replacement of or substitution for the property destroyed or damaged, upon receipt by the Corporate Trustee of:

- (i) a letter signed by an officer of the Company requesting such payment,
- (ii) an Engineer's Certificate:
 - (A) describing the property so damaged or destroyed;
 - (B) stating the Cost of such property (or, if the fair value to the Company of such property at the time the same became Funded Property was certified to be an amount less than the Cost thereof, then such fair value, as so certified, in lieu of Cost) or, if such damage or destruction shall have affected

only a portion of such property, stating the allocable portion of such Cost or fair value;

(C) stating the amounts so expended or committed for expenditure in the rebuilding, renewal, replacement of and/or substitution for such property; and

(D) stating the fair value to the Company of such property as rebuilt or renewed or as to be rebuilt or renewed and/or of the replacement or substituted property, and if

(a) within six months prior to the date of acquisition thereof by the Company, such property has been used or operated, by a person or persons other than the Company, in a business similar to that in which it has been or is to be used or operated by the Company, and

(b) the fair value to the Company of such property as set forth in such Engineer's Certificate is not less than Twenty-five Thousand Dollars (\$25,000) and not less than one percent (1%) of the aggregate principal amount of the bonds at the time Outstanding,

the Engineer making the statement required by this clause (D) shall be an Independent Engineer, and

(iii) an Opinion of Counsel stating that, in the opinion of the signer, the property so rebuilt or renewed or to be rebuilt or renewed, and/or the replacement property, is or will be subject to the Lien hereof.

Any such moneys not so applied within thirty-six (36) months after its receipt by the Corporate Trustee, or in respect of which notice in writing of intention to apply the same to the work of rebuilding, renewal, replacement or substitution then in progress and uncompleted shall not have been given to the Corporate Trustee by the Company within such thirty-six (36) months, or which the Company shall at any time notify the Corporate Trustee is not to be so applied, shall thereafter be withdrawn, used or applied in the manner, to the extent and for the purposes, and subject to the conditions, provided in Section 61; provided, however, that if the amount of such moneys shall exceed the amount stated pursuant to clause (B) in the Engineer's Certificate referred to above, the amount of such excess shall not be deemed to be Funded Cash, shall not be subject to Section 61 and shall be remitted to or upon the order of the Company upon the withdrawal, use or application of the balance of such moneys pursuant to Section 61.

Anything in this Indenture to the contrary notwithstanding, if property on or with respect to which a loss occurs constitutes Funded Property in part only, the Company may, at its election, obtain the reimbursement of insurance proceeds attributable to the part of such property which constitutes Funded Property under this subsection (b) and obtain the reimbursement of insurance proceeds attributable to the part of such property which does not constitute Funded Property under subsection (c) of this Section.

(c) All moneys paid to the Corporate Trustee by the Company in accordance with this Section or received by the Corporate Trustee as proceeds of any insurance, in either case on account of a loss on or with respect to property which does not constitute Funded Property, shall, subject to the requirements of any Lien prior hereto upon

property subject to the Lien hereof, be held by the Corporate Trustee and, subject as aforesaid, shall be paid by it to the Company upon receipt by the Corporate Trustee of:

- (i) a letter from an officer of the Company requesting such payment;
-

(ii) an Engineer's Certificate stating:

(A) that such moneys were paid to or received by the Corporate Trustee on account of a loss on or with respect to property which does not constitute Funded Property; and

(B) if true, either (I) that the aggregate amount of the Cost or fair value to the Company (whichever is less) of all Property Additions which do not constitute Funded Property (excluding, to the extent of such loss, the property on or with respect to which such loss was incurred), after making deductions therefrom and additions thereto of the character contemplated by Section 4, is not less than zero (0) or (II) that the amount of such loss does not exceed the aggregate Cost or fair value to the Company (whichever is less) of Property Additions acquired, made or constructed on or after the ninetieth (90th) day prior to the date of the request for such payment; or

(C) if neither of the statements contemplated in subclause (B) above can be made, the amount by which zero (0) exceeds the amount referred to in subclause (B)(I) above (showing in reasonable detail the calculation thereof); and

(iii) if the Engineer's Certificate required by clause (ii) above contains neither of the statements contemplated in clause (ii)(B) above, an amount in cash, to be held by the Corporate Trustee as part of the Mortgaged and Pledged Property, equal to the amount shown in clause (ii)(C) above.

To the extent that the Company shall be entitled to withdraw proceeds of insurance pursuant to this subsection (c), such proceeds shall be deemed not to constitute Funded Cash.

(d) Whenever under the provisions of this Section the Company is required to deliver moneys to the Corporate Trustee and at the same time shall have satisfied the conditions set forth herein for payment of moneys by the Corporate Trustee to the Company, there shall be paid to or retained by the Corporate Trustee or paid to the Company, as the case may be, only the net amount."

SECTION 2.05. *Property Additions*. The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend subdivision (I) of Section 4 of the Mortgage, as amended and supplemented, to read substantially as follows:

"(I) The term "Property Additions" shall mean Mortgaged and Pledged Property acquired by the Company by purchase, consolidation, merger, donation, construction, erection or in any way whatsoever, subsequent to March 31, 1946, or in the process of construction or erection in so far as actually constructed or erected subsequent to March 31, 1946, and used or useful in any business that the Company may conduct.

At any time and from time to time, the Company may elect, by supplemental indenture, to subject any property that is Excepted Property to the Lien of the Mortgage, as amended and supplemented, and such property shall thereupon cease to be Excepted Property.

The term "Natural Gas and Oil Production Property" shall mean all leases, consolidated leases and operating agreements, fee lands and other mineral interest, gas and oil rights, wells, field compressors, equipment and other properties and rights whether producing or non-producing, used

or useful primarily and principally for the production and gathering of natural gas up to the point of connection with any gas transmission or distribution system or used or useful primarily and principally for the production and gathering of oil.

