SIXTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of November, 1988, made and entered into by and between NORTHWEST NAT-URAL 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 COM-PANY, 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

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

County	Date Recorded	Book, Film or Reel	<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 (#8627)	177) -
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	86153 8	_
Washington	July 3, 1986	86028953	-
Yamhill	July 7, 1986	204	1510

Filed as a Financing Statement

<u>Office</u>	Date Filed for Record	File No.
Secretary of State	July 3, 1986	K 52983

WASHINGTON

Real Property Mortgage Records

County	Date Recorded	Book, Film <u>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

Office Date Filed for Record File Number

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>	Principal Amount Outstanding
4-3/4% Series due 1989	\$ 4,200,000 \$ 9,765,000 None \$12,951,000 None None \$15,000,000 \$15,000,000 \$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

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 ambiquity 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;

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 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

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

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 herein-before 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 Bonds of the Seventeenth Series shall be specified. 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,

1999102.00%	2009100.00%
2000101.50%	2010100.00%
2001101.00%	2011100.00%
2002100.50%	2012100.00%
2003100.50%	2013100.00%
2004100.00%	2014100.00%
2005100.00%	2015100.00%
2006100.00%	2016100.00%
2007100.00%	2017100.00%
2008100.00%	2018100.00%
	2000101.50% 2001101.00% 2002100.50% 2003100.50% 2004100.00% 2005100.00% 2006100.00% 2007100.00%

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,

		2000 100 000
1989100.00%	1999100.00%	2009100.00%
1990100.00%	2000100.00%	2010100.00%
1991100.00%	2001100.00%	2011100.00%
1992100.00%	2002100.00%	2012100.00%
1993100.00%	2003100.00%	2013100.00%
1994100.00%	2004100.00%	2014100.00%
1995100.00%	2005100.00%	2015100.00%
1996100.00%	2006100.00%	2016100.00%
1997100.00%	2007100.00%	2017100.00%
1998100.00%	2008100.00%	2018100.00%

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

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. 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

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-

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.

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.

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.

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 Brue Rd Ce Bass

Senior Vice President, Finance and Administration

Attest:

Virginia Mulance
Assistant Secretary

Executed, sealed and delivered by NORTHWEST NATURAL GAS COMPANY in the presence of:

Leslie K. alldrin

BANKERS TRUST COMPANY, as Trustee,

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:

Eic M. Hawner

STATE OF OREGON

ss.:

COUNTY OF MULTNOMAH

November 23, A.D. 1988.

Before me personally appeared (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.

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

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

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

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 NAT-URAL 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 COM-PANY, 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

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

County	Date Recorded	1	Book, Film or Reel	Page
Benton	December 1, 1	1988	M-106910-88	-
Clackamas	December 1,	1988	88 50344	- .
Clatsop	December 1, 1	1988	707	470
Columbia	December 1, 1	1988	88-6204	-
Coos	December 2,		88-12-0109	-
Douglas	December 2,		1042	119
Hood River	December 2,		882808	-
Lane	December 1,		1546R (8850420) -
Lincoln	December 1,		199	0823
Linn	December 1,		487	472
Marion	December 2,		659	370
Multnomah	December 2,		2160	667
Polk	December 1,		218	448
Tillamook	December 1,		318	943
Wasco	December 1,		883474	-
Washington	December 2,		88-53799	_
Yamhill	December 1,		F228P0068	-

Filed as a Financing Statement

<u>Office</u>	Date Filed for Record	File No.
Secretary of State	December 2, 1988	N 01045

WASHINGTON

Real Property Mortgage Records

County	Date Recorded	Book, Film or Reel	<u>Paqe</u>
Clark Klickitat Skamania	December 2, 1988 December 1, 1988 December 2, 1988	8812020080 250 112	294 95

Filed as a Financing Statement

Office Date Filed for Record File Number

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:

	Principal Amount
<u>Series</u>	Outstanding
4-3/4% Series due 1989	None \$ 9,518,000 None \$11,739,000 None None None \$15,000,000 \$15,000,000 \$48,000,000 \$24,989,000
; 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 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:

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 Seventeenth 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 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

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 herein-before 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,

2000104.22%	2010	100.00%
2001103.80%	2011	100.00%
2002103.37%	2012	100.00%
2003102.95%	2013	100.00%
2004102.53%	2014	100.00%
2005102.11%	2015	100.00%
2006101.69%	2016	100.00%
2007101.27%	2017	100.00%
2008100.85%	2018	100.00%
2009100.43%	2019	100.00%
	2001103.80% 2002103.37% 2003102.95% 2004102.53% 2005102.11% 2006101.69% 2007101.27% 2008100.85%	2001103.80% 2011 2002103.37% 2012 2003102.95% 2013 2004102.53% 2014 2005102.11% 2015 2006101.69% 2016 2007101.27% 2017 2008100.85% 2018

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,

1990100.00%	2000100.00%	2010100.00%
1991100.00%	2001100.00%	2011100.00%
1992100.00%	2002100.00%	2012100.00%
1993100.00%	2003100.00%	2013100.00%
1994100.00%	2004100.00%	2014100.00%
1995100.00%	2005100.00%	2015100.00%
1996100.00%	2006100.00%	2016100.00%
1997100.00%	2007100.00%	2017100.00%
1998100.00%	2008100.00%	2018100.00%
1999100.00%	2009100.00%	2019100.00%

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

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

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

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-

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

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.

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

by

Attest:
. C.J. Rue Secretary
Executed, sealed and delivered by NORTHWEST NATURAL GAS COMPANY in the presence of:
Lou-Wayne Steiger
Leslie K. Alldrin

	BANKERS	TRUST	COMPANY,	as	Trustee
[CORPORATE SEAL]					
	Ву	Barba Vic	<u>ra A. Joi</u> e Preside	ner nt	
Attest:					
Y. Petras Blue Assistant Secretary					
	STANL		<u>nley Burg</u> G, as Tru		e
Executed, sealed and delivered by BANKERS TRUS COMPANY and STANLEY BURG in the presence of:	T				

Todd A. Gasper

Eric M. Hawner

STATE OF OREGON) : ss.:
COUNTY OF MULTNOMAH)
October 19, A.D. 1989.

Before me personally appeared BRUCE R. DEBOLT, who, being duly sworn, did say that he is Senior 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.

On this 19th day of October, 1989, before me personally appeared BRUCE R. DEBOLT, to me known to be Senior 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.

[NOTARIAL SEAL]

LAURA L. KILLAM

Notary Public, State of Oregon
My Commission Expires January 5, 1991

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

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

Counterpart No.	County	Date Recorded	Book, Film or Reel	<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

No.	<u>Office</u>	Date Filed for Record	File No.
10	Secretary of State	October 27, 1989	N 596 89

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

Counterpart No.	County	Date Recorded	Book, Film or Reel	<u>Page</u>
30 31 32	Clark Klickitat Skamania	October 27, 1989 October 27, 1989 October 30, 1989	399 258 116	1 214 503
	<u>Filed a</u>	s a Financing State	ement	
Counterpart No.	Office	<u>Date Filed</u>	for Record	File No.
29	Secretary of	State October	30 1080	90-202-0661

[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 NAT-URAL 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 COM-PANY, 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

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

County	Date Recorded	Book, Film or Reel	Page
Benton	October 27, 1989	M-116844-89	-
Clackamas	October 30, 1989	89 48562	-
Clatsop	October 30, 1989	726	580
Columbia	October 27, 1989	89-6310	-
Coos	October 31, 1989	89-10-1993	_
Douglas	October 27, 1989	1079	129
Hood River	October 30, 1989	892994	-
Lane	October 27, 1989	8948696	-
Lincoln	October 27, 1989	210	0933
Linn	October 27, 1989	514	812
Marion	October 27, 1989	726	415
Multnomah	October 30, 1989	2248	1890
Polk	October 27, 1989	227	957
Tillamook	October 30, 1989	324	615
Wasco	October 27, 1989	893143	-
Washington	October 30, 1989	89~52457	-
Yamhill	October 31, 1989	F237P1391	-

Filed as a Financing Statement

Office	Date Filed for Record	File No.
Secretary of State	October 27, 1989	N 59689

WASHINGTON

Real Property Mortgage Records

County	Date Recorded	Book, Film or Reel	Page
Clark	October 27, 1989	399	1
Klickitat	October 27, 1989	258	214
Skamania	October 30, 1989	116	503

Filed as a Financing Statement

Office	Date Filed for Record	File Number
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:

Series	Principal Amount Outstanding
5-3/4% Series due 1991	\$ 9,368,000 \$11,668,000 \$15,000,000 \$15,000,000 \$48,000,000 \$24,989,000 \$25,000,000

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-

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

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 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,

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.

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 herein-before 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.

(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,

2001104.63%	2009100.93%
2002104.17%	2010100.47%
2003103.70%	2011100.00%
2004103.24%	2012100.00%
2005102.78%	2013100.00%
2006102.32%	2014100.00%
2007101.85%	2015100.00%
2008101 398	

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.

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

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 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 (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:

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"(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).

- Sumplified of Property of Control of Control
- "(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:

- (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

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

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

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.

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

	BANKERS TRUST COMPANY, as Truscee,
[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 TRUSCOMPANY and STANLEY BURG in the presence of:	ST
John M. Stuart	
Maria Basa	

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]

<u>Virginia M. Vance</u> VIRGINIA M. VANCE Notary Public, State of Oregon

Notary Public, State of Oregon My Commission Expires March 24, 1991 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

STATE OF NEW YORK) : ss.:
COUNTY OF NEW YORK)

July 2, A.D. 1990.

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 2nd day of July, 1990.

[NOTARIAL SEAL]

Lizbeth Parker

LIZBETH PARKER

Notary Public, State of New York

No. 31-4959621

Qualified in New York County

Commission Expires December 4, 1991

SUMMARY OF RECORDING DATA IN THE STATE OF OREGON

Real Property Mortgage Records

Counterpart No.	County	Date I	Reco		Book, Film or Reel	<u>Page</u>
12	Benton	July 5	5, 19	990	M-124638-90	-
13	Clackamas	July 5	5, 19	990	90 32191	-
14	Clatsop	July 5	5, 19	990	740	116
15	Columbia	July 6	5, 1	990	90-3628	-
16	Coos	July 5			90~7~0187	-
17	Douglas	July 5	5, 19	990	1103	916
18	Hood River	July 5	5, 1	990	901847	-
19	Lane	July 5	5, 19	990	9031527	-
20	Lincoln	July 5			218	2391
21	Linn	July S	5, 19	990	535	950
22	Marion	July 9	9, 19	990	783	40
23	Multnomah	July 5			2320	0466
24	Polk	July 6	5, 19	990	233	1777
25	Tillamook	July 5	5, 19	990	329	220
26	Wasc o	July 5	5, 19	990	902494	-
27	Washington	July 5	5, 19	990	90-35190	-
28	Yamhill	July 6			F245P0613	-

Filed as a Financing Statement

Counterpart Office		Date Filed for Record	File No.
10	Secretary of State	July 10, 1990	P03266

IN THE STATE OF WASHINGTON Real Property Mortgage Records

Counterpart No.	County	Date Recorded	Book, Film or Reel	Page
30 31 32	Clark Klickitat Skamania	July 5, 1990 July 5, 1990 July 5, 1990	9007050038 264 119	877 651

File as a Financing Statement

Counterpart No.	Office	Date Filed for Record	File No.
29	Secretary of State	July 19, 1990	90-200-0195

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 NAT-URAL 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 COM-PANY, 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 1946 July 1, (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

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 Indenture), its Fifteenth Supplemental 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 (hereinafter called its Seventeenth October 1, 1989 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

County	Date Recorded	Book, Film or Reel	Page
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	5 35	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>	Date Filed for Record	File No.
Secretary of State	July 10, 1990	P03266

WASHINGTON

Real Property Mortgage Records

County	Date Recorded	Book, Film or Reel	Page
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>	Date Filed for Record	File Number
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:

Series	Principal Amount Outstanding
8-5/8% Series due 1996	\$11,658,000 \$15,000,000 \$15,000,000 \$46,000,000 \$24,938,000 \$25,000,000 \$50,000,000

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-

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

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 whereso-ever 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 Mortas 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,

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.

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

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. 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

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

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

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

Attest:	
C.J. Rue Secretary	
Executed, sealed and deli NORTHWEST NATURAL GAS CO the presence of:	vered by MPANY in
Susana M. Jordan	
Lou-Wayne Steiger	
	BANKERS TRUST COMPANY, as Trustee,
	By <u>Jerry Olivo, Jr.</u> Assistant Vice President
Attest:	
Nancy L. Wilson Assistant Secretary	
	Stanley Burg STANLEY BURG, as Trustee
Executed, sealed an delivered by BANKERS TRUS COMPANY and STANLEY BUR in the presence of:	T
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 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
Sandra Shirley
Notary Public, State of New York
No. 41-4847807
My Commission Expires May 31, 1993

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

Counterpart No.	County	Date Recorded	Book, Film or Reel	<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	
ģ	Coos	June 14, 1991	91-06-0532	
10	Douglas	June 14, 1991	1140	3 73
	Hood River	June 18, 1991	911493	
11		June 17, 1991	9127918	
12	Lane		230	2261
13	Lincoln	June 14, 1991		
14	Linn	June 14, 1991	5 66	2
15	Marion	June 14, 1991	861	37
16	Multnomah	June 14, 1991	2424	970
17	Polk	June 14, 1991	242	1891
	Tillamook	June 14, 1991	335	496
18			912001	
19	Wasco	June 14, 1991		
20	Washington	June 14, 1991	91030895	
21	Yamhill	June 14, 1991	F255P2185	

Filed as a Financing Statement

Counterpart No. Office		Date Filed <u>for Record</u>	File No.
3	Secretary of State	June 14, 1991	P56754

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

CounterpartNo.	County	Date Reco	orded	Book, Fil	lm <u>Page</u>
23 24 25	Clark Klickitat Skamania	June 14, June 14, June 18,	1991	910614014 273 123	904 757
	Filed as	a Financi	ng State	ment	
Counterpart No.	Office		Date F		File No.
22	Secretary o	of State	June 1	7, 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

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, 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

1.

called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Fighth 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

County	Date Recorded	Book, Film or Reel	Page
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	
Coos	June 14, 1991	91-06-0532	
Douglas	June 14, 1991	1140	373
Hood River	June 18, 1991	911493	
Lane	June 17, 1991	9127918	
Lincoln	June 14, 1991	230	2261
Linn	June 14, 1991	566	2
Marion	June 14, 1991	861	37
Multnomah	June 14, 1991	2424	970
Polk	June 14, 1991	242	1891
Tillamook	June 14, 1991	335	496
	June 14, 1991	912001	
Wasco	June 14, 1991	91030695	
Washington		F255P2185	
Yamhill	June 14, 1991	123312203	

Filed as a Financing Statement

Office	Date Filed for Record	<u>File No.</u>
Secretary of State	June 14, 1991	P56754

WASHINGTON

Real Property Mortgage Records

County	Date Recorded	Book, Film or Reel	Page
Clark	June 14, 1991	9106140143	
Klickitat	June 14, 1991	273	904
Skamania	June 18, 1991	123	757

Filed as a Financing Statement

Office	Date Filed for Record	File No.
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>	Principal Amount Outstanding
8-5/8% Series due 1996	\$11,658,000 \$46,000,000 \$24,938,000 \$25,000,000 \$50,000,000 \$50,000,000

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 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 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 (by purchase, Mortgage, hereafter acquired by the Company 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.

WITH all and singular the tenements, TOGETHER prescriptions, servitudes and appurtenances hereditaments, 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, pleaged, 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 Cas 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

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

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 Twentyfirst 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 Notwithstanding the foregoing, so long as there payment date). 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

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.

- 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

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

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 Brue Radel Jale
Senior Vice President and
Chief Financial Officer

Attest:

J. L. Vhyers Yu Hayra Miger

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

STAMLEY BURG, As Trustee

Executed, sealed and delivered by BANKERS TRUST COMPANY and STANLEY BURG in the presence of:

KENKYN 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.

OFFICIAL SEAL
VIRGINIA V. BURGESS
NOTARY PUBLIC-OREGON
COMMISSION NO. 024344
MY CUMMISSION EXPIRES MARCH 24, 1995

STATE OF NEW YORK)

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

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

FORM OF SUPPLEMENTAL INDENTURE

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

TWENTY-FIRST SUPPLEMENTAL INDENTURE

_____, 2012, made and entered day of INDENTURE, dated as of the 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

EXHIBIT A (to Bond Purchase Agreement)

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

No.	County	Date Recorded	Book, Film or Reel	Page
11	Benton	June 23, 1993	M-166017-93	-
		June 29, 1993 (re-	M-166297-93) -
		recorded)		
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	<u> -</u>

Filed as a Financing Statement

No.	Office	Date Filed for Record	File No.	
9	Secretary of State	June 23, 1993	R61325	

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

No.	County	Date Recorded	Book, Film or Reel	Page
<u>No.</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

No.	Office	Date Filed for Record	File No.
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:

Series	Principal Amount Outstanding
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

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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 Twentysecond 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".

Optional Redemption. At any time prior to April 30, 2042 (six months (I) 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 Twentysecond 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.

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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 comptroller 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

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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.

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corporate name to be hereunto affixed, a President or one of its Vice President Secretary or one of its Assistant Secretary, as of, in Post Americas, has caused its corporate name signed and sealed by its Vice Presidents seal to be attested by one of its Vice Assistant Secretaries or one of its Assistant Secretaries or one of New Y	rthwest Natural Gas Company, has caused its and this instrument to be signed and sealed by its its, and its corporate seal to be attested by its taries for and in its behalf on the day of rtland, Oregon; Deutsche Bank Trust Company to be hereunto affixed, and this instrument to be or its Assistant Vice Presidents and its corporate Presidents, Assistant Vice Presidents, one of its ociates on the day of, as of York; and Stanley Burg has hereunto set his hand ew York, on the day of, as of
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	NORTHWEST NATURAL GAS COMPANY
	_
	By [Name]
	[Title]
Attest:	
[Name] [Title] Executed, sealed and delivered by NORTHWEST NATURAL GAS COM in the presence of:	1PANY
[Name]	

Executed, sealed and delivered by DEUTSCHE BANK TRUST COMPANY AMERICAS and STANLEY BURG in the presence of:

STATE OF OREGON) : ss.:	
COUNTY OF MULTNOMAH)	
, A.D	
asid Compression and that said instrument	, who, being duly sworn, did , of NORTHWEST NATURAL GAS foregoing instrument is the corporate seal of t was signed and sealed in behalf of said rectors; and he acknowledged said instrument
within and foregoing instrument, and acknowledge voluntary act and deed of said Corporation, and on oath stated that he was authorized affixed is the corporate seal of said Corporation.	to be of NY, one of the corporations that executed the sowledged said instrument to be the free and for the uses and purposes therein mentioned to execute said instrument and that the seal tion.
	Notary Public - Oregon Commission No
	Commission No My Commission Expires

STATE OF NEW YORK)	
: ss.: COUNTY OF NEW YORK)	
, A.D	
Before me personally appeared that [he/she] is a Vice President of DE AMERICAS and that the seal affixed to the formation and that said instrument Corporation by authority of its Board of Dinstrument to be its voluntary act and deed.	oregoing instrument is the corporate seal of was signed and sealed in behalf of said
On this day of and respectively, a Vice President, a Vice President, a Vice President, and AMERICAS, within and foregoing instrument, and acknow voluntary act and deed of said Corporation, for and on oath stated that they were authorized affixed is the corporate seal of said Corporation. IN WITNESS WHEREOF I have her seal the day and year first above written.	vledged said instrument to be the free and or the uses and purposes therein mentioned, to execute said instrument and that the seal
	Notary Public, State of New York No My Commission Expires

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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 ______, 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.

or imprinted hereon and attested by its Secretary or one of its Assistant Secretaries by his signature or a facsimile thereof. Dated: GAS NATURAL NORTHWEST **COMPANY** Attest: [SEAL] [Title] [Title] This bond is one of the bonds, of the series herein designated, described or provided for in the within-mentioned Mortgage. **COMPANY** TRUST BANK DEUTSCHE AMERICAS, (New York) Corporate Trustee By

Authorized Officer

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

EXHIBIT A (to Bond Purchase Agreement)

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 NATU	JRAL GAS COMPANY and does hereby
attorney, to transfer said bond on the books power of substitution in the premises.	of the within-mentioned Company, with full
Dated:	

NORTHWEST NATURAL GAS COMPANY BOND PURCHASE AGREEMENT DATED JULY 12, 2012 50,000,000 First Mortgage Bonds, 4.00% Series Due 2042

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NORTHWEST NATURAL GAS COMPANY 220 N.W. SECOND AVENUE PORTLAND, OREGON 97209

\$50,000,000 First Mortgage Bonds, 4.00% Series Due 2042

July 12, 2012

To Each of The Purchaser(s) Listed In The Attached Schedule A:

Ladies and Gentlemen:

Northwest Natural Gas Company, an Oregon corporation (the "Company"), agrees with the institutional investors listed in the attached Schedule A (the "Purchasers") to this Bond Purchase Agreement (this "Agreement") as follows:

SECTION 1. AUTHORIZATION OF BONDS.

