

SECTION 3. Section 14 of the Mortgage is hereby amended to read as follows:

"SECTION 14. All bonds authenticated and delivered hereunder shall, from time to time, be executed on behalf of the Company by its President or one of its Vice-Presidents whose signature, except on bonds of the 3½ % Series due 1976 and 3¾ % Series due 1974, may be facsimile and its corporate seal shall be thereon impressed or imprinted and attested by its Secretary or one of its Assistant Secretaries, whose signature, except on bonds of the 3½ % Series due 1976, 3¾ % Series due 1974, 4¾ % Series due 1976, 5½ % Series due 1984, 5½ % Series due 1986, 4¾ % Series due 1989, 5¾ % Series due 1991 and 9¾ % Series due 1974, may also be facsimile. The coupons to be attached to coupon bonds shall bear the facsimile signature of the present or any future Treasurer of the Company. In case any of the officers who shall have signed any bonds or attested the seal thereon, or whose facsimile signature appears on any bond or coupon, shall cease to be such officers of the Company before the bonds so signed and/or sealed shall have been actually authenticated and delivered by the Corporate Trustee or issued by the Company, such bonds nevertheless may be authenticated, delivered and/or issued with the same force and effect as though the person or persons who signed such bonds and/or attested the seal thereon and/or whose facsimile signature appears on any bond or coupon had not ceased to be such officer or officers of the Company. Before authenticating any coupon bonds, the Corporate Trustee shall cut off and cancel all matured coupons thereto attached (except as otherwise provided or permitted in Sections 12 and 16 hereof)."

ARTICLE III.

Miscellaneous Provisions.

SECTION 4. Subject to the amendments provided for in this Ninth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Ninth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 5. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Section 2

of the Ninth Supplemental Indenture dated as of April 1, 1971," after the words "March 1, 1966".

SECTION 6. The Company reserves the right, without any consent or other action by holders of bonds of the Tenth Series or of any subsequently created series, to amend Article XIX of the Mortgage, as supplemented, to read as follows:

"ARTICLE XIX.

"MEETINGS AND CONSENTS OF BONDHOLDERS.

"SECTION 107. Modifications and alterations of this Indenture and/or of any indenture supplemental hereto and/or of the rights and obligations of the Company and/or of the rights of the holders of bonds and coupons issued hereunder may be made as provided in this Article XIX.

"SECTION 108. The Corporate Trustee may at any time call a meeting of the bondholders entitled to vote on the matters to be considered at such meeting and it shall call such a meeting on written request of the holders of not less than a majority in principal amount of the bonds Outstanding hereunder (determined as provided in Section 71 hereof) at the time of such request. The Company, pursuant to a Resolution of its Board of Directors, may also call a meeting of the bondholders at any time. In each case the purpose or purposes of such meeting shall be set forth in reasonable detail. In the event of the Corporate Trustee's failing for ten (10) days to call a meeting after being thereunto requested by the bondholders as above set forth, holders of Outstanding bonds in the amount above specified in this Section or the Company, pursuant to Resolution of its Board of Directors, may call such meeting. Every such meeting called by and at the instance of the Corporate Trustee shall be held in the Borough of Manhattan, The City of New York, or with the written approval of the Company, at any other place in the United States of America, and written notice thereof, stating the place and time thereof and in general terms the business to be submitted, shall be mailed by the Corporate Trustee not less than thirty (30) days before such meeting (a) to all holders of bonds the names and addresses of whom are then preserved as required by Section 43 hereof, and (b) to the Company

addressed to it at 735 S. W. Morrison Street, Portland, Oregon (or at such other address as may be designated by the Company from time to time), and, unless all Outstanding bonds entitled to vote are fully registered or are registered as to principal, shall be published by the Corporate Trustee once on at least four different days preceding the meeting, in a Daily Newspaper, printed in the English language, and of general circulation in the Borough of Manhattan, The City of New York, the first publication to be not less than twenty (20) days prior to the date of such meeting; provided, however, that, if notice is given by publication as aforesaid, then the mailing of such notice to any bondholder shall in no case be a condition precedent to the validity of any action taken at such meeting. If such meeting is called by or at the instance either of the Company or of the bondholders, it shall be held at such place in the United States of America as may be specified in the notice calling such meeting and notice thereof shall be sufficient for all purposes hereof if given by newspaper publication as aforesaid stating the place and time of the meeting and in general terms the business to be submitted. Any meeting of bondholders shall be valid without notice if the holders of all bonds then Outstanding hereunder are present in person or by proxy and if the Company and the Corporate Trustee are present by duly authorized representatives, or if notice is waived in writing before or after the meeting by the Company, the holders of all bonds Outstanding hereunder and by the Corporate Trustee, or by such of them as are not present in person or by proxy.

"SECTION 109. Officers and nominees of the Corporate Trustee and of the Company and of the Co-Trustee or their or its nominees may attend such meeting, but shall not as such be entitled to vote thereat. Attendance by bondholders may be in person or by proxy. In order that the holder of any bond payable to bearer and his proxy may attend and vote without producing his bond, the Corporate Trustee, with respect to any such meeting, may make and from time to time vary such regulations as it shall think fit for deposit of bonds with, (i) any bank, or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) the United States of America, any Territory thereof, the District of Columbia, any State of the United

States, any municipality in any State or Territory of the United States or any public instrumentality of the United States, any State or Territory, or (iv) any other person or corporation satisfactory to the Corporate Trustee, and for the issue to the persons depositing the same of certificates by such depositaries entitling the holders thereof to be present and vote at any such meeting and to appoint proxies to represent them and vote for them at any such meeting in the same way as if the persons so present and voting, either personally or by proxy, were the actual bearers of the bonds in respect of which such certificates shall have been issued and any regulations so made shall be binding and effective. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf. In lieu of or in addition to providing for such deposit, the Corporate Trustee may, in its discretion, permit such institutions to issue certificates stating that bonds were exhibited to them, which certificates shall entitle the holders thereof to vote at any meeting only if the bonds with respect to which they are issued are not produced at the meeting by any other person and are not at the time of the meeting registered in the name of any other person. Each such certificate shall state the date on which the bond or bonds in respect of which such certificate shall have been issued were deposited with or exhibited to such institution and the series, maturities and serial numbers of such bonds. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf. In the event that two or more such certificates shall be issued with respect to any bond or bonds, the certificate bearing the latest date shall be recognized and be deemed to supersede any certificate or certificates previously issued with respect to such bond or bonds. If any such meeting shall have been called, under the provisions of Section 108 hereof, by bondholders or by the Company, regulations to like effect for such deposit or exhibition of bonds and the issue of certificates by (i) any bank or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) by the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State or Territory of the United States or any public instrumentality of the United States, any State or Territory shall be similarly binding and effective for all purposes hereof if adopted or approved by the bondholders calling such meeting or by the Board of Directors of the Company, if such meeting

shall have been called by the Company, provided that in either such case copies of such regulations shall be filed with the Corporate Trustee. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf.

"SECTION 110. Subject to the restrictions specified in Sections 109 and 113 hereof, any registered holder of bonds Outstanding hereunder and any holder of a certificate (not superseded) provided for in Section 109 hereof, shall be entitled in person or by proxy to attend and vote at such meeting as holder of the bonds registered or certified in the name of such holder without producing such bonds. All others seeking to attend or vote at such meeting in person or by proxy must, if required by any authorized representative of the Corporate Trustee or the Company or by any other bondholder, produce the bonds claimed to be owned or represented at such meeting, and everyone seeking to attend or vote shall, if required as aforesaid, produce such further proof of bond ownership or personal identity as shall be satisfactory to the authorized representative of the Corporate Trustee, or if none be present then to the Inspectors of Votes hereinafter provided for. Proxies shall be witnessed or in the alternative may (a) have the signature guaranteed by a bank or trust company or a registered dealer in securities, (b) be acknowledged before a Notary Public or other officer authorized to take acknowledgments, or (c) have their genuineness otherwise established to the satisfaction of the Inspectors of Votes. All proxies and certificates presented at any meeting shall be delivered to said Inspectors of Votes and filed with the Corporate Trustee.

"SECTION 111. Persons nominated by the Corporate Trustee, if it is represented at the meeting, shall act as temporary Chairman and Secretary, respectively, of the meeting, but if the Corporate Trustee shall not be represented or shall fail to nominate such persons or if any person so nominated shall not be present, the bondholders and proxies present shall by a majority vote, irrespective of the amount of their holdings, elect another person or other persons from those present to act as temporary Chairman and/or Secretary. A permanent Chairman and a permanent Secretary of such meeting shall be elected from those present by the bondholders and proxies present by a majority vote of bonds repre-

sented. The Corporate Trustee, if represented at the meeting, shall appoint two Inspectors of Votes who shall decide as to the right of anyone to vote and shall count all votes cast at such meeting, except votes on the election of a Chairman and Secretary, both temporary and permanent, as aforesaid, and who shall make and file with the permanent Secretary of the meeting their verified written report in duplicate of all such votes so cast at said meeting. If the Corporate Trustee shall not be represented at the meeting or shall fail to nominate such Inspectors of Votes or if either Inspector of Votes fails to attend the meeting, the vacancy shall be filled by appointment by the permanent Chairman of the meeting.

"SECTION 112. The holders of not less than sixty-six and two-thirds per centum ($66\frac{2}{3}\%$) in principal amount of the bonds Outstanding hereunder when such meeting is held must be present at such meeting in person or by proxy in order to constitute a quorum for the transaction of business, less than a quorum, however, having power to adjourn.

"SECTION 113. Subject to the provisions of Sections 71 and 80 hereof, any modification or alteration of this Indenture and/or of any indenture supplemental thereto and/or of the rights and obligations of the Company and/or the rights of the holders of bonds and/or coupons issued hereunder in any particular, may be made at a meeting of bondholders duly convened and held in accordance with the provisions of this Article, but only by resolution duly adopted by the affirmative vote of the holders of sixty-six and two-thirds per centum ($66\frac{2}{3}\%$) or more in principal amount of the bonds Outstanding hereunder, and, if the rights of one or more, but less than all, series of bonds then Outstanding are to be affected by action taken at such meeting, then also by affirmative vote of the holders of at least sixty-six and two-thirds per centum ($66\frac{2}{3}\%$) in principal amount of each series of bonds so to be affected and Outstanding hereunder, when such meeting is held, and in every case approved by Resolution of the Board of Directors of the Company as hereinafter specified; provided, however, that no such modification or alteration shall, without the consent of the holder of any bond issued hereunder affected thereby, (1) impair or affect the right of such holder to receive payment of the principal of (and premium, if any) and interest on such bond, on or after the respective due dates expressed in such bond, or to institute suit for the enforcement of any such payment

on or after such respective dates, or (2) permit the creation of any lien ranking prior to, or on a parity with, the Lien of this Indenture with respect to any of the Mortgaged and Pledged Property, or (3) permit the deprivation of any non-assenting bondholder of a lien upon the Mortgaged and Pledged Property for the security of his bonds (subject only to the lien of taxes, assessments or governmental charges not then delinquent and to any mortgage or other liens existing upon such property which are prior hereto at the date of the calling of any such bondholders' meeting), or (4) permit the reduction of the percentage required by the provisions of this Section for the taking of any action under this Section with respect to any bond Outstanding hereunder. For all purposes of this Article, the Trustees, subject to the provisions of Sections 88 and 89 hereof, shall be entitled to rely upon an Opinion of Counsel with respect to the extent, if any, as to which any action taken at such meeting affects the rights under this Indenture or under any indenture supplemental hereto of any holders of bonds then Outstanding hereunder.

"Except for the purpose of waiving any past Default, as defined in Section 65 hereof, of the Company and the consequences thereof, in which event the provisions of Section 71 hereof shall be applicable, bonds owned and/or held by and/or for account of and/or for the benefit or interest of the Company, or any corporation of which the Company shall own twenty-five per centum (25%) or more of the outstanding voting stock, shall not be deemed Outstanding for the purpose of any vote or of any calculation of bonds Outstanding in this Article XIX provided for, except that, subject to the provisions of Sections 88 and 89 hereof, for the purpose of determining whether the Trustees, or either of them, shall be protected in relying on any such vote or calculation, only bonds which the Trustees, or either of them, know are so owned and/or held, shall be excluded.

"SECTION 114. A record in duplicate of the proceedings of each meeting of bondholders shall be prepared by the permanent Secretary of the meeting and shall have attached thereto the original reports of the Inspectors of Votes, and affidavits by one or more persons having knowledge of the facts showing a copy of the notice of the meeting, and showing that said notice was mailed and published as provided

in Section 108 hereof. Such record shall be signed and verified by the affidavits of the permanent Chairman and the permanent Secretary of the meeting, and one duplicate thereof shall be delivered to the Company and the other to the Corporate Trustee for preservation by the Corporate Trustee. Any record so signed and verified shall be proof of the matters therein stated, and if such record shall also be signed and verified by the affidavit of a duly authorized representative of the Corporate Trustee, such meeting shall be deemed conclusively to have been duly convened and held and such record shall be conclusive, and any resolution or proceeding stated in such record to have been adopted or taken, shall be deemed conclusively to have been duly adopted or taken by such meeting. A true copy of any resolution adopted by such meeting shall be mailed by the Corporate Trustee to all holders of bonds Outstanding hereunder, the names and addresses of whom are then preserved by the Corporate Trustee pursuant to the provisions of Section 43 hereof, and proof of such mailing by the affidavit of some person having knowledge of the fact shall be filed with the Corporate Trustee, but failure to mail copies of such resolution as aforesaid shall not affect the validity thereof. No such resolution shall be binding until and unless such resolution is approved by Resolution of the Board of Directors of the Company, and it shall be the duty of the Company to file a copy of such Resolution of approval, if any, certified by the Secretary or an Assistant Secretary of the Company with the Corporate Trustee, but if such Resolution of the Board of Directors of the Company is adopted and a certified copy thereof is filed with the Corporate Trustee, the resolution so adopted by such meeting shall (to the extent permitted by law) be deemed conclusively to be binding upon the Company, the Trustees and the holders of all bonds and coupons issued hereunder, at the expiration of sixty (60) days after such filing, except in the event of a final decree of a court of competent jurisdiction setting aside such resolution, or annulling the action taken thereby in a legal action or equitable proceeding for such purposes commenced within such sixty (60) day period; provided, however, that no such resolution of the bondholders, or Resolution of the Company, shall in any manner change or modify or be so construed as to change or modify any of the rights, immunities, or obligations of the Trustees or either of them without their, its or his written assent thereto.