SECTION 2.06. *Priority and Authority Opinions.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to restate subdivisions (7) and (9) of Section 28 of the Mortgage, as amended and supplemented, to read substantially as follows:

“(7) either an Opinion of Counsel or an Officers’ Certificate to the effect that:

(a) this Indenture constitutes, or, upon the delivery of, and/or the filing and/or recording in the proper places and manner of, the instruments of conveyance, assignment or transfer, if any, specified in said opinion or certificate, will constitute, a Lien on all the Property Additions to be made the basis of the authentication and delivery of such bonds, subject to no Lien thereon prior to the Lien of this Indenture except Permitted Liens and any other Liens of which the signer of said opinion or certificate has no actual knowledge and which do not appear on a specified lien search report received by said signer not more than five (5) Business Days prior to the date of said opinion or certificate; and

(b) the Company has corporate authority to operate such Property Additions;

(c) that the general nature and extent of Qualified Liens, and the principal amount of the then Outstanding Qualified Lien Bonds secured thereby, if any, mentioned in the accompanying Engineer’s Certificate, are correctly stated;

(9) copies of the instruments of conveyance, assignment and transfer, if any, and the lien search report, if any, specified in the opinion or certificate provided for in clause (7) above.”

SECTION 2.07. *Maintenance.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 38 of the Mortgage, as amended and supplemented, to read substantially as follows:

“Section 38. The Company shall cause (or, with respect to property owned in common with others, make reasonable effort to cause) the Mortgaged and Pledged Property, considered as a whole, to be maintained and kept in good condition, repair and working order and shall cause (or, with respect to property owned in common with others, make reasonable effort to cause) to be made such repairs, renewals, replacements, betterments and improvements thereof, as, in the judgment of the Company, may be necessary in order that the operation of the Mortgaged and Pledged Property, considered as a whole, may be conducted in accordance with common industry practice; provided, however, that nothing in this Section shall prevent the Company from discontinuing, or causing the discontinuance of, the operation and maintenance of any portion of the Mortgaged and Pledged Property if such discontinuance is in the judgment of the Company desirable in the conduct of its business; and provided, further,

that nothing in this Section shall prevent the Company from selling, transferring or otherwise disposing of, or causing the sale, transfer or other disposition of, any portion of the Mortgaged and Pledged Property in compliance with the other provisions of this Indenture.”

SECTION 2.08. *Excepted Property.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) to add any one or more of the following types of property to the list of Excepted Property:

(a) any vessels, boats, barges, and other marine equipment;

(b) any personal property of such character that the perfection of a security interest therein or other Lien thereon is not governed by the Uniform Commercial Code as in effect in the jurisdiction in which the Company is organized or the property is located;

(c) any general intangibles, including computer software;

(d) any patents, patent licenses and other patent rights, patent applications, trade names, trademarks, copyrights and other intellectual property;

(e) any governmental and other licenses, permits and franchises (other than the Company's franchises, permits and licenses that are transferable and necessary for the operation of the Mortgaged and Pledged Property); or

(f) any unrecorded easements and rights of way.

SECTION 2.09. *Mergers into the Company.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 85 of the Mortgage, as amended and supplemented, to add a new paragraph reading substantially as follows:

“Nothing in this Indenture shall be deemed to prevent or restrict any consolidation or merger after the consummation of which the Company would be the surviving or resulting corporation or any conveyance or other transfer, or lease, of any part of the Mortgaged and Pledged Property which does not constitute the entirety or substantially the entirety of the Mortgaged and Pledged Property. Unless, in the case of a consolidation or merger described in the preceding sentence, an indenture supplemental hereto shall otherwise provide, this Indenture shall not become or be, or be required to become or be, a Lien upon any of the properties acquired by the Company in or as a result of such transaction or any improvements, extensions or additions to such properties or any renewals, replacements or substitutions of or for any part or parts thereof.”

SECTION 2.10. *Transfer of Less than Substantially All.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 85 of the Mortgage, as amended and supplemented, to add a new paragraph reading substantially as follows:

“A conveyance, transfer or lease by the Company of any part of the Mortgaged and Pledged Property shall not be deemed to constitute the conveyance, transfer or lease of all or substantially all of the Mortgaged and Pledged Property as an entirety for purposes of this Indenture if the Fair Value of the Mortgaged and Pledged Property retained by the Company exceeds the Reciprocal of the Bonding Ratio multiplied by the sum of the aggregate principal amount of all Outstanding bonds and any other outstanding debt of the Company secured by a purchase money lien that ranks equally with, or senior to, the bonds with respect to such Mortgaged and Pledged Property. Such Fair Value shall

be established by the delivery to the Corporate Trustee of an Independent Engineer's Certificate stating the Independent Engineer's opinion of such Fair Value as of a date not more than 90 days before or after such conveyance, transfer or lease. This Article XVI is not intended to limit the Company's conveyances, transfers or leases of less than substantially the entirety of the Mortgaged and Pledged Property or to create an inference that any conveyance, transfer or lease of any part of the Mortgaged and Pledged Property shall necessarily be deemed to constitute a conveyance, transfer or lease of all or substantially all of the Mortgaged and Pledged Property as an entirety for purposes of this Indenture where the Fair Value of the Mortgaged and Pledged Property retained by the Company is less than the Reciprocal of the Bonding Ratio multiplied by the aggregate principal amount of all Outstanding bonds and any other outstanding debt of the Company secured by a purchase money lien that ranks equally with, or senior to, the bonds with respect to such Mortgaged and Pledged Property."