Authorization of the Bonds. The Company has authorized the issue and sale of \$50,000,000 aggregate principal amount of its First Mortgage Bonds, 4.00% Series Due 2042 (the "Bonds"). The Bonds will be issued under and in accordance with the Mortgage and Deed of Trust, dated as of July 1, 1946 (the "Original Mortgage"), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company), as corporate trustee, and Stanley Burg (successor to R. G. Page and J. C. Kennedy), as co-trustee (the corporate trustee and the co-trustee hereinafter collectively called the "Trustee"), as amended and supplemented by various supplemental indentures and other instruments including the Twenty-first Supplemental Indenture, to be dated as of a date within thirty (30) days prior to the issuance of the Bonds (such Twenty-first Supplemental Indenture being hereinafter called the "Supplemental Indenture." and the Original Mortgage, as so amended and supplemented (including by the Supplemental Indenture) being hereinafter called the "Mortgage"). The Bonds shall be substantially in the form set out in Exhibit A to the Supplemental Indenture, with such changes therefrom, if any, as may be approved by the Purchasers and the Company. Certain capitalized and other terms used in this Agreement are defined in Schedule B to this Agreement and references to a "Schedule" or an "Exhibit" are, unless otherwise specified, to a Schedule or an Exhibit attached to this Agreement.

Section 1.2. Description of the Bonds. The Bonds shall be dated the date of authentication in accordance with the Mortgage (the "Issue Date"), shall bear interest (computed on the basis of a 360-day year of twelve 30-day months) on the unpaid principal balance thereof from the date of issuance at the rate of 4.00% per annum, payable on each Interest Payment Date, commencing with the first Interest Payment Date (as defined in the Supplemental Indenture)

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occurring after the Issue Date, until such principal sum shall have been paid (whether at maturity, upon redemption or otherwise).

SECTION 2. SALE AND PURCHASE OF BONDS.

Subject to the terms and conditions of this Agreement, the Company will issue and sell to each Purchaser and each Purchaser will purchase from the Company, at the Closing provided for in Section 3, Bonds in the principal amount specified opposite such Purchaser's name in Schedule A to this Agreement at the purchase price of 100% of the principal amount thereof. The obligations of each Purchaser hereunder are several and not joint obligations and each Purchaser shall have no obligation and no liability to any Person for the performance or nonperformance by any other Purchaser hereunder.

SECTION 3. EXECUTION DATE; CLOSING.

The execution and delivery of this Agreement will be made at the offices of Morgan, Lewis & Bockius LLP, 101 Park Avenue, New York, New York 10178 on July 12, 2012 (the "Execution Date").

The sale and purchase of the Bonds to be purchased by each Purchaser shall occur at the offices of Morgan, Lewis & Bockius LLP, 101 Park Avenue, New York, New York 10178. The closing for the sale and purchase of the Bonds (the "Closing") shall take place at 10:00 a.m., New York time, on such Business Day prior to October 31, 2012 that the Company designates for closing by notice to the Purchasers, provided that such notice shall be delivered to the Purchasers at least five (5) Business Days prior to such designated Closing date. At the Closing, the Company shall cause to be duly executed, authenticated and delivered to each Purchaser the Bonds to be purchased by such Purchaser in the form of a single Bond (or such greater number of Bonds in denominations of at least \$100,000 and, at the option of the Company, in any multiple or multiples of \$1,000, as such Purchaser may request) dated the date of the Closing and registered in such Purchaser's name (or in the name of such Purchaser's nominee), against delivery by such Purchaser to the Company or its order of immediately available funds in the amount of the purchase price therefor by wire transfer to the bank account of the Company specified in the funding instructions letter provided pursuant to Section 4.13 of this Agreement. If at the Closing the Company shall fail to tender Bonds to any Purchaser as provided above in this Section 3, or any of the conditions specified in Section 4 shall not have been fulfilled to any Purchaser's satisfaction, such Purchaser shall, at such Purchaser's election, be relieved of all further obligations under this Agreement with respect to such Bonds, without thereby waiving any rights such Purchaser may have by reason of such failure or such nonfulfillment.

If at the Closing any Purchaser shall fail to purchase the Bonds which it is obligated to purchase under this Agreement, the Company shall have the option of terminating its obligation to sell any Bonds only to any such defaulting Purchaser and be relieved of all further obligations under this Agreement only with respect to any such defaulting Purchaser.

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SECTION 4. CONDITIONS TO CLOSING.

The obligation of each Purchaser to purchase and pay for the Bonds to be sold to such Purchaser at the Closing is subject to the fulfillment, prior to or at the Closing, of the following conditions:

- Section 4.1. Representations and Warranties. The representations and warranties of the Company in this Agreement shall be correct on the Execution Date and at the time of the Closing (as if made at such time).
- Section 4.2. Performance. The Company shall have performed and complied with all agreements and conditions contained in this Agreement required to be performed or complied with by it prior to or at the Closing.

Section 4.3. Compliance Certificates.

- (a) Officer's Certificate. The Company shall have delivered to such Purchaser an Officer's Certificate, dated the date of the Closing, certifying that the conditions specified in Sections 4.1, 4.2 and 4.9 have been fulfilled.
- (b) Secretary's Certificate. The Company shall have delivered to such Purchaser a certificate of its Secretary or Assistant Secretary, dated the date of the Closing, certifying as to the resolutions attached thereto and other corporate proceedings relating to the authorization, execution and delivery of the Bonds, this Agreement and the other Bond Documents to which it is party.
- Section 4.4. Opinions of Counsel. Such Purchaser shall have received opinions in form and substance satisfactory to such Purchaser, dated the date of the Closing (a) from Margaret D. Kirkpatrick, Esq., General Counsel for the Company, Stoel Rives LLP, Oregon counsel for the Company, and Morgan, Lewis & Bockius LLP, as special counsel to the Company, substantially in the form set forth in Exhibit 4.4(a), with such changes as such Purchaser may reasonably request (and the Company hereby instructs its counsel to deliver such opinion to such Purchaser) and (b) from Chapman and Cutler LLP, as special counsel for the Purchasers in connection with such transactions, substantially in the form set forth in Exhibit 4.4(b), with such changes as such Purchaser may reasonably request.
- Section 4.5. Purchase Permitted By Applicable Law, Etc. On the date of the Closing, the purchase of Bonds by each Purchaser shall (i) be permitted by the laws and regulations of each jurisdiction to which such Purchaser is subject, without recourse to provisions (such as Section 1405(a)(8) of the New York Insurance Law) permitting limited investments by insurance companies without restriction as to the character of the particular investment, (ii) not violate any applicable law or regulation (including, without limitation, Regulations T, U or X of the Board of Governors of the Federal Reserve System) and (iii) not subject such Purchaser to any tax, penalty or liability under or pursuant to any applicable law or regulation, which law or regulation was not in effect on the date hereof (excluding any of the foregoing that are of general application to the business of a Purchaser). If requested by any Purchaser, such Purchaser shall have received

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an Officer's Certificate certifying as to such matters of fact as such Purchaser may reasonably specify to enable such Purchaser to determine whether such purchase is so permitted.

- Section 4.6. Sale of All Bonds. Subject to the last sentence of Section 3, the Company shall have consummated the sale of the entire principal amount of the Bonds scheduled to be sold on the date of the Closing to the Purchasers pursuant to this Agreement.
- Section 4.7. Payment of Special Counsel Fees. Without limiting the provisions of Section 10.1, the Company shall have paid on or before the Closing the fees, charges and disbursements of Purchasers' special counsel referred to in Section 4.4(b) to the extent reflected in a statement of such counsel rendered to the Company at least one Business Day prior to the Closing.
- Section 4.8. Private Placement Number. A Private Placement Number issued by Standard & Poor's CUSIP Service Bureau (in cooperation with the Securities Valuation Office of the National Association of Insurance Commissioners, the "SVO") shall have been obtained for each series of Bonds.
- Section 4.9. Changes in Corporate Structure The Company shall not have changed its jurisdiction of incorporation or organization, as applicable, or been a party to any merger or consolidation or succeeded to all or any substantial part of the liabilities of any other entity, at any time following the date of the most recent financial statements referred to in Section 5.4.
- Section 4.10. Mortgage. At or prior to the Closing, the Mortgage shall have been duly authorized, executed and delivered by the Company and the Trustee.
- Section 4.11. Execution, Authentication and Delivery of Bonds. The Bond or Bonds to be purchased by each Purchaser at the Closing shall have been duly authorized, executed and delivered by the Company and duly authenticated and delivered by the Trustee to each such Purchaser and all conditions precedent to the issuance of the Bonds under the Bond Documents shall have been satisfied.
- Section 4.12. Approvals. The Company shall have furnished to such Purchaser and such Purchaser's special counsel true and correct copies of all certificates, approvals, authorizations and consents necessary for the execution, delivery or performance by the Company of this Agreement, the Bonds, the Supplemental Indenture and the other Bond Documents including, without limitation, the consents and approvals referred to in Section 5.6 hereof.
- Section 4.13. Funding Instructions. At least three Business Days prior to the date of the Closing, the Purchasers shall have received written instructions executed by a Responsible Officer of the Company directing the manner of the payment of the purchase price of the Bonds to be issued and sold at the Closing and setting forth (a) the name and address of the transferee bank, (ii) such transferee bank's ABA number, (iii) the account name and number into which the purchase price for the Bonds is to be deposited, and (iv) the name and telephone number of the account representative responsible for verifying receipt of such funds.

Section 4.14. Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated by this Agreement and all documents and instruments incident to such transactions shall be satisfactory to such Purchaser and such Purchaser's special counsel, and such Purchaser and such Purchaser's special counsel shall have received all such counterpart originals or certified or other copies of such documents as such Purchaser or such Purchaser's special counsel may reasonably request.

SECTION 5. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to each Purchaser as of the Execution Date and as of the Closing Date that:

Section 5.1. Organization; Power and Authority. The Company is a corporation duly organized and validly existing under the laws of the State of Oregon, and is duly qualified as a foreign corporation and is in good standing in each jurisdiction in which such qualification is required by law, other than those jurisdictions as to which the failure to be so qualified or in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Company has the corporate power and authority to own or hold under lease the properties it purports to own or hold under lease, to transact the business it transacts, to execute and deliver this Agreement, the Bonds and any other Bond Document and to perform the provisions hereof and thereof.

Section 5.2. Authorization, Etc. This Agreement, the Mortgage and the Bonds have been duly authorized by all necessary corporate action on the part of the Company, and the Original Mortgage constitutes, and upon execution and delivery thereof this Agreement, the Supplemental Indenture and each Bond will constitute, legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (ii) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law); and the Bonds, when executed and authenticated in accordance with the provisions of the Mortgage and delivered to the Purchasers as contemplated by this Agreement, will be entitled to the benefits of the Mortgage equally and ratably with the other securities issued thereunder.

Section 5.3. Disclosure. The Company, through its agent, Wells Fargo Securities LLC, has delivered to each Purchaser a copy of the Company's Annual Report on Form 10-K for the year ended December 31, 2011, a copy of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, and a copy of the Company's Current Report on Form 8-K filed with the SEC on May 30, 2012, each of which has been filed with the SEC under the Exchange Act (collectively, the "Disclosure Documents"). The Disclosure Documents fairly describe, in all material respects and as of their respective dates, the general nature of the business and principal properties of the Company. The Disclosure Documents, taken together, do not contain, as of the Execution Date, any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein not misleading in light of the circumstances under which they were made. Except as disclosed in or contemplated by the Disclosure Documents,

since December 31, 2011, there has been no change in the financial condition, business, operations or properties of the Company except changes that individually or in the aggregate would not reasonably be expected to have a Material Adverse Effect. There is no fact known to the Company that would reasonably be expected to have a Material Adverse Effect that has not been set forth herein or in the Disclosure Documents.

Documents (including in each case the related schedules and notes) fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of the respective dates specified in such financial statements and the results of operations and cash flows of the Company and its consolidated Subsidiaries for the respective periods so specified and have been prepared in accordance with GAAP consistently applied throughout the periods involved except as set forth in the notes thereto (subject, in the case of any interim financial statements, to normal year-end adjustments). The Company and its Subsidiaries do not have any Material liabilities that are not disclosed on such financial statements or otherwise disclosed in or contemplated by the Disclosure Documents, except for liabilities incurred after the Execution Date in the ordinary course of business that individually and in the aggregate would not be reasonably expected to have a Material Adverse Effect.

No Conflict with Laws, Other Instruments, Etc. The execution, delivery and Section 5.5. performance by the Company of this Agreement, the Bonds and any other Bond Document to which the Company is party will not (i) contravene, result in any breach of, or constitute a default under, or result in the creation of any Lien (other than the Lien of the Mortgage) in respect of any property of the Company or any Material Subsidiary of the Company under, any indenture, mortgage, deed of trust, loan, purchase or credit agreement, lease, corporate charter or by-laws, or any other Material agreement or instrument to which the Company or any Material Subsidiary is bound or by which the Company or any Material Subsidiary or any of their respective properties may be bound or affected, (ii) conflict with or result in a breach of any of the terms, conditions or provisions of any order, judgment, decree, or ruling of any court, arbitrator or Governmental Authority applicable to the Company or any Material Subsidiary or (iii) violate any provision of any statute or other rule or regulation of any Governmental Authority applicable to the Company or any Material Subsidiary. The representation by the Company to each Purchaser in subsection (iii) of this Section 5.5 is made in reliance upon and subject to the accuracy of such Purchaser's representation in Section 6.1 as to its purchase for investment and purchaser status.

Section 5.6. Governmental Authorizations, Etc. The Public Utility Commission of Oregon (the "OPUC"), has issued an order authorizing the issuance and sale by the Company of the Bonds on the terms set forth in or contemplated by this Agreement and the Mortgage (the "Commission Order"); the Commission Order is in full force and effect as of the Execution Date; and, except for an informational filing with the Washington Utilities and Transportation Commission, no further consent, approval or authorization of, or registration, filing or declaration with, any Governmental Authority is required in connection with the execution, delivery or performance by the Company of this Agreement, the Bonds or any other Bond Document to which the Company is party; provided, however, that the representation by the Company to each Purchaser in the third clause of this Section 5.6 is made in reliance upon and

subject to the accuracy of such Purchaser's representation in Section 6.1 as to its purchase for investment and purchaser status..

- Section 5.7. Litigation. (a) Except as disclosed in or contemplated by the Disclosure Documents, there are no actions, suits, investigations or proceedings pending or, to the knowledge of the Company, threatened against or affecting the Company or any Subsidiary or any property of the Company or any Subsidiary in any court or before any arbitrator of any kind or before or by any Governmental Authority that, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.
- (b) Neither the Company nor any Material Subsidiary is in default under any term of any agreement or instrument to which it is a party or by which it is bound, or any order, judgment, decree or ruling of any court, arbitrator or Governmental Authority or is in violation of any applicable law, ordinance, rule or regulation (including without limitation Environmental Laws or the USA Patriot Act) of any Governmental Authority, which default or violation, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.
- Section 5.8. Taxes. The Company and its Subsidiaries have filed all state and Federal tax returns that are required to have been filed in any jurisdiction, and have paid all taxes shown to be due and payable on such returns and all other taxes and assessments levied upon them or their properties, assets, income or franchises, to the extent such taxes and assessments have become due and payable and before they have become delinquent, except for any taxes and assessments (i) the amount of which is not individually or in the aggregate Material or (ii) the amount, applicability or validity of which is currently being contested in good faith by appropriate proceedings and with respect to which the Company or any such Subsidiary, as the case may be, has established reserves in accordance with GAAP.
- Section 5.9. Title to Property; Lien of Mortgage. (a) The Company has good and sufficient title to all of the real properties owned by the Company that are described in the Mortgage and intended to be subject to the lien thereof, subject only to Excepted Encumbrances (as defined in the Mortgage) and to minor defects and irregularities of the nature customarily found in properties of like size and character, which, in the Company's opinion, do not materially impair the use of the property affected thereby in the operation of the business of the Company; upon the due execution, delivery and appropriate recording of the Supplemental Indenture, the Mortgage will constitute, subject only to the exceptions referred to above, a valid first mortgage lien on such properties.
- (b) The description in the Mortgage of the properties intended to be subject to the Mortgage is adequate to constitute a Lien thereon.
- Section 5.10. Licenses, Permits, Etc. (a) As of the Execution Date, the Company and its Material Subsidiaries own or possess all licenses, permits, franchises, authorizations, patents, copyrights, proprietary software, service marks, trademarks and trade names, or rights thereto, that individually or in the aggregate are Material, without known conflict with the rights of others.

- Section 5.11. Compliance with ERISA. The execution and delivery of this Agreement and the Mortgage (including, without limitation, the Supplemental Indenture) and the issuance and sale of the Bonds hereunder will not involve any transaction that is subject to the prohibitions of Section 406 of ERISA or in connection with which a tax could be imposed pursuant to Section 4975(c)(1)(A)-(D) of the Code. The representation by the Company to each Purchaser in the first sentence of this Section 5.11 is made in reliance upon and subject to the accuracy of such Purchaser's representation in Section 6.2 and the completeness of such Purchaser's disclosures pursuant to Section 6.2 as to the sources of the funds used to pay the purchase price of the Bonds to be purchased by such Purchaser.
- Section 5.12. Private Offering by the Company. Neither the Company nor anyone acting on its behalf has offered the Bonds or any similar securities for sale to, or solicited any offer to buy any of the same from, or otherwise approached or negotiated in respect thereof with, any Person other than the Purchasers and not more than 10 other Institutional Investors, each of which has been offered the Bonds at a private sale for investment. Neither the Company nor anyone acting on its behalf has taken, or will take, any action that would subject the offer or sale of the Bonds to the registration requirements of Section 5 of the Securities Act or to the registration requirements of any securities or blue sky laws of any applicable jurisdiction.
- Section 5.13. Use of Proceeds; Margin Regulations. The Company will apply the proceeds of the sale of the Bonds to repay existing Indebtedness and for general corporate purposes. No part of the proceeds from the sale of the Bonds hereunder will be used, directly or indirectly, for the purpose of buying or carrying any margin stock within the meaning of Regulation U of the Board of Governors of the Federal Reserve System (12 CFR 221), or for the purpose of buying or carrying or trading in any securities under such circumstances as to involve the Company in a violation of Regulation X of said Board (12 CFR 224) or to involve any broker or dealer in a violation of Regulation T of said Board (12 CFR 220). Margin stock does not constitute more than 5% of the value of the consolidated assets of the Company and its Subsidiaries and the Company does not have any present intention that margin stock will constitute more than 5% of the value of such assets. As used in this Section, the terms "margin stock" and "purpose of buying or carrying" shall have the meanings assigned to them in said Regulation U.
- Section 5.14. Foreign Assets Control Regulations, Etc. (a) Neither the Company nor any Subsidiary is (i) a Person whose name appears on the list of Specially Designated Nationals and Blocked Persons published by the Office of Foreign Assets Control, U.S. Department of Treasury ("OFAC") or a Person that is otherwise subject to an OFAC Sanctions Program (an "OFAC Listed Person") or (ii) a department, agency or instrumentality of, or is otherwise controlled by or acting on behalf of, directly or indirectly, (x) any OFAC Listed Person or (y) any Person, entity, organization, foreign country or regime that is subject to any OFAC Sanctions Program (each OFAC Listed Person and each other Person, entity, organization and government of a country described in clause (ii), a "Blocked Person").
- (b) No part of the proceeds from the sale of the Bonds hereunder constitutes or will constitute funds obtained on behalf of any Blocked Person or will otherwise be used, directly by the Company or directly or indirectly any Subsidiary, in connection with any

investment in, or any transactions or dealings with, any Blocked Person or for investment in the Iranian energy sector (as defined in Section 201 (1) of CISADA).