"SECTION 115. Bonds authenticated and delivered after the date of any bondholders' meeting may bear a notation in form approved by the Corporate Trustee as to the action taken at meetings of bondholders theretofore held, and upon demand of the holder of any bond Outstanding at the date of any such meeting and presentation of his bond for the purpose at the principal office of the Corporate Trustee, the Company shall cause suitable notation to be made on such bond by endorsement or otherwise as to any action taken at any meeting of bondholders theretofore held. If the Company or the Corporate Trustee shall so determine, new bonds so modified as in the opinion of the Corporate Trustee and the Board of Directors of the Company to conform to such bondholders' resolution shall be prepared, authenticated and delivered, and upon demand of the holder of any bond then Outstanding and affected thereby shall be exchanged without cost to such bondholder for bonds then Outstanding hereunder upon surrender of such bonds with all unmaturing coupons, if any, appertaining thereto. The Company or the Corporate Trustee may require bonds Outstanding to be presented for notation or exchange as aforesaid if either shall see fit to do so. Instruments supplemental to this Indenture embodying any modification or alteration of this Indenture or of any indenture supplemental hereto made at any bondholders' meeting, and approved by Resolution of the Board of Directors of the Company, as aforesaid, may be executed by the Trustees and the Company and upon demand of the Corporate Trustee, or if so specified in any resolution adopted by any such bondholders' meeting, shall be executed by the Company and the Trustees.

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

"SECTION 116. (A) Anything in this Article contained to the contrary notwithstanding, the Corporate Trustee shall receive the written consent (in any number of instruments of similar tenor executed by bondholders or by their attorneys appointed in writing) of the holders of sixty-six and two-thirds per centum ($66\frac{2}{3}\%$) or more in principal amount of the bonds Outstanding hereunder, and, if the rights of one or more, but less than all, series of bonds then Outstanding are to be affected by action taken pursuant to such consent, then also the written

consent of the holders of at least sixty-six and two-thirds per centum (66 $\frac{2}{3}$ %) in principal amount of each series of bonds so to be affected and Outstanding hereunder (at the time the last such needed consent is delivered to the Corporate Trustee) in lieu of the holding of a meeting pursuant to this Article and in lieu of all action at such a meeting and with the same force and effect as a resolution duly adopted in accordance with the provisions of Section 113 hereof.

“(B) Instruments of consent shall be witnessed or in the alternative may (a) have the signature guaranteed by a bank or trust company or a registered dealer in securities, (b) be acknowledged before a Notary Public or other officer authorized to take acknowledgments, or (c) have their genuineness otherwise established to the satisfaction of the Corporate Trustee.

“The amount of bonds payable to bearer, and the series and serial numbers thereof, held by a person executing an instrument of consent (or whose attorney has executed an instrument of consent in his behalf), and the date of his holding the same, may be proved either by exhibiting the bonds themselves to the Corporate Trustee or by a certificate executed (i) by any bank or trust or insurance company, (ii) by any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization or similar fund, (iii) by the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State or Territory of the United States or any public instrumentality of the United States, any State or Territory, or (iv) by any other person or corporation satisfactory to the Corporate Trustee. A bondholder in any of the foregoing categories may sign a certificate in his own behalf.

“Each such certificate shall be dated and shall state in effect that as of the date thereof a coupon bond or bonds of a specified series and bearing a specified serial number or numbers was deposited with or exhibited to the signer of such certificate. The holding by the person named in any such certificate of any bond specified therein shall be presumed to continue unless (1) any certificate bearing a later date issued in respect of the same bond shall be produced, (2) the bond specified in such certificate (or any bond or bonds issued in exchange or substitution for such bond) shall be produced by another holder, or (3) the bond specified in such certificate shall be registered as to princi-

pal or shall have been surrendered in exchange for a fully registered bond registered in the name of another holder. The Corporate Trustee may nevertheless in its discretion require further proof in cases where it deems further proof desirable. The ownership of registered bonds shall be proved by the registry books.

“(C) Until such time as the Corporate Trustee shall receive the written consent of the necessary percentum in principal amount of the bonds required by the provisions of subsection (A) above for action contemplated by such consent, any holder of a bond, the serial number of which is shown by the evidence to be included in the bonds the holders of which have consented to such action, may, by filing written notice with the Corporate Trustee at its principal office and upon proof of holding as provided in subsection (B) above, revoke such consent so far as it concerns such bond. Except as aforesaid, any such consent shall be conclusive and binding upon such holder and upon all future holders of such bond (and any bond issued in lieu thereof or exchanged therefor), irrespective of whether or not any notation of such consent is made upon such bond, and in any event any action taken by the holders of the percentage in aggregate principal amount of the bonds specified in subsection (A) above in connection with such action shall, subject to the provisions of the last sentence of Section 114 hereof, be conclusively binding upon the Company, the Trustees and the holders of all the bonds.”

SECTION 6. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Ninth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Ninth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and

insertions, if any, as may be appropriate to make the same conform to the provisions of the Ninth Supplemental Indenture.

SECTION 7. Whenever in this Ninth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Ninth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 8. Nothing in this Ninth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Ninth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Ninth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 9. This Ninth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 23rd day of April, 1971, as of April 1, 1971 in the City of Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and J. C. Kennedy, one of the parties hereto of the second part (who is resigning as Co-Trustee effective at the close of business on April 27, 1971), has hereunto set his hand and affixed his seal, and Stanley Burg, one of the parties

hereto of the second part (who is appointed as successor Co-Trustee effective at the close of business on April 27, 1971), has hereunto set his hand and affixed his seal, all in The City of New York, on the 26th day of April, 1971, as of April 1, 1971.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By FRANCIS F. HILL
President.

Attest:

W. E. RADFORD
Secretary.

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

W. A. COOK
KATHLEEN SKINNER

BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By G. E. MAIER
Vice President.

Attest:

W. L. TISCHLER
Assistant Secretary.

J. C. KENNEDY (L.S.)
J. C. KENNEDY

STANLEY BURG (L.S.)
STANLEY BURG

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

IRA M. BRATT
M. E. SECHEHAY, JR.

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

April 23rd, A. D. 1971.

Before me personally appeared FRANCIS F. HILL, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 23rd day of April, 1971, before me personally appeared FRANCIS F. HILL, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

H. W. PIERCE
Notary Public for Oregon
My Commission Expires January 25, 1974

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

April 26th, A. D. 1971.

Before me personally appeared G. E. MAIER, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 26th day of April, 1971, before me personally appeared G. E. MAIER, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

CHRISTINE GERACE
Notary Public

CHRISTINE GERACE
Notary Public, State of New York
No. 24-1407147
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1973

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

April 26th, A. D. 1971.

Before me personally appeared the above-named J. C. KENNEDY and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me J. C. KENNEDY to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 26th day of April, 1971.

[NOTARIAL SEAL]

CHRISTINE GERACE
Notary Public

CHRISTINE GERACE
Notary Public, State of New York
No. 24-1407147
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1973

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

April 26th, A. D. 1971.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 26th day of April, 1971.

[NOTARIAL SEAL]

CHRISTINE GERACE
Notary Public

CHRISTINE GERACE
Notary Public, State of New York
No. 24-1407147
Qualified in Kings County
Certificate filed in New York County
Commission Expires March 30, 1973

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

FRANCIS F. HILL, being duly sworn, deposes and says that he is President of NORTHWEST NATURAL GAS COMPANY, the Mortgagor named in the foregoing instrument, and makes this affidavit for and on its behalf; that said instrument is made in good faith, and without any design to hinder, delay, or defraud creditors.

FRANCIS F. HILL

Subscribed and sworn to before me }
this 23rd day of April, 1971. }

[NOTARIAL SEAL]

H. W. PIERCE
Notary Public for Oregon

My Commission Expires January 25, 1974

34

(EXHIBIT A)**NOTICE OF RESIGNATION OF CO-TRUSTEE**

NOTICE IS HEREBY GIVEN that the undersigned J. C. Kennedy has resigned as successor Co-Trustee under the Mortgage and Deed of Trust dated as of July 1, 1946, as amended, of Portland Gas & Coke Company (now Northwest Natural Gas Company) to Bankers Trust Company and R. G. Page (J. C. Kennedy, successor), as Trustees, such resignation having taken effect at the close of business on April 27, 1971.

Dated, April 28, 1971.

J. C. KENNEDY

NOTICE OF APPOINTMENT OF SUCCESSOR CO-TRUSTEE

NOTICE IS HEREBY GIVEN that the undersigned Northwest Natural Gas Company has received notice of and accepted the foregoing resignation of J. C. Kennedy as Co-Trustee under its said Mortgage and Deed of Trust dated as of July 1, 1946, as amended, and that as provided in said Mortgage and Deed of Trust the undersigned has appointed Stanley Burg as successor Co-Trustee thereunder, effective at the close of business on April 27, 1971.

Dated, April 28, 1971.

NORTHWEST NATURAL GAS COMPANY

SUMMARY OF RECORDING DATA

IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
11	Benton	May 11, 1971	24409	—
12	Clackamas	May 11, 1971	71-10026	—
13	Clatsop	May 11, 1971	347	503
14	Columbia	May 11, 1971	115	864
15	Coos	May 11, 1971	71-5-58818/52	—
16	Douglas	May 11, 1971	466	219
17	Hood River	May 11, 1971	710790	—
18	Lane	May 11, 1971	531R	—
19	Lincoln	May 11, 1971	25	760
20	Linn	May 11, 1971	MF14	877
21	Marion	May 11, 1971	670	171
22	Multnomah	May 11, 1971	786	1449
23	Polk	May 11, 1971	16	351
24	Tillamook	May 11, 1971	223	72
25	Wasco	May 11, 1971	710749	—
26	Washington	May 11, 1971	816	680
27	Yamhill	May 11, 1971	83	1952

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
9	Secretary of State.....	May 11, 1971	C-02566

(An executed counterpart of the Ninth Supplemental Indenture was filed on May 7, 1971 in the office of the Auditor of the City of Portland.)

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
29	Clark	May 11, 1971	780758	—
30	Klickitat	May 11, 1971	104	263A
31	Skamania	May 11, 1971	48	969

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
28	Secretary of State ...	May 11, 1971	0124352

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG

(SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)

Tenth Supplemental Indenture

providing among other things for
First Mortgage Bonds, 12% Series due 1984

Dated as of January 1, 1975

TENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of January, 1975, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is Suite 300, 200 S.W. Market Street, Portland, Oregon, 97201 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Sixteen Wall Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Tenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Tenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), and its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture); and

WHEREAS said First through Eighth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Tenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture); and

WHEREAS said Ninth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	May 11, 1971	24409	—
Clackamas	May 11, 1971	71-10026	—
Clatsop	May 11, 1971	347	503
Columbia	May 11, 1971	115	864
Cook	May 11, 1971	71-5-58818/52	—
Douglas	May 11, 1971	466	219
Hood River	May 11, 1971	710790	—
Lane	May 11, 1971	531R	—
Lincoln	May 11, 1971	25	760
Linn	May 11, 1971	MF14	877
Marion	May 11, 1971	670	171
Multnomah	May 11, 1971	786	1449
Polk	May 11, 1971	16	351
Tillamook	May 11, 1971	223	72
Wasco	May 11, 1971	710749	—
Washington	May 11, 1971	816	680
Yamhill	May 11, 1971	83	1952

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	May 11, 1971	C-02566

(An executed counterpart of the Ninth Supplemental Indenture was filed on May 7, 1971 in the office of the Auditor of the City of Portland.)

WASHINGTON
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	May 11, 1971	780758	—
Klickitat	May 11, 1971	104	263A
Skamania	May 11, 1971	48	969

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	May 11, 1971	0124352

and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3 $\frac{1}{8}$ % Series due 1976.....	\$10,000,000
3 $\frac{7}{8}$ % Series due 1974.....	None
4 % Series due 1974.....	None
4 $\frac{3}{8}$ % Series due 1976.....	\$ 1,744,000
5 $\frac{1}{8}$ % Series due 1984.....	\$ 4,972,000
5 $\frac{1}{8}$ % Series due 1986.....	\$ 5,062,000
4 $\frac{3}{4}$ % Series due 1989.....	\$ 5,855,000
5 $\frac{3}{4}$ % Series due 1991.....	\$14,075,000
9 $\frac{3}{8}$ % Series due 1974.....	None
8 $\frac{5}{8}$ % Series due 1996.....	\$18,000,000;

and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause

to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the Company wishes to secure the repayment of \$30,000,000 aggregate principal amount of its 12% Secured Notes Due 1984 (the "Secured Notes") issued pursuant to several Note Purchase Agreements dated December 31, 1974 (the "Note Purchase Agreements"), between the Company and the several purchasers named therein, by the issuance and pledge of \$30,000,000 aggregate principal amount of such new series of bonds to be created and issued pursuant to the Mortgage, as heretofore supplemented, and as supplemented by this Tenth Supplemental Indenture; and

WHEREAS the execution and delivery by the Company of this Tenth Supplemental Indenture, and the terms of the bonds of the Eleventh Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole

and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

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

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Tenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held

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

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

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Tenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Eleventh Series of Bonds.

SECTION 1.01. *Amount, Interest and Maturity.* There shall be a series of bonds designated "12% Series due 1984" (herein sometimes referred to as the "Eleventh Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Eleventh Series shall be limited to \$30,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on December 1, 1984, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest from January 21, 1975 at the rate of 12% per annum (computed on the basis of a 360-day year of twelve 30-day months), payable, subject to Section 1.03 hereof, semi-annually on June 1 and December 1 of each year, commencing June 1, 1975; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, the City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, and, at the option of the Company, may be paid by check mailed to the registered holder thereof. Bonds of the Eleventh Series shall be dated as in Section 10 of the Mortgage provided.

10

SECTION 1.02. *Redemption.* Bonds of the Eleventh Series shall be redeemable at the option of the Company on any date on or after December 1, 1979 in accordance with the requirements of the Mortgage in whole at any time, or in part from time to time (if in part, in multiples of \$100,000 but in amounts not less than \$1,000,000 in aggregate principal amount of such bonds), prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption at the following redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

<u>If redeemed during the twelve-month period beginning December 1,</u>	<u>Percentage</u>
1979	105.00%
1980	103.75
1981	102.50
1982	101.25
1983 and thereafter	100.00

in each case, together with accrued interest to the date fixed for redemption; *provided, however,* that prior to June 1, 1984, no bonds of the Eleventh Series may be redeemed pursuant to this Section prior to maturity as part of or in anticipation of any refinancing operation involving, directly or indirectly, the incurring of indebtedness by the Company or any subsidiary or affiliate thereof for borrowed funds having an interest rate or cost (calculated in accordance with generally accepted financial practice) of less than 12% per annum. The term "affiliate" means a person directly or indirectly controlling, controlled by, or under direct or indirect common control with, the Company. A person shall be deemed to control a corporation or other person, for the purpose of this definition, if such person possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of such corporation or other person, whether through the ownership of voting securities, by contract, or otherwise. The term "subsidiary" means any corporation at least a majority of whose outstanding voting stock shall at the time be owned by the Company and/or by one or more subsidiaries of the Company.