SECTION 2.11. *Corporate Trustee Replacement.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 101 of the Mortgage, as amended and supplemented, to add a new paragraph reading substantially as follows:

"So long as no event which is, or after notice or lapse of time, or both, would become, a Default shall have occurred and be continuing, and except with respect to a Corporate Trustee appointed by the bondholders as provided in Section 102 hereof, if the Company shall have delivered to the Corporate Trustee (i) resolutions of the Board of Directors appointing a successor Corporate Trustee, effective as of a date specified therein, and (ii) an instrument of acceptance of such appointment, effective as of such date, by such successor Corporate Trustee in accordance with Section 104 hereof, the Corporate Trustee shall be deemed to have resigned as contemplated in the first sentence of Section 101 hereof, the successor Corporate Trustee shall be deemed to have been appointed by the Company pursuant to Section 102 hereof and such appointment shall be deemed to have been accepted as contemplated in Section 104 hereof, all as of such date, and all other provisions of Sections 101, 102 and 104 hereof shall be applicable to such resignation, appointment and acceptance except to the extent inconsistent with this paragraph."

SECTION 2.12. *Terms of New Series of Bonds.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 8 of the Mortgage, as amended and supplemented,

(A) to add the words "or an Authorized Officer" after the words "Board of Directors of the Company" in the first sentence of Section 8,

(B) to change the words "Resolution of the Board of Directors of the Company" in the second sentence of Section 8 to "Resolution, supplemental indenture or Officers' Certificate",

(C) to change the words "the Board of Directors" in the fifth sentence of Section 8 to "Resolution, supplemental indenture or Officers' Certificate",

(D) to add the words “or an Authorized Officer” after the words “Board of Directors” in the sixth sentence of Section 8 and in clause (c) of Section 8.

SECTION 2.13. *Investment of Money Held by Corporate Trustee.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 118 of the Mortgage, as amended and supplemented, (A) to delete the parenthetical in the first sentence of Section 118, (B) to delete the words “evidenced by a Resolution” in the first sentence of Section 118, and (C) to add a sentence after the first sentence in Section 118 reading substantially as follows:

“Any money which is held by the Corporate Trustee for the purpose of effecting the purchase, payment or redemption of any bonds issued hereunder, or the payment of any interest on such bonds, shall only be invested in bonds or other obligations maturing on or before the date specified for such purchase, payment or redemption.”

SECTION 2.14. *Officer's Certificates.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, (A) to change the words “Officers' Certificate” to “Officer's Certificate” wherever used in the Mortgage and any supplemental indenture thereto, including the amendments described in this Article II, and (B) to restate the definition of “Officers' Certificate” in Section 3 of the Mortgage, as amended and supplemented, to read substantially as follows:

“The term “Officer's Certificate” shall mean a certificate signed by an Authorized Officer. If and to the extent required by the provisions of Section 121 hereof, each such certificate shall include the statements provided for in said Section.”

SECTION 2.15. *Majority Vote or Consent.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Article XIX of the Mortgage, as amended and supplemented, to read substantially as follows:

“ARTICLE XIX.

Meetings and Consents of Bondholders.

SECTION 107. Modifications and alterations of this Indenture and/or of any indenture supplemental hereto and/or of the rights and obligations of the Company and/or of the rights of the holders of bonds and coupons issued hereunder may be made as provided in this Article XIX.

SECTION 108. The Corporate Trustee may at any time call a meeting of the holders of bonds of one or more, or all, series and it shall call such a meeting on written request of the Company, given pursuant to a Resolution of its Board of Directors, or a resolution of the holders of a majority or more in principal amount of the bonds of such series Outstanding hereunder, considered as one class, at the time of such request. In the event of the Corporate Trustee's failing for ten (10) days to call a meeting after being thereunto requested by the Company or bondholders as above set forth, holders of Outstanding bonds in the amount above specified in this Section or the Company, pursuant to Resolution of its Board of

Directors, may call such meeting. Every such meeting called by and at the instance of the Corporate Trustee shall be held in the Borough of Manhattan, The City of New York, or with the written approval of the Company, at any other place in the United States of America, and written notice thereof, stating the place and time thereof and in general terms the business to be submitted, shall be mailed by the Corporate Trustee not less than thirty (30) days before such meeting (a) to each registered holder of bonds of the series in respect of which such meeting is being called

then Outstanding hereunder addressed to him at his address appearing on the registry books, (b) to all other holders of bonds of such series then Outstanding hereunder the names and addresses of whom are preserved by the Corporate Trustee as required by the provisions of Section 43 hereof and (c) to the Company addressed to it at 220 N.W. Second Avenue, Portland, Oregon 97209 (or at such other address as may be designated by the Company from time to time), and, if any bonds of such series shall not be in fully registered form, shall be published by the Corporate Trustee at least once a week for four (4) successive calendar weeks immediately preceding the meeting, upon any secular day of each such calendar week, which need not be the same day of each week, in a Daily Newspaper, printed in the English language, and published and of general circulation in The City of New York; provided, however, that, if such notice by publication shall have been given, the mailing of such notice to any bondholders shall in no case be a condition precedent to the validity of any action taken at such meeting. Any meeting of holders of the bonds of one or more, or all, series shall be valid without notice if the holders of all bonds of such series then Outstanding hereunder are present in person or by proxy and if the Company and the Corporate Trustee are present by duly authorized representatives, or if notice is waived in writing before or after the meeting by the Company, the holders of all bonds of such series Outstanding hereunder and by the Corporate Trustee, or by such of them as are not present in person or by proxy.