- (c) To the Company's knowledge after making due inquiry, neither the Company nor any Subsidiary (i) is under investigation by any Governmental Authority for, or has been charged with, or convicted of, money laundering, drug trafficking, terrorist related activities or other money laundering predicate crimes under any applicable law (collectively, "Anti Money Laundering Laws"), (ii) has been assessed civil penalties under any Anti Money Laundering Laws or (iii) has had any of its funds seized or forfeited in an action under any Anti Money Laundering Laws. The Company has taken reasonable measures appropriate to the circumstances (in any event as required by applicable law) to ensure that the Company and its Subsidiaries are in compliance with all applicable Anti Money Laundering Laws.
- (d) No part of the proceeds from the sale of the Bonds hereunder will be used, directly or indirectly, for any improper payments to any governmental official or employee, political party, official of a political party, candidate for political office, official of any public international organization or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage. The Company has taken reasonable measures appropriate to the circumstances (in any event as required by applicable law) to ensure that the Company and its Subsidiaries are in compliance with all applicable anti corruption laws and regulations.
- Section 5.15. Investment Company Act. Neither the Company nor any Subsidiary is subject to regulation as an "investment company" under the Investment Company Act of 1940, as amended.
- Environmental Matters. Except as disclosed in or contemplated by the Section 5.16. Disclosure Documents, (a) neither the Company nor any Subsidiary has knowledge of any claim or has received any notice of any claim, and no proceeding has been instituted raising any claim against the Company or any of its Subsidiaries or any of their respective real properties now or formerly owned, leased or operated by any of them or other assets, alleging any damage to the environment or violation of any Environmental Laws, except, in each case, such as would not reasonably be expected to result in a Material Adverse Effect; (b) neither the Company nor any Subsidiary has knowledge of any facts which would give rise to any claim, public or private, of violation of Environmental Laws or damage to the environment emanating from, occurring on or in any way related to real properties now or formerly owned, leased or operated by any of them or to other assets or their use, except, in each case, such as would not reasonably be expected to result in a Material Adverse Effect; (c) neither the Company nor any Subsidiary has stored any Hazardous Materials on real properties now or formerly owned, leased or operated by any of them and has not disposed of any Hazardous Materials in a manner contrary to any Environmental Laws in each case in any manner that would reasonably be expected to result in a Material Adverse Effect; and (d) all buildings on all real properties now owned, leased or operated by the Company or any Subsidiary are in compliance with applicable Environmental Laws, except where failure to comply would not reasonably be expected to result in a Material Adverse Effect.

SECTION 6. REPRESENTATIONS OF THE PURCHASERS.

- Section 6.1. Purchase for Investment. Each Purchaser severally represents that it is a "qualified institutional buyer" as defined in Rule 144A under the Securities Act, and that it is purchasing the Bonds for its own account or for one or more separate accounts maintained by it or for the account of one or more pension or trust funds and not with a view to the distribution thereof, provided that the disposition of such Purchaser's or such pension or trust fund's property shall at all times be within such Purchaser's or such pension or trust fund's control. Each Purchaser understands that the Bonds have not been registered under the Securities Act and may be resold only if registered under the Securities Act or if an exemption from registration is available, except under circumstances where neither such registration nor such an exemption is required by law, and that the Company is not required to register the Bonds under the Securities Act.
- Section 6.2. Source of Funds. Each Purchaser severally represents that at least one of the following statements is an accurate representation as to each source of funds (a "Source") to be used by such Purchaser to pay the purchase price of the Bonds to be purchased by such Purchaser hereunder:
 - (a) the Source is an "insurance company general account" (as the term is defined in the United States Department of Labor's Prohibited Transaction Exemption ("PTE") 95-60) in respect of which the reserves and liabilities (as defined by the annual statement for life insurance companies approved by the National Association of Insurance Commissioners (the "NAIC Annual Statement")) for the general account contract(s) held by or on behalf of any employee benefit plan together with the amount of the reserves and liabilities for the general account contract(s) held by or on behalf of any other employee benefit plans maintained by the same employer (or affiliate thereof as defined in PTE 95-60) or by the same employee organization in the general account do not exceed 10% of the total reserves and liabilities of the general account (exclusive of separate account liabilities) plus surplus as set forth in the NAIC Annual Statement filed with such Purchaser's state of domicile; or
 - (b) the Source is a separate account that is maintained solely in connection with such Purchaser's fixed contractual obligations under which the amounts payable, or credited, to any employee benefit plan (or its related trust) that has any interest in such separate account (or to any participant or beneficiary of such plan (including any annuitant)) are not affected in any manner by the investment performance of the separate account; or
 - (c) the Source is either (i) an insurance company pooled separate account, within the meaning of PTE 90-1 or (ii) a bank collective investment fund, within the meaning of the PTE 91-38 and, except as disclosed by such Purchaser to the Company in writing pursuant to this clause (c), no employee benefit plan or group of plans maintained by the same employer or employee organization beneficially owns more than 10% of all assets allocated to such pooled separate account or collective investment fund; or

- the Source constitutes assets of an "investment fund" (within the meaning of Part VI of PTE 84 14 (the "QPAM Exemption")) managed by a "qualified professional asset manager" or "QPAM" (within the meaning of Part VI of the QPAM Exemption), no employee benefit plan's assets that are managed by the QPAM in such investment fund, when combined with the assets of all other employee benefit plans established or maintained by the same employer or by an affiliate (within the meaning of Part VI(c)(1) of the QPAM Exemption) of such employer or by the same employee organization and managed by such QPAM, represent more than 20% of the total client assets managed by such QPAM, the conditions of Part I(c) and (g) of the QPAM Exemption are satisfied, neither the QPAM nor a person controlling or controlled by the QPAM maintains an ownership interest in the Company that would cause the QPAM and the Company to be "related" within the meaning of Part VI(h) of the QPAM Exemption and (i) the identity of such QPAM and (ii) the names of any employee benefit plans whose assets in the investment fund, when combined with the assets of all other employee benefit plans established or maintained by the same employer or by an affiliate (within the meaning of Part VI(c)(1) of the QPAM Exemption) of such employer or by the same employee organization, represent 10% or more of the assets of such investment fund, have been disclosed to the Company in writing pursuant to this clause (d); or
- (e) the Source constitutes assets of a "plan(s)" (within the meaning of Part IV of PTE 96-23 (the "INHAM Exemption")) managed by an "in-house asset manager" or "INHAM" (within the meaning of Part IV of the INHAM Exemption), the conditions of Part I(a), (g) and (h) of the INHAM Exemption are satisfied, neither the INHAM nor a person controlling or controlled by the INHAM (applying the definition of "control" in Part IV(d) of the INHAM Exemption) owns a 10% or more interest in the Company and (i) the identity of such INHAM and (ii) the name(s) of the employee benefit plan(s) whose assets constitute the Source have been disclosed to the Company in writing pursuant to this clause (e); or
 - (f) the Source is a governmental plan; or
- (g) the Source is one or more employee benefit plans, or a separate account or trust fund comprised of one or more employee benefit plans, each of which has been identified to the Company in writing pursuant to this clause (g); or
- (h) the Source does not include assets of any employee benefit plan, other than a plan exempt from the coverage of ERISA.

As used in this Section 6.2, the terms "employee benefit plan", "governmental plan", "party in interest" and "separate account" shall have the respective meanings assigned to such terms in Section 3 of ERISA.

SECTION 7. INFORMATION AS TO COMPANY.

Section 7.1. Information After Closing. As long as any Bonds are outstanding, the Company shall deliver to each holder of Bonds that is an Institutional Investor:

- (a) Quarterly Statements within 60 days (or such shorter period as is 15 days greater than the period applicable to the filing of the Company's Quarterly Report on Form 10-Q (the "Form 10-Q") with the SEC regardless of whether the Company is subject to the filing requirements thereof) after the end of each quarterly fiscal period in each fiscal year of the Company (other than the last quarterly fiscal period of each such fiscal year), duplicate copies of,
 - (i) a consolidated balance sheet of the Company and its Subsidiaries as at the end of such quarter, and
 - (ii) consolidated statements of income and cash flows of the Company and its Subsidiaries, for such quarter and, in the case of the second and third quarters, cash flows for the portion of the fiscal year ending with such quarter,

setting forth in each case in comparative form the figures for the corresponding periods in the previous fiscal year, all in reasonable detail, prepared in accordance with GAAP applicable to quarterly financial statements generally, and certified by a Senior Financial Officer as fairly presenting, in all material respects, the financial position of the companies being reported on and their results of operations and cash flows, subject to changes resulting from year-end adjustments, provided that delivery within the time period specified above of copies of the Company's Form 10-Q prepared in compliance with the requirements therefor and filed with the SEC shall be deemed to satisfy the requirements of this Section 7.1(a), and provided, further, that the Company shall be deemed to have made such delivery of such Form 10-Q if it shall have timely made such Form 10-Q available on "EDGAR" and on its home page on the worldwide web (such availability being referred to as "Electronic Delivery");

- (b) Annual Statements within 120 days (or such shorter period as is 15 days greater than the period applicable to the filing of the Company's Annual Report on Form 10-K (the "Form 10-K") with the SEC regardless of whether the Company is subject to the filing requirements thereof) after the end of each fiscal year of the Company, duplicate copies of,
 - (i) a consolidated balance sheet of the Company and its Subsidiaries, as at the end of such year, and
 - (ii) consolidated statements of income and cash flows of the Company and its Subsidiaries, for such year, and consolidated statements of changes in shareholders' equity of the Company and its Subsidiaries for such year (or a footnote in lieu of separate statements)

setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail, prepared in accordance with GAAP, and accompanied by an opinion thereon of an independent registered public accounting firm of recognized national standing, which opinion shall state that such financial statements present fairly, in all material respects, the financial position of the companies being reported upon and their

results of operations and cash flows and have been prepared in conformity with GAAP, and that the examination of such accounting firm in connection with such financial statements has been made in accordance with generally accepted auditing standards, and that such audit provides a reasonable basis for such opinion in the circumstances, provided that the delivery within the time period specified above of the Company's Annual Report on Form 10-K for such fiscal year (together with the Company's annual report to shareholders, if any, prepared pursuant to Rule 14a-3 under the Exchange Act) prepared in accordance with the requirements therefor and filed with the SEC or otherwise available on EDGAR shall be deemed to satisfy the requirements of this Section 7.1(b), and provided, further, that the Company shall be deemed to have made such delivery of such Form 10-K if it shall have timely made Electronic Delivery thereof;

- (c) SEC and Other Reports promptly upon their becoming available, one copy of (i) each financial statement, report, notice or proxy statement sent by the Company or any Material Subsidiary to its public securities holders generally, and (ii) each regular or periodic report, each registration statement that shall have become effective (without exhibits except as expressly requested by such holder), and each final prospectus and all amendments thereto filed by the Company or any Material Subsidiary with the SEC (except to the extent such documents have been made available through Electronic Delivery);
- (d) Notice of Default or Event of Default promptly, and in any event within five days after a Responsible Officer becoming aware of the existence of any Default or Event of Default or that any Person has given any notice or taken any action with respect to a claimed default hereunder or that any Person has given any notice or taken any action with respect to a claimed default under the Mortgage, a written notice specifying the nature and period of existence thereof and what action the Company is taking or proposes to take with respect thereto, provided, however, that the Company shall not be required to comply with the provisions of this Section 7.1(d) for so long as the Company is subject to the public reporting requirements of the Exchange Act; and
- (e) Requested Information with reasonable promptness, such other data and information relating to the business, operations, affairs, financial condition, assets or properties of the Company or any of its Subsidiaries (including, but without limitation, actual copies of the Company's Form 10-Q and Form 10-K) or relating to the ability of the Company to perform its obligations under this Agreement and under the Bonds as from time to time may be reasonably requested by such holder of Bonds.
- Section 7.2. Visitation. The Company shall permit the representatives of each holder of Bonds that is an Institutional Investor:
 - (a) No Default if no Event of Default then exists, at the expense of such holder and upon reasonable prior notice to the Company, to visit the principal executive office of the Company, to discuss the affairs, finances and accounts of the Company and its Subsidiaries with the Company's officers, and, with the consent of the Company (which consent will not be unreasonably withheld) to visit the other offices and properties

of the Company and each Subsidiary, all at such reasonable times and as often as may be reasonably requested in writing; and

(b) Default — if an Event of Default then exists, at the expense of the Company to visit and inspect any of the offices or properties of the Company or any Subsidiary, to examine all their respective books of account, records, reports and other papers, to make copies and extracts therefrom, and to discuss their respective affairs, finances and accounts with their respective officers and independent public accountants (and by this provision the Company authorizes said accountants to discuss the affairs, finances and accounts of the Company and its Subsidiaries), all at such times and as often as may be requested.

SECTION 8. PAYMENTS ON BONDS.

Section 8.1. Place of Payment. Subject to Section 8.2, payments of principal, premium, if any, and interest becoming due and payable on the Bonds shall be made in accordance with the terms and provisions of the Mortgage.

Home Office Payment. So long as any Purchaser or its nominee shall be the Section 8.2. holder of any Bond, the Company will pay or cause to be paid all sums becoming due on such Bond(s) for principal, premium, if any, and interest by the method and at the address specified for such purpose in the letter of instructions from such Purchaser, or their counsel on their behalf, to the Company referenced in Schedule A, or by such other method or at such other address as such Purchaser shall have from time to time specified to the Company in writing for such purpose, without the presentation or surrender of such Bond(s) or the making of any notation thereon, except that upon written request of the Company made concurrently with or reasonably promptly after payment or prepayment in full of any Bond, such Purchaser shall surrender such Bond for cancellation, reasonably promptly after any such request, to the Trustee at the place of payment designated pursuant to the Mortgage. Prior to any sale or other disposition of any Bond held by any Purchaser or its nominee such Purchaser will, at its election, either endorse thereon the amount of principal paid thereon and the last date to which interest has been paid thereon or surrender such Bond to the Company or the Trustee in exchange for a new Bond or Bonds pursuant to Section 12 of the Mortgage. The Company will afford the benefits of this Section 8.2 to any Institutional Investor that is the direct or indirect transferee of any Bond purchased by a Purchaser under this Agreement and has made the same agreement relating to such Bond as such Purchaser has made in this Section 8.2.

SECTION 9. ADDITIONAL AGREEMENTS.

Section 9.1. Terrorism Sanctions Regulations. The Company will not and will not permit any Subsidiary to (a) become a Person described or designated in the Specially Designated Nationals and Blocked Persons List of the Office of Foreign Assets Control or in Section 1 of the Anti Terrorism Order or (b) engage in any dealings or transactions with any such Person.

SECTION 10. EXPENSES, ETC.

Whether or not the transactions contemplated Transaction Expenses. Section 10.1. hereby are consummated, the Company will pay (and indemnify the Purchasers against) all reasonable costs and expenses (including reasonable attorneys' fees of a single special counsel for all of the Purchasers and, if reasonably required and disclosed to the Company, a single local counsel in any relevant jurisdiction hired for all of the Purchasers) incurred by the Purchasers, in connection with such transactions and in connection with any amendments, waivers or consents under or in respect of this Agreement or any Bond Document (whether or not such amendment, waiver or consent becomes effective) including, without limitation, (a) the costs and expenses incurred in enforcing or defending (or determining whether or how to enforce or defend) any rights under this Agreement or the Bond Documents or in responding to any subpoena or other legal process or informal investigative demand issued in connection with this Agreement or the Bond Documents, or by reason of being a holder of any Bond, (b) the costs and expenses, including financial advisors' fees, incurred in connection with the insolvency or bankruptcy of the Company or any Subsidiary or in connection with any work out or restructuring of the transactions contemplated hereby and by the Bonds, and (c) the costs and expenses incurred in connection with the initial filing of this Agreement and all related financial information with the SVO. The Company will pay, and will save each Purchaser harmless from, all claims in respect of any fees, costs or expenses, if any, of brokers and finders (other than any retained by the Purchasers).

Section 10.2. Survival. The obligations of the Company under this Section 10 will survive the payment or transfer of any Bond, the enforcement, amendment or waiver of any provision of this Agreement, the Bonds or any other Bond Document, and the termination of this Agreement.

SECTION 11. SURVIVAL OF REPRESENTATIONS AND WARRANTIES; ENTIRE AGREEMENT.

All representations and warranties contained herein shall survive the execution and delivery of this Agreement, the Mortgage (including, without limitation, the Supplemental Indenture) and the Bonds, the purchase or transfer by any Purchaser of any Bond or portion thereof or interest therein and the payment of any Bond, and may be relied upon by any subsequent holder of a Bond, regardless of any investigation made at any time by or on behalf of such Purchaser or any other holder of a Bond. All statements contained in any certificate or other instrument delivered by or on behalf of the Company pursuant to this Agreement or the other Bond Documents shall be deemed representations and warranties of the Company under this Agreement. Subject to the preceding sentence, this Agreement, the Mortgage and the Bonds embody the entire agreement and understanding between the Purchasers and the Company and supersede all prior agreements and understandings relating to the subject matter hereof.

SECTION 12. AMENDMENT AND WAIVER.

Section 12.1. Requirements. In addition to and not in limitation of any rights of the Company to amend or waive any provision of the Mortgage, and the rights of a holder of a Bond under the Mortgage, including the right to consent or withhold consent to an amendment or

waiver of any provision thereof, this Agreement may be amended, and the observance of any term hereof may be waived (either retroactively or prospectively), with (and only with) the written consent of the Company and the Required Holders, except that (a) no amendment or waiver of any of the provisions of Sections 1, 2, 3, 4, 5 or 6 hereof, or any defined term (as it is used therein), will be effective as to any Purchaser unless consented to by such Purchaser in writing, and (b) no such amendment or waiver may, without the written consent of the holder of each Bond at the time outstanding affected thereby, amend any of this Section 12 or Section 15.

Section 12.2. Solicitation of Holders of Bonds.