Bonds of the Eleventh Series shall be redeemable by the application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or Section 64 of the Mortgage or with the Proceeds of Released Property; *provided, however,* that no bonds of the Eleventh Series shall be redeemable pursuant to any Section of the Mortgage (other than pursuant to the first paragraph of this Section 1.02) which permits the Com-

pany to designate one or more series from which redemption is to be made without the prior written consent of the holders of not less than 70% of the principal amount of the bonds of the Eleventh Series then Outstanding, which consent shall be requested by the Company. Any such redemption, if consented to, shall be made at a redemption price equal to 100% of the principal amount thereof, together with accrued interest to the date fixed for redemption.

Subject to the provisions of Section 1.03 hereof, Bonds of the Eleventh Series shall be redeemed through the annual operation of the sinking fund pursuant to Article II hereof at a sinking fund redemption price equal to 100% of the principal amount thereof, in each case together with accrued interest to the date fixed for redemption.

SECTION 1.03. *Effect of Payment of Secured Notes; Covenant to Pay.* The obligation of the Company to pay the principal of, premium, if any, and interest on the bonds of the Eleventh Series on any date fixed for the payment of such amounts pursuant to this Tenth Supplemental Indenture shall be discharged by (i) the payment of all of the corresponding amounts when due and payable in respect of the principal of, premium, if any, and interest on the Secured Notes to be issued pursuant to Note Purchase Agreements, each dated December 31, 1974, between the Company and the purchasers named therein; and (ii) in the case of payments of principal and premium, if any, the presentation and surrender for cancellation or exchange, or the presentation for notation, of the bonds of the Eleventh Series to the Corporate Trustee as provided in Section 54 of the Mortgage. Without limiting the effect of the foregoing, prepayment of the Secured Notes pursuant to Section 2.01 or 2.02 of the Note Purchase Agreements shall, upon presentation and surrender for cancellation or exchange, or presentation for notation, of the bonds of the Eleventh Series as provided in the preceding sentence, discharge the obligation hereunder to make an Eleventh Series Sinking Fund Payment or redemption pursuant to Section 2.01, 2.02 or 1.02 hereof for the corresponding date. If any amounts payable in respect of the Secured Notes on a date fixed for the payment thereof pursuant to the Note Purchase Agreements shall not be paid on such date, the corresponding amount payable in respect of the bonds of the Eleventh Series on such date, or the portion thereof which is equal to that portion of the amounts then payable in respect of the Secured Notes and remaining unpaid, shall be paid to the registered owners of the bonds of the Eleventh Series.

The Company covenants that it will duly and punctually pay the principal of, premium, if any, and interest on the Secured Notes as and when the same shall become due and payable whether at maturity, upon redemption,

12

whether mandatory or optional, by declaration or otherwise. The Company covenants that it will promptly notify the Corporate Trustee of any Event of Default under the Note Purchase Agreements.

SECTION 1.04. *Payment Certificates.* The Company shall, if it is the case, deliver to the Corporate Trustee on each date on which any amounts would otherwise be required to be paid in respect of bonds of the Eleventh Series pursuant to the provisions hereof and of the Mortgage, an Officers' Certificate (the "Payment Certificate") that it has duly and punctually made the corresponding payments in respect of the Secured Notes, in which event the Company shall not, unless default is made in the making of any such payment on the Secured Notes, be required to pay any such amounts in respect of bonds of the Eleventh Series. The Corporate Trustee shall be entitled to rely conclusively upon any Payment Certificate delivered by the Company unless and until it shall have received written notice from the holder of any bond of the Eleventh Series that any such amounts so payable in respect of the Secured Notes have not been duly paid.

SECTION 1.05. *Exchange and Registration.* At the option of the registered owner, any bonds of the Eleventh Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, the City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Eleventh Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, the City of New York.

Upon any registration of transfer or exchange of bonds of the Eleventh Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Eleventh Series.

ARTICLE II.**Sinking Fund for Bonds of the Eleventh Series.**

SECTION 2.01. *Regular Sinking Fund and Dates.* Subject to the provisions of Section 1.03 hereof, the Company covenants that, unless all bonds

of the Eleventh Series shall have ceased to be Outstanding, it will, as a sinking fund for the retirement of bonds of the Eleventh Series, pay to the Corporate Trustee an amount in cash not later than December 1 in each of the years 1979 to and including 1983 (subject to acceleration pursuant to Section 2.02 hereof) sufficient to redeem \$4,500,000 principal amount of such bonds (subject to adjustment pursuant to Section 2.02 hereof) at the sinking fund redemption price, together with accrued interest thereon to the date fixed for redemption. The dates upon which such payments are to be made are herein called "Eleventh Series Sinking Fund Payment Dates". The amount to be paid to the Corporate Trustee on an Eleventh Series Sinking Fund Payment Date is herein called an "Eleventh Series Sinking Fund Payment".

The Company shall not be entitled to increase, or to anticipate, any payment in satisfaction of its obligations in respect of the Sinking Fund for the Eleventh Series, except as specifically provided in Section 2.02 below. The Company will not, and will not permit any subsidiary to, acquire directly or indirectly by purchase or otherwise any of the outstanding bonds of the Eleventh Series except by way of payment or redemption in accordance with the provisions of this Tenth Supplemental Indenture.

SECTION 2.02. Adjusted Sinking Fund Payments and Accelerated Sinking Fund Payment Dates. The terms used in this Section 2.02 shall have the meanings defined in Section 2.03. On or before March 31 of each year beginning with the year 1975, the Company covenants that it shall file a Certificate of Firm Gas Supply with the Trustee and, so long as any original holder of bonds of the Eleventh Series continues to hold any of such bonds, deliver a copy of such Certificate to such original holder. If the Date of Exhaustion of Firm Gas Supply shown by the Certificate of Firm Gas Supply so filed shall be a date earlier than December 1, 1984, then the dates of the Eleventh Series Sinking Fund Payment Dates and the amounts of the Eleventh Series Sinking Fund Payments shall be redetermined as follows: The aggregate principal amount of bonds of the Eleventh Series outstanding on the date on which such certificate was filed shall be divided by the number of December 1sts subsequent to the date on which such certificate is filed and prior to such Date of Exhaustion. The resulting quotient (rounded to the next higher integral multiple of \$1,000 if the quotient is not an integral multiple of \$1,000) shall thereupon become the adjusted Eleventh Series Sinking Fund Payment. Each December 1st subsequent to the

date on which such certificate is filed and prior to such Date of Exhaustion that is also prior to December 1, 1979 shall thereupon become an accelerated Eleventh Series Sinking Fund Payment Date. Such adjusted Eleventh Series Sinking Fund Payment shall then be paid to the Corporate Trustee not later than each Eleventh Series Sinking Fund Payment Date, including any accelerated Eleventh Series Sinking Fund Payment Date.

If any Certificate of Firm Gas Supply filed in any year after the Company's Eleventh Series Sinking Fund Payment has been adjusted as hereinabove provided shall show a Date of Exhaustion of Firm Gas Supply that is both different from the Date of Exhaustion shown in the most recent previous Certificate of Firm Gas Supply and prior to December 1, 1984, the amount of the Company's remaining adjusted Eleventh Series Sinking Fund Payments shall again be adjusted in the same manner as provided above. If any such subsequently filed Certificate of Firm Gas Supply shall show a Date of Exhaustion later than November 30, 1984, then (until such time as a further subsequent Certificate of Firm Gas Supply shall be filed showing a Date of Exhaustion prior to December 1, 1984) no further payments on accelerated Eleventh Series Sinking Fund Payment Dates shall be required to be made and the remaining Eleventh Series Sinking Fund Payments shall be made as provided, exclusive of any adjustment, in the first paragraph of Section 2.01, except that (1) if less than \$22,500,000 shall then have been paid, each such remaining Eleventh Series Sinking Fund Payment shall be reduced by a fraction computed by dividing (i) the sum of (x) any Eleventh Series Sinking Fund Payments theretofore made on accelerated Eleventh Series Sinking Fund Payment Dates plus (y) the aggregate amount of any excess of an adjusted Eleventh Series Sinking Fund Payment over \$4,500,000 for all such payments theretofore made on the Eleventh Series Sinking Fund Payment Dates after December 1, 1978, by (ii) \$4,500,000 multiplied by the number of December 1sts which are subsequent to both December 1, 1978 and the date such Certificate is filed and which are prior to December 1, 1984, or (2) if \$22,500,000 or more shall then have been paid, no further payments shall be required to be made on any remaining Eleventh Series Sinking Fund Payment Dates.

Nothing contained in this Section 2.02 shall affect the obligation of the Company to repay the unpaid principal amount of bonds of the Eleventh Series at maturity on December 1, 1984.

SECTION 2.03. *Certain Definitions.* For purposes of this Article II, the following terms shall have the following meanings:

The term "*Certificate of Firm Gas Supply*" shall mean an Officers' Certificate which shall state:

- (a) The Company's Firm Gas Supply as at January 1 of the year in which such Certificate is filed;

15

- (b) The Company's Annual Gas Requirements;
- (c) The Company's Firm Gas Supply Life as at January 1 of the year in which such Certificate is filed; and
- (d) The Date of Exhaustion of Firm Gas Supply.

The terms "*Date of Exhaustion of Firm Gas Supply*" or "*Date of Exhaustion*" shall mean the first day of the calendar month next following the end of the period commencing on January 1 of the year in which a Certificate of Firm Gas Supply is filed and extending for the Firm Gas Supply Life shown in such Certificate.

The term "*Firm Gas Supply Life*" shall mean a period of years, stated to the nearest 1/10 of a year, computed by dividing the Company's Firm Gas Supply by the Company's Annual Gas Requirements, each stated in a Certificate of Firm Gas Supply.

The term "*Annual Gas Requirements*" shall mean, for the purposes of any Certificate of Firm Gas Supply, the average of the aggregate annual amount in Therms of all gas sold and of all gas used by the Company during the three calendar years next preceding the date of such Certificate, including gas unaccounted for but excluding the excess, if any, in Therms, of the average aggregate annual amount of gas sold on an interruptible basis during the same period over 35% of the average aggregate annual amount of all gas sold and used.

The term "*Firm Gas Supply*" shall mean, for the purposes of any Certificate of Firm Gas Supply, the sum, without duplication, of

(a) the aggregate amount in Therms of proven (as evidenced by an independent geologist's certificate dated January 1st or later of the then current year) recoverable natural gas reserves of Distribution Quality (including gas in solution or in a common reservoir with oil or distillate and to be produced with such oil or distillate in the form of casing-head gas) controlled by the Company by virtue of leaseholds owned by the Company or by virtue of contracts or other legal entitlements under which the Company is entitled to purchase natural gas produced from such reserves, which, after taking into account the current availability of transportation facilities and all other pertinent factors relative to such reserves, the Company can reasonably expect to produce, at economically practicable prices, and have delivered to it and to transport to its markets to meet requirements in the future for sales to its customers, after exclud-

ing from such aggregate any amounts to be utilized in connection with the production of Liquefied Natural Gas included under (c) or (e); *provided*, however, that no amounts shall be taken into account hereunder from any reserve unless on or prior to the date of such Certificate, (i) all necessary regulatory approvals required for the commencement and continuation of withdrawals from such reserves and deliveries to the Company's markets have been obtained and are still in full force and effect and (ii) construction of any facilities required for the withdrawal of such gas is in progress and is reasonably expected by the Company to be completed within a period of eighteen months from the date of such Certificate;

(b) to the extent not included in (a) above, the aggregate amount in Therms of gas of Distribution Quality owned or controlled by the Company in storage reservoirs, excluding non-recoverable cushion gas;

(c) the aggregate amount in Therms of Distribution Quality gas which the Company is entitled to purchase or otherwise acquire from interstate, intrastate or Canadian gas pipeline companies under any contract or other legal entitlement providing for the delivery of such gas to, or for the account of, the Company, *provided* that on or prior to the date of such Certificate, all necessary regulatory approvals required for the commencement and continuation of deliveries to the Company of such gas have been obtained and are still in full force and effect, and *provided further* that such aggregate amount shall be diminished by the excess, if any, of (i) that portion which, in light of the circumstances existing on the date of such Certificate, can reasonably be expected will not be delivered to the Company because (x) the Company has received notice or has reason to believe that such pipeline supplier does not intend to or cannot deliver such portion, or (y) the Company has not reasonably assured itself to the extent feasible that such pipeline supplier has itself a sufficient gas supply to perform its contract or other legal obligation for delivery of such portion to, or for the account of, the Company over (ii) the aggregate amount, if any, of Synthetic Gas of Distribution Quality and/or Liquefied Natural Gas of Distribution Quality meeting the requirements of subsections (d) and (e) below (except for the dates set forth in clauses (iii) of such subsections) available to the Company by reason of arrangements made in response to reduction of pipeline supply resulting from the events referred to in (i) above;

(d) the aggregate amount in Therms of Synthetic Gas of Distribution Quality controlled by the Company by virtue of an interest held by the Company in, or under contracts or other legal entitlements to purchase or otherwise acquire production from, any facilities for the production of Synthetic Gas, *provided* that (i) all regulatory approvals required to be obtained on or prior to the date of such Certificate for the construction or operation of such facilities and the purchase or other acquisition of such gas have been obtained and are still in full force and effect, and that construction of such facilities (if not completed) is in progress and is reasonably expected by the Company to be completed within a period of eighteen months from the date of such Certificate, (ii) no event or circumstance has occurred which would prevent the completion and operation of any project of which such facilities are a part, and (iii) any such amount of Synthetic Gas shall as of the date of such Certificate be available to the Company for a remaining term ending not earlier than December 1, 1984; and