SECTION 109. Officers and nominees of the Corporate Trustee and of the Company or their or its nominees may attend such meeting, but shall not as such be entitled to vote thereat. Attendance by bondholders may be in person or by proxy. In order that the holder of any bond payable to bearer and his proxy may attend and vote without producing his bond, the Corporate Trustee, with respect to any such meeting, may make and from time to time vary such regulations as it shall think fit for deposit of bonds with, (i) any bank or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State of the United States or any public instrumentality of the United States, any State or Territory, or (iv) any other person or corporation satisfactory to the Corporate Trustee, and for the issue to the persons depositing the same of certificates by such depositories entitling the holders thereof to be present and vote at any such meeting and to appoint proxies to represent them and vote for them at any such meeting in the same way as if the persons so present and voting, either personally or by proxy, were the actual bearers of the bonds in respect of which such certificates shall have been issued and any regulations so made shall be binding and effective. In lieu of or in addition to providing for such deposit, the Corporate Trustee may, in its discretion, permit such institutions to issue certificates stating that bonds were exhibited to them, which certificates shall entitle the holders thereof to vote at any meeting only if the bonds with respect to which they are issued are not produced at the meeting by any other person and are not at the time of the meeting registered in the name of any other person. Each such certificate shall state the date on which the bond or bonds in respect of which such certificate shall have been issued were deposited with or exhibited to such institution and the series, maturities and serial numbers of such bonds. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf. In the event that two or more such certificates shall be issued with respect to any bond or bonds, the certificate bearing the latest date shall be recognized and be deemed to supersede any certificate or certificates previously issued with respect to such bond or bonds. If any such meeting shall have been called under

the provisions of Section 108 hereof, by bondholders or by the Company, and the Corporate Trustee shall fail to make regulations as above authorized, then regulations to like effect for such deposit, or exhibition of bonds and the issue of certificates by (i) any bank or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) by the United States of America, any Territory thereof,

the District of Columbia, any State of the United States, any municipality in any State of the United States or any public instrumentality of the United States, any State or Territory shall be similarly binding and effective for all purposes hereof if adopted or approved by the bondholders calling such meeting or by the Board of Directors of the Company, if such meeting shall have been called by the Company, provided that in either such case copies of such regulations shall be filed with the Corporate Trustee. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf.

SECTION 110. Subject to the restrictions specified in Sections 109 and 113 hereof, any registered holder of bonds Outstanding hereunder and any holder of a certificate (not superseded) provided for in Section 109 hereof relating to bonds Outstanding hereunder, in either case of the series in respect of which a meeting shall have been called, shall be entitled in person or by proxy to attend and vote at such meeting as a holder of the bonds registered or certified in the name of such holder without producing such bonds. All others seeking to attend or vote at such meeting in person or by proxy must, if required by any authorized representative of the Corporate Trustee or the Company or by any other bondholder, produce the bonds claimed to be owned or represented at such meeting and every one seeking to attend or vote shall, if required as aforesaid, produce such further proof of bond ownership or personal identity as shall be satisfactory to the authorized representative of the Corporate Trustee, or if none be present then to the Inspectors of Votes hereinafter provided for. Proxies shall be witnessed or in the alternative may (a) have the signature guaranteed by a bank or trust company or a registered dealer in securities participating in a recognized signature guarantee medallion program, (b) be acknowledged before a Notary Public or other officer authorized to take acknowledgements, or (c) have their genuineness otherwise established to the satisfaction of the Inspector of Votes. All proxies and certificates presented at any meeting shall be delivered to said Inspectors of Votes and filed with the Corporate Trustee.

SECTION 111. Persons nominated by the Corporate Trustee if it is represented at the meeting shall act as temporary Chairman and Secretary, respectively, of the meeting, but if the Corporate Trustee shall not be represented or shall fail to nominate such persons or if any person so nominated shall not be present, the bondholders and proxies present shall by a majority vote of bonds represented elect another person or other persons from those present to act as temporary Chairman and/or Secretary. A permanent Chairman and a permanent Secretary of such meeting shall be elected from those present by the bondholders and proxies present by a majority vote of bonds represented. The Corporate Trustee, if represented at the meeting, shall appoint two Inspectors of Votes who shall decide as to the right of anyone to vote and shall count all votes cast at such meeting, except votes on the election of a Chairman and Secretary, both temporary and permanent, as aforesaid, and who shall make and file with the permanent Secretary of the meeting their verified written report in duplicate of all such votes so cast at said meeting. If the Corporate Trustee shall not be represented at the meeting or shall fail to nominate such Inspectors of Votes or if either Inspector of Votes fails to attend the meeting, the vacancy shall be filled by appointment by the permanent Chairman of the meeting.

SECTION 112. The holders of a majority in aggregate principal amount of the bonds Outstanding hereunder of the series with respect to which a meeting shall have been called as hereinbefore provided, considered as one class, shall constitute a quorum for a meeting of

holders of bonds of such series; provided, that if any action is to be taken at such meeting which this Indenture expressly provides may be taken by the holders of a specified percentage which is less than a majority in principal amount of the bonds of such series Outstanding hereunder, considered as one class, then the holders of such specified percentage in principal amount of the bonds of such series Outstanding hereunder, considered as one class, shall constitute a quorum. In the absence of a quorum within one hour of the time appointed for any such meeting, the meeting shall, if convened at the request of

holders of bonds of such series, be dissolved. In any other case the meeting may be adjourned for such period or periods as may be determined and announced by the chairman of the meeting prior to the adjournment thereof.