- (a) Solicitation. The Company will provide each holder of the Bonds (irrespective of the amount of Bonds then owned by it) with sufficient information, sufficiently far in advance of the date a decision is required, to enable such holder to make an informed and considered decision with respect to any proposed amendment, waiver or consent in respect of any of the provisions hereof or of the Bonds. The Company will deliver executed or true and correct copies of each amendment, waiver or consent effected pursuant to the provisions of this Section 12 to each holder of outstanding Bonds promptly following the date on which it is executed and delivered by, or receives the consent or approval of, the requisite holders of Bonds.
- (b) Payment. The Company will not directly or indirectly pay or cause to be paid any remuneration, whether by way of supplemental or additional interest, fee or otherwise, to any Holder of Bonds as consideration for or as an inducement to the entering into by any Holder of Bonds of any waiver or amendment of any of the terms and provisions hereof unless such remuneration is concurrently offered, on the same terms, ratably to each Holder of Bonds then outstanding.
- Section 12.3. Binding Effect, Etc. Any amendment or waiver consented to as provided in this Section 12 applies equally to all holders of Bonds and is binding upon them and upon each future holder of any Bond and upon the Company without regard to whether such Bond has been marked to indicate such amendment or waiver. No such amendment or waiver will extend to or affect any obligation, covenant or agreement not expressly amended or waived or impair any right consequent thereon. No course of dealing between the Company and the holder of any Bond nor any delay in exercising any rights hereunder or under any Bond shall operate as a waiver of any rights of any holder of such Bond. As used herein, the term "this Agreement" and references thereto shall mean this Agreement as it may from time to time be amended or supplemented.
- Section 12.4. Bonds Held by Company, Etc. Solely for the purpose of determining whether the holders of the requisite percentage of the aggregate principal amount of Bonds then outstanding approved or consented to any amendment, waiver or consent to be given under this Agreement, or have directed the taking of any action provided herein to be taken upon the direction of the holders of a specified percentage of the aggregate principal amount of Bonds then outstanding, Bonds directly or indirectly owned by the Company or any of its Affiliates shall be deemed not to be outstanding.

SECTION 13. NOTICES.

All notices and communications provided for hereunder shall be in writing and sent (a) by telecopy if the sender on the same day sends a confirming copy of such notice by a recognized overnight delivery service (charges prepaid), or (b) by registered or certified mail with return receipt requested (postage prepaid), or (c) by a recognized overnight delivery service (with charges prepaid). Any such notice must be sent:

- (i) if to a Purchaser or its nominee, to such Purchaser or its nominee at the address specified for such communications in Schedule A to this Agreement, or at such other address as such Purchaser or its nominee shall have specified to the Company in writing,
- (ii) if to any other holder of any Bond, to such holder at such address as such other holder shall have specified to the Company in writing, or
- (iii) if to the Company, to the Company at its address set forth at the beginning hereof to the attention of its Senior Vice President and Chief Financial Officer, or at such other address as the Company shall have specified to the holder of each Bond in writing.

Notices under this Section 13 will be deemed given only when actually received.

SECTION 14. REPRODUCTION OF DOCUMENTS.

This Agreement and all documents relating thereto, including, without limitation, (a) consents, waivers and modifications that may hereafter be executed, (b) documents received by any Purchaser at the Closing (except the Bonds themselves), and (c) financial statements, certificates and other information previously or hereafter furnished to any Purchaser, may be reproduced by any Person who is a party to or recipient of any such document by any photographic, photostatic, microfilm, microcard, miniature photographic or other similar process and such Person may destroy any original document so reproduced. The Company and each Purchaser agrees and stipulates that, to the extent permitted by applicable law, any such reproduction shall be admissible in evidence as the original itself in any judicial or administrative proceeding (whether or not the original is in existence and whether or not such reproduction was made by such Person in the regular course of business) and any enlargement, facsimile or further reproduction of such reproduction shall likewise be admissible in evidence. This Section 14 shall not prohibit the Company, a Purchaser or any other holder of Bonds from contesting any such reproduction to the same extent that it could contest the original, or from introducing evidence to demonstrate the inaccuracy of any such reproduction.

SECTION 15. CONFIDENTIAL INFORMATION.

For the purposes of this Section 15, "Confidential Information" means information delivered to any Purchaser by or on behalf of the Company or any Subsidiary in connection with the transactions contemplated by or otherwise pursuant to this Agreement that is proprietary in nature and that was clearly marked or labeled or otherwise adequately identified when received

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by such Purchaser as being confidential information of the Company or such Subsidiary; provided that such term does not include information that (a) was publicly known or otherwise known to such Purchaser prior to the time of such disclosure, (b) subsequently becomes publicly known through no act or omission by such Purchaser or any person acting on such Purchaser's behalf, (c) otherwise becomes known to such Purchaser other than through disclosure by the Company or any Subsidiary or (d) constitutes financial statements delivered to such Purchaser that are otherwise publicly available. Each Purchaser will maintain the confidentiality of such Confidential Information in accordance with procedures adopted by such Purchaser in good faith to protect confidential information of third parties delivered to such Purchaser; provided that such Purchaser may deliver or disclose Confidential Information to (i) such Purchaser's directors, trustees, officers, employees, agents, attorneys and affiliates (to the extent such disclosure reasonably relates to the administration of the investment represented by such Purchaser's Bonds), (ii) such Purchaser's financial advisors and other professional advisors who agree to hold confidential the Confidential Information substantially in accordance with the terms of this Section 15, (iii) any other holder of any Bond, (iv) any Institutional Investor to which such Purchaser sells or offers to sell such Bond or any part thereof or any participation therein (if such Person has agreed in writing prior to its receipt of such Confidential Information to be bound by the provisions of this Section 15), (v) any Person from which such Purchaser offers to purchase any security of the Company (if such Person has agreed in writing prior to its receipt of such Confidential Information to be bound by the provisions of this Section 15), (vi) any federal or state regulatory authority having jurisdiction over such Purchaser, (vii) the National Association of Insurance Commissioners or any similar organization, or any nationally recognized rating agency that requires access to information about such Purchaser's investment portfolio or (viii) any other Person to which such delivery or disclosure may be necessary or appropriate (w) to effect compliance with any law, rule, regulation or order applicable to such Purchaser, (x) in response to any subpoena or other legal process, (y) in connection with any litigation to which such Purchaser is a party or (z) if an Event of Default has occurred and is continuing, to the extent such Purchaser may reasonably determine such delivery and disclosure to be necessary or appropriate in the enforcement or for the protection of the rights and remedies under such Purchaser's Bonds and this Agreement. Each holder of a Bond, by its acceptance of a Bond, will be deemed to have agreed to be bound by and to be entitled to the benefits of this Section 15 as though it were a party to this Agreement. On reasonable request by the Company in connection with the delivery to any holder of a Bond of information required to be delivered to such holder under this Agreement or requested by such holder (other than a holder that is a party to this Agreement or its nominee), such holder will enter into an agreement with the Company embodying the provisions of this Section 15.

SECTION 16. MISCELLANEOUS.

Section 16.1. Successors and Assigns. All covenants and other agreements contained in this Agreement by or on behalf of any of the parties hereto bind and inure to the benefit of their respective successors and assigns (including, without limitation, any subsequent holder of a Bond) whether so expressed or not.

Section 16.2. Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such

prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall (to the full extent permitted by law) not invalidate or render unenforceable such provision in any other jurisdiction.

- Section 16.3. Construction. Each covenant contained herein shall be construed (absent express provision to the contrary) as being independent of each other covenant contained herein, so that compliance with any one covenant shall not (absent such an express contrary provision) be deemed to excuse compliance with any other covenant. Where any provision herein refers to action to be taken by any Person, or which such Person is prohibited from taking, such provision shall be applicable whether such action is taken directly or indirectly by such Person.
- Section 16.4. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original but all of which together shall constitute one instrument. Each counterpart may consist of a number of copies hereof, each signed by less than all, but together signed by all, of the parties hereto.
- Section 16.5. Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the law of the State of New York excluding choice-of-law principles of the law of such State that would require the application of the laws of a jurisdiction other than such State.
- Section 16.6. Jurisdiction and Process; Waiver of Jury Trial. Jurisdiction and Process; Waiver of Jury Trial. (a) The Company irrevocably submits to the non-exclusive jurisdiction of any New York State or federal court sitting in the Borough of Manhattan, The City of New York, over any suit, action or proceeding arising out of or relating to this Agreement or the Bonds. To the fullest extent permitted by applicable law, the Company irrevocably waives and agrees not to assert, by way of motion, as a defense or otherwise, any claim that it is not subject to the jurisdiction of any such court, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.
- (b) The Company consents to process being served by or on behalf of any holder of Bonds in any suit, action or proceeding of the nature referred to in this Agreement by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, return receipt requested, to it at its address specified in Section 13 or at such other address of which such holder shall then have been notified pursuant to said Section. The Company agrees that such service upon receipt (i) shall be deemed in every respect effective service of process upon it in any such suit, action or proceeding and (ii) shall, to the fullest extent permitted by applicable law, be taken and held to be valid personal service upon and personal delivery to it. Notices hereunder shall be conclusively presumed received as evidenced by a delivery receipt furnished by the United States Postal Service or any reputable commercial delivery service.
- (c) Nothing in this Section 16.6 shall affect the right of any holder of a Bond to serve process in any manner permitted by law, or limit any right that the holders of any of the

Bonds may have to bring proceedings against the Company in the courts of any appropriate jurisdiction or to enforce in any lawful manner a judgment obtained in one jurisdiction in any other jurisdiction.

(d) THE PARTIES HERETO HEREBY WAIVE TRIAL BY JURY IN ANY ACTION BROUGHT ON OR WITH RESPECT TO THIS AGREEMENT, THE BONDS OR ANY OTHER DOCUMENT EXECUTED IN CONNECTION HEREWITH OR THEREWITH.

The execution hereof by the Purchasers shall constitute a contract among the Company and the Purchasers for the uses and purposes hereinabove set forth.

Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: Stephen P. Feltz

Title: Treasurer and Controller

This Agreement is hereby accepted and agreed to as of the date thereof.

John Hancock Life Insurance Company (U.S.A.)

John Hancock Life & Health Insurance Company

John Hancock Life Insurance Company of New

York

By:

NAME: GAVIN DANAHER
TITLE: MANAGING DIRECTOR

This Agreement is hereby accepted and agreed to as of the date thereof.

Thrivent Financial for Lutherans

AME: ALAN D. ONSTAD

TITLE: SENIOR DIRECTOR

NAME OF AND ADDRESS OF PURCHASER

PRINCIPAL AMOUNT OF MORTGAGE BONDS TO BE PURCHASED

JOHN HANCOCK LIFE INSURANCE COMPANY (U.S.A.)

\$3,000,000 \$5,000,000

c/o John Hancock Financial Services 197 Clarendon Street Boston, Massachusetts 02116

Payments

All payments to be by bank wire transfer of immediately available funds to:

[To be provided in a letter of instructions pursuant to Section 8.2]

Notices

All notices with respect to payments, prepayments (scheduled and unscheduled, whether partial or in full) and maturity shall be sent to:

John Hancock Financial Services

and

John Hancock Financial Services

197 Clarendon Street Boston, MA 02116 197 Clarendon Street

Attn: US Securities Operations, C-4

Boston, MA 02116 Attn: Investment Administration, C-4

Fax Number: (617) 572-0628

Fax Number: (617) 572-5495

Email: bossecops@jhancock.com

Email: InvestmentAdministration@jhancock.com

All notices and communication with respect to compliance reporting, financial statements and related certifications shall be sent to:

John Hancock Financial Services 197 Clarendon Street

Boston, MA 02116

Attention: Bond and Corporate Finance, C-2

Fax Number: (617) 572-5068 Email: powerteam@jhancock.com

All other notices shall be sent to:

John Hancock Financial Services

John Hancock Financial Services

197 Clarendon Street Boston, MA 02116 197 Clarendon Street Boston, MA 02116

Attention: Investment Law, C-3

Attention: Bond and Corporate Finance, C-2

Fax Number: (617) 572-9269

Fax Number: (617) 572-5068 Email: powerteam@jhancock.com

Physical Delivery

SCHEDULE A (to Bond Purchase Agreement)

and

John Hancock Financial Services 197 Clarendon Street, C-3-16 Boston, MA 02116 Attn: David Pemstein

Name of Nominee in which Bonds are to be issued: None

Taxpayer I.D. Number: [To be provided in a letter of instructions pursuant to Section 8.2]

DB1/69997019.11 - A-2 -

NAME OF AND ADDRESS OF PURCHASER

PRINCIPAL AMOUNT OF MORTGAGE BONDS TO BE PURCHASED

JOHN HANCOCK LIFE & HEALTH INSURANCE COMPANY

\$10,000,000

c/o John Hancock Financial Services 197 Clarendon Street Boston, Massachusetts 02116

Payments

All payments to be by bank wire transfer of immediately available funds to:

[To be provided in a letter of instructions pursuant to Section 8.2]

Notices

All notices with respect to payments, prepayments (scheduled and unscheduled, whether partial or in full) and maturity shall be sent to:

John Hancock Financial Services

and

197 Clarendon Street Boston, MA 02116

Attn: US Securities Operations, C-4

Fax Number: (617) 572-0628

Email: bossecops@jhancock.com

John Hancock Financial Services

197 Clarendon Street Boston, MA 02116

Attn: Investment Administration, C-4

Fax Number: (617) 572-5495

Email: InvestmentAdministration@jhancock.com

All notices and communication with respect to compliance reporting, financial statements and related certifications shall be sent to:

John Hancock Financial Services 197 Clarendon Street

Boston, MA 02116

Attention: Bond and Corporate Finance, C-2

Fax Number: (617) 572-5068 Email: powerteam@jhancock.com

All other notices shall be sent to:

John Hancock Financial Services

197 Clarendon Street Boston, MA 02116

Attention: Investment Law, C-3

Fax Number: (617) 572-9269

and John Hancock Financial Services

197 Clarendon Street Boston, MA 02116

Attention: Bond and Corporate Finance, C-2

Fax Number: (617) 572-5068 Email: powerteam@jhancock.com

Physical Delivery

John Hancock Financial Services 197 Clarendon Street, C-3-16 Boston, MA 02116 Attn: David Pemstein

Name of Nominee in which Bonds are to be issued: None

Taxpayer I.D. Number: [To be provided in a letter of instructions pursuant to Section 8.2]

DB1/69997019.11 - A-4 -

NAME OF AND ADDRESS OF PURCHASER

PRINCIPAL AMOUNT OF MORTGAGE BONDS TO BE PURCHASED

JOHN HANCOCK LIFE INSURANCE COMPANY OF NEW YORK

\$7,000.000

c/o John Hancock Financial Services 197 Clarendon Street Boston, Massachusetts 02116

Payments

All payments to be by bank wire transfer of immediately available funds to:

[To be provided in a letter of instructions pursuant to Section 8.2]

Notices

All notices with respect to payments, prepayments (scheduled and unscheduled, whether partial or in full) and maturity shall be sent to:

John Hancock Financial Services

and

197 Clarendon Street Boston, MA 02116

Attn: US Securities Operations, C-4

Fax Number: (617) 572-0628

Email: bossecops@jhancock.com

John Hancock Financial Services

197 Clarendon Street Boston, MA 02116

Attn: Investment Administration, C-4

Fax Number: (617) 572-5495

Email: InvestmentAdministration@jhancock.com

All notices and communication with respect to compliance reporting, financial statements and related certifications shall be sent to:

John Hancock Financial Services 197 Clarendon Street Boston, MA 02116

Attention: Bond and Corporate Finance, C-2

Fax Number: (617) 572-5068 Email: powerteam@jhancock.com

All other notices shall be sent to:

John Hancock Financial Services

and

John Hancock Financial Services

197 Clarendon Street Boston, MA 02116

197 Clarendon Street Boston, MA 02116

Attention: Investment Law, C-3 Fax Number: (617) 572-9269

Attention: Bond and Corporate Finance, C-2

Fax Number: (617) 572-5068 Email: powerteam@jhancock.com

Physical Delivery

John Hancock Financial Services 197 Clarendon Street, C-3-16 Boston, MA 02116 Attn: David Pemstein

Name of Nominee in which Bonds are to be issued: None

Taxpayer I.D. Number: [To be provided in a letter of instructions pursuant to Section 8.2]

NAME OF AND ADDRESS OF PURCHASER	PRINCIPAL AMOUNT OF MORTGAGE BONDS TO BE PURCHASED
THRIVENT FINANCIAL FOR LUTHERANS 625 Fourth Avenue South Minneapolis, Minnesota 55415 Attention: Investment Division-Private Placements Fax Number: (612) 844-4027 Email: privateinvestments@thrivent.com	\$5,000,000 \$5,000,000 \$5,000,000 \$5,000,000 \$5,000,000

Payments

All payments of principal, premium or interest on the account of the Bonds shall be made by bank wire transfer (in immediately available funds) to:

[To be provided in a letter of instructions pursuant to Section 8.2]

All payments must include the following information: Security Description, Private Placement Number, Reference Purpose of Payment and Interest and/or Principal Breakdown.

Notices

Notices of payments and written confirmation of such wire transfers to be addressed:

Thrivent Financial for Lutherans 625 Fourth Avenue South Minneapolis, Minnesota 55415 Attention: Investment Division-Private Placements

Alan D. Onstad Fax: (612) 844-4027

Email: privateinvestments@thrivent.com

with a copy to:
Thrivent Accounts
State Street Kansas City
801 Pennsylvania
Kansas City, Missouri 64105
Attention: Brian Kershner

Fax: (816) 871-5509

All other communications to be addressed as first provided above.

Physical Delivery

DTC/New York Window 55 Water Street Plaza Level - 3rd Floor New York, NY 10041

Attention: Robert Mendez
Account: State Street

Fund Name: Thrivent Financial for Lutherans

Fund Number: NCE1

Nominee Name: Swanbird & Co.

Nominee Tax ID Number: 04-3475606

with a copy to the Thrivent Financial in-house attorney, Tina Smith, Senior Counsel - Private Investments, 625 Fourth Avenue South, MS 1100, Minneapolis, MN 55415,

tina.smith@thrivent.com.

Name of Nominee in which Bonds are to be issued: Swanbird & Co.

Taxpayer I.D. Number of Swanbird & Co.: [To be provided in a letter of instructions pursuant to Section 8.2]

Tax payer I.D. Number of Thrivent Financial for Lutherans: [To be provided in a letter of instructions pursuant to Section 8.2]

DEFINED TERMS

As used herein, the following terms have the respective meanings set forth below or set forth in the Section hereof following such term:

"Affiliate" means, at any time, and with respect to any Person, any other Person that at such time directly or indirectly through one or more intermediaries Controls, or is Controlled by, or is under common Control with, such first Person, and, with respect to the Company, includes any Person beneficially owning or holding, directly or indirectly, 10% or more of any class of voting or equity interests of such first Person or any corporation of which such first Person beneficially owns or holds, in the aggregate, directly or indirectly, 10% or more of any class of voting or equity interests. As used in this definition, "Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise. Unless the context otherwise clearly requires, any reference to an "Affiliate" is a reference to an Affiliate of the Company.

"Bond Documents" means this Agreement, the Bonds, the Supplemental Indenture, the Mortgage, the Security Documents and all other instruments, certificates, documents and other writings now or hereafter executed and delivered by the Company pursuant to or in connection with any of the foregoing.

"Bonds" is defined in Section 1.1 hereto.

"Business Day" means any day other than a Saturday, a Sunday or a day on which commercial banks in New York, New York or Spokane, Washington are required or authorized to be closed.

"Closing" is defined in Section 3 hereto.

"Code" means the Internal Revenue Code of 1986, as amended from time to time, and the rules and regulations promulgated thereunder from time to time.

"Company" means Northwest Natural Gas Company, an Oregon corporation.

"Confidential Information" is defined in Section 15 hereto.

"Default" means an event or condition the occurrence or existence of which would, with the lapse of time or the giving of notice or both, become an Event of Default.

"Environmental Laws" means any and all Federal, state, local, and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or governmental restrictions relating to pollution and the protection of the environment or the release of any materials into the environment, including but not limited to those related to Hazardous Materials.

SCHEDULE B (to Bond Purchase Agreement)

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

"ERISA Affiliate" means any trade or business (whether or not incorporated) that is treated as a single employer together with the Company under section 414 of the Code.

"Event of Default" means "Defaults" as set forth in the Mortgage.

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time.

"GAAP" means generally accepted accounting practices as in effect from time to time in the United States of America.