(e) the aggregate amount in Therms of Liquefied Natural Gas of Distribution Quality controlled by the Company by virtue of an interest held by the Company in, or under contracts or other legal entitlements to purchase or otherwise acquire production from, any facilities for the liquefaction of natural gas, *provided* that (i) all regulatory approvals required to be obtained on or prior to the date of such Certificate for the construction or operation of such facilities and the purchase or other acquisition of such gas have been obtained and are still in full force and effect, and that construction of such facilities (if not completed) is in progress and is reasonably expected by the Company to be completed within a period of eighteen months from the date of such Certificate, (ii) no event or circumstance has occurred which would prevent the completion and operation of any project of which such facilities are a part, and (iii) any such amount of Liquefied Natural Gas shall as of the date of such Certificate be available to the Company for a remaining term ending not earlier than June 1, 1984;

provided, however, that in the case of (c), the signers of any Certificate of Firm Gas Supply may, if they shall consider such information reliable and of sufficiently recent date and so state in such Certificate, rely on any figures relating to the gas supply of any pipeline supplier contained in the certificate of gas supply most recently filed with a trustee under any indenture securing

bonds or other obligations of said pipeline supplier if (i) such certificate was signed by a person who would qualify as an independent geologist under such indenture and (ii) pursuant to the terms of said indenture, the signer of such certificate of gas supply, in rendering the opinion set forth therein, shall be required to consider substantially the same factors in a substantially similar manner in determining the amount of such gas supply as are required to be considered by the signers of a Certificate of Firm Gas Supply under this Section 2.03 in determining the Firm Gas Supply of the Company, and such certificate of gas supply of the supplier shall be submitted, in conjunction with the Company's Certificate of Firm Gas Supply, to the Trustee and to the original holders of the bonds of the Eleventh Series so long as such original holder continues to hold any such Series; *provided, further*, that in the case of (d) and (e), the aggregate amounts will be included only to the extent that, in the express written opinion of the signers of the Certificate of Firm Gas Supply hereunder, (i) the design, capacity and useful life of such facilities will permit the production of such amount; (ii) raw materials to be consumed in the production of Synthetic Gas by any facilities referred to in (d) have been acquired or contracted for in quantities sufficient to permit the production of such amount; (iii) the natural gas required to be consumed or used in the production of Liquefied Natural Gas by any facilities referred to in (e) has been acquired or contracted for in quantities sufficient to permit the production of such amount; and (iv) the nature and extent of the Company's interest in such facilities, or the contracts or other legal entitlements by virtue of which the Company has rights to purchase or otherwise acquire production therefrom, and the Company's ability to procure the transportation thereof, are such as to permit the Company to obtain the delivery of such amount; *and provided, further*, in computing Firm Gas Supply, any gas, including Liquefied Natural Gas and Synthetic Gas, available to the Company from sources not located in the United States of America, whether owned by the Company, its supplier or any supplier of such supplier, shall be included only to the extent that the amount thereof (i) can reasonably be expected to be transported into the United States, over the life of any applicable contract to which the Company is a party, by the Company or its supplier or for delivery to such supplier for sale to the Company, (ii) can be exported from the foreign sources without violating any law, regulation or embargo of any country other than the United States having jurisdiction thereof relating to the export of such gas, and (iii) can be imported into the United States by the Company or its supplier or for delivery to such supplier for sale to the Company without violating any law, regulation or embargo of the United States relating to the import of such gas.

The term "*Distribution Quality*", when used in reference to any gas, shall mean gas which upon delivery to the Company or after further treatment or processing by available and feasible means, or after blending with other gas available to the Company, is of a quality susceptible for sale or use by the Company in satisfying its gas requirements.

The term "*Liquefied Natural Gas*" shall mean natural gas converted to a liquid form and which is subject to regasification.

The term "*Synthetic Gas*" shall mean gas produced by the conversion of coal, oil, naphtha, oil shale or any other substance from a solid or a liquid to a gaseous state, but shall not include gas produced by the regasification of Liquefied Natural Gas.

The term "*Therms*" shall mean 100,000 British thermal units.

SECTION 2.04. *Treatment of Certain Amounts.* For all purposes of the Mortgage (including all calculations thereunder), so long as any bonds of the Eleventh Series remain Outstanding, as defined in Section 2 of the Mortgage:

(i) any cash deposited under the provisions of this Article shall be deemed to be Funded Cash; and

(ii) any bonds of the Eleventh Series delivered to the Corporate Trustee pursuant to the provisions of this Article shall, after such delivery, be deemed to have been retired by the use of Funded Cash.

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

SECTION 2.05. *Waivers.* Any provision of this Article II may be waived with, and only with, the consent of the holders of 100% of the aggregate unpaid principal amount of the bonds of the Eleventh Series.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Tenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore

supplemented, shall, for all purposes of this Tenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. Section 55 of the Mortgage, as amended, is hereby further amended by inserting the words "and subject to the provisions of Article II of the Tenth Supplemental Indenture dated as of January 1, 1975," after the words "April 1, 1971".

SECTION 3.03. So long as any bonds of the Eleventh Series remain Outstanding, subdivision (c) of Section 65 of the Mortgage is hereby amended to read as follows:

"(c) (1) Failure to pay interest upon or principal (whether at maturity as therein expressed or by declaration, or otherwise) of any Outstanding Qualified Lien Bonds continued beyond the period of grace, if any, specified in the Qualified Lien securing the same; or (2) failure to pay the principal of, or premium, if any, or interest on (whether at maturity or any prepayment or interest payment date as therein expressed, or by acceleration or otherwise) any of the Company's Secured Notes due 1984 issued under its Note Purchase Agreements dated December 31, 1974, when any such payment is due and such failure shall have continued beyond any applicable period of grace specified in such Agreements."

SECTION 3.04. If for purposes of Section 113 of the Mortgage, the bonds of the Eleventh Series otherwise Outstanding within the meaning of Section 2 of the Mortgage shall at any time be deemed not to be Outstanding, the Company covenants that it will not (i) consent to any amendment or modification of the Mortgage, or of any indenture supplemental thereto (if, in such case, the consent of holders of such bonds of the Eleventh Series would be required if such bonds had been deemed to be Outstanding for purposes of such Section), unless prior thereto the Company, treating the bonds of the Eleventh Series as Outstanding for this purpose, has obtained the consent of the holders of the requisite percentage in aggregate principal amount of First Mortgage Bonds then Outstanding, or (ii) without the prior written consent of holders of not less than 66 $\frac{2}{3}$ % of the aggregate principal amount of Bonds of the Eleventh Series then Outstanding within the meaning of Section 2 of the Mortgage, consent to any amendment or modification of this Tenth Supplemental Indenture.

SECTION 3.05. The Trustees hereby accept the trusts hereby declared provided, created or supplemented, and agree to perform the same upon the

terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Tenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Tenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Tenth Supplemental Indenture.

SECTION 3.06. To the extent permitted by Sections 88 and 89 of the Mortgage, the Trustees or either of them may rely and shall be protected in acting upon any certificate delivered under Article I or Article II and believed by them, it or him to be genuine and to have been signed or presented by the proper party or parties.

SECTION 3.07. Whenever in this Tenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Tenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.08. Nothing in this Tenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Tenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Tenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.09. This Tenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this

instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 13th day of January, 1975, as of January 1, 1975 in the City of Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 16th day of January, 1975, as of January 1, 1975.

NORTHWEST NATURAL GAS COMPANY

By FRANCIS F. HILL
President.

Attest:

W. E. RADFORD
Secretary.

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

[CORPORATE SEAL]

JOSEPH S. LONG
KATHLEEN SKINNER

BANKERS TRUST COMPANY, as Trustee,

By W. L. TISCHLER
Assistant Vice President.

Attest:

JUNE A. GRABER
Assistant Secretary.

STANLEY BURG (L.S.)
STANLEY BURG, *as Trustee.*

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

[CORPORATE SEAL]

S. D. MINEO
K. MCGRAW

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

January 13, A. D. 1975.

Before me personally appeared FRANCIS F. HILL, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 13th day of January, 1975, before me personally appeared FRANCIS F. HILL, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

H. W. PIERCE
Notary Public for Oregon

My commission expires January 25, 1984

[NOTARIAL SEAL]

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

January 16, A. D. 1975.

Before me personally appeared W. L. TISCHLER, who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 16th day of January, 1975, before me personally appeared W. L. TISCHLER, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

CHRISTINE GERACE
CHRISTINE GERACE
Notary Public, State of New York
No. 43-1407147
Qualified in Richmond County
Certificate filed in New York County
Commission Expires March 30, 1975

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

January 16, A. D. 1975.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 16th day of January, 1975.

[NOTARIAL SEAL]

CHRISTINE GERACE
CHRISTINE GERACE
Notary Public, State of New York
No. 43-1407147
Qualified in Richmond County
Certificate filed in New York County
Commission Expires March 30, 1975

SUMMARY OF RECORDING DATA

IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
16	Benton	January 27, 1975	53450	—
17	Clackamas	January 27, 1975	75-2101	—
18	Clatsop	January 27, 1975	406	698
19	Columbia	January 27, 1975	131	162
20	Coos	January 27, 1975	75 1-109240/65	—
21	Douglas	January 27, 1975	562	540
22	Hood River	January 27, 1975	750137	—
23	Lane	January 27, 1975	727 R	—
24	Lincoln	January 28, 1975	54	970
25	Linn	January 27, 1975	MF 101	828
26	Marion	January 27, 1975	7	1849
13	Multnomah	January 21, 1975	1024	1415
27	Polk	January 27, 1975	67	212
28	Tillamook	January 27, 1975	239	329
29	Wasco	January 27, 1975	750186	26
30	Washington	January 28, 1975	1009	141
31	Yamhill	January 27, 1975	104	150

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
14	Secretary of State	January 28, 1975	D-05654

(An executed counterpart of the Tenth Supplemental Indenture was filed on February 12, 1975, in the office of the Auditor of the City of Portland.)

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
33	Clark	January 27, 1975	G 681197	943795
34	Klickitat	January 27, 1975	112	9
35	Skamania	January 27, 1975	52	420

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
32	Secretary of State	January 27, 1975	0282357

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG

(SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and Deed
of Trust, dated as of July 1, 1946, of
Portland Gas & Coke Company (now
Northwest Natural Gas Company)

Eleventh Supplemental Indenture

providing among other things for
First Mortgage Bonds, 10½% Series due 1986

Dated as of December 1, 1975

ELEVENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of December, 1975, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is Suite 300, 200 S.W. Market Street, Portland, Oregon 97201 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Eleventh Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eleventh Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture) and its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture); and

WHEREAS said First through Ninth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eleventh Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture); and

WHEREAS said Tenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	January 27, 1975	53450	—
Clackamas	January 27, 1975	75-2101	—
Clatsop	January 27, 1975	406	698
Columbia	January 27, 1975	131	162
Coos	January 27, 1975	75 1-109240/65	—
Douglas	January 27, 1975	562	540
Hood River	January 27, 1975	750137	—
Lane	January 27, 1975	727 R	—
Lincoln	January 28, 1975	54	970
Linn	January 27, 1975	MF 101	828
Marion	January 27, 1975	7	1849
Multnomah	January 21, 1975	1024	1415
Polk	January 27, 1975	67	212
Tillamook	January 27, 1975	239	329
Wasco	January 27, 1975	750186	26
Washington	January 28, 1975	1009	141
Yamhill	January 27, 1975	104	150

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	January 28, 1975	D-05654

(An executed counterpart of the Tenth Supplemental Indenture was filed on February 12, 1975, in the office of the Auditor of the City of Portland.)

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	January 27, 1975	G 681197	943795
Klickitat	January 27, 1975	112	9
Skamania	January 27, 1975	52	420

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	January 27, 1975	0282357
; and		

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3 1/8 % Series due 1976.....	\$10,000,000
3 7/8 % Series due 1974.....	None
4 % Series due 1974.....	None
4 3/8 % Series due 1976.....	\$ 1,742,000
5 1/8 % Series due 1984.....	\$ 4,941,000
5 1/8 % Series due 1986.....	\$ 5,045,000
4 3/4 % Series due 1989.....	\$ 5,854,000
5 3/4 % Series due 1991.....	\$13,849,000
9 3/8 % Series due 1974.....	None
8 5/8 % Series due 1996.....	\$17,283,000
12 % Series due 1984.....	\$30,000,000;

and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the pro-

visions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Eleventh Supplemental Indenture, and the terms of the bonds of the Twelfth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and

premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the

occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

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

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Eleventh Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and

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

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

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Eleventh Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the

same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Twelfth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "10½ % Series due 1986" (herein sometimes referred to as the "Twelfth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Twelfth Series shall be limited to \$20,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on January 1, 1986, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); they shall bear interest at the rate of 10½ % per annum, the first interest payment to be made on July 1, 1976, for the period from December 11, 1975, to July 1, 1976, with subsequent interest payments to be made semi-annually on July 1 and January 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twelfth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Twelfth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior

to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed prior to January 1, 1977, 110.50% and if redeemed during the 12 months period ending December 31,

1977	109.19%	1982	102.63%
1978	107.88%	1983	101.31%
1979	106.56%	1984	100.00%
1980	105.25%	1985	100.00%
1981	103.94%		

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Twelfth Series may be redeemed pursuant to this subdivision (I) prior to December 1, 1983, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 10.50% per annum.

(II) Bonds of the Twelfth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 39 or (so long as any bonds of the First, Fourth, Fifth, Sixth, Seventh, Eighth, Tenth or Eleventh Series remain Outstanding) Section 64 of the Mortgage or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed prior to January 1, 1977, 100.00% and if redeemed during the 12 months period ending December 31,

1977	100.00%	1982	100.00%
1978	100.00%	1983	100.00%
1979	100.00%	1984	100.00%
1980	100.00%	1985	100.00%
1981	100.00%		

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

ARTICLE II.**Exchanges and Transfers of Bonds of the Twelfth Series.**

SECTION 2.01. At the option of the registered owner, any bonds of the Twelfth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Twelfth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York or such other locations as the Company may designate from time to time.

Upon any registration of transfer or exchange of bonds of the Twelfth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Twelfth Series.

ARTICLE III.**Miscellaneous Provisions.**

SECTION 3.01. The Corporate Trustee may, from time to time, appoint an authenticating agent or agents to act on its behalf and subject to its direction in connection with the authentication of bonds issued from time to time in fully registered form under the Mortgage as heretofore or hereafter amended or supplemented. Any such authenticating agent shall, so long as it so acts hereunder, be a bank or trust company and be a corporation organized and doing business under the laws of the United States or of any State or Territory or of the District of Columbia, with a combined capital and surplus of at least Five Million Dollars (\$5,000,000), and be authorized under such laws to act as authenticating agent and be subject to supervision or examination by Federal, State, Territorial, or District of Columbia authority. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

Any corporation into which any authenticating agent may be merged or converted or with which it may be consolidated, of any corporation resulting from any merger, conversion or consolidation to which any authenticating agent shall be a party, or any corporation succeeding to the corporate agency business of any authenticating agent, shall, if otherwise eligible under the provisions of this Section, continue to be an authenticating agent without the execution or filing of any paper or any further act on the part of the Corporate Trustee or the predecessor authenticating agent.