SECTION 113. Any modification or alteration of this Indenture and/or of any indenture supplemental hereto and/or of the rights and obligations of the Company and/or the rights of the holders of bonds and/or coupons issued hereunder in any particular may be made at a meeting of bondholders duly convened and held in accordance with the provisions of this Article, but only by resolution duly adopted by the affirmative vote of the holders of a majority in principal amount of the bonds Outstanding hereunder, considered as one class (or, if such modification or alteration shall materially adversely affect the holders of bonds of one or more, but less than all, series then Outstanding hereunder, then the affirmative vote only of the holders of a majority in aggregate principal amount of the bonds of the series adversely affected in any material respect then Outstanding hereunder, considered as one class), when such meeting is held, and in every case approved by Resolution of the Board of Directors of the Company as hereinafter specified; provided, however, that no such modification or alteration shall, without the consent of the holder of any bond issued hereunder affected thereby, permit (1) the extension of the maturity of the principal of, or interest on, such bond, or (2) the reduction in such principal or the rate of interest thereon or any other modification in the terms of payment of such principal or interest, or (3) the creation of any lien ranking prior to, or on a parity with, the Lien of this Indenture with respect to any of the Mortgaged and Pledged Property, or (4) the deprivation of any non-assenting bondholder of a lien upon the Mortgaged and Pledged Property for the security of his bonds (subject only to Excepted Encumbrances) or (5) the reduction of the percentage required by the provisions of this Section for the taking of any action under this Section with respect to any bond Outstanding hereunder. For all purposes of this Article, the Trustees shall be entitled to rely upon an Opinion of Counsel with respect to the extent, if any, as to which any action taken at such meeting affects the rights under this Indenture or under any indenture supplemental hereto of any holders of bonds then Outstanding hereunder.

Bonds owned and/or held by and/or for account of and/or for the benefit or interest of the Company, or any corporation of which the Company shall own twenty-five per centum (25%) or more of the outstanding voting stock, shall not be deemed Outstanding for the purpose of any vote or of any calculation of bonds Outstanding in Article XVI hereof or in this Article XVIII or for the purpose of the quorum provided for in Section 112 of this Article; provided, however, that bonds so owned or held which have been pledged in good faith may be regarded as Outstanding for purposes of this paragraph if the pledgee establishes to the satisfaction of the Corporate Trustee the pledgee's right to vote or give consents with respect to such bonds and that the pledgee is not the Company or a corporation of which the Company shall own twenty-five per centum (25%) or more of the outstanding voting stock. For all purposes of this Indenture, the Corporate Trustee, the Chairman and Secretary of any meeting held pursuant to the provisions of this Article XIX and the Inspectors of Votes at any such meeting shall (unless the fact is challenged at such meeting by any holder of bonds Outstanding hereunder entitled to vote at such meeting and a contrary fact is established) be entitled conclusively to rely upon a notification in writing by an officer of the Company, specifying the principal amount of bonds Outstanding hereunder owned by or held by or for the account of or for the benefit or interest of the Company or any corporation of which the

Company shall own twenty-five per centum (25%) or more of the outstanding voting stock, or stating that no such bonds are so owned or held. In case the meeting shall have been called otherwise than on the written request of the Company, the Corporate Trustee shall be entitled conclusively to assume that none of the bonds Outstanding hereunder is so owned or held unless a notification by the Company is furnished as in

this paragraph provided or unless the fact is challenged at such meeting by any holder of bonds Outstanding hereunder and a contrary fact is established.

SECTION 114. A record in duplicate of the proceedings of each meeting of bondholders shall be prepared by the permanent Secretary of the meeting and shall have attached thereto the original reports of the Inspectors of Votes, and affidavits by one or more persons having knowledge of the facts showing a copy of the notice of the meeting, and showing that said notice was mailed and published as provided in Section 108 hereof. Such record shall be signed and verified by the affidavit of the permanent Chairman and the permanent Secretary of the meeting, and one duplicate thereof shall be delivered to the Company and the other to the Corporate Trustee for preservation by the Corporate Trustee. Any record so signed and verified shall be proof of the matters therein stated, and if such record shall also be signed and verified by the affidavit of a duly authorized representative of the Corporate Trustee, such meeting shall be deemed conclusively to have been duly convened and held and such record shall be conclusive, and any resolution or proceeding stated in such record to have been adopted or taken, shall be deemed conclusively to have been duly adopted or taken by such meeting. A true copy of any resolution adopted by such meeting shall be mailed by the Corporate Trustee (a) to each registered holder of bonds of the series adversely affected in any material respect by such resolution then Outstanding addressed to him at his address appearing on the registry books and (b) to all other holders of bonds then Outstanding hereunder, the names and addresses of whom are then preserved by the Corporate Trustee pursuant to the provisions of Section 43 hereof, and proof of such mailing by the affidavit of some person having knowledge of the fact shall be filed with the Corporate Trustee, but failure to mail copies of such resolution as aforesaid shall not affect the validity thereof. No such resolution shall be binding until and unless such resolution is approved by Resolution of the Board of Directors of the Company, of which such Resolution of approval, if any, it shall be the duty of the Company to file a copy certified by the Secretary or an Assistant Secretary of the Company with the Corporate Trustee, but if such Resolution of the Board of Directors of the Company is adopted and a certified copy thereof is filed with the Corporate Trustee, the resolution so adopted by such meeting shall (to the extent permitted by law) be deemed conclusively to be binding upon the Company, the Trustees and the holders of all bonds and coupons issued hereunder, at the expiration of sixty (60) days after such filing, except in the event of a final decree of a court of competent jurisdiction setting aside such resolution, or annulling the action taken thereby in a legal action or equitable proceeding for such purposes commenced within such sixty (60) day period; provided, however, that no such resolution of the bondholders, or of the Company, shall in any manner be so construed as to change or modify any of the rights, immunities, or obligations of the Trustees or either of them without their, its or his written assent thereto.