"Governmental Authority" means

(a) the government of

- (i) the United States of America or any State or other political subdivision thereof, or
- (ii) any jurisdiction in which the Company or any Subsidiary conducts all or any part of its business, or which asserts jurisdiction over any properties of the Company or any Subsidiary, or
- (b) any entity exercising executive, legislative, judicial, regulatory or administrative functions of, or pertaining to, any such government.

"Hazardous Material" means any and all pollutants, toxic or hazardous wastes or other substances that might pose a hazard to health and safety, the removal of which may be required or the generation, manufacture, refining, production, processing, treatment, storage, handling, transportation, transfer, use, disposal, release, discharge, spillage, seepage or filtration of which is or shall be restricted, prohibited or penalized by any applicable law including, but not limited to, asbestos, urea formaldehyde foam insulation, polychlorinated biphenyls, petroleum, petroleum products, lead based paint, radon gas or similar restricted, prohibited or penalized substances.

"Indebtedness" means all indebtedness of the Company which is required to be included on the consolidated balance sheet of the Company prepared in accordance with GAAP.

"Institutional Investor" means (a) any original Purchaser of a Bond, (b) any holder of a Bond holding (together with one or more of its Affiliates) more than \$1,000,000 in aggregate principal amount of the Bonds then outstanding, and (c) any bank, trust company, savings and loan association or other financial institution, any pension plan, any investment company, any

insurance company, any broker or dealer, or any other similar financial institution or entity, regardless of legal form.

"Lien" means, with respect to any Person, any mortgage, lien, pledge, charge, security interest or other encumbrance, or any interest or title of any vendor, lessor, lender or other secured party to or of such Person under any conditional sale or other title retention agreement or capital lease, upon or with respect to any property or asset of such Person (including in the case of stock, stockholder agreements, voting trust agreements and all similar arrangements).

"Material" means material in relation to the financial condition, business, operations or properties of the Company and its Subsidiaries taken as a whole.

"Material Adverse Effect" means a material adverse effect on (a) the financial condition, business, operations or properties of the Company and its Subsidiaries taken as a whole, or (b) the ability of the Company to perform its obligations under this Agreement, the Mortgage or the Bonds, or (c) the validity or enforceability of this Agreement, the Mortgage or the Bonds.

"Material Subsidiary" means Gill Ranch Storage, LLC.

"Mortgage" is defined in Section 1.1 hereto.

"Multiemployer Plan" means any Plan that is a "multiemployer plan" (as such term is defined in section 4001(a)(3) of ERISA).

"Officer's Certificate" means a certificate of a Senior Financial Officer or of any other officer of the Company whose responsibilities extend to the subject matter of such certificate.

"PBGC" means the Pension Benefit Guaranty Corporation referred to and defined in ERISA or any successor thereto.

"Person" means an individual, partnership, corporation, limited liability company, association, trust, unincorporated organization, or a government or agency or political subdivision thereof.

"Plan" means an "employee benefit plan" (as defined in section 3(3) of ERISA) that is or, within the preceding five years, has been established or maintained, or to which contributions are or, within the preceding five years, have been made or required to be made, by the Company or any ERISA Affiliate or with respect to which the Company or any ERISA Affiliate may have any liability.

"property" or "properties" means, unless otherwise specifically limited, real or personal property of any kind, tangible or intangible, choate or inchoate.

"Purchasers" means the Purchasers named in Schedule A hereto.

"Required Holders" means, at any time, the holders of more than 50% in principal amount of the Bonds at the time outstanding (exclusive of Bonds then owned by the Company or any of its Affiliates).

"Responsible Officer" means any Senior Financial Officer and any other officer of the Company with responsibility for the administration of the relevant portion of this Agreement.

"SEC" means the Securities and Exchange Commission.

"Securities Act" means the Securities Act of 1933, as amended from time to time.

"Security Documents" means, collectively, the Mortgage, the Supplemental Indenture and all additional security documents and all financing statements, assignments, pledges, lien entry forms, notices, documents and other writings executed and delivered from time to time in favor of the Trustee, for the equal and ratable benefit of the holders of the Bonds and the other holders of the outstanding bonds under the Mortgage, in order to secure the obligations of the Company under and in respect of such outstanding bonds under the Mortgage and any and all amendments, supplements and other modifications thereto.

"Senior Financial Officer" means the chief financial officer, principal accounting officer, treasurer or controller of the Company.

"Subsidiary" means, as to any Person, any corporation, association or other business entity in which such Person or one or more of its Subsidiaries or such Person and one or more of its Subsidiaries owns sufficient equity or voting interests to enable it or them (as a group) ordinarily, in the absence of contingencies, to elect a majority of the directors (or Persons performing similar functions) of such entity, and any partnership or joint venture if more than a 50% interest in the profits or capital thereof is owned by such Person or one or more of its Subsidiaries or such Person and one or more of its Subsidiaries (unless such partnership or joint venture can and does ordinarily take major business actions without the prior approval of such Person or one or more of its Subsidiaries). Unless the context otherwise clearly requires, any reference to a "Subsidiary" is a reference to a Subsidiary of the Company.

"Supplemental Indenture" is defined in Section 1.1 hereto.

"SVO" is defined in Section 4.8 hereto.

"USA Patriot Act" means United States Public Law 107-56, Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

FORM OF SUPPLEMENTAL INDENTURE
NORTHWEST NATURAL GAS COMPANY
ТО
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 Dced 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 _______, 2012

TWENTY-FIRST SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the ____ day of _____, 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

EXHIBIT A (to Bond Purchase Agreement)

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

No.	County	Date Recorded	Book, Film or Reel	Page
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

No.	Office	Date Filed for Record	<u>File No.</u>
9	Secretary of State	June 23, 1993	R61325

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

No.	County	Date Recorded	Book, Film or Reel	<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

No.	Office	Date Filed for Record	File No.
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:

Series	Principal Amount Outstanding
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

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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 franchiscs 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 their successors in 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 Twentysecond 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".

Optional Redemption. At any time prior to April 30, 2042 (six months (I) 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 Twentysecond 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.

Maturity; Surrender, Etc. In the case of each notice of redemption of (III)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 comptroller 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.

corporate name to be hereunto affixed, and President or one of its Vice Presidents, Secretary or one of its Assistant Secretarie, as of, in Portlar Americas, has caused its corporate name to signed and sealed by its Vice Presidents or seal to be attested by one of its Vice Presidents or Assistant Secretaries or one of its Associa, in The City of New York and affixed his seal, in The City of New	west Natural Gas Company, has caused its this instrument to be signed and sealed by its and its corporate seal to be attested by its es for and in its behalf on the day of and, Oregon; Deutsche Bank Trust Company be hereunto affixed, and this instrument to be its Assistant Vice Presidents and its corporate sidents, Assistant Vice Presidents, one of its ates on the day of, as of as and Stanley Burg has hereunto set his hand York, on the day of, as of
	NORTHWEST NATURAL GAS COMPANY
	By [Name] [Title]
Attest:	
[Name] [Title] Executed, sealed and delivered by NORTHWEST NATURAL GAS COMPA in the presence of:	ANY
[Name]	
[Name]	

DEUTSCHE BANK TRUST COMPANY AMERICAS, as Trustee,

Ву	[Name] Vice President
Ву	[Name]
	Vice President
STAN	NLEY BURG, as Trustee
AMER	ICAS and

STATE OF OREGON)	
: ss COUNTY OF MULTNOMAH)). :
, A.D	
say that he is COMPANY and that the seal affixed to said Corporation and that said instruments.	, who, being duly sworn, did , of NORTHWEST NATURAL GAS the foregoing instrument is the corporate seal of ment was signed and sealed in behalf of said f Directors; and he acknowledged said instrument
within and foregoing instrument, and a voluntary act and deed of said Corporat and on oath stated that he was authori affixed is the corporate seal of said Corp	ve hereunto set my hand and affixed my officia
	Notory Public Oragon
	Notary Public - Oregon Commission No
	Commission No My Commission Expires

STATE OF NEW YORK)	
: SS.:	
COUNTY OF NEW YORK)	
, A.D	
that [he/she] is a Vice President of AMERICAS and that the seal affixed to the said Corporation and that said instrument	, who, being duly sworn, did say DEUTSCHE BANK TRUST COMPANY e foregoing instrument is the corporate seal of at was signed and sealed in behalf of said f Directors; and [he/she] acknowledged said
within and foregoing instrument, and ack voluntary act and deed of said Corporation and on oath stated that they were authoriz affixed is the corporate seal of said Corporation	before me personally appeared, to me known to be, President and of DEUTSCHE s, one of the corporations that executed the nowledged said instrument to be the free and a, for the uses and purposes therein mentioned, ed to execute said instrument and that the seal ation.
scal the day and year first above written.	notounto set my mara ana armies my oriesta.
	Notary Public, State of New York
	No My Commission Expires
	My Commission Expires

STATE OF NE	W YOR	K))							
COUNTY OF 1	NEW YO		: ss.:)							
	A.D	 • .								
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	v									
					Notary I					
					My Con	ımıssıo	n Expir	es		

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 ______, 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.

or imprinted hereon and attested by its Secretary or one of its Assistant Secretaries by his signature or a facsimile thereof. Dated: **GAS** NORTHWEST NATURAL **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. COMPANY TRUST DEUTSCHE BANK AMERICAS, (New York) Corporate Trustee By

Authorized Officer

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

EXHIBIT A (to Bond Purchase Agreement)

Dated:

[FORM OF OPINION COVERING OREGON AND WASHINGTON LAW]

- 1. The Company is a validly organized and existing corporation under the laws of the State of Oregon, is authorized to transact business in the State of Washington and has corporate power to execute and perform its obligations under the Agreement, the Mortgage (defined to include the Supplemental Indenture) and the Bonds, to issue to sell the Bonds pursuant to the Agreement, to own its properties and conduct its business as currently conducted.
- 2. The Agreement has been duly and validly authorized by all necessary corporate action, has been duly and validly executed and delivered, and is a valid and binding obligation of the Company enforceable in accordance with its terms, subject, as to enforcement, to laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including, without limitation, bankruptcy and insolvency.
- 3. The Mortgage has been duly and validly authorized by all necessary corporate action, has been duly and validly executed and delivered, and is a valid and binding instrument enforceable in accordance with its terms, subject, as to enforcement, to laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including, without limitation, bankruptcy and insolvency.
- 4. The Bonds have been duly established in conformity with the provisions of the Mortgage, have been duly authorized by all necessary corporate action, and executed and delivered by the Company and constitute valid and binding obligations of the Company, entitled to the benefits provided by the Mortgage, and enforceable against the Company in accordance with their terms, subject, as to enforcement, to laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including, without limitation, bankruptcy and insolvency.
- 5. The issuance and sale of the Bonds, the compliance by the Company with all of the provisions of the Bonds, the Mortgage, and the Agreement and the consummation of the transactions contemplated by the Agreement will not result in a breach or violation of any of the terms and provisions of, or constitute a default under, any statute, or under any material indenture, mortgage, deed of trust or other agreement or instrument to which the Company is a party or by which it is bound or to which any of the property of the Company is subject and which are set forth in a certificate of an officer of the Company, the Company's Restated Articles of Incorporation, as amended, or Bylaws, as amended, or any order (which is set forth in a certificate of an officer of the Company), rule or regulation, in each case, of any court or governmental agency or body having jurisdiction over the Company or any of its properties.
- 6. Except as disclosed in or contemplated by the Disclosure Documents, there are no pending material legal or governmental proceedings and, to the opinion giver's knowledge, no material threatened legal or governmental proceedings, to which the Company is a party or of which any property of the Company is the subject, other than ordinary routine litigation incidental to the kind of business conducted by the Company.

EXHIBIT 4.4(a) (to Bond Purchase Agreement)

- 7. The Mortgage creates and constitutes a valid security interest in such of the Mortgaged and Pledged Property as is subject to the provisions of Article 9 of the Uniform Commercial Code (the "UCC") as in effect in the State of Oregon (the "UCC Property") in favor of the Trustee for the equal and ratable benefit of the bonds outstanding under the Mortgage, including the Bonds issued under the Agreement. The Indenture Lien on the UCC Property is duly perfected under the UCC to the extent a security interest in personal property or fixtures can be perfected by the filing of UCC-1 financing statements under the UCC.
- 8. The Company has good and sufficient title to all of the real properties owned by the Company that are described in the Mortgage and intended to be subject to the lien thereof, subject only to Excepted Encumbrances (as defined in the Mortgage) and to minor defects and irregularities of the nature customarily found in properties of like size and character; the description in the Mortgage of such properties is adequate to constitute the Mortgage a lien thereon; and the Mortgage is a valid first mortgage lien on such properties, subject to the exceptions noted above in this paragraph 8.
- 9. The OPUC has issued orders authorizing the issuance and sale by the Company of the Bonds; the issuance of the Bonds pursuant to and in accordance with the Agreement and the Mortgage conforms with the OPUC order; and no further approval, authorization, consent or other order of, or filing with, any public board or body (other than in connection or in compliance with the provisions of the securities or blue sky laws of any jurisdiction and other than the statements to be filed with the WUTC establishing compliance with applicable statutory provisions) is legally required in Oregon or Washington for the issuance and sale of the Bonds on the terms and conditions set forth in the Agreement.

[FORM OF MORGAN LEWIS OPINION COVERING NY LAW]

- 1. The Company is a validly organized and existing corporation under the laws of the State of Oregon, and is authorized to transact business in the State of Washington.
- 2. The Agreement has been duly and validly authorized by all necessary corporate action, has been duly and validly executed and delivered, and is a valid and binding obligation of the Company enforceable in accordance with its terms, subject, as to enforcement, to laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including, without limitation, bankruptcy and insolvency.
- 3. The Mortgage has been duly and validly authorized by all necessary corporate action, has been duly and validly executed and delivered, and is a valid and binding instrument enforceable in accordance with its terms, subject, as to enforcement, to laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including, without limitation, bankruptcy and insolvency.
- 4. The Bonds have been duly established in conformity with the provisions of the Mortgage, have been duly authorized by all necessary corporate action, and executed and delivered by the Company and constitute valid and binding obligations of the Company, entitled to the benefits provided by the Mortgage, and enforceable against the Company in accordance with their terms, subject, as to enforcement, to laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including, without limitation, bankruptcy and insolvency.
- 5. The issuance and sale of the Bonds, the compliance by the Company with all of the provisions of the Bonds, the Mortgage, and the Agreement and the consummation of the transactions contemplated by the Agreement will not result in a breach or violation of any of the terms and provisions of, or constitute a default under, the Mortgage or the Company's Restated Articles of Incorporation, as amended, or Bylaws, as amended.
- 6. The execution, delivery and performance by the Company of the Agreement, the Mortgage and the Bonds do not and will not violate any provision of Regulations T, U or X of the Board of Governors of the Federal Reserve System.
- 7. It is not necessary, in connection with the sale of the Bonds to the Purchasers by the Company, in the manner contemplated by the Agreement, to register the Bonds under the Securities Act of 1933, as amended, or to qualify the Mortgage under the Trust Indenture Act of 1939, as amended.

EXHIBIT A (to Bond Purchase Agreement)

8. The Company is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

FORM OF OPINION OF CHAPMAN & CUTLER, LLP, SPECIAL COUNSEL TO THE PURCHASERS [TO BE DELIVERED ON A CASE BY CASE BASIS.]

EXHIBIT 4.4(b) (to Bond Purchase Agreement)

220 NW 2ND AVENUE PORTLAND, OR 97209

503.226.4211 800.422.4012

www.nwnatural.com

SECRETARY'S CERTIFICATE

OF

NORTHWEST NATURAL GAS COMPANY

I, MardiLyn Saathoff, the duly elected and acting Corporate Secretary of Northwest Natural Gas Company, a corporation organized and existing under the laws of the State of Oregon, HEREBY CERTIFY that the following is a true and complete copy of resolutions adopted by the Board of Directors of said Corporation at a meeting thereof duly convened and held on the 20th day of December 2007, relating to the approval of certain debt issuances by Northwest Natural Gas Company; and that said resolutions are in full force and effect as of the date of this certificate, namely:

General

RESOLVED, that the Company issue and sell, from time to time, in one or more series (other than with respect to the Common Stock), in any combination, an amount of its securities to be approved by the Finance Committee or, in the case of Medium-Term Notes, Series B, in the amounts hereinafter authorized, and such securities may be in the form of (i) First Mortgage Bonds (which may be in the form of secured Medium-Term Notes, which includes the \$85,000,000 remaining principal amount of Medium-Term Notes, Series B heretofore authorized by this Board), (ii) Unsecured Notes, including junior subordinated debentures (which may be in the form of unsecured Medium-Term Notes, which includes the \$85,000,000 remaining principal amount of Medium-Term Notes, Series B heretofore authorized by this Board), (iii) Preferred Stock (which may be convertible or exchangeable into other securities of the Company), (iv) Common Stock, (v) contracts to purchase Common Stock or other agreements or instruments requiring the Company to issue Common Stock (collectively, "Stock Purchase Contracts"), and (vi) units, each representing ownership of a Stock Purchase Contract and one or more series or tranches of debt securities of the Company or debt securities of third parties, including U.S. Treasury securities, any of which may be convertible or exchangeable into other securities of the Company, or by a combination thereof (collectively, the "Securities"), provided, however, that the maximum number of shares of Common Stock and of Preferred Stock to be issued and sold shall not exceed the number of shares authorized by the Restated Articles of Incorporation, as amended, less any shares issued or reserved for issuance; and further

RESOLVED, that the officers of the Company hereby are authorized and directed, in its name and behalf, to prepare, execute and file with the Oregon Public Utility Commission ("OPUC") and the Washington Utilities and Transportation Commission ("WUTC") such applications, together with any and all necessary amendments, exhibits and other documents related thereto, as may be necessary to obtain orders, in the case of the OPUC, authorizing, and in the case of the WUTC, establishing compliance with applicable statutory requirements in connection with, the issuance and sale of the Securities; and further

RESOLVED, that the officers of the Company hereby are authorized and directed, in its name and behalf, to prepare, execute and file with the Securities and Exchange Commission (the "Commission") a registration statement or statements on an appropriate form, together with any and all necessary amendments, exhibits and other documents related thereto, (i) for the purpose of registering an unspecified amount of the Securities under the Securities Act of 1933 ("Securities Act"), and the rules and regulations of the Commission thereunder and (ii) in connection with any registration rights agreement, covering securities to be offered for exchange or registered for sale, in any such case pursuant to Rule 415 or other appropriate rule under the Securities Act, and the rules and regulations of the Commission thereunder, together with any and all necessary amendments, exhibits and documents relating thereto as in the judgment of such officers are deemed by them to be necessary or appropriate; and further

RESOLVED, that each director and officer of the Company who may execute a registration statement or any amendment thereto with respect to the Securities hereby is authorized to appoint Mark S. Dodson, David H. Anderson, Margaret D. Kirkpatrick and John T. Hood, and each of them, severally, his or her true and lawful attorneys and attorney, with power to act with or without the others and with full power of substitution and resubstitution, to execute in his or her name, place and stead, in his or her capacity as a director or officer of the Company, such registration statement, together with any and all necessary amendments, exhibits and other documents related thereto, and to file the same with the Commission, with full power and authority to each of such attorneys to do and perform, in the name and on behalf of each of such directors and officers, or any of them, every act whatsoever necessary or desirable to be done in the premises as fully and to all intents and purposes as any such director or officer might or could do in person; and further

RESOLVED, that, in connection with the proposed issuance and sale by the Company of the Securities, it may be necessary and desirable that the Securities be qualified or registered for sale in various jurisdictions of the United States of America; that the officers of the Company hereby are authorized and directed, in its name and behalf, to determine the jurisdictions of the United States of America in which appropriate action shall be taken to qualify or register for sale all or such part of the Securities as such officers may deem to be necessary or advisable; that the officers of the Company hereby are authorized and directed, in its name and behalf, to perform any and all acts which they may deem to be necessary or desirable in order to comply with the applicable laws of any such jurisdiction, and in connection therewith, to execute and file all requisite instruments and documents, including but not limited to applications, reports,

surety bonds, irrevocable consents and appointments of attorneys for service of process; and that the execution by such officers, or any of them, of any such instrument or document or the doing by them of any act in connection with the foregoing matters shall conclusively establish their authority therefor from the Company and the validity of the instruments and documents so executed and the action so taken; and further