Any authenticating agent may at any time resign by giving written notice of resignation to the Corporate Trustee and to the Company. The Corporate Trustee may at any time terminate the agency of any authenticating agent by giving written notice of termination to such authenticating agent and to the Company. Any successor authenticating agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers, duties and responsibilities of its predecessor hereunder, with like effect as if originally named as an authenticating agent herein. No successor authenticating agent shall be appointed unless eligible under the provisions of this Section.

The Corporate Trustee agrees to pay to any authenticating agent from time to time reasonable compensation for its services, and the Corporate Trustee shall be entitled to be reimbursed for such payments, and be entitled to the benefits of Section 96 of the Mortgage, with respect thereto.

SECTION 3.02. When all bonds of the First, Fourth, Fifth, Sixth, Seventh, Eighth, Tenth and Eleventh Series are no longer Outstanding, Section 64 shall be excised from the Mortgage.

SECTION 3.03. Subject to the amendments provided for in this Eleventh Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Eleventh Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.04. The Trustees hereby accept the trusts hereby declared provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Eleventh Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals

are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Eleventh Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Eleventh Supplemental Indenture.

SECTION 3.05. Whenever in this Eleventh Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Eleventh Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.06. Nothing in this Eleventh Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Eleventh Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Eleventh Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.07. This Eleventh Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 3rd day of December, 1975, as of December 1, 1975, in The City of New York; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its

corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 3rd day of December, 1975, as of December 1, 1975.

NORTHWEST NATURAL GAS COMPANY

By
President.

Attest:

.....
Secretary.

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

.....
.....

BANKERS TRUST COMPANY, as Trustee,

By
Assistant Vice President.

Attest:

.....
Assistant Secretary.

.....
STANLEY BURG, as Trustee.

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

.....
.....

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

December 3, A.D. 1975.

Before me personally appeared RONALD T. MILLER, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of December, 1975, before me personally appeared RONALD T. MILLER, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
MORTON BARAD
Notary Public, State of New York
No. 41-5170980
Certs. filed in Bronx, Kings, Nassau,
New York, and Westchester Cos.
Qualified in Queens County
Commission Expires March 30, 1976

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

December 3, A. D. 1975.

Before me personally appeared ROMANO I. PELUSO, who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of December, 1975, before me personally appeared ROMANO I. PELUSO, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

.....
LYLE TEMPLE
Notary Public, State of New York
No. 30-3948960
Qualified in Nassau County
Certificate filed in New York County
Commission Expires March 30, 1977

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

December 3, A. D. 1975.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 3rd day of December, 1975.

.....

LYLE TEMPLE
Notary Public, State of New York
No. 30-3948960
Qualified in Nassau County
Certificate filed in New York County
Commission Expires March 30, 1977

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG

(SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

**As Trustees under the Mortgage and Deed of
Trust, dated as of July 1, 1946, of Portland
Gas & Coke Company (now Northwest Natu-
ral Gas Company)**

TWELFTH SUPPLEMENTAL INDENTURE

**providing among other things for
First Mortgage Bonds, 14¾% Series due 1989**

Dated as of July 1, 1981

TWELFTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of July, 1981, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is Suite 1900, 200 S.W. Market Street, Portland, Oregon 97201 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twelfth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twelfth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental

Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture) and its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture); and

WHEREAS said First through Tenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twelfth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture); and

WHEREAS said Eleventh Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

Oregon			
Real Property Mortgage Records			
<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	December 12, 1975	61642	—
Clackamas	December 12, 1975	75-36719	—
Clatsop	December 12, 1975	421	724
Columbia	December 12, 1975	135	384
Coos	December 15, 1975	75-12	444
Douglas	December 15, 1975	588	45
Hood River	December 12, 1975	752480	—

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Lane.....	December 15, 1975	R-773	—
Lincoln	December 16, 1975	61	804
Linn	December 12, 1975	123	657
Marion.....	December 12, 1975	R-31	1714
Multnomah.....	December 12, 1975	1077	803
Polk.....	December 12, 1975	80	675
Tillamook.....	December 12, 1975	243	227
Wasco	December 12, 1975	752912	—
Washington	December 12, 1975	1058	710
Yamhill.....	December 12, 1975	109	1101

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 15, 1975	D-30958

Washington

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	December 12, 1975	G 708683	985932
Klickitat	December 15, 1975	113	461
Skamania	December 12, 1975	53	31

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 15, 1975	0321966

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture

STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3¼% Series due 1976	None
3¾% Series due 1974	None
4 % Series due 1974	None
4¾% Series due 1976	None
5¼% Series due 1984	\$ 4,941,000 4,279,000
5¾% Series due 1986	\$ 5,045,000 4,233,000
4¾% Series due 1989	\$ 5,854,000 4,970,000
5¾% Series due 1991	\$12,849,000 11,828,000
9¾% Series due 1974	None
8¾% Series due 1996	\$17,283,000 15,049,000
12 % Series due 1984	\$21,000,000
10½% Series due 1986	\$20,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any

way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twelfth Supplemental Indenture, and the terms of the bonds of the Thirteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases,

conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may

hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

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

Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Twelfth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and

choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Twelfth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

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

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Twelfth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and

had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Thirteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "14 $\frac{1}{4}$ % Series due 1989" (herein sometimes referred to as the "Thirteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Thirteenth Series shall be limited to \$30,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on July 1, 1989, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Thirteenth Series shall bear interest at the rate of 14 $\frac{1}{4}$ % per annum, the first interest payment to be made on January 1, 1982 for the period from the date of first authentication by the Corporate Trustee of Bonds of the Thirteenth Series to January 1, 1982, with subsequent interest payments to be made semi-annually on January 1 and July 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Thirteenth Series shall be dated as in Section 10 of the Mortgage provided.

Bonds of the Thirteenth Series shall not be redeemable prior to July 1, 1986. On and after July 1, 1986, bonds of the Thirteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the

Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

If redeemed on or after July 1, 1986 and on or before July 1, 1987.....
104.22%

If redeemed after July 1, 1987 and on or before July 1, 1988.....
102.11%

If redeemed after July 1, 1988..... 100.00%
; in each case together with accrued interest to the date fixed for redemption.

ARTICLE II.

Exchanges and Transfers of Bonds of the Thirteenth Series.

SECTION 2.01. At the option of the registered owner, any bonds of the Thirteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Thirteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York or such other locations as the Company may designate from time to time.

Upon any registration of transfer or exchange of bonds of the Thirteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes required to be paid solely by virtue of such transfer by the Company, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Thirteenth Series.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Twelfth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Twelfth Supplemental In-

denture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Twelfth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Twelfth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Twelfth Supplemental Indenture.

SECTION 3.03. Whenever in this Twelfth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Twelfth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.04. Nothing in this Twelfth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Twelfth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twelfth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.05. This Twelfth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 6th day of July 1981, as of July 1, 1981, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 3rd day of July 1981, as of July 1, 1981.

NORTHWEST NATURAL GAS
COMPANY

By *Ronald W. Miller*
President

Attest:

Mike Rapson
Secretary

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

Quintin R. Williams
C. J. Lee

BANKERS TRUST COMPANY,
as Trustee,

By Carl H. Davis
Assistant Vice President

Attest:

[Signature]
Assistant Secretary

STANLEY BURG, as Trustee

By BANKERS TRUST COMPANY
Attorney-in-fact

By [Signature]
Assistant Secretary

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

H. M. Decker
P. A. Schuyman

STATE OF OREGON }
COUNTY OF MULTNOMAH } ss.:

July 6, A.D. 1981.

Before me personally appeared RONALD T. MILLER, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 6th day of July, 1981, before me personally appeared RONALD T. MILLER, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



.....
H. W. PIERCE
Notary Public, State of Oregon
My Commission Expires 11/24/81

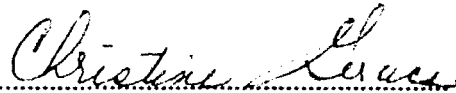
STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.:

July 3, A.D. 1981.

Before me personally appeared **CARL H. NASIB**, who, being duly sworn, did say that he is an Assistant Vice President of **BANKERS TRUST COMPANY** and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of July, 1981, before me personally appeared **CARL H. NASIB**, to me known to be an Assistant Vice President of **BANKERS TRUST COMPANY**, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



CHRISTINE GERACE
Notary Public, State of New York
No. 450497187
Qualified in Westchester County
Commission Expires March 22, 1983

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

July 3, A.D. 1981.

Before me personally appeared S.D. MINEO, who, being duly sworn, did say that he is an Assistant Secretary of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 3rd day of July, 1981, before me personally appeared S.D. MINEO, to me known to be an Assistant Secretary of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

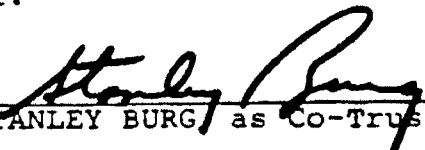
IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Christie Lewis

CUSTOMER SERVICE
Notary Public in and for New York
No. 42-1407147
Qualified in Richmond County
Certificate filed in New York County
Commission Expires March 30, 1983

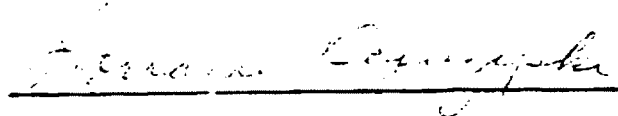
KNOW ALL MEN BY THESE PRESENTS, that I, the undersigned, STANLEY BURG, as Co-Trustee, do hereby make, constitute and appoint Bankers Trust Company my true and lawful attorney-in-fact with full power and authority to execute, deliver and acknowledge on my behalf, as Co-Trustee, the Twelfth Supplemental Indenture of Northwest Natural Gas Company and any acknowledgments, oaths, representations or certificates attached thereto or in connection therewith and to do and perform all and every act and thing whatsoever requisite, necessary or desirable and proper to be done, as fully and to all intents and purposes as I might or could do if personally present, in connection with said execution, delivery or acknowledgment of such Indenture, acknowledgements, oaths, representations or certificates, hereby ratifying and confirming all that my said attorney-in-fact shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, I have hereunto set my hand on this 2nd day of July, 1981.


STANLEY BURG as Co-Trustee

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

On this 2nd day of July, 1981, before me, a Notary Public within and for said County, personally appeared STANLEY BURG, to me known to be the person described in and who executed the foregoing power of attorney and acknowledged that he executed the same as his free act and deed.



LORRAINE KAPUZYSKI
Notary Public, State of New York
No. 43-4030783
Qualified in Richmond County
Commission Expires in New York County
Commission expires March 30, 1982

[Conformed Copy]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

THIRTEENTH SUPPLEMENTAL INDENTURE

providing among other things for
First Mortgage Bonds, 10 1/8% Series due 1995

Dated as of June 1, 1985

THIRTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the first day of June, 1985, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Thirteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Thirteenth Supplemental Indenture is to be recorded; and

• WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

-2-

mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture); and

WHEREAS said First through Eleventh Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Thirteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture); and

WHEREAS said Twelfth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

Oregon
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	July 7, 1981	M-30015-81	--
Clackamas	July 6, 1981	81 23737	--
Clatsop	July 7, 1981	556	477
Columbia	July 7, 1981	170	663
Coos	July 7, 1981	81 3 1370	--
Douglas	July 7, 1981	793	409
Hood River	July 7, 1981	811211	--
Lane	July 7, 1981	8129229	--
Lincoln	July 7, 1981	125	1053
Linn	July 7, 1981	292	461
Marion	July 6, 1981	254	1835
Multnomah	July 6, 1981	1535	1455
Polk	July 6, 1981	158	1137
Tillamook	July 7, 1981	276	963
Wasco	July 7, 1981	811 735	--
Washington	July 7, 1981	81023623	--
Yamhill	July 7, 1981	162	0861

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 6, 1981	G 49291

Washington
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	July 7, 1981	81-07070027	--
Klickitat	July 7, 1981	126	511
Skamania	July 7, 1981	57	957

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 6, 1981	81188012

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3-1/8% Series due 1976.....	None
3-7/8% Series due 1974.....	None
4 % Series due 1974.....	None
4-3/8% Series due 1976.....	None
5-1/8% Series due 1984.....	None
5-1/8% Series due 1986.....	\$ 3,898,000
4-3/4% Series due 1989.....	\$ 4,255,000
5-3/4% Series due 1991.....	\$10,330,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$13,697,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	\$20,000,000
14-3/4% Series due 1989.....	\$30,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Di-

-5-

rectors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Thirteenth Supplemental Indenture, and the terms of the bonds of the Fourteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid

-6-

by the Trustees at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the trans-

-7-

mission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Thirteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus,

-8-

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

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

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Thirteenth Supplemental Indenture being supplemental thereto.

-9-

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Fourteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "10 1/8% Series due 1995" (herein sometimes referred to as the "Fourteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters herein-after in this Section specified. Bonds of the Fourteenth Series shall be limited to \$15,000,000 in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on June 1, 1995, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Fourteenth Series shall bear interest at the rate of 10 1/8% per annum, payable semi-annually on December 1 and June 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the

-10-

Fourteenth Series shall be dated as in Section 10 of the Mortgage provided.

Bonds of the Fourteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending May 31,

1986.....	109.50%	1991.....	104.23%
1987.....	108.45%	1992.....	103.17%
1988.....	107.39%	1993.....	102.12%
1989.....	106.34%	1994.....	101.06%
1990.....	105.28%	1995.....	100.00%

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Fourteenth Series may be redeemed at said general redemption prices prior to June 1, 1990, as part of any 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 10.289% per annum.

Bonds of the Fourteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Sixth, Seventh, Eighth or Tenth Series remain Outstanding) or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending May 31,

1986.....	100.00%	1991.....	100.00%
1987.....	100.00%	1992.....	100.00%
1988.....	100.00%	1993.....	100.00%
1989.....	100.00%	1994.....	100.00%
1990.....	100.00%	1995.....	100.00%

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

ARTICLE II.

Exchanges and Transfers of Bonds of the Fourteenth Series.

SECTION 2.01. At the option of the registered owner, any bonds of the Fourteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Fourteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York or such other locations as the Company may designate from time to time.

Upon any registration of transfer or exchange of bonds of the Fourteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes required to be paid solely by virtue of such transfer by the Company, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Fourteenth Series.