SECTION 115. Bonds authenticated and delivered after the date of any bondholders' meeting may bear a notation in form approved by the Corporate Trustee as to the action taken at meetings of bondholders theretofore held, and upon demand of the holder of any bond Outstanding at the date of any such meeting and presentation of his bond for the purpose at the principal office of the Corporate Trustee, the Company shall cause suitable notation to be made on such bond by endorsement or otherwise as to any action taken at any meeting of bondholders theretofore held. If the Company or the Corporate Trustee shall so determine, new bonds so modified as in the opinion of the Corporate Trustee and the Board of Directors

of the Company to conform to such bondholders' resolution shall be prepared, authenticated and delivered, and upon demand of the holder of any bond then Outstanding and affected thereby shall be exchanged without cost to such bondholders for bonds then Outstanding hereunder upon surrender of such bonds with all unmatured coupons, if any, appertaining thereto. The Company or the Corporate Trustee may require bonds Outstanding to be presented for notation or exchange as aforesaid if either shall see fit to do so. Instruments supplemental to this Indenture

embodying any modification or alteration of this Indenture or of any indenture supplemental hereto made at any bondholders' meeting and approved by Resolution of the Board of Directors of the Company, as aforesaid, may be executed by the Trustees and the Company and upon demand of the Corporate Trustee, or if so specified in any resolution adopted by any such bondholders' meeting, shall be executed by the Company and the Trustees.

Any instrument supplemental to this Indenture executed pursuant to the provisions of this Section or otherwise, shall comply with all applicable provisions of the Trust Indenture Act of 1939 as in force on the date of the execution of such supplemental indenture.

SECTION 116. (A) Anything in this Article XIX contained to the contrary notwithstanding, the Corporate Trustee shall receive the written consent (in any number of instruments of similar tenor executed by bondholders or by their attorneys appointed in writing or in the supplemental indenture or supplemental indentures creating such series of bonds) of the holders of a majority in principal amount of the bonds Outstanding hereunder, considered as one class (or, if any action proposed to be taken shall materially adversely affect the holders of bonds of one or more, but less than all, series then Outstanding hereunder, then the consent only of the holders of a majority in aggregate principal amount of bonds of the series so adversely affected in any material respect then Outstanding hereunder, considered as one class), at the time the last such needed consent is delivered to the Corporate Trustee, in lieu of the holding of a meeting pursuant to this Article XIX and in lieu of all action at such a meeting and with the same force and effect as a resolution duly adopted in accordance with the provisions of Section 113 hereof.

(B) Instruments of consent shall be witnessed or in the alternative may (a) have the signature guaranteed by a bank or trust company or a registered dealer in securities participating in a recognized signature guarantee medallion program, (b) be acknowledged before a Notary Public or other officer authorized to take acknowledgments, or (c) have their genuineness otherwise established to the satisfaction of the Corporate Trustee.

The amount of bonds payable to bearer, and the series and serial numbers thereof, held by a person executing an instrument of consent (or whose attorney has executed an instrument of consent in his behalf), and the date of his holding the same, may be proved by exhibiting the bonds to and obtaining a certificate executed by (i) any bank or trust or insurance company organized under the laws of the United States of America or of any State thereof, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization or similar fund or funds, or (iii) the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State of the United States or any public instrumentality of the United States, or of any State or of any Territory, or (iv) any other person or corporation satisfactory to the Corporate Trustee. A bondholder in any of the foregoing categories may sign a certificate in his own behalf.

Each such certificate shall be dated and shall state in effect that as of the date thereof a coupon bond or bonds bearing a specified serial number or numbers was exhibited to the signer of such certificate. The holding by the person named in any such certificate of any bonds specified therein shall be presumed to continue unless (1) any certificate bearing a later date issued in respect of the same bond shall be produced, (2) the bond specified in such

certificate (or any bond or bonds issued in exchange or substitution for such bond) shall be produced, or (3) the bond specified in such certificate shall be registered as to principal in the name of another holder or shall have been surrendered in exchange or a fully registered bond registered in the name of another holder. The

Corporate Trustee may nevertheless in its discretion require further proof in cases where it deems further proof desirable. The ownership of registered bonds shall be proved by the registry books.

(C) Until such time as the Corporate Trustee shall receive the written consent of the necessary per centum in principal amount of the bonds required by the provisions of subsection (A) above for action contemplated by such consent, any holder of a bond, the serial number of which is shown by the evidence to be included in the bonds the holders of which have consented to such action, may, by filing written notice with the Corporate Trustee at its principal office and upon proof of holding as provided in subsection (B) above, revoke such consent so far as it concerns such bond unless such consent states that it shall be irrevocable or is set forth in the supplemental indenture creating such series of bonds. Except as aforesaid, any such action taken by the holder of any bond shall be conclusive and binding upon such holder and upon all future holders of such bond (and any bond issued in lieu thereof or exchanged therefor), irrespective of whether or not any notation of such consent is made upon such bond, and in any event any action taken by the holders of the percentage in aggregate principal amount of the bonds specified in subsection (A) above in connection with such action shall be conclusively binding upon the Company, the Corporate Trustee and the holders of all the bonds.”

SECTION 2.16. *Amendments without the Consent of Bondholders.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 120 of the Mortgage, as amended and supplemented, to read substantially as follows:

“SECTION 120. Anything in this Indenture to the contrary notwithstanding, without the consent of any holders of bonds, the Company and the Trustees, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustees, for any of the following purposes:

(a) to evidence the succession of another corporation to the Company and the assumption by any such successor of the covenants of the Company herein and in the bonds, all as provided in Article XVI hereof, or

(b) to add one or more covenants of the Company or other provisions for the benefit of all holders of the bonds or for the benefit of the holders of, or to remain in effect only so long as there shall be Outstanding, bonds of one or more specified series, and to make the occurrence of a default in the performance of any of such additional covenants an additional “Default” under Section 65 permitting the enforcement of all or any of the several remedies provided in this Indenture, as herein set forth; provided, however, that in respect of any such additional covenant, such supplemental indenture may provide for a particular period of grace after default (which period may be shorter or longer than those allowed in the case of other defaults) or may provide for an immediate enforcement upon such default, or may (subject to the provisions of applicable law) limit the remedies available to the Trustees upon such default; or to provide that the occurrence of one or more specified events shall constitute additional