RESOLVED, that the officers of the Company hereby are authorized, in their discretion and on behalf of the Company, to conduct negotiations with or conduct competitive bidding amongst such underwriters, brokers, dealers, agents and other potential purchasers as they shall select with respect to negotiated or competitively bid underwritten public offerings or private sales by the Company of the Securities; and further

RESOLVED, that, without limiting the authority otherwise provided by these resolutions, the officers of the Company are hereby authorized and empowered to prepare one or more private placement or offering memoranda or an offering circular or other disclosure memoranda, including subscription agreements and other documents, for the offer and sale of any of the Securities in private sales, and any changes in and additions, amendments or supplements thereto, as any of the officers of the Company may deem necessary or desirable; and further

RESOLVED, that, subject to the receipt of all requisite regulatory approvals, the Finance Committee of the Board hereby is authorized, in its discretion and on behalf of the Company, to approve all matters relating to the issuance and sale of the Securities, other than the Medium-Term Notes previously and hereinafter authorized, including the approval of the number of shares of Common Stock to be sold and the terms of the issuance and sale of the Common Stock and the shares of Preferred Stock, or any securities convertible or exchangeable into, or to acquire, the Common Stock or Preferred Stock, including the price to be paid to the Company therefor, the designation and relative rights, preferences and limitations of any series of Preferred Stock, the execution and delivery of indentures, supplemental indentures, purchase contract agreements and other agreements pursuant to which the terms and conditions of the Securities are established and the terms and conditions of any underwriting, purchase, sales, agency and other agreements with respect to their sales; and further

RESOLVED, that the Chief Executive Officer, the President, any Vice President, the Treasurer, any Assistant Treasurer and any duly authorized Attorney-in-Fact of the Company hereby are authorized and directed, in its name and behalf, to execute and deliver any and all indentures, supplemental indentures, purchase contract agreements and other agreements pursuant to which the terms and conditions of the Securities are established and any and all underwriting, purchase, sales, agency and other agreements with respect to the sale by the Company of the Securities in substantially the form approved by the Finance Committee of the Board, but with such changes therein as may be approved by the person executing the same, his or her approval of any such change to be conclusively evidenced by his or her execution thereof; and that any of such officers and any such Attorney-in-Fact of the Company hereby are authorized and directed, in its name and behalf, to sign, seal, if necessary, and deliver such instruments

and documents and to do or cause to be done any and all such acts and things as they shall deem to be necessary or advisable in order to enable the Company to perform all of its obligations under any such agreement; and further

RESOLVED, that in the event that the Company enters into a registration rights agreement or registration rights agreements in connection with the sale of all or a portion of the Securities, nothing herein is intended to, nor shall it, limit or restrict the amount of the Company's Securities which may be issued in exchange for the Securities so sold in accordance with such registration rights agreement(s).

Common Stock

RESOLVED, that the form of certificate currently being used to represent shares of the Company's Common Stock hereby is approved as the form of certificate to represent the Common Stock; and further

RESOLVED, that, subject to the receipt of all requisite regulatory approvals and upon approval and acceptance by the Finance Committee of an offer to purchase Common Stock, the Company reserve out of the authorized but unissued common stock of the Company the Common Stock, and that, upon issuance, delivery and payment for any Common Stock which may be issued and sold in accordance with the underwriting, purchase, sales, agency and other agreements with respect to the sale by the Company of the Common Stock, such Common Stock shall be fully paid and nonassessable and shall be entitled to all of the rights and privileges provided in the Company's Restated Articles of Incorporation, as amended, and its Bylaws, as amended; and further

RESOLVED, that American Stock Transfer & Trust Company, or any successor approved by the Board, as the case may be, hereby is appointed Transfer Agent and Registrar for the Common Stock; that the officers of the Company hereby are authorized and directed to issue, countersign and deliver the number of shares of the Common Stock issued and sold pursuant to the authorization of the Finance Committee of the Board; and that the Registrar is authorized and directed to register the number of shares of Common Stock issued and sold pursuant to the authorization of the Finance Committee of the Board upon written orders signed in the Company's name by its Chief Executive Officer, President or a Vice President and by its Secretary or an Assistant Secretary; and further

RESOLVED, that the officers of the Company, be, and each of them hereby is, authorized and directed, in the name and on behalf of the Company, to make application to the New York Stock Exchange, Inc. for the listing of the Common Stock, to appear before officials of the New York Stock Exchange, Inc. in connection with such application, and to make such changes in such application and to execute such documents and to take such other action in connection therewith as they may deem necessary or appropriate, the execution of any such instruments or documents and the doing or the causing the doing of any such acts or things to constitute conclusive evidence that the execution and delivery of such instrument or document or the doing of such acts or things was necessary and advisable.

Medium-Term Notes

RESOLVED, that, from time to time, the Company issue and sell, through agents, by competitive bidding or on a negotiated basis, subject to management's judgment, at the times of sales, as to which method shall be more prudent and to regulatory approval, not more than an additional \$300,000,000 principal amount of Medium-Term Notes, Series B, which amount includes the previously authorized Notes which remain unsold; and further

RESOLVED, that the officers of the Company hereby are authorized, on behalf of the Company, to conduct negotiations with such underwriters, brokers, dealers, agents and others as they shall select with respect to the sale of not more than an additional \$300,000,000 principal amount of Medium-Term Notes, Series B; and further

RESOLVED, that the Chief Executive Officer, the President, any Vice President, the Treasurer, any Assistant Treasurer and any duly authorized Attorney-in-Fact of the Company hereby are authorized and directed, in its name and behalf, to execute and deliver one or more distribution agreements related to Medium-Term Notes, Series B, in substantially the form of the Company's current Distribution Agreement, filed as Exhibit 4j to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2006, but with such changes therein as may be approved by the person executing the same, his or her approval of any such change to be conclusively evidenced by his or her execution thereof; and that any of such officers and any such Attorney-in-Fact of the Company hereby are authorized and directed, in its name and behalf, to sign, seal, if necessary, and deliver such instruments and documents and to do or cause to be done any and all such acts and things as they shall deem to be necessary or advisable in order to enable the Company to perform all of its obligations under any such agreement; and further

RESOLVED, that the officers of the Company hereby are authorized to execute, in its name and behalf, its Unsecured Medium-Term Notes, Series B, under and pursuant to the provisions of the Indenture dated as of June 1, 1991 from the Company to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) (the "Indenture"), as Trustee, in the forms and denominations hereinbefore established or authorized, with the Company's corporate seal, or a facsimile thereof, impressed or imprinted thereon and attested, and to deliver such Notes for authentication to Deutsche Bank Trust Company Americas, as Trustee under the Indenture; and that Deutsche Bank Trust Company Americas, as Trustee, hereby is requested to authenticate such Notes and to deliver the same as directed by a Company Order or Orders or Instructions pursuant thereto; provided, however, that unless otherwise authorized by this Board, the aggregate principal amount of such Notes to be executed, authenticated and delivered on the basis of this authorization shall not exceed \$300,000,000 (excluding any of such Notes issued upon the transfer or in exchange or replacement thereof); and further

RESOLVED, that the proper officers of the Company hereby are authorized to execute, in its name and behalf, its First Mortgage Bonds of the Twenty-first Series under and pursuant to the provisions of the Company's Mortgage and Deed of

Trust, dated as of July 1, 1946, as heretofore supplemented, in the forms and denominations hereinbefore established or authorized, with the Company's corporate seal, or a facsimile thereof, impressed or imprinted thereon and attested, and to deliver such bonds for authentication to Deutsche Bank Trust Company Americas, as Corporate Trustee under such Mortgage and Deed of Trust; and that Deutsche Bank Trust Company Americas, as Corporate Trustee, hereby is requested to authenticate such bonds, and to deliver the same to or upon the written order or written instructions of the Chief Executive Officer, the President or a Vice President and Treasurer or an Assistant Treasurer of the Company in such authorized denominations as such officers may determine; provided, however, that unless otherwise authorized by this Board, the aggregate principal amount of such bonds to be executed, authenticated and delivered pursuant to this authorization shall not exceed \$300,000,000 (excluding any of such bonds issued upon the transfer or in exchange or replacement thereof); and further

RESOLVED, that full power and authority hereby is delegated to, and vested in, the Finance Committee of the Board to do or cause to be done any and all such actions and things as it shall deem necessary or advisable in order to effect the issuance and sale of not more than an additional \$300,000,000 principal amount of Medium-Term Notes, Series B, and to carry out the purposes of the foregoing resolutions with respect thereto; and further

RESOLVED, that, subject to such further approvals, directions and authorizations as may be given by the Finance Committee of the Board, the officers of the Company hereby are authorized and directed, in its name and behalf, to execute and deliver such instruments and documents and to do or cause to be done any and all such acts and things as they may deem to be necessary or desirable in order to effect the issuance and sale of not more than an additional \$300,000,000 principal amount of Medium-Term Notes, Series B, and to carry out the purposes of the foregoing resolutions with respect thereto.

WITNESS my hand and the seal of Northwest Natural Gas Company this 10th day

of August 2012.



220 NW 2ND AVENUE PORTLAND, OR 97209

TEL 503.226.4211 800.422.4012

www.nwnatural.com

SECRETARY'S CERTIFICATE

OF

NORTHWEST NATURAL GAS COMPANY

I, MardiLyn Saathoff, the duly elected and acting Corporate Secretary of Northwest Natural Gas Company, a corporation organized and existing under the laws of the State of Oregon, HEREBY CERTIFY that the following is a true and complete copy of resolutions adopted by the Finance Committee of the Board of Directors of said Corporation at a meeting thereof duly convened and held on the 10th day of July 2012; and that said resolutions are in full force and effect as of the date of this certificate.

RESOLVED, that the Chief Executive Officer, the President, any Vice President, the Treasurer and any Assistant Treasurer ("Authorized Officers") of the Company be and each of them hereby is authorized to cause the Company to offer and sell a principal amount not to exceed in the aggregate \$50 million of one or more series of its First Mortgage Bonds, issued under the Company's Mortgage and Deed of Trust, dated as of July 1, 1946 (the "Mortgage"), as supplemented; and further

RESOLVED, that the form, terms and provisions of the form of the Bond Purchase Agreement, heretofore presented to this meeting, including the provisions contemplating a delayed funding, currently anticipated to occur on or prior to October 31, 2012, be, and the same are, in all respects approved, and that any Authorized Officer is, authorized and empowered to execute, in the name and on behalf of the Company, in any number of counterparts, and to deliver and perform, or cause the Company to perform, the Bond Purchase Agreement, with such changes therein, including any changes to the provisions contemplating a delayed funding, as the officer executing the same may deem necessary, desirable or appropriate, his or her execution and delivery thereof to be conclusive evidence of such approval; and further

RESOLVED, that any Authorized Officer be, and he or she is, authorized and empowered to negotiate the terms, provisions and conditions of the Bond Purchase Agreement, and of all other contracts and agreements required by or in connection with. and to consummate the transactions contemplated by the Bond Purchase Agreement; and further

RESOLVED, that the form of Twenty-first Supplemental Indenture, heretofore presented to this meeting, is approved; and that the Authorized Officers of the Company are authorized and directed, in its name and behalf and under its corporate seal, to execute, deliver and perform, or cause the Company to perform, a Twenty-first Supplemental Indenture to the Mortgage, as heretofore supplemented, in substantially the form presented to this meeting, with such changes therein as the officers executing the same shall approve, such approval to be conclusively evidenced by their execution thereof; and further

RESOLVED, that the officers of the Company are authorized and directed to record and file or cause to be recorded and filed such Twenty-first Supplemental Indenture, when executed, in such offices as in their judgment may be necessary or appropriate; and further

RESOLVED, that, in accordance with the provisions of the Mortgage, as supplemented and as it will be supplemented by the Twenty-first Supplemental Indenture, there is established a Twenty-second Series of the Company's First Mortgage Bonds, with the descriptive titles of "4.00% Series due 2042", and "First Mortgage Bonds", to be issued as fully registered bonds in denominations of \$100,000 and, at the option of the Company, any integral multiple of \$1,000 (the exercise of such option to be evidenced by the execution and delivery thereof); that each bond of the Twenty-second Series shall be dated as provided in Section 10 of the Mortgage and in the Twenty-first Supplemental Indenture and shall mature on such date as shall be set forth in such bond and shall bear interest at the rate set forth in such bond; that interest on each bond of the Twenty-second Series shall accrue from the date set forth in such bond and be payable on such dates as shall be set forth in such bond and at maturity; and that, 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, the principal of, and premium, if any, and interest on, bonds of the Twenty-second Series 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 or private debts; and that bonds of the Twenty-second Series shall be redeemable, registrable, transferable and exchangeable, all as contemplated in the form thereof hereinafter established; and further

RESOLVED, that this Finance Committee of the Board determines that each bond of the Twenty-second Series to be issued from time to time shall (i) contain such provisions with respect to interest payment dates, record dates, the issue date, redemption thereof prior to maturity, and the dates and prices associated therewith, and delayed funding as shall be set forth therein, and (ii) have such other terms and provisions, all as may be determined from time to time by an Authorized Officer of the Company and as shall be set forth or referred to in, and confirmed by, written order or orders or written instructions for the authentication and delivery of the bonds of the Twenty-second Series under the Mortgage, as heretofore supplemented and as to be supplemented by the Twenty-first Supplemental Indenture thereto; and that, each such written order or instruction shall conclusively establish the determination by the Board of Directors of all

of the terms of the principal amount of the bonds of the Twenty-second Series subject to such written order or instruction; and further

RESOLVED, that in accordance with the provisions of the Mortgage, as heretofore supplemented and as proposed to be further supplemented, the temporary and definitive forms of bonds of the Twenty-second Series are established and approved in the form of bond heretofore presented to this meeting and attached as Exhibit A to the Twenty-first Supplemental Indenture, with such additions thereto, changes therein or omissions therefrom as may be necessary to reflect the terms of the bonds of the Twenty-second Series; and further

RESOLVED, that upon all bonds of the Twenty-second Series, the signature of the President or any Vice President of the Company may be facsimile and the Company's seal, or a facsimile thereof, may be impressed or imprinted and attested by the signature of the Company's Secretary or one of its Assistant Secretaries, either of whose signatures also may be facsimile; and that such facsimile signatures and seal so impressed or imprinted are approved and adopted; and further

RESOLVED, that the proper officers of the Company are authorized to execute, in its name and behalf, its bonds of the Twenty-second Series under and pursuant to the provisions of the Mortgage, as heretofore supplemented and as proposed to be further supplemented, in the forms and denominations hereinbefore established or authorized, with the Company's corporate seal, or a facsimile thereof, impressed or imprinted thereon and attested, and to deliver such bonds for authentication to Deutsche Bank Trust Company Americas, as Corporate Trustee under such Mortgage; and that Deutsche Bank Trust Company Americas, as Corporate Trustee, is requested to authenticate such bonds, and to deliver the same to or upon the written order or written instructions of an Authorized Officer of the Company in such authorized denominations as any of such officers may determine; provided, however, that unless otherwise authorized by this Board, the aggregate principal amount of such bonds to be executed, authenticated and delivered shall not exceed \$50,000,000 (excluding any of such bonds issued upon the transfer or in exchange or replacement thereof); and further

RESOLVED, that the net proceeds from the sale of the bonds of the Twenty-second Series will be used to repay existing indebtedness and for general corporate purposes; and further

RESOLVED, that in respect of the bonds of the Twenty-second Series, Deutsche Bank Trust Company Americas is appointed agent of the Company (1) in respect of the payment of the principal of, and premium, if any, and interest on, with respect to those bonds not held by registered owners with whom the Company has an agreement for direct payments; (2) in respect of the registration, transfer and exchange of all bonds of the Twenty-second Series; and (3) where notices, presentations and demands to or upon the Company in respect of bonds of the Twenty-second Series or in respect of the Mortgage, as heretofore supplemented and as proposed to be further supplemented, may be given or made; and further

RESOLVED, that, without limiting the authority otherwise provided by these resolutions, the Authorized Officers of the Company are authorized and empowered to prepare one or more private placement or offering memoranda or an offering circular or other disclosure memoranda, and any other documents for the offer and sale of any of the bonds of the Twenty-second Series, with any changes in and additions, amendments or supplements thereto, as any of the Authorized Officers of the Company may deem necessary or desirable; and further

RESOLVED, that, the authority granted to the officers of the Company in these resolutions is in addition to the authorizations contained in the resolutions adopted by the Board at its meeting held in December 2007 ("Prior Resolutions") and such Prior Resolutions authorizing the issuance of securities of the Company and authorizing the Finance Committee of the Board to approve certain issuances of securities remain in full force and effect except as expressly provided in these resolutions; and further

RESOLVED, that any and all actions heretofore taken by any officer or officers or director or directors of the Company within the terms of the preceding resolutions are approved, ratified and confirmed in all respects; and further

RESOLVED, that the officers of the Company are authorized and empowered for and in the name and on behalf of the Company to prepare, execute, seal, acknowledge, verify, deliver or file or cause to be prepared, executed, sealed, acknowledged, verified, delivered or filed, such offering documents, certificates, financial statements, letters or other papers or documents, including any Bond Documents (as defined in the Bond Purchase Agreement), and to do or cause to be done any and all such acts and things as they may deem to be necessary or desirable in order to effect the issuance and sale of the bonds of the Twenty-second Series authorized hereby and to carry out the purposes of the foregoing resolutions with respect thereto.

IN WITNESS WHEREOF, I have hereunto signed my name this 10th day of August, 2012.



RESTATED ARTICLES OF INCORPORATION

of

NORTHWEST NATURAL GAS COMPANY

AMENDED AND RESTATED ARTICLES OF INCORPORATION

OF

NORTHWEST NATURAL GAS COMPANY

(These Amended and Restated Articles of Incorporation of Northwest Natural Gas Company supersede its theretofore existing Restated Articles of Incorporation and all amendments thereto.)

ARTICLE I

The name of this corporation is NORTHWEST NATURAL GAS COMPANY, and its duration shall be perpetual.

ARTICLE II

The purposes of the corporation are to engage in any lawful activity for which corporations may be organized under the Oregon Business Corporation Act.

ARTICLE III

- A. The aggregate number of shares of capital stock which the corporation shall have authority to issue is 103,500,000 shares, divided into 3,500,000 shares of Preferred Stock, issuable in series as hereinafter provided, and 100,000,000 shares of Common Stock.
- B. A statement of the preferences, limitations and relative rights of each class of capital stock of the corporation, namely, the Preferred Stock and the Common Stock, of the variations in the relative rights and preferences as between series of the Preferred Stock, insofar as the same are fixed by these Restated Articles of Incorporation, and of the authority vested in the board of directors of the corporation to establish series of Preferred Stock and to fix and determine the variations in the relative rights and preferences as between series insofar as the same are not fixed by these Restated Articles of Incorporation, is as follows:

Preferred Stock

- 1. The shares of the Preferred Stock may be divided into and issued in series. Each series shall be so designated as to distinguish the shares thereof from the shares of all other series of the Preferred Stock and all other classes of capital stock of the corporation. To the extent that these Restated Articles of Incorporation shall not have established series of the Preferred Stock and fixed and determined the variations in the relative rights and preferences as between series, the board of directors shall have authority, and is hereby expressly vested with authority, to divide the Preferred Stock into series and, within the limitations set forth in these Restated Articles of Incorporation and such limitations as may be provided by law, to fix and determine the relative rights and preferences of any series of the Preferred Stock so established. Such action by the board of directors shall be expressed in a resolution or resolutions adopted by it prior to the issuance of shares of each series, which resolution or resolutions shall also set forth the distinguishing designation of the particular series of the Preferred Stock established thereby. Without limiting the generality of the foregoing, authority is hereby expressly vested in the board of directors so to fix and determine with respect to any series of the Preferred Stock:
 - (a) The rate of dividend and the relative preference of each series in the payment of dividends;
 - (b) The price at which and the terms and conditions on which shares may be redeemed;
 - (c) The amount payable upon shares in the event of voluntary and involuntary liquidation and the relative preference of each series on liquidation;
 - (d) Sinking fund provisions, if any, for the redemption or purchase of shares;
 - (e) The terms and conditions, if any, on which shares may be converted if the shares of any series are issued with the privilege of conversion; and

(f) Any other relative right or preference as permitted by law.