-12-

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Thirteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Thirteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The third paragraph of Section 106 of the Mortgage is amended to read in its entirety as follows, such amendment to take effect immediately for the Fourteenth Series of bonds and all future series of bonds to be issued under the Mortgage:

"Bonds and interest obligations for the payment of which and bonds for the redemption of which either (i) moneys in the necessary amount or (ii) (a) direct obligations of the government of the United States of America or (b) obligations guaranteed by the government of the United States of America or (c) securities that are backed by obligations of the government of the United States of America as collateral under an arrangement by which the interest and principal payments on the collateral generally flow immediately through to the holder of the security, which in any case are not subject to redemption prior to maturity by anyone other than the holders the principal of and the interest on which when due, and without any regard to reinvestment thereof, in the opinion of an independent accountant, and, in the opinion of the officers of the Company executing an Officers' Certificate to that effect, will provide moneys which, together with the moneys, if any, deposited with or held by the Corporate Trustee, shall be sufficient to pay when due the principal of, premium, if any, and interest due and to become due on said bonds or portions thereof on the redemption date or maturity date thereof, as the case may be, shall have been set apart by or deposited with the Corporate Trustee, with irrevocable direction so to apply the same, subject to the provisions of Section 119 hereof (with or without any additional right given to the holders to surrender their bonds or obtain therefrom payment therefor prior to the redemption date) shall for purposes of satisfying the Lien of this Indenture be deemed to have been paid and for any other purpose under this Indenture be deemed not to be Outstanding; provided that in case of redemption the notice requisite to the validity of such redemption shall have been given or arrangements shall have been made in-

-13-

uring to the satisfaction of the Corporate Trustee that the same will be given."

SECTION 3.03. When all bonds of the Sixth through Thirteenth Series are no longer Outstanding, the first paragraph of Section 99 of the Mortgage is amended to read as follows:

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

SECTION 3.04. When all bonds of the Sixth through Thirteenth Series are no longer Outstanding, the first paragraph of Section 101 of the Mortgage is amended to read as follows:

"Section 101. Any Trustee may at any time resign and be discharged of the trusts hereby created by giving written notice to the Company specifying the day upon which such resignation shall take effect and thereafter publishing notice thereof, once in one newspaper printed in the English language and of general circulation in the Borough of Manhattan, The City of New York, on any business day of the week, and such resignation shall take effect upon the day specified in such notice unless previously a successor trustee shall have been appointed by the bondholders or the Company in the manner hereinafter provided in Section 102 and in such event such resignation shall take effect immediately on the appointment of such successor trustee. This Section shall not be

-14-

applicable to resignations pursuant to Section 99 hereof."

Section 3.05. All bonds of the First through Third Series being no longer Outstanding, Section 5 of the Mortgage is amended to add the following proviso at the end of clause (4) thereof:

"provided, however, that when no bonds of the First, Second or Third Series remain Outstanding, Property Additions of a Cost not in excess of \$1,100,000 so substituted at any time under subdivision (B) of subsection (II) of Section 4 hereof for Funded Property used primarily and principally in the handling and processing of carbon owned at April 1, 1956 and retired subsequent to April 1, 1956 shall cease to be or to be deemed to have been Funded Property;"

SECTION 3.06. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Thirteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Thirteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Thirteenth Supplemental Indenture.

SECTION 3.07. Whenever in this Thirteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Thirteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.08. Nothing in this Thirteenth Supplemental Indenture, expressed or implied, is intended, or

shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Thirteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Thirteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.09. This Thirteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 7th day of June 1985, as of June 1, 1985 in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second

-16-

part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 11th day of June, 1985, as of June 1, 1985.

NORTHWEST NATURAL GAS COMPANY

[Corporate Seal]

By Robert L. Ridgley
President

Attest:

C. J. Rue
Secretary

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

W. E. Radford

Leslie K. Alldrin

BANKERS TRUST COMPANY, as Trustee,

[Corporate Seal]

By T. J. Moskie
Vice President

Attest:

Robert Cascone
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

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

Marie A. Colas

Alfred C. Vinton

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

June 7, A.D. 1985.

Before me personally appeared ROBERT L. RIDGLEY, who, being duly sworn, did say that he is President of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 7th day of June, before me personally appeared ROBERT L. RIDGLEY, to me known to be President of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

 R. L. Hordichok
R. L. HORDICHOK
Notary Public, State of Oregon
My Commission Expires 10/9/88

[Notarial Seal]

-18-

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

June 11, A.D. 1985.

Before me personally appeared T. J. MOSKIE, who, being duly sworn, did say that he is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 11th day of June, 1985, before me personally appeared T. J. MOSKIE, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Helmut F. Leuffen
HELMUT F. LEUFFEN
Notary Public, State of New York
No. 31-4657770
Qualified in New York County
Commission Expires March 30, 1987

[Notarial Seal]

-19-

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

June 11th, A.D. 1985.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 11th day of June, 1985.

Helmut F. Leuffen
HELMUT F. LEUFFEN
Notary Public, State of New York
No. 31-4657770
Qualified in New York County
Commission Expires March 30, 1987

[Notarial Seal]

-20-

SUMMARY OF RECORDING DATA

In the State of Oregon

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
10	Benton	June 19, 1985	M-68069-85	-
11	Clackamas	June 19, 1985	85 21105	-
12	Clatsop	June 19, 1985	638	554
13	Columbia	June 19, 1985	191	127
14	Coos	June 19, 1985	85 3 0443	-
15	Douglas	June 19, 1985	917	169
16	Hood River	June 19, 1985	851100	-
17	Lane	June 19, 1985	8521471	-
18	Lincoln	June 19, 1985	161	2312
19	Linn	June 19, 1985	387	224
20	Marion	June 19, 1985	398	117
21	Multnomah	June 19, 1985	1831	1136
22	Polk	June 19, 1985	187	1346
23	Tillamook	June 19, 1985	299	176
24	Wasco	June 19, 1985	851312	-
25	Washington	June 19, 1985	85022638	-
26	Yamhill	June 19, 1985	195	747

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
8	Secretary of State	June 19, 1985	J 94033

In the State of Washington

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
28	Clark	June 19, 1985	85-06190126	-
29	Klickitat	June 19, 1985	135	474
30	Skamania	June 19, 1985	61	583

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
27	Secretary of State	June 19, 1985	85-171-0052

[Conformed Copy]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

FOURTEENTH SUPPLEMENTAL INDENTURE

providing among other things for

First Mortgage Bonds, 10.35% Series due November 1, 1997

Dated as of November 1, 1985

FOURTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the first day of November, 1985, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Fourteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fourteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

-2-

February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture) and its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture); and

WHEREAS said First through Twelfth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fourteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture); and

WHEREAS said Thirteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

-3-

Oregon
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	June 19, 1985	M-68069-85	-
Clackamas	June 19, 1985	85-21105	-
Clatsop	June 19, 1985	638	554
Columbia	June 19, 1985	191	127
Coos	June 19, 1985	85 3 0443	-
Douglas	June 19, 1985	917	169
Hood River	June 19, 1985	851100	-
Lane	June 19, 1985	8521471	-
Lincoln	June 19, 1985	161	2312
Linn	June 19, 1985	387	224
Marion	June 19, 1985	398	117
Multnomah	June 19, 1985	1831	1136
Polk	June 19, 1985	187	1346
Tillamook	June 19, 1985	299	176
Wasco	June 19, 1985	851312	-
Washington	June 19, 1985	85022638	-
Yamhill	June 19, 1985	195	747

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	June 19, 1985	J 94033

Washington
Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	June 19, 1985	85-06190126	-
Klickitat	June 19, 1985	135	474
Skamania	June 19, 1985	61	583

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State ; and	June 19, 1985	85-171-0052

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
3-1/8% Series due 1976.....	None
3-7/8% Series due 1974.....	None
4 % Series due 1974.....	None
4-3/8% Series due 1976.....	None
5-1/8% Series due 1984.....	None
5-1/8% Series due 1986.....	\$ 3,898,000
4-3/4% Series due 1989.....	\$ 4,255,000
5-3/4% Series due 1991.....	\$10,330,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$13,508,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	\$30,000,000
10-1/8% Series due 1995.....	\$15,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the

-5-

form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Fourteenth Supplemental Indenture, and the terms of the bonds of the Fifteenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

-6-

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat

-7-

or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Fourteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and

-8-

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

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

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth

-9-

in the Mortgage, as heretofore supplemented, this Fourteenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Fifteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "10.35% Series due November 1, 1997" (herein sometimes referred to as the "Fifteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Section specified. Bonds of the Fifteenth Series shall be limited to \$15,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on November 1, 1997, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Fifteenth Series shall bear interest at the rate of 10.35% per annum, payable semi-annually on May 1 and November 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts.

-10-

Bonds of the Fifteenth Series shall be dated as in Section 10 of the Mortgage provided.

Bonds of the Fifteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending October 31,

1986.....	109.35%	1992.....	103.74%
1987.....	108.42%	1993.....	102.81%
1988.....	107.48%	1994.....	101.87%
1989.....	106.55%	1995.....	100.94%
1990.....	105.61%	1996.....	100.00%
1991.....	104.68%	1997.....	100.00%

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Fifteenth Series may be redeemed at said general redemption prices prior to November 1, 1990, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 10.60% per annum.

Bonds of the Fifteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Sixth, Seventh, Eighth or Tenth Series remain Outstanding) or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

-11-

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending
October 31,

1986.....	100.00%	1992.....	100.00%
1987.....	100.00%	1993.....	100.00%
1988.....	100.00%	1994.....	100.00%
1989.....	100.00%	1995.....	100.00%
1990.....	100.00%	1996.....	100.00%
1991.....	100.00%	1997.....	100.00%

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

ARTICLE II.

Exchanges and Transfers of Bonds of the Fifteenth Series.

SECTION 2.01. At the option of the registered owner, any bonds of the Fifteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Fifteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York or such other locations as the Company may designate from time to time.

Upon any registration of transfer or exchange of bonds of the Fifteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes required to be paid solely by virtue of such transfer by the Company, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Fifteenth Series.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Fourteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Fourteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Fourteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Fourteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Fourteenth Supplemental Indenture.

SECTION 3.03. Whenever in this Fourteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Fourteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.04. Nothing in this Fourteenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Fourteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as

-13-

set forth in this Fourteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.05. This Fourteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 22nd day of November 1985, as of November 1, 1985, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 26th day of November 1985, as of November 1, 1985.

NORTHWEST NATURAL GAS COMPANY

[Corporate Seal]

By Robert L. Ridgley
President

Attest:

C. J. Rue
Secretary

Executed, sealed and delivered
by NORTHWEST NATURAL GAS COM-
PANY in the presence of:

W. E. RadfordLeslie K. Alldrin

BANKERS TRUST COMPANY, as Trustee,

[Corporate Seal]

By Joan M. Morgan
Vice President

Attest:

Lloyd McKenzie
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

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

Gail Violick Boylan

Shirley R. West

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

November 26, A.D. 1985.

Before me personally appeared JOAN M. MORGAN, who, being duly sworn, did say that she is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 26th day of November 1985, before me personally appeared JOAN M. MORGAN, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 30, 1987

[Notarial Seal]

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

November 26, A.D. 1985.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 26th day of November, 1985.

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 31, 1987

[Notarial Seal]

-18-

SUMMARY OF RECORDING DATA
IN THE STATE OF OREGON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
10	Benton	December 10, 1985	M-72799-85	-
11	Clackamas	December 10, 1985	8543580	-
12	Clatsop	December 10, 1985	648	268
13	Columbia	December 10, 1985	193	990
14	Coos	December 10, 1985	85-5-6578	-
15	Douglas	December 10, 1985	933	243
16	Hood River	December 10, 1985	852267	-
31	Lane	January 31, 1986	1386R	-
18	Lincoln	December 10, 1985	166	2385
19	Linn	December 10, 1985	399	500
20	Marion	December 10, 1985	431	294
21	Multnomah	December 10, 1985	1870	308
22	Polk	December 11, 1985	191	472
23	Tillamook	December 10, 1985	301	588
24	Wasco	December 10, 1985	852802	-
25	Washington	December 10, 1985	85048868	-
26	Yamhill	December 11, 1985	199	1339

-19-

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
8	Secretary of State	December 10, 1985	K 20799

IN THE STATE OF WASHINGTONReal Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
28	Clark	December 11, 1985	85-12110068	-
29	Klickitat	December 10, 1985	136	660
30	Skamania	December 11, 1985	62	284

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
27	Secretary of State	December 10, 1985	85-345-0000

[Conformed Copy]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

FIFTEENTH SUPPLEMENTAL INDENTURE

providing among other things for

First Mortgage Bonds, 9 3/8% Series due 2011

Dated as of July 1, 1986

FIFTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of July, 1986, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is One Bankers Trust Plaza, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is 23 Dover Green, Staten Island, New York 10312 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Fifteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fifteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supple-

-2-

mental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture) and its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture); and

WHEREAS said First through Thirteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Fifteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture); and

WHEREAS said Fourteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	December 10, 1985	M-72799-85	-
Clackamas	December 10, 1985	8543580	-
Clatsop	December 10, 1985	648	268
Columbia	December 10, 1985	193	990
Coos	December 10, 1985	85-5-6578	-
Douglas	December 10, 1985	933	243
Hood River	December 10, 1985	852267	-
Lane	January 31, 1986	1386R	-
Lincoln	December 10, 1985	166	2385
Linn	December 10, 1985	399	500
Marion	December 10, 1985	431	294
Multnomah	December 10, 1985	1870	308
Polk	December 11, 1985	191	472
Tillamook	December 10, 1985	301	588
Wasco	December 10, 1985	852802	-
Washington	December 10, 1985	85048868	-
Yamhill	December 11, 1985	199	1339

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	December 10, 1985	K 20799

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	December 11, 1985	85-12110068	-
Klickitat	December 10, 1985	136	660
Skamania	December 11, 1985	62	284

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 10, 1985	85-345-0000

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding at the Close of Business July 1, 1986</u>
3-1/8% Series due 1976.....	None
3-7/8% Series due 1974.....	None
4 % Series due 1974.....	None
4-3/8% Series due 1976.....	None
5-1/8% Series due 1984.....	None
5-1/8% Series due 1986.....	None
4-3/4% Series due 1989.....	\$ 4,230,000
5-3/4% Series due 1991.....	\$10,330,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$13,400,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	None
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000

-5-

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Fifteenth Supplemental Indenture, and the terms of the bonds of the Sixteenth Series hereinafter referred to, have been duly authorized by the Board of

-6-

Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas,

-7-

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

-8-

of this Fifteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Fifteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, in the above subdivisions (2) and (3) shall (to the extent permitted by law) cease to be so excepted in the event and as of the date that either or both of the Trustees or a receiver or trustee shall enter upon and take possession of the Mortgaged and Pledged Property in the manner provided in Article XIII of the Mortgage by reason of the occurrence of a Default as defined in Section 65 thereof.