“Defaults” under Section 65 as if set forth therein, or to surrender any right or power herein conferred upon the Company, which additional “Default” or surrender may be limited so as to remain in effect only so long as bonds of one or more specified series shall remain Outstanding; or

(c) to correct or amplify the description of any property at any time subject to the Lien of this Indenture, or better to assure, convey and confirm unto the Trustees any property

subject or required to be subjected to the Lien of this Indenture, or to subject to the Lien of this Indenture additional property; or

(d) to change or eliminate any provision of this Indenture or to add any new provision to this Indenture; provided, however, that no such change, elimination or addition shall adversely affect the interests of the holders of bonds of any series in any material respect; or

(e) to establish the form or terms of bonds of any series as contemplated by Article II of this Indenture; or

(f) to provide for the procedures required to permit the Company to utilize, at its option, a non-certificated system of registration for all or any series of bonds; or

(g) to change any place or places (within the United States of America) where (1) the principal of and premium, if any, and interest, if any, on all or any series of bonds shall be payable, (2) all or any series of bonds may be surrendered for registration of transfer, (3) all or any series of bonds may be surrendered for exchange and (4) notices and demands to or upon the Company in respect of all or any series of bonds and this Indenture may be served; or

(h) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein; or to make any other changes to the provisions hereof or to add other provisions with respect to matters or questions arising under this Indenture, provided that such other changes or additions shall not adversely affect the interests of the holders of bonds of any series in any material respect.

Without limiting the generality of the foregoing, if the Trust Indenture Act of 1939, as in effect at any time and from time to time,

(x) shall require one or more changes to any provisions hereof or the inclusion herein of any additional provisions, or shall by operation of law be deemed to effect such changes or incorporate such provisions by reference or otherwise, this Indenture shall be deemed to have been amended so as to conform to the Trust Indenture Act of 1939 as then in effect, and the Company and the Trustees may, without the consent of any holders of bonds, enter into an indenture supplemental hereto to evidence such amendment hereof; or

(y) shall permit one or more changes to, or the elimination of, any provisions hereof which shall theretofore have been required by the Trust Indenture Act of 1939 to be contained herein or are contained herein to reflect any provisions of the Trust Indenture Act of 1939, this Indenture shall be deemed to have been amended to effect such changes or elimination, and the Company and the Trustees may, without the consent of any holders of bonds, enter into an indenture supplemental hereto to evidence such amendment hereof, provided that the Indenture shall not be amended as provided in this clause (y) so as to adversely affect the interests of the holders of bonds of any series in any material respect.”

SECTION 2.17. *Excepted Encumbrances*. The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, (A) to delete the definition of “Excepted Encumbrances” in Section 6 of the Mortgage, as amended and supplemented, and

(B) to change the words “Excepted Encumbrances” wherever used in the Mortgage or in any supplemental indenture, including the amendments described in this Article II, to “Permitted Liens”.

SECTION 2.18. *Release of Company after Transfer of Substantially All of the Mortgaged Property.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 86 of the Mortgage to add a new paragraph reading substantially as follows:

“In case the Company, as permitted by Section 85 hereof, shall convey or transfer, subject to the Lien of this Indenture, all or substantially all of the Mortgaged and Pledged Property as an entirety to a successor corporation, the indenture described above in this Section may also provide for the release and discharge of the Company from all obligations under this Indenture or any bonds issued hereunder which are assumed by such successor corporation.”

SECTION 2.19. *Easements, Ground Leases, Rights-of-Way.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 58 of the Mortgage, as amended and supplemented, to restate clause (2) thereof to read substantially as follows:

“(2) (a) cancel or make changes or alterations in or substitutions of any and all right of way grants; (b) sell or otherwise dispose of, free from the Lien of this Indenture, cancel, make changes or alterations in or substitutions of any and all contracts, leases, operating agreements, obligations, securities, accounts receivable, choses in action, and other rights, interests and property not constituting Property Additions; and (c) grant, free from the Lien of this Indenture, easements, ground leases or rights-of-way in, upon, over and/or across the property or rights-of-way of the Company for the purpose of roads, pipe lines, transmission lines, distribution lines, communication lines, railways, removal or transportation of coal, lignite, gas, oil or other minerals or timber, and other like purposes, or for the joint or common use of real property, rights-of-way, facilities and/or equipment; provided, however, that such grant shall not materially impair the use of the property or rights-of-way for the purposes for which such property or rights-of-way are held by the Company; and”

SECTION 2.20. *Elimination of Five Year Limit on Property Additions Used for Releases.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend clause (b) of subdivision (4) of Section 59 of the Mortgage, as amended and supplemented, to delete the words “that no such application for release may be based in whole or in part upon Property Additions acquired, made or constructed more than five years prior to the last day of the calendar month immediately preceding the date of such application, and provided, further,”:

SECTION 2.21. *Releases Based on Retired Bonds.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November

1, 2016, to amend clause (c) of subdivision (4) of Section 59 of the Mortgage, as amended and supplemented, to read substantially as follows:

“(c) the principal amount of each bond or fraction of bond to the authentication and delivery of which the Company shall be entitled under the provisions of Section 26 or the Reciprocal of the Bonding Ratio multiplied by the principal amount of each bond or fraction of bond to the authentication

and delivery of which the Company shall be entitled under the provisions of Section 29 hereof, by virtue of compliance with all applicable provisions of said Section 26 or Section 29, as the case may be (except as hereinafter in this Section otherwise provided); provided, however, that (except as hereinafter in this Section otherwise provided) the application for such release shall operate as a waiver by the Company of such right to the authentication and delivery of each such bond or fraction thereof on the basis of which right such property is released and to such extent no such bond or fraction thereof may thereafter be authenticated and delivered hereunder, and any Corresponding Retired Bonds or Corresponding Qualified Lien Bonds, as hereinafter defined, shall be deemed to have been made the basis of the release of such property; for purposes of this clause (c), the following definitions shall apply:

The term “Corresponding Retired Bond” shall mean the bond or fraction of a bond selected by the Company to serve as the basis under the provisions of Section 29 of the Mortgage for such right to the authentication and delivery of bond(s) or fraction of a bond so waived; and

The term “Corresponding Qualified Lien Bond” shall mean the Qualified Lien Bond selected by the Company to serve as the basis under the provisions of Section 26 of the Mortgage for such right to the authentication and delivery of bond(s) or fraction of a bond so waived.”