All shares of the Preferred Stock of the same series shall be identical except that shares of the same series issued at different times may vary as to the dates from which dividends thereon shall be cumulative; and all shares of the Preferred Stock, irrespective of series, shall constitute one and the same class of stock and shall be identical except as to the designation thereof, the date or dates from which dividends on shares thereof shall be cumulative, and the relative rights and preferences set forth above in clauses (a) through (f) of this subdivision, as to which there may be variations between different series. Except as otherwise may be provided by law or by the resolutions establishing any series of Preferred Stock in accordance with the foregoing provisions of this subdivision, whenever the written consent, affirmative vote, or other action on the part of the holders of the Preferred Stock may be required for any purpose, such consent, vote or other action shall be taken by the holders of the Preferred Stock as a single class irrespective of series and not by different series.

- 2. The holders of shares of the Preferred Stock of each series shall be entitled to receive dividends, when and as declared by the board of directors, out of any funds legally available for the payment of dividends, at the annual rate fixed and determined with respect to each series either by these Restated Articles of Incorporation or in accordance with subdivision III. B. 1., and no more, payable quarterly on the 15th day of February, May, August and November in each year or on such other date or dates as the board of directors shall determine in the resolutions establishing such series. Such dividends shall be cumulative in the case of shares of each series either from the date of issuance of shares of such series or from the first day of the current dividend period within which shares of such series shall be issued, as the board of directors shall determine, so that if dividends on all outstanding shares of each particular series of the Preferred Stock, at the annual dividend rates fixed and determined either by these Restated Articles of Incorporation or in accordance with subdivision III. B. 1., shall not have been paid or declared and set apart for payment for all past dividend periods and for the then current dividend periods, the deficiency shall be fully paid or dividends equal thereto declared and set apart for payment. No interest, or sum of money in lieu of interest, shall be payable in respect of any dividend payment or payments which may be in arrears.
- In the event of any dissolution, liquidation or winding up of the corporation, before any distribution or payment shall be made to the holders of the Common Stock, the holders of the Preferred Stock of each series then outstanding shall be entitled to be paid out of the net assets of the corporation available for distribution to its shareholders the respective amounts per share fixed and determined with respect to each series either by these Restated Articles of Incorporation or in accordance with subdivision III. B. 1., and no more. If upon dissolution, liquidation or winding up of the corporation, whether voluntary or involuntary, the net assets of the corporation available for distribution to its shareholders shall be insufficient to pay the holders of all outstanding shares of Preferred Stock of all series the full amounts to which they shall be respectively entitled as aforesaid, the net assets of the corporation so available for distribution shall be distributed to the holders of Preferred Stock in accordance with the relative preferences of each series of Preferred Stock established either by these Restated Articles of Incorporation or in accordance with subdivision III. B. 1. For the purposes of this subdivision, any dissolution, liquidation or winding up which may arise out of or result from the condemnation or purchase of all or a major portion of the properties of the corporation by (i) the United States Government or any authority, agency or instrumentality thereof (ii) a State of the United States or any political subdivision, authority, agency or instrumentality thereof, or (iii) a district, cooperative or other association or entity not organized for profit, shall be deemed to be an involuntary dissolution, liquidation or winding up; and a consolidation, merger or amalgamation of the corporation with or into any other corporation or corporations shall not be deemed to be a dissolution, liquidation or winding up of the corporation, whether voluntary or involuntary.
- 4. The holders of shares of the Preferred Stock shall have no right to vote in the election of directors or for any other purpose, except as may be otherwise provided by law or by resolutions establishing any series of Preferred Stock in accordance with subdivision III. B. 1. Holders of Preferred Stock shall be entitled to notice of each meeting of shareholders at which they shall have any right to vote, but shall not be entitled to notice of any other meeting of shareholders.

Common Stock

- 5. Subject to the limitations set forth in subdivisions III. B. 2. (and subject to the rights of any class of stock hereafter authorized), dividends may be paid upon the Common Stock when and as declared by the board of directors of the corporation out of any funds legally available for the payment of dividends.
- 6. Subject to the limitations set forth in subdivisions III. B. 3. (and subject to the rights of any other class of stock hereafter authorized), upon any dissolution, liquidation or winding up of the corporation, whether voluntary or involuntary, the net assets of the corporation shall be distributed ratably to the holders of the Common Stock.
- 7. Except as may be otherwise provided by law or by the resolutions establishing any series of Preferred Stock in accordance with subdivision III. B. 1., the holders of the Common Stock shall have the exclusive right to vote for the election of directors and for all other purposes. In the election of directors of the corporation, every holder of record of any share or shares of the Common Stock of the corporation shall have the right to cast as many votes for one candidate as shall equal the number of such shares multiplied by the number of directors to be elected, or to distribute such number of votes among any two or more candidates for such election.
- 8. Upon the issuance for money or other consideration of any shares of capital stock of the corporation, or of any security convertible into capital stock of the corporation, no holder of shares of the capital stock, irrespective of the class or kind thereof, shall have any preemptive or other right to subscribe for, purchase or receive any proportionate or other amount of such shares of capital stock, or such security convertible into capital stock, proposed to be issued; and the board of directors may cause the corporation to dispose of all or any of such shares of capital stock, or of any such security convertible into capital stock, as and when said board may determine, free of any such right, either by offering the same to the corporation's then shareholders or by otherwise selling or disposing of such shares of other securities, as the board of directors may deem advisable.

ARTICLE IV

- A. The business and affairs of the corporation shall be managed by a board of directors. Except as provided in subdivision B. below, the number of members of the board, their classifications and terms of office, and the manner of their election and removal shall be as follows:
 - 1. The number of directors shall be that number, not less than nine or more than thirteen, determined from time to time by resolution adopted by affirmative vote of a majority of the entire board of directors. The directors shall be divided into three classes, designated Class I, Class II, and Class III. Each class shall consist, as nearly as possible, of one-third of the total number of directors. At the 1984 annual meeting of shareholders, Class I directors shall be elected for a one-year term, Class II directors for a two-year term, and Class III directors for a three-year term. At each succeeding annual meeting of shareholders, successors to directors whose terms expire at that annual meeting shall be of the same class as the directors they succeed, and shall be elected for three-year terms. If the number of directors should be changed by resolution of the board of directors, any increase or decrease shall be apportioned among the classes so as to maintain the number of directors in each class as nearly equal as possible, but in no case shall a decrease in the number of directors shorten the term of any incumbent director.
 - 2. A director shall hold office until the annual meeting for the year in which his or her term shall expire and until his or her successor shall have been elected and qualified, subject, however, to prior death, resignation, retirement or removal from office. Any newly created directorship resulting from an increase in the number of directors and any other vacancy on the board of directors, however caused, may be filled by the affirmative vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director.
 - 3. One or more of the directors may be removed with or without cause by the affirmative vote of the holders of not less than two-thirds of the shares entitled to vote thereon at a meeting of the shareholders called

expressly for that purpose; provided, however, that for as long as the corporation shall have cumulative voting, if fewer than all the directors should be candidates for removal, no one of them shall be removed if the votes cast against his or her removal would be sufficient to elect him or her if then cumulatively voted at an election of the class of directors of which he or she shall be a part.

- 4. No person, except those persons nominated by the board, shall be eligible for election as a director at any annual or special meeting of shareholders unless a written request that his or her name be placed in nomination shall be received from a shareholder of record entitled to vote at such election by the secretary of the corporation not later than the latter of (a) the thirtieth day prior to the date fixed for the meeting, or (b) the tenth day after the mailing of notice of that meeting, together with the written consent of the nominee to serve as a director.
- B. Notwithstanding the provisions of subdivision A. above, whenever the holders of any one or more classes of the capital stock of the corporation shall have the right, voting separately as a class or classes, to elect directors at an annual or special meeting of shareholders, the election, term of office, filling of vacancies and other features of such directorships shall be governed by the provisions of these Restated Articles of Incorporation applicable thereto. Directors so elected shall not be divided into classes unless expressly provided by such provisions, and during their prescribed terms of office, the board of directors shall consist of such directors in addition to the directors determined as provided in subdivision A. above.
- C. This Article IV may not be repealed or amended in any respect unless such action shall be approved by the affirmative vote of the holders of not less than two-thirds of the shares entitled to vote at an election of directors determined as provided in subdivision A. above, at a meeting of the shareholders called expressly for that purpose.

ARTICLE V

A. For purposes of this Article V:

- 1. The term "Affiliate", as used to indicate a relationship with a specified "Persons" (as hereinafter defined), shall mean a Person that directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified.
- 2. The term "Associate", as used to indicate a relationship with a specified Person, shall mean (a) any Person (other than the corporation) of which such specified Person is a director, officer, partner, trustee, guardian, fiduciary or official or is, directly or indirectly, the beneficial owner of 10% or more of any class of equity securities or any beneficial interest, (b) any Person who is a director, officer, partner, trustee, guardian, fiduciary or official or is, directly or indirectly, the beneficial owner of 10% or more of any class of equity securities or any beneficial interest of or in such specified Person (other than the corporation), and (c) any relative or spouse of such specified Person, or any relative of such spouse who has the same home as such specified Person.
- 3. The term "Beneficial Owner" shall have the meaning set forth in Rule 13d-3 of the General Rules and Regulations under the Securities Exchange Act of 1934 as in effect on April 9, 1984; provided, however, that, notwithstanding the provisions of such Rule, a Person shall be deemed to be the Beneficial Owner of any share of the capital stock of the corporation that such Person shall have the right to acquire at any time pursuant to any agreement, contract, arrangement or understanding, or upon exercise of conversion rights, warrants or options, or otherwise, and any such share of capital stock shall be deemed to be outstanding for purposes of subdivision V.A.9.
- 4. The term "Business Transaction" shall include, without limitation, (a) any merger, consolidation or plan of exchange of the corporation, or any Person controlled by or under common control with the corporation, with or into any "Related Person" (as hereinafter defined), (b) any merger, consolidation or plan of exchange of a Related Person with or into the corporation or any Person controlled by or under common control with the corporation, (c) any sale, lease, exchange, transfer or other disposition (in one transaction or a series of transactions) including without limitation a mortgage or any other security device, of all or

any "Substantial Part" (as hereinafter defined) of the property and assets of the corporation, or any Person controlled by or under common control with the corporation, to or with a Related Person, (d) any purchase, lease, exchange, transfer or other acquisition (in one transaction or a series of transactions), including without limitation a mortgage or any other security device, of all or any Substantial Part of the property and assets of a Related Person, by or with the corporation or any Person controlled by or under common control with the corporation, (e) any recapitalization of the corporation that would have the effect of increasing the voting power of a Related Person, (f) the issuance, sale, exchange or other disposition of any securities of the corporation, or of any Person controlled by or under common control with the corporation, by the corporation or by any Person controlled by or under common control with the corporation, (g) any liquidation, spinoff, splitoff, splitup or dissolution of the corporation, and (h) any agreement, contract or other arrangement providing for any of the transactions described in this subdivision.

- 5. The term "Continuing Director" shall mean a director who was a director of the corporation on April 9, 1984 and a director who shall become a director subsequent thereto whose election, or whose nomination for election by the shareholders, shall have been approved by a vote of a majority of the then Continuing Directors.
- 6. The term "Highest Purchase Price" shall mean, with respect to the shares of any class or series of the capital stock of the corporation, the highest amount of consideration paid by a Related Person for a share of the same class and series at any time regardless of whether the share was acquired before or after such Related Person became a Related Person; provided, however, that the Highest Purchase Price shall be appropriately adjusted to reflect the occurrence of any reclassification, recapitalization, stock split, reverse stock split or other readjustment in the number of outstanding shares of that class or series, or the declaration of a stock dividend thereon. The Highest Purchase Price shall include any brokerage commissions, transfer taxes and soliciting dealers' fees paid by such Related Person with respect to any shares of the capital stock acquired by such Related Person.
- 7. The term "Other Consideration" shall include, without limitation, capital stock to be retained by the shareholders of the corporation in a Business Transaction in which the corporation shall be the survivor.
- 8. The term "Person" shall mean any natural person, corporation, partnership, trust, firm, association, government, governmental agency or any other entity whether acting in an individual, fiduciary or other capacity.
- 9. The term "Related Person" shall mean (a) any Person which, together with its Affiliates and Associates, shall be the Beneficial Owner in the aggregate of 10 percent or more of the capital stock of the corporation, and (b) any Affiliate or Associate (other than the corporation or a wholly owned subsidiary of the corporation) of any such Person. Two or more Persons acting in concert for the purpose of acquiring, holding or disposing of the capital stock of the corporation shall be deemed to be a "Related Person". A Related Person shall be deemed to have acquired a share of capital stock at the time when such Related Person became the Beneficial Owner thereof. With respect to the shares of the capital stock of the corporation owned by any Related Person, if the price paid for such shares cannot be determined by a majority of the Continuing Directors, the price so paid shall be deemed to be the market price of the shares in question at the time when such Related Person became the Beneficial Owner thereof.
- 10. The term "Substantial Part" shall mean 10% or more of the fair market value of the total assets of a Person, as reflected on the most recent balance sheet of such Person available to the Continuing Directors on the date of mailing of the notice of the meeting of shareholders called for the purpose of voting with respect to a Business Transaction involving the assets constituting any such Substantial Part.
- B. The corporation shall not enter into any Business Transaction with a Related Person or in which a Related Person shall have an interest (except proportionately as a shareholder of the corporation) without first obtaining both (1) the affirmative vote of the holders of not less than two-thirds of the outstanding shares of the capital stock of the corporation not held by such Related Person, and (2) the determination of a majority of the Continuing Directors that the cash or fair market value of the property, securities or Other Consideration to be received per share by the holders, other than such Related Person, of the shares of each class or series of the

capital stock of the corporation in such Business Transaction shall not be less than the Highest Purchase Price paid by such Related Person in acquiring any of its holdings of shares of the same class or series, unless the Continuing Directors by a majority vote shall either (a) have expressly approved the acquisition of the shares of the capital stock of the corporation that caused such Related Person to become a Related Person, or (b) have expressly approved such Business Transaction.

- C. For the purposes of this Article V, a majority of the Continuing Directors shall have the power to make a good faith determination, on the basis of information known to them, of: (1) the number of shares of capital stock of the corporation of which any Person shall be the Beneficial Owner, (2) whether a Person is an Affiliate or Associate of another Person, (3) whether a Person has an agreement, contract, arrangement or understanding with another Person as to the matters referred to in subdivision V.A.3. or clause (h) of subdivision V.A.4., (4) the Highest Purchase Price paid by a Related Person for shares of any class or series of the capital stock, (5) whether the assets subject to any Business Transaction constitute a Substantial Part, (6) whether any Business Transaction is one in which a Related Person has an interest (except proportionately as a shareholder of the corporation), and (7) such other matters with respect to which a determination may be required under this Article V.
- D. In determining whether to give their approval as provided in subdivision V.B., the Continuing Directors shall give due consideration to all relevant factors involved, including, without limitation, (1) the value of the corporation in a freely negotiated transaction and its future value as an independent entity, (2) the recognition of gain or loss to the corporation for tax purposes or the postponement of such recognition in a tax-free transaction, (3) the anticipated developments of the business of the corporation not yet reflected in the price of its shares, and (4) the impact on employees, customers, suppliers and the public generally within the geographical area it serves.
- E. This Article V may not be repealed or amended in any respect unless such action shall be approved by the affirmative vote of the holders of not less than two-thirds of the capital stock of the corporation not held by a Related Person at a meeting of the shareholders called expressly for that purpose.

ARTICLE VI

No director of the corporation shall be personally liable to the corporation or its shareholders for monetary damages for conduct as a director; provided that this Article VI shall not eliminate the liability of a director for any act or omission for which such elimination of liability is not permitted under the Oregon Business Corporation Act. No amendment to the Oregon Business Corporation Act that further limits the acts or omissions for which elimination of liability is permitted shall affect the liability of a director for any act or omission which occurs prior to the effective date of such amendment.

ARTICLE VII

The corporation shall indemnify to the fullest extent then permitted by law any person who is made, or threatened to be made, a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, investigative or otherwise (including an action, suit or proceeding by or in the right of the corporation) by reason of the fact that the person is or was a director or officer of the corporation or is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise against all judgments, amounts paid in settlement, fines and such expenses (including attorneys' fees), actually and reasonably incurred in connection therewith. This Article shall not be deemed exclusive of any other provisions for indemnification of directors and officers that may be included in any statute, bylaw, agreement, vote of shareholders or directors or otherwise, both as to action in any official capacity and as to action in another capacity while holding an office.

As amended June 3, 2008.

BYLAWS

of

NORTHWEST

NATURAL

GAS

COMPANY

As Adopted by the Board of Directors July 17, 1975 As Amended through May 24, 2012

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The following Bylaws were adopted by Northwest Natural Gas Company on July 17, 1975 superseding amended Bylaws originally adopted in conformity with an order of the District Court of the United States for the District of Oregon enforcing a plan for rearrangement of the Company's capital structure effective December 31, 1951, and subsequently amended by the stockholders on May 17, 1954, May 20, 1957, May 21, 1973, and May 20, 1974.

BYLAWS OF NORTHWEST NATURAL GAS COMPANY

ARTICLE I.

OFFICES

Section 1. Office. The principal office of the company shall be located in the City of Portland, Oregon. The company also may have offices at such other places both within and without the State of Oregon as the board of directors from time to time may determine.

Section 2. Registered Office. The registered office of the company required by law to be maintained in the state shall be at the same location as the principal office unless otherwise designated by resolution of the board of directors.

ARTICLE II.

MEETINGS OF SHAREHOLDERS

Amended 1/1/85

- Section 1. Annual Meeting. The annual meeting of shareholders of the company for the election of directors and for the transaction of other business shall be held at the company's office in the City of Portland, Oregon, or such other place in that City as shall be determined by the board of directors, on the fourth Thursday of May in each year, unless such day shall be a legal holiday, in which event such meeting shall be held on the next business day. If such meeting shall not be held on such day in any year, it shall be held within 60 days thereafter on such day as shall be fixed by the board of directors and be specified in the notice of the meeting. Every such meeting shall be held at the hour of two o'clock p.m., or at such other hour as shall be fixed by the board and specified in such notice.
- Section 2. Special Meetings. Special meetings of the shareholders of the company may be called by the board of directors or the holders of not less than one-tenth of all shares entitled to vote at the meeting. Each special meeting shall be held for such purposes, at such place in the City of Portland, Oregon, and at such time as shall be specified in the notice thereof.
- Section 3. Notice. Written or printed notice stating the place, day and hour of the meeting and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than 10 nor more than 50 days before the date of the meeting, either personally or by mail, by or at the direction of the board of directors or the persons calling the meeting, to each shareholder of record entitled to vote at such meeting.
- Section 4. Fixing Record Date. For the purpose of determining shareholders entitled to notice of or to vote at any meeting of shareholders, or any adjournment thereof, or entitled to receive payment of any dividend, or in order to make a determination of shareholders for any other proper purpose, the board of directors may fix in advance a date as the record date for any such determination of shareholders, such date in any case to be not more than 50 days and, in the case of a meeting of shareholders, not less than 10 days prior to the date on which the particular action requiring such determination of shareholders is to be taken. If no record date is fixed for the determination of shareholders entitled to notice of or to vote at a meeting of shareholders, or shareholders entitled to receive payment of a dividend, the date on which notice of the meeting is mailed or the date on which the resolution of the board declaring such dividend is adopted, as the case may be, shall be the record date for such determination of shareholders. When a determination of shareholders entitled to vote at any meeting of shareholders has been made as provided in this section, such determination shall apply to any adjournment thereof.