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

-9-

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Fifteenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Sixteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9 3/8% Series due 2011" (herein sometimes referred to as the "Sixteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters herein-after in this Section specified. Bonds of the Sixteenth Series shall be limited to \$50,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on July 1, 2011, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Sixteenth Series shall bear interest at the rate of 9 3/8% per annum, payable semi-annually on January 1 and July 1 of each year; and the principal of, premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of

-10-

Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Sixteenth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Sixteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending
June 30,

1987.....	108.63%	2000.....	103.02%
1988.....	108.19%	2001.....	102.59%
1989.....	107.76%	2002.....	102.16%
1990.....	107.33%	2003.....	101.72%
1991.....	106.90%	2004.....	101.29%
1992.....	106.47%	2005.....	100.86%
1993.....	106.04%	2006.....	100.43%
1994.....	105.61%	2007.....	100.00%
1995.....	105.17%	2008.....	100.00%
1996.....	104.74%	2009.....	100.00%
1997.....	104.31%	2010.....	100.00%
1998.....	103.88%	2011.....	100.00%
1999.....	103.45%		

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Sixteenth Series may be redeemed pursuant to this subdivision (I) prior to July 1, 1991 as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 9.531% per annum.

(II) Bonds of the Sixteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the

provisions of Section 64 of the Mortgage or of Section 2 hereof or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calendar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due in accordance with the Total Special Redemption Fund Requirement for said calendar year, or

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

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

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending
June 30,

1987.....	100.00%	2000.....	100.00%
1988.....	100.00%	2001.....	100.00%
1989.....	100.00%	2002.....	100.00%
1990.....	100.00%	2003.....	100.00%
1991.....	100.00%	2004.....	100.00%
1992.....	100.00%	2005.....	100.00%
1993.....	100.00%	2006.....	100.00%
1994.....	100.00%	2007.....	100.00%
1995.....	100.00%	2008.....	100.00%
1996.....	100.00%	2009.....	100.00%
1997.....	100.00%	2010.....	100.00%
1998.....	100.00%	2011.....	100.00%
1999.....	100.00%		

-12-

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

(III) At the option of the registered owner, any bonds of the Sixteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Sixteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Sixteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration or exchange or transfer of bonds of the Sixteenth Series.

ARTICLE II.

Special Redemption Fund for Bonds of the Sixteenth Series

Section 2. The Company covenants that, unless all bonds of the Sixteenth Series shall have ceased to be Outstanding, it will, as a Special Redemption Fund for the retirement of bonds of the Sixteenth Series, deliver to the Corporate Trustee an amount in cash and/or principal amount of bonds of the Sixteenth Series, on July 1 of each year, beginning with the year 1991 to and including the year 2010, equal to the Total Special Redemption Fund Requirement for said calendar year. The term "Total Special Redemption Fund Requirement" shall mean for any calendar year \$2,000,000 in cash and/or principal amount of bonds of the Sixteenth Series (herein called the "Mandatory Special Redemption Fund Requirement") plus the Optional Special Redemption Fund Payment, if any, for such calendar year. The term "Optional Special Redemption Fund Payment" shall mean, for any calendar year, any amount, not in excess of \$2,000,000 in cash and/or principal amount of bonds of the Sixteenth Series, that the Company elects to add to the Special Redemption Fund for such calendar year. At the option of the Company, Optional Special Redemption

-13-

Fund Payments may (at any time after they are made) be applied (to the extent not theretofore so applied) in whole or in part from time to time, to reduce Mandatory Special Redemption Fund Requirements for subsequent years upon written notice to the Corporate Trustee.

The Company, at its option (as evidenced by a written order of its Vice President-Finance, its Treasurer or an Assistant Treasurer delivered to the Corporate Trustee directing such credit), shall be credited against any of the requirements of this Section with the aggregate principal amount of any bond(s) of the Sixteenth Series (a) which are not then being and have not theretofore been delivered to meet the requirements of this Section, (b) which have been purchased or redeemed and cancelled or for the purchase or redemption of which moneys in the necessary amount shall be held by the Corporate Trustee with irrevocable direction so to apply the same (provided that any such purchase or redemption shall have been, or is to be, effected otherwise than with cash deposited under the provisions of Section 64 of the Mortgage or with cash which, after giving effect to the provisions of Section 61 of the Mortgage, is then deemed to be or to have been Funded Cash, and, in the case of redemption, the notice required therefor shall have been given or have been provided for to the satisfaction of the Corporate Trustee) and (c) which have not theretofore been made the basis under any of the provisions of the Mortgage for the authentication and delivery of bonds, the withdrawal of cash or the release of property or the basis of a credit under the provisions of this Section (subject to the provisions of Sections 59 and 61 of the Mortgage, permitting the revocation of the waiver of the right to the authentication and delivery of bonds).

Except as hereinafter specifically prohibited by this paragraph, and notwithstanding any other provisions of this Fifteenth Supplemental Indenture, (i) the Company shall be permitted from time to time to anticipate in whole or in part the Total Special Redemption Fund Requirement becoming due on July 1 of the then current year or the mandatory sinking fund requirement becoming due on July 1 of any subsequent year or years, by depositing cash and/or a principal amount of bonds of the Sixteenth Series with the Corporate Trustee in full satisfaction or in partial satisfaction of the requirements of this Section, and (ii) any cash deposited under this Section, whether in full satisfaction or in partial satisfaction of the requirements of this Section and whether becoming due on July 1 of the then current year or of a subsequent year, shall be applied by the Corporate Trustee

-14-

from time to time, as the Company may request, to the purchase of bonds of the Sixteenth Series, at public or private sale, provided, however, that the Corporate Trustee, before making any purchases of bonds as so provided shall by mail notify all registered owners of bonds of the Sixteenth Series of the amount of cash to be applied to the purchase of such bonds and request tenders of bonds by a specified date, and on or after such date the Corporate Trustee, to the extent, as nearly as is possible, of the cash so to be applied, shall purchase the bonds so tendered at the price or prices (including accrued interest and brokerage, if any) most favorable to the Company but not exceeding the cost of redeeming such bonds on a date forty (40) days after the date of such purchase (including premium, if any, and accrued interest from the interest date next preceding the date of purchase to such redemption date in such cost), and, if more bonds are offered at any specified price than there is cash then available to purchase the same, the Corporate Trustee shall prorate its purchases of bonds at such price as nearly as may be practicable between the owners of bonds offered at such price in proportion to the principal amounts of bonds of the Sixteenth Series registered in the names of the owners offering bonds at such price, or to the redemption of bonds of the Sixteenth Series; provided, however, that if moneys in excess of the sum of Fifty Thousand Dollars (\$50,000) deposited with the Corporate Trustee pursuant to this Section (except moneys which theretofore have been set aside to be applied to the purchase of bonds so tendered or to the redemption of bonds called for redemption) shall have remained on deposit for a period of six calendar months, such moneys so remaining on deposit shall promptly thereafter be applied by the Corporate Trustee to the redemption of bonds of the Sixteenth Series; and provided further that, unless consented to by the holders of a majority in principal amount of bonds of the Sixteenth Series Outstanding at the time of such consent, the Company may not deposit cash prior to July 1, 1991 in anticipation of the requirements of this Section, if the cash so deposited represents a part of a refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 9.531% per annum.

Any cash deposited under the provisions of this Section shall not be deemed to be Funded Cash; any bonds of the Sixteenth Series delivered to the Corporate Trustee pursuant to the provisions of this Section shall not be deemed to have been retired by the use of Funded Cash; and with respect to all credits taken under this Section on

-15-

the basis of the purchase or redemption of bonds of the Sixteenth Series, it shall not be deemed that a credit has been taken under the Mortgage on the basis thereof.

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

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

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

after deducting therefrom

(BB) the aggregate principal amount of all bonds theretofore, and of all bonds then to be, purchased and/or redeemed pursuant to the provisions of this Section plus the aggregate of all such further payments theretofore made pursuant to the provisions of this Section on account of accrued interest, brokerage and/or premium, if any.

ARTICLE III.

Miscellaneous Provisions.

SECTION 3.01. Subject to the amendments provided for in this Fifteenth Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Fifteenth Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 3.02. The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

-16-

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Fifteenth Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Fifteenth Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of the Fifteenth Supplemental Indenture.

SECTION 3.03. Whenever in this Fifteenth Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Fifteenth Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 3.04. Nothing in this Fifteenth Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Fifteenth Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Fifteenth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 3.05. This Fifteenth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 26th day of June, 1986, as of July

-17-

1, 1986, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 27th day of June, 1986, as of July 1, 1986.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By W. E. Radford
Vice President, Finance
and Treasurer

Attest:

C. J. Rue
Secretary

Executed, sealed and delivered
by NORTHWEST NATURAL GAS COM-
PANY in the presence of:

Virginia M. Vance

Leslie K. Alldrin

BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By Joan M. Morgan
Vice President

Attest:

Louise A. Buckley
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

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

Shirley R. West

Andrew A. Steckler

STATE OF OREGON)
): ss.:
COUNTY OF MULTNOMAH)

June 26, A.D. 1986.

Before me personally appeared W. E. RADFORD, who, being duly sworn, did say that he is Vice President, Finance and Treasurer of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 26th day of June 1986, before me personally appeared W. E. RADFORD, to me known to be Vice President, Finance and Treasurer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

Barbara Trautman
Barbara Trautman
Notary Public, State of Oregon
My Commission Expires March 30, 1989

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

June 27, A.D. 1986.

Before me personally appeared JOAN M. MORGAN, who, being duly sworn, did say that she is a Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 27th day of June 1986, before me personally appeared JOAN M. MORGAN, to me known to be a Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

[NOTARIAL SEAL]

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 31, 1987

-21-

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

June 27, A.D. 1986.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 27th day of June, 1986.

[NOTARIAL SEAL]

Valerie Ann Hedberg
Valerie Ann Hedberg
Notary Public, State of New York
No. 31-4836412
Qualified in New York County
Commission Expires March 31, 1987

-22-

SUMMARY OF RECORDING DATA
IN THE STATE OF OREGON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
11	Benton	July 3, 1986	M-78662-86	-
12	Clackamas	July 7, 1986	86 24733	-
13	Clatsop	July 3, 1986	658	288
14	Columbia	July 3, 1986	197	114
15	Coos	July 7, 1986	86-3-2413	-
16	Douglas	July 3, 1986	951	551
17	Hood River	July 3, 1986	861198	-
18	Lane	July 21, 1986	1411R (#8627177)	-
19	Lincoln	July 7, 1986	172	809
20	Linn	July 3, 1986	414	743
21	Marion	July 3, 1986	472	468
22	Multnomah	July 3, 1986	1918	305
23	Polk	July 3, 1986	195	722
24	Tillamook	July 3, 1986	304	5
25	Wasco	July 3, 1986	861538	-
26	Washington	July 3, 1986	86028953	-
27	Yamhill	July 7, 1986	204	1510

-23-

Filed as a Financing Statement

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

IN THE STATE OF WASHINGTON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
29	Clark	July 3, 1986	399	1
30	Klickitat	July 3, 1986	138	112
31	Skamania	July 3, 1986	101	752

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
28	Secretary of State	July 3, 1986	86-188-0036

NORTHWEST NATURAL GAS COMPANY

AND

Centerre Trust Company of St. Louis,
Trustee

INDENTURE

Dated as of January 15, 1987

\$15,000,000

7-1/4% Convertible Debentures
due March 1, 2012

CROSS-REFERENCE TABLE

<u>TIA</u> <u>Section</u>	<u>Indenture</u> <u>Section</u>
310 (a)(1)	8.10
(a)(2)	8.10
(a)(3)	N.A.
(a)(4)	N.A.
(b)	8.08; 8.10; 12.02
(c)	N.A.
311 (a)	8.11
(b)	8.11
(c)	N.A.
312 (a)	2.05
(b)	12.03
(c)	12.03
313 (a)	8.06
(b)(1)	N.A.
(b)(2)	8.06
(c)	12.02
(d)	8.06
314 (a)	5.02; 12.02
(b)	N.A.
(c)(1)	12.04
(c)(2)	12.04
(c)(3)	N.A.
(d)	N.A.
(e)	12.05
(f)	N.A.
315 (a)	8.01(b)
(b)	8.05; 12.02
(c)	8.01(a)
(d)	8.01(c)
(e)	7.11
316 (a)(last sentence)	2.09
(a)(1)(A)	7.05
(a)(1)(B)	7.04
(a)(2)	N.A.
(b)	7.07

<u>TIA Section</u>	<u>Indenture Section</u>
317 (a)(1)	7.08
(a)(2)	7.09
(b)	2.04
318 (a)	12.01

N.A. means Not Applicable.

NOTE: This Cross-Reference Table shall not, for any purpose, be deemed to be a part of the Indenture.