SECTION 2.22. *Releases Based on Purchase Money Mortgage Obligations.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 59 of the Mortgage, as amended and supplemented, to delete the clause at the end of subdivision (4) beginning with the words “provided, however, that (i) no obligations ...” and ending with the words “... at such time Outstanding under this Indenture” and substituting therefor substantially the following:

“provided, however, that no obligations secured by a purchase money mortgage upon any property being released from the Lien hereof shall be used as a credit in any application for such release unless the Company shall deliver to the Trustees a certificate or opinion of an engineer, appraiser or other expert as to the fair value of such purchase money mortgage obligations to the Company, and provided further, that if the fair value to the Company of such purchase money mortgage obligations and of all other securities (other than bonds authenticated and delivered hereunder) made the basis of any authentication and delivery of bonds hereunder, the withdrawal of any cash constituting part of the trust estate hereunder, or the release of any property or securities from the Lien hereof since the commencement of the then calendar year, as set forth in the certificates or opinions required by this clause, is ten per centum (10%) or more of the aggregate principal amount of the bonds at the time Outstanding under this Indenture, such certificate or opinion shall be made by an independent engineer, appraiser, or other expert; but such a certificate of an independent engineer, appraiser, or other expert shall not be required with respect to any purchase money mortgage obligations so deposited, if the fair value thereof to the Company as set forth in the certificate or opinion required by this clause is less than twenty-five thousand Dollars (\$25,000) or less than one per centum (1%) of the aggregate principal amount of bonds at the time Outstanding under this Indenture.”

SECTION 2.23. *Mineral Rights*. The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 3 of the Mortgage, as amended and supplemented, to add the following definition:

The term “mineral rights”, for purposes of the Mortgage, as amended and supplemented, shall mean rights to extract minerals that naturally exist under or on real property (and associated express and implied rights), but shall exclude any rights or other property constructed, acquired or held by the Company primarily for the purpose of storing and withdrawing gas that has been injected into, or may from time to time be injected into, storage reservoirs or other facilities located on or under real property, whether or not such rights or other property constitute “mineral rights” under applicable law, whether or not such storage reservoirs or other facilities are naturally existing or were constructed, and whether or not such storage reservoirs or other facilities contain some gas that naturally exists in such reservoir or facility.

ARTICLE III.

Consent to Amendments.

SECTION 3.01 Each initial and future holder of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, by its acquisition of an interest in such bonds, irrevocably (a) consents to the amendments set forth in Article II of this Twenty-second Supplemental Indenture, in each case without any other or further action by any holder of such bonds, and (b) designates the Corporate Trustee, and its successors, as its proxy with irrevocable instructions to vote and deliver written consents on behalf of such holder in favor of such amendments at any bondholder meeting, in lieu of any bondholder meeting, in any consent solicitation or otherwise. The terms of the bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, as set forth in the Twentieth Supplemental Indenture, are hereby amended to include such consent and designation.

ARTICLE IV.

Miscellaneous Provisions.

SECTION 4.01 Subject to the amendments provided for in this Twenty-second Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Twenty-second Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 4.02 The Trustee hereby accepts the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Twenty-second Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Twenty-second Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Twenty-second Supplemental Indenture.

SECTION 4.03 Whenever in this Twenty-second Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this

Twenty-second Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustee shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 4.04 Nothing in this Twenty-second Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Twenty-second Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twenty-second Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 4.05 Except to the extent specifically provided herein, no provision of this Twenty-second Supplemental Indenture is intended to reinstate any provisions in the Mortgage which were amended and superseded by the amendments to the Trust Indenture Act of 1939 effective as of November 15, 1990.

SECTION 4.06 This Twenty-second Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 1st day of November, 2016, as of November 1, 2016, in Portland, Oregon; Deutsche Bank Trust Company Americas, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its Vice Presidents or its Assistant Vice Presidents and its corporate seal to be attested by one of its Vice Presidents, Assistant Vice Presidents, one of its Assistant Secretaries or one of its Associates on the 1st day of November, 2016, as of November 1, 2016, in The City of New York.

NORTHWEST NATURAL GAS COMPANY

By /s/ MardiLyn Saathoff
MardiLyn Saathoff
Senior Vice President, Regulation and General Counsel

Attest:

/s/ Shawn M. Filippi
Shawn M. Filippi
Vice President, Chief Compliance Officer
and Corporate Secretary

Executed, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY
in the presence of:

/s/ Chu Lee
Chu Lee

/s/ Elissa Ann Twombly
Elissa Ann Twombly

DEUTSCHE BANK TRUST COMPANY
AMERICAS, as Trustee,

By ___ /s/Li Jiang_____
Li Jiang
Vice President

By ___ /s/Nigel Luke_____
Nigel Luke
Vice President

Attest:

___ /s/Jackson Hui_____
Jackson Hui
Associate

Executed, sealed and delivered by
DEUTSCHE BANK TRUST COMPANY AMERICAS
in the presence of:

___ /s/Oneaka Hendricks_____
Oneaka Hendricks
Vice President

___ /s/Jin Choi_____
Jin Choi
Associate