Section 5. Record of Shareholders. The officer or agent having charge of the transfer books for shares of the company shall make, at least 10 days before each meeting of shareholders, a complete record of the shareholders entitled to vote at such meeting or any adjournment thereof, arranged in alphabetical order with the address of and the number of shares held by each, which record, for a period of 10 days prior to such meeting, shall be kept on file at the registered office of the company and shall be subject to inspection by any shareholder at any time during usual business hours. Such record also shall be produced and kept open at the time and place of the meeting and shall be subject to the inspection of any shareholder during the whole time of the meeting. The original transfer books for shares shall be prima facie evidence as to who are the shareholders entitled to examine such record or transfer books or to vote at any meeting of the shareholders.

Section 6. Quorum. A majority of the shares of the company entitled to vote, represented in person or by proxy, shall constitute a quorum at all meetings of shareholders. If a quorum is present, in person or by proxy, the affirmative vote of a majority of the shares represented at the meeting and entitled to vote on the subject matter shall be the act of the shareholders, unless the vote of a greater number, or voting by classes, is required by law or the Restated Articles of Incorporation.

If a quorum shall not be represented at any meeting of shareholders, the shareholders represented may adjourn the meeting from time to time without further notice. At such adjourned meeting, at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally noticed. The shareholders represented at a duly organized meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a quorum.

Amended 12/13/01

Section 7. Voting. Each outstanding share, regardless of class, shall be entitled to one vote on each matter submitted to a vote at a meeting of shareholders, except to the extent that the voting rights of the shares of any class or classes are limited or denied by law or the Restated Articles of Incorporation. At each election of directors holders of shares of common stock have the right to cumulative voting as provided for in the Restated Articles of Incorporation. A shareholder may vote either in person or by proxy. A shareholder may authorize a person or persons to act for the shareholder as proxy in any manner permitted by law. An authorization of a proxy is effective when received by the secretary of the company or other officer or agent authorized to tabulate votes.

Amended 5/23/02

Section 8. Conduct of Meetings. Every meeting of shareholders shall be presided over by the chairman of the board, in his or her absence by the president, in their absence by a vice president or, if none be present, by a chairman appointed by the shareholders present at the meeting. The minutes of such meeting shall be recorded by the secretary or an assistant secretary but, if neither be present, by a secretary appointed for that purpose by the chairman of the meeting. The board of directors may adopt by resolution such rules and regulations for the conduct of meetings of shareholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the board of directors, the chairman of any meeting of shareholders shall have the exclusive right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the board of directors or prescribed by the chairman of the meeting, may include, without limitation, the following: (a) the establishment of an agenda or order of business for the meeting; (b) rules and procedures for maintaining order at the meeting and the safety of those present; (c) limitations on attendance at or participation in the meeting to shareholders of record of the company, their duly authorized and constituted proxies or such other persons as the chairman of the meeting shall determine; (d) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (e) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the board of directors or the chairman of the meeting, meetings of shareholders shall not be required to be held in accordance with the rules of parliamentary procedure.

Amended 5/23/02

Section 9. Proper Business for Meetings. (a) No business shall be conducted at any meeting of shareholders that has not been properly brought before the meeting. To be properly brought before a special meeting of shareholders, business must be specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors or the persons calling the meeting. To be properly brought before an annual meeting of shareholders, business must be either (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors, (ii) otherwise brought before the meeting by or at the direction of the board of directors or

the chairman of the board, or (iii) otherwise properly brought before the meeting by a shareholder. In addition to any other applicable requirements, for business to be properly brought before an annual meeting by a shareholder, the shareholder must have given timely notice thereof in writing to the secretary of the company. To be timely, a shareholder's notice must be delivered to the secretary at the principal executive office of the company not less than 90 days prior to the first anniversary of the previous year's annual meeting of shareholders; provided, however, that in the event that the date of the annual meeting is advanced by more than 30 days or delayed (other than as a result of adjournment) by more than 30 days from the anniversary of the previous year's annual meeting, notice by a shareholder to be timely must be delivered not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made. For purposes of this section, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the company with the Securities and Exchange Commission; (b) A shareholder's notice to the secretary shall set forth (i) one or more matters appropriate for shareholder action that the shareholder proposes to bring before the meeting, (ii) a brief description of the matters desired to be brought before the meeting and the reasons for conducting such business at the meeting, (iii) the name and record address of the shareholder, (iv) the class and number of shares of the company that the shareholder owns or is entitled to vote and (v) any material interest of the shareholder in such matters; and (c) The chairman of the meeting shall have the power and duty (i) to determine whether any proposed business was properly brought before the meeting in accordance with the procedures set forth in this Section 9, and (ii) if the chairman determines that any proposed business was not brought before the meeting in compliance with this Section 9, to declare that such proposed business shall not be transacted.

ARTICLE III.

BOARD OF DIRECTORS

Section 1. Directors. The business and affairs of the company shall be managed by its board of directors. The number of members of the board, their classification and terms of office, and the manner of their election and removal shall be determined as provided by the Restated Articles of Incorporation. Directors need not be residents of the State of Oregon or shareholders of the company. Unless otherwise determined by the board of directors, no person who has reached the age of 70 years shall be eligible to be elected a director.

Amended 5/17/84 Amended 5/23/02 Amended 12/18/03 Amended 5/24/07

Section 2. Chairman of the Board. The board of directors may elect one of its members as chairman of the board. The chairman of the board, if that position be filled, shall preside at all meetings of the shareholders and the board of directors and shall have such other duties and responsibilities as may be prescribed by the board of directors. If there shall be no chairman of the board, or in his or her absence or disability, the president also shall exercise the duties and responsibilities of that position.

Amended 1/1/85

Section 3. Compensation. Directors shall receive such reasonable compensation for their services as may be fixed from time to time by resolution of the board of directors, and shall be reimbursed for their expenses properly incurred in the performance of their duties as directors. No such payment shall preclude any director from serving the company in any other capacity and receiving such reasonable compensation for such services as may be fixed by resolution of the board.

Amended 5/17/84

ARTICLE IV.

MEETINGS OF THE BOARD OF DIRECTORS

Section 1. Regular Meetings. Regular meetings of the board of directors shall be held in the company's offices at two o'clock p.m., Pacific Time, on the fourth Thursday of February, April, May, July and September, and on the third Thursday of December, or on such other date or at such other hour and place as shall be specified in the notice of meeting. The date, time and place for holding regular meetings of the board of directors may be changed upon the giving of notice to all directors by or at the request of the chairman of the board or the president. The board may provide by resolution the time and place either within or without the State of Oregon for holding of meetings or may omit the holding of any meeting without other notice than such resolution.

Amended 5/26/88 Amended 5/23/91 Amended 12/16/93 Amended 7/25/96 Amended 5/28/98 Amended 1/1/85 Amended 2/24/95 Amended 5/23/02 Section 2. Special Meetings. Special meetings of the board of directors may be called by or at the request of the chairman of the board, the chairman of the governance committee, the president or any two directors. The person or persons authorized to call special meetings of the board may fix any place, either within or without the State of Oregon, as the place for holding any special meeting of the board called by them. Notice of the time and place of special meetings shall be given to each director at least one day in advance by the secretary or other officer performing his or her duties.

Section 3. Waiver of Notice. Any director may waive notice of any meeting. The attendance of a director at any meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Except as otherwise provided by law or the Restated Articles of Incorporation, neither the business to be transacted at, nor the purpose of, any regular or special meeting of the board of directors need be specified in the notice or waiver of notice of such meeting.

Amended 5/17/84

- **Section 4. Quorum.** A majority of the number of directors at any time fixed by resolution adopted by the affirmative vote of a majority of the entire board of directors shall constitute a quorum for the transaction of business. If a quorum shall not be present at any meeting of directors, the directors present may adjourn the meeting from time to time without further notice until a quorum shall be present.
- Section 5. Manner of Acting. Except as otherwise provided by law or the Restated Articles of Incorporation, the act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors.
- Section 6. Action Without a Meeting. Any action required or permitted to be taken at a meeting of the board of directors may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the directors entitled to vote with respect to the subject matter thereof.

ARTICLE V.

COMMITTEES OF THE BOARD

Amended 5/17/84 Amended 1/1/85 Amended 11/21/91 Amended 2/24/95 Amended 5/23/96 Amended 5/23/02 Section 1. Governance Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint a governance committee composed of three or more independent directors. The board shall designate one member of the committee as chairman. The committee shall have and may exercise all of the authority of the board of directors in the management of the company, except with respect to matters upon which by law only the board of directors may act. The committee's responsibilities shall include serving as the nominating committee of the board; making recommendations to the board on board and board committee composition and structure, including recommendations with respect to committee and committee chairmanship assignments; and conducting periodic board self-assessments, peer reviews of individual directors and evaluations of committee effectiveness. The committee shall also perform such other functions as the board by resolution from time to time may direct.

Amended 2/24/95 Amended 5/23/02 Section 2. Audit Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint an audit committee composed of three or more independent directors. The board shall designate one member of the committee as chairman. The duties of the committee shall be to discuss and review with the company's independent auditors the annual audit of the company, including the scope of the audit, and report the results of this review to the board; to meet with the independent auditors at such other times as the committee shall deem to be advisable; and to perform such other functions as the board by resolution from time to time may direct.

Amended 2/22/90 Amended 2/24/95 Amended 5/23/02 Section 3. Organization and Executive Compensation Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint an organization and executive compensation committee composed of three or more independent directors. The board shall designate one member of the committee as chairman. The duties of the committee shall be to discuss and review the management of the affairs of the company relating to its organization and to executive personnel and their compensation, and to perform such other functions as the board by resolution from time to time may direct.

Section 4.

Amended 7/24/03 Amended 9/25/03 Amended 5/24/12

Section 4. Finance Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint a finance committee composed of three or more directors, a majority of whom shall not be officers or retired officers of the company. The board shall designate one member of the committee who is not an officer or retired officer of the company as chairman. The duties of the committee shall be to discuss and review the management of the affairs of the company relating to financing, including the development of financial planning goals and financial policy, and to perform such other functions as the board by resolution from time to time may direct.

Amended 2/24/95 Amended 2/25/99 Amended 9/25/03

Section 5. Public Affairs and Environmental Policy Committee. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint from among its members a public affairs and environmental policy committee composed of three or more directors, a majority of whom shall not be officers or retired officers of the company. The board shall designate one member of the committee who is not an officer or retired officer of the company as chairman. The duties of the committee shall be (i) to consider, review and monitor significant matters of public interest and societal trends, and the company's community affairs, charitable contributions, diversity and equal employment opportunity compliance programs, and (ii) to monitor significant environmental issues affecting the company and to recommend to the board appropriate environmental policies. The committee shall also perform such other functions as the board by resolution from time to time may direct.

Amended 5/22/03 Amended 9/25/03

Section 6. Other Committees. The board of directors at any time, by resolution adopted by a majority of the board of directors, may appoint from among its members such other committees and the chairmen thereof as it may deem to be advisable. Each such committee shall have such powers and authority as are set forth in the resolutions pertaining thereto from time to time adopted by the board.

Amended 2/24/95

- Section 7. Changes of Size and Function. Subject to the provisions of law, the board of directors shall have the power at any time to increase or decrease the number of members of any committee, to fill vacancies thereon, to change any members thereof and to change the functions and terminate the existence thereof.
- Section 8. Conduct of Meetings. Each committee shall conduct its meetings in accordance with the applicable provisions of these bylaws relating to the conduct of meetings of the board of directors. Each committee shall adopt such further rules and regulations regarding its conduct, keep such minutes and other records and appoint such subcommittees and assistants as it shall deem to be appropriate.
- Section 9. Compensation. Persons serving on any committee shall receive such reasonable compensation for their services on such committee as may be fixed by resolution of the board of directors, provided that no person shall receive compensation for his or her services on any committee while serving as an officer of the company.

ARTICLE VI.

NOTICES

- Section 1. Form and Manner. Whenever, under the provisions of law or the Restated Articles of Incorporation, notice is required to be given to any director or shareholder, unless otherwise specified, it shall be given in writing by mail addressed to such director or shareholder at his or her address as it appears on the stock transfer books or other records of the company, with postage thereon prepaid, and such notice shall be deemed to be delivered when deposited in the United States Mail. Notice to directors also may be given by telephone or in any other manner which is reasonably calculated to give adequate notice.
- Section 2. Waiver. Whenever any notice whatever is required to be given under the provisions of law, the Restated Articles of Incorporation or these bylaws, a waiver thereof in writing signed by the

person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

ARTICLE VII.

OFFICERS

Amended 1/1/85 Amended 5/24/07

- Section 1. Election. The board of directors, at its first meeting following the annual meeting of shareholders each year, shall elect a president and a secretary. At such meeting, or at any other time it shall deem appropriate, the board may elect one or more vice presidents and a treasurer. The board also may elect or appoint such other officers and agents as it may deem necessary. Any two or more offices may be held by the same person, except the offices of president and secretary.
- Section 2. Compensation. The officers of the company shall receive such reasonable compensation for their services as from time to time may be fixed by resolution of the board of directors.

Amended 5/17/84

- Section 3. Term. The term of office of all officers shall commence upon their election or appointment and shall continue until the first meeting of the board of directors following the annual meeting of shareholders and thereafter until their successors shall be elected or until their resignation or removal. A vacancy occurring in any office of the company for whatever reason may be filled by the board.
- **Section 4. Removal.** Any officer or agent elected or appointed by the board of directors may be removed by the board whenever in its judgment the best interests of the company will be served thereby but such removal shall be without prejudice to the contract rights, if any, of the officer or agent so removed.

Amended 10/18/84 Amended 3/1/96 Amended 5/24/07 Section 5. President. Unless otherwise determined by the board of directors, the president shall be the chief executive officer of the company and, subject to the control of the board of directors, shall be responsible for the general administration and operation of the company. He shall have such other duties and responsibilities as may pertain to such office or be prescribed by the board of directors. In the absence or disability of the president, an officer designated by the board shall exercise the duties and responsibilities of the president.

In the event the offices of chief executive officer and president are not held by the same person, the chief executive officer shall exercise the duties and responsibilities of the president described in these bylaws.

- Section 6. Vice Presidents. Each vice president shall have such duties and responsibilities as may be prescribed by the board of directors and the president. The board or the president may confer a special title upon a vice president.
- Section 7. Secretary. The secretary shall record and keep the minutes of the shareholders in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these bylaws or as required by law; and perform such other duties as may be prescribed by the board or the president. The secretary shall have custody of the corporate seal of the company and shall affix the seal to any instrument requiring it and attest the same by his or her signature.

The assistant secretaries shall have such duties as may be prescribed from time to time by the board, the president or the secretary. In the absence or disability of the secretary, his or her duties shall be performed by an assistant secretary.

Amended 1/1/85

Section 8. Treasurer. The treasurer shall have charge and custody and be responsible for all funds and securities of the company; deposit all moneys and other valuable effects in the name and to the credit of the company in such depositories as may be designated by the board of directors; and disburse the funds of the company as may be authorized by the board and take proper vouchers for such disbursements. The treasurer shall have such other duties as may be prescribed from time to time by the board or the president. In the absence or disability of the treasurer, his or her duties shall be performed by an assistant treasurer.

ARTICLE VIII.

CONTRACTS, LOANS, CHECKS AND DEPOSITS

- Section 1. Contracts. The board of directors by resolution may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the company, and such authority may be general or confined to specific instances.
- Section 2. Loans. No loans shall be contracted on behalf of the company and no evidences of indebtedness shall be issued in its name unless authorized by a resolution of the board of directors. Such authority may be general or confined to specific instances.
- Section 3. Checks and Drafts. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the company shall be signed by such officer or officers, agent or agents of the company and in such manner as shall from time to time be determined by resolution of the board of directors.
- Section 4. Deposits. All funds of the company not otherwise employed shall be deposited from time to time to the credit of the company in such banks, trust companies or other depositories as the board of directors or officers of the company designated by the board may select, or be invested as authorized by the board.

ARTICLE IX.

CERTIFICATES FOR SHARES AND THEIR TRANSFER

Section 1. Certificates for Shares. The shares of the company shall be represented by certificates; provided, however, the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of the company's shares shall be uncertificated shares. When shares are not represented by certificates then within a reasonable time after the issuance or transfer of such shares, the company shall send or cause to be sent to the shareholder to whom such shares have been issued or transferred a written statement of the information required by the laws of the State of Oregon to be on certificates.

Amended 1/1/93 Amended 7/22/04

Certificates representing shares of the company shall be issued only for whole numbers of shares and shall be in such form as the board of directors may, from time to time, prescribe in accordance with the laws of the State of Oregon. Such certificates shall be signed by the president or a vice president and by the secretary or an assistant secretary and sealed with the corporate seal or a facsimile thereof. The signatures of such officers upon a certificate may be facsimiles thereof. In case of a lost, destroyed or mutilated certificate a new one may be issued therefor upon such terms and indemnity to the company as the board may authorize.

Amended 7/22/04

- Section 2. Transfer. Shares of stock of the company shall be transferable on the books of the company by the holder of record thereof, or by his or her legal representative who shall furnish proper evidence of authority to transfer, or by his or her attorney thereunto authorized by duly executed power of attorney, and on surrender for cancellation of the certificates, if any, for such shares. The board of directors may appoint one or more transfer agents and registrars of stock of the company.
- Section 3. Owner of Record. The company shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by law.

ARTICLE X.

INDEMNIFICATION AND INSURANCE

Section 1. Indemnification. The company shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director, officer, employee or agent of the company, or is or was serving at the request of the

company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other enterprise or any employee benefit plan, against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with the defense or settlement of such action, suit or proceeding to the fullest extent permissible under the Oregon Business Corporation Act or the indemnification provisions of any successor Act. The foregoing rights of indemnification shall not be exclusive of any other rights to which any such person so indemnified may be entitled, under any agreement, vote of shareholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding such office; shall continue as to a person who has ceased to be a director, officer, employee or agent; and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 2. Insurance. The company may purchase and maintain insurance (and pay the entire premium therefor) on behalf of any person who is or was a director, officer, employee or agent of the company, or is or was serving at the request of the company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the company would have the power to indemnify him or her against such liability under the provisions of the Oregon Business Corporation Act or any successor Act; and on behalf of any person who is or was a fiduciary under the Employee Retirement Income Security Act of 1974 with regard to an employee benefit plan of the company against any liability asserted against him or her and incurred by him or her in his or her fiduciary capacity.

ARTICLE XI.

SEAL

The corporate seal of the company shall be circular in form and shall bear an inscription containing the name of the company, the year of its organization, the state of its incorporation and the words "Corporate Seal."

ARTICLE XII.

AMENDMENTS

These bylaws, or any of them, may be altered, amended or repealed, or new bylaws adopted, by resolution of a majority of the board of directors, subject to repeal or change by action of the shareholders.

CERTIFICATE

I, MardiLyn Saathoff, Corporate Secretary or Shawn M. Filippi, Assistant Corporate Secretary, respectively, of Northwest Natural Gas Company, a corporation organized and existing under the laws of the State of Oregon, HEREBY CERTIFY that the foregoing eight printed pages entitled "Bylaws of Northwest Natural Gas Company" constitute a full and true copy of the Bylaws of said corporation as of the date hereof.

WITNESS my hand and seal of said corporation this 10.

MardiLyn Saathoff Corporate Secretary

Shawn M. Filippi

Assistant Corporate Secretary