TABLE OF CONTENTS

<u>Article</u>	<u>Section</u>	<u>Heading</u>	<u>Page</u>
1		DEFINITIONS AND INCORPORATION BY REFERENCE	1
	1.01	Definitions.	1
	1.02	Other Definitions.	3
	1.03	Incorporation by Reference of Trust Indenture Act.	3
	1.04	Rules of Construction.	4
2		THE DEBENTURES	4
	2.01	Creation of the Debentures	4
	2.02	Execution and Authentication	5
	2.03	Registrar, Paying Agent and Conversion Agent.	5
	2.04	Paying Agent to Hold Money in Trust.	6
	2.05	Debentureholder Lists.	6
	2.06	Transfer and Exchange.	6
	2.07	Replacement Debentures	7
	2.08	Outstanding Debentures	7
	2.09	Treasury Debentures.	7
	2.10	Temporary Debentures	8
	2.11	Cancellation	8
	2.12	Defaulted Interest	8
3		REDEMPTION OF DEBENTURES AT CORPORATION'S OPTION	9
	3.01	Redemption Right at Corporation's Option	9
	3.02	Notices to Trustee	10
	3.03	Selection of Debentures to be Redeemed	10
	3.04	Notice of Redemption	10
	3.05	Effect of Notice of Redemption	11
	3.06	Deposit of Redemption Price.	11
	3.07	Debentures Redeemed in Part.	11
	3.08	Conversion Arrangements on Call for Redemption.	12
4		REDEMPTION OF DEBENTURES UPON DEATH OF DEBENTUREHOLDER OR BENEFICIAL OWNER.	13
	4.01	Redemption Right	13
	4.02	Redemption Procedure	13
	4.03	Withdrawal	15
	4.04	Redemption Register.	15

5	COVENANTS	15
	5.01 Payment of Debentures	15
	5.02 Reporting	16
	5.03 Corporate Existence	16
	5.04 Compliance Certificates	16
6	SUCCESSORS	16
	6.01 When Corporation May Merge, etc.	16
7	DEFAULTS AND REMEDIES	17
	7.01 Events of Default	17
	7.02 Acceleration	19
	7.03 Other Remedies	19
	7.04 Waiver of Past Defaults	20
	7.05 Control by Majority	20
	7.06 Limitation on Suits	20
	7.07 Rights of Holders to Receive Payment	21
	7.08 Collection Suit by Trustee	21
	7.09 Trustee May File Proofs of Claim	21
	7.10 Priorities	22
	7.11 Undertaking for Costs	22
	7.12 Waiver of Stay or Extension Laws	22
	7.13 Restoration of Rights and Remedies	22
8	TRUSTEE	23
	8.01 Duties of Trustee	23
	8.02 Rights of Trustee	24
	8.03 Individual Rights of Trustee	25
	8.04 Trustee's Disclaimer	25
	8.05 Notice of Events of Defaults	25
	8.06 Reports by Trustee to Holders	25
	8.07 Compensation and Indemnity	25
	8.08 Replacement of Trustee	26
	8.09 Successor Trustee by Merger, etc.	27
	8.10 Eligibility; Disqualification	27
	8.11 Preferential Collection of Claims Against Corporation	27
	8.12 Appointment of Co-Trustee	28
9	DISCHARGE OF INDENTURE	28
	9.01 Termination of Corporation's Obligations	28
	9.02 Application of Trust Money	29
	9.03 Repayment to Corporation	29

10	AMENDMENTS, SUPPLEMENTS AND WAIVERS.	30
	10.01 Without Consent of Holders	30
	10.02 With Consent of Holders.	30
	10.03 Compliance with Trust Indenture Act.	31
	10.04 Revocation and Effect of Consents.	31
	10.05 Notation on or Exchange of Debentures.	31
	10.06 Trustee Protected.	31
11	CONVERSION	31
	11.01 Conversion Privilege; Conversion Price	31
	11.02 Conversion Procedure	32
	11.03 Fractional Shares.	32
	11.04 Taxes on Conversion.	33
	11.05 Corporation to Provide Stock	33
	11.06 Adjustment for Change in Capital Stock	33
	11.07 Adjustment for Rights Issue.	34
	11.08 Adjustment for Other Distributions	35
	11.09 Current Market Price	36
	11.10 When Adjustment May be Deferred.	36
	11.11 When No Adjustment Required.	36
	11.12 Notice of Adjustment	37
	11.13 Voluntary Reduction.	37
	11.14 Notice of Certain Transactions	37
	11.15 Reorganization of Corporation.	38
	11.16 Corporation Determination Final.	38
	11.17 Trustee's Disclaimer	38
12	MISCELLANEOUS.	39
	12.01 Trust Indenture Act Controls	39
	12.02 Notices.	39
	12.03 Communication by Holders with Other Holders.	40
	12.04 Certificate and Opinion as to Conditions Precedent	40
	12.05 Statements Required in Certificate or Opinion	40
	12.06 Rules by Trustee and Agent	41
	12.07 Legal Holidays	41
	12.08 No Recourse Against Others	41
	12.09 Duplicate Originals.	41
	12.10 Governing Law.	41
	12.11 Table of Contents, Headings, Etc.	41
	SIGNATURES.	42
	EXHIBIT A -- FORM OF DEBENTURE.	A-1

INDENTURE dated as of January 15, 1987, between NORTHWEST NATURAL GAS COMPANY, an Oregon corporation ("Corporation"), and CENTERRE TRUST COMPANY OF ST. LOUIS, a Missouri corporation ("Trustee").

Each party agrees as follows for the benefit of the other party and for the equal and ratable benefit of the Holders of the Corporation's 7-1/4% Convertible Debentures due 2012 ("Debentures"):

ARTICLE 1 DEFINITIONS AND INCORPORATION BY REFERENCE

Section 1.01. Definitions.

"Affiliate" means any person directly or indirectly controlling or controlled by or under direct or indirect common control with the Corporation.

"Agent" means any Registrar, Paying Agent, Conversion Agent, or co-registrar or agent for service of notices and demands. See Section 2.03.

"Board of Directors" means the Board of Directors of the Corporation or any authorized committee of the Board.

"Board Resolution" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Corporation to have been duly adopted by the Board of Directors and to be in full force and effect.

"Capital Stock" means any and all shares, interests, participations or other equivalents (however designated) of corporate stock.

"Common Stock" means the common stock, \$3 1/6 par value, of the Corporation as the same exists at the date of this Indenture or as such stock shall be constituted from time to time.

"Corporate Trust Office" means the office of the Trustee located in St. Louis, Missouri, at which at any time its corporate trust business shall be principally administered, which office at the date of execution of this Indenture is located at 510 Locust Street, St. Louis, Missouri 63101, Attention: Corporate Trust Division.

"Corporation" means the party named as such above until a successor replaces it pursuant to the applicable provisions of the Indenture and thereafter means the successor.

"Debenture" means any one of the Debentures described above issued under this Indenture.

"Default" means any event which is, or after notice or passage of time would be, an Event of Default.

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

"Holder" or "Debentureholder" means a person in whose name a Debenture is registered.

"Indenture" means this Indenture as amended from time to time.

"Officers" means the President, any Vice President, the Treasurer, the Controller, the Secretary, any Assistant Treasurer or any Assistant Secretary of the Corporation.

"Officers' Certificate" means a certificate signed by two Officers, one of whom must be President or a Vice President of the Corporation. See Sections 12.04 and 12.05.

"Opinion of Counsel" means a written opinion from legal counsel who may be an employee of or counsel to the Corporation or the Trustee and who is acceptable to the Trustee. See Sections 12.04 and 12.05.

"Person" means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof.

"Principal" of the Debenture means the principal amount of the Debenture plus the premium, if any, on the Debenture.

"Qualified Institution" means a member firm of a registered national securities exchange or of the National Association of Securities Dealers, Inc., or a commercial bank or trust company located in the United States.

"Quoted Price" means the last transaction price of the Common Stock as reported on a national securities exchange or a national interdealer automated securities quotation system.

"Redemption Date" when used with respect to any Debenture to be redeemed means the date fixed for such redemption pursuant to this Indenture.

"Redemption Price" when used with respect to any Debenture to be redeemed means the price at which it is to be redeemed pursuant to this Indenture and the Debenture.

"SEC" means the Securities and Exchange Commission.

"Subsidiary" means a corporation at least the majority of whose voting stock is owned by the Corporation or a Subsidiary.

"TIA" means the Trust Indenture Act of 1939 (15 U.S.C. §§77aaa-77bbb) as in effect on the date shown above except as provided in Section 10.03.

"Trustee" means the party named as such above until a successor replaces it pursuant to the applicable provisions of the Indenture and thereafter means the successor.

"Trust Officer" means the Chairman of the Board, the President or any other officer or assistant officer of the Trustee assigned by the Trustee to administer its corporate trust matters.

"United States" means the United States of America.

Section 1.02. Other Definitions.

<u>Term</u>	<u>Defined in Section</u>
"Bankruptcy Law"	7.01
"Called Debenture"	3.08
"Conversion Agent"	2.03
"Conversion Date"	11.02
"Conversion Price"	11.01
"Custodian"	7.01
"Defaulted Interest"	2.12
"Event of Default"	7.01
"Legal Holiday"	12.07
"Paying Agent"	2.03
"Registrar"	2.03
"U.S. Government Obligations"	9.01

Section 1.03. Incorporation by Reference of Trust Indenture Act.

Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture.

The following TIA terms used in this Indenture have the following meanings:

"indenture securities" means the Debentures.

"indenture securityholder" means a Debentureholder.

"indenture to be qualified" means this Indenture.

"indenture trustee" or "institutional trustee" means the Trustee.

"obligor" on the indenture securities means the Corporation.

All other terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA have the meanings assigned to them.

Section 1.04. Rules of Construction.

Unless the context otherwise requires:

- (1) a term has the meaning assigned to it;
- (2) an accounting term not otherwise defined has the meaning assigned to it in accordance with generally accepted accounting principles;
- (3) "or" is not exclusive;
- (4) words in the singular include the plural, and in the plural include the singular;
- (5) provisions apply to successive events and transactions; and
- (6) "Section" shall refer to a Section of this Indenture.

ARTICLE 2 THE DEBENTURES

Section 2.01. Creation of the Debentures.

There is hereby authorized and created under this Indenture an issue of Debentures, entitled to the benefit of this Indenture, limited in aggregate principal amount to \$15,000,000. The Debentures shall be designated by the title "7-1/4% Convertible Debentures Due 2012." The Debentures shall bear interest, computed on the basis of a 360-day year consisting of twelve 30-day months, from the date of their original issuance, payable semi-annually on March 1 and September 1 of

each year commencing September 1, 1987. The Debentures shall mature, subject to prior redemption, upon the terms and conditions hereinafter set forth, on March 1, 2012.

The Debentures issued hereunder shall be substantially in the form of Exhibit A, which is part of this Indenture. The Debentures may have notations, legends or endorsements required by law, stock exchange rule or usage. Each Debenture shall be dated the date of its authentication.

Section 2.02. Execution and Authentication.

Two Officers shall sign the Debentures for the Corporation by manual or facsimile signature. The Corporation's seal shall be reproduced on the Debenture.

If an Officer whose signature is on a Debenture no longer holds that office at the time the Debenture is authenticated, the Debenture shall nevertheless be valid.

A Debenture shall not be valid until authenticated by the manual signature of the Trustee. The signature shall be conclusive evidence that the Debenture has been authenticated under this Indenture.

The Trustee shall authenticate Debentures for original issue up to the aggregate principal amount of \$15,000,000 upon a written order of the Corporation signed by two Officers. The aggregate principal amount of Debentures outstanding at any time may not exceed that amount except as provided in Section 2.07.

The Trustee may appoint an authenticating agent acceptable to the Corporation to authenticate Debentures. An authenticating agent may authenticate Debentures whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with the Corporation or an Affiliate.

Section 2.03. Registrar, Paying Agent and Conversion Agent.

The Corporation shall maintain an office or agency where Debentures may be presented for registration of transfer or for exchange ("Registrar"), an office or agency where Debentures may be presented for payment ("Paying Agent"), an office or agency where Debentures may be presented for conversion ("Conversion Agent") and an office or agency where notices and demands to or upon the Corporation in respect of the Debentures and this Indenture may be served. The Registrar shall keep a register of the Debentures and of their transfer and exchange. The Corporation may appoint one or more co-registrars, one or more additional paying agents and one or more additional

conversion agents. The Corporation or any Subsidiary may act as Registrar, Paying Agent or Conversion Agent. The term "Paying Agent" includes any additional paying agent and the term "Conversion Agent" includes any additional conversion agent.

The Corporation shall notify the Trustee of the name and address of any Agent not a party to this Indenture. If the Corporation fails to maintain a Registrar, Paying Agent, Conversion Agent or agent for service of notices and demands or fails to give the foregoing notice, the Trustee shall act as such Agent.

The Corporation initially appoints the Centerre Trust Company of St. Louis as Registrar, Paying Agent, Conversion Agent and agent for service of notices and demands.

Section 2.04. Paying Agent to Hold Money in Trust.

The Corporation shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust for the benefit of Debentureholders or the Trustee all money held by the Paying Agent for the payment of principal or interest on the Debentures, and will notify the Trustee of any Default by the Corporation in making any such payment. While any such Default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Corporation at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent shall have no further liability for the money. If the Corporation (or any Subsidiary) acts as Paying Agent, it shall segregate and hold as a separate trust fund all money held by it as Paying Agent.

Section 2.05. Debentureholder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Debentureholders. If the Trustee is not the Registrar, the Corporation shall furnish to the Trustee on or before each interest payment date and at such other times as the Trustee may request in writing a list of the names and addresses of Debentureholders in such form and as of such date as the Trustee may reasonably require.

Section 2.06. Transfer and Exchange.

When Debentures are presented to the Registrar or a co-registrar with a request to register the transfer or to exchange them for an equal principal amount of Debentures of other denominations, the Registrar shall register the transfer or make the exchange, provided that every Debenture presented or surrendered for registration of transfer or exchange shall

be duly endorsed or be accompanied by a written instrument of transfer in form satisfactory to the Corporation and the Registrar duly executed by the Holder thereof or by his attorney duly authorized in writing. To permit registrations of transfer and exchanges, the Trustee shall authenticate Debentures at the Registrar's request. No service charge shall be made for any registration of transfer or exchange of Debentures, but the Corporation may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto, other than exchanges pursuant to Sections 2.10, 3.07, 4.02, 10.05 or 11.02.

Section 2.07. Replacement Debentures.

If the Holder of a Debenture claims that the Debenture has been lost, destroyed or wrongfully taken, the Corporation shall issue and the Trustee shall authenticate a replacement Debenture if the Trustee's requirements are met. If required by the Trustee or the Corporation, an indemnity bond must be obtained and be sufficient in the judgment of both to protect the Corporation, the Trustee, any Agent or any authenticating agent from any loss which any of them may suffer if a Debenture is replaced. The Corporation may charge for its expenses in replacing a Debenture.

Every replacement Debenture is an additional obligation of the Corporation.

Section 2.08. Outstanding Debentures.

The Debentures outstanding at any time are all the Debentures authenticated by the Trustee except for those cancelled by it, those delivered to it for cancellation, and those described in this Section as not outstanding.

If a Debenture is replaced pursuant to Section 2.07, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Debenture is held by a bona fide purchaser.

If Debentures are considered paid under Section 5.01, they cease to be outstanding and interest on them ceases to accrue.

A Debenture does not cease to be outstanding because the Corporation or an Affiliate holds the Debenture.

Section 2.09. Treasury Debentures.

In determining whether the Holders of the required principal amount of Debentures have concurred in any direction, waiver or consent, Debentures owned by the Corporation or an

Affiliate shall be disregarded, except for purposes of determining whether the Trustee shall be protected in relying on any such direction, waiver or consent. Only Debentures which the Trustee knows are so owned shall be disregarded.

Section 2.10. Temporary Debentures.

Until definitive Debentures are ready for delivery, the Corporation may prepare and the Trustee shall authenticate temporary Debentures. Temporary Debentures shall be substantially in the form of definitive Debentures but may have variations that the Corporation considers appropriate for temporary Debentures. Without unreasonable delay, the Corporation shall prepare and the Trustee shall authenticate definitive Debentures in exchange for temporary Debentures.

Section 2.11. Cancellation.

The Corporation at any time may deliver Debentures to the Trustee for cancellation. The Registrar, the Paying Agent and the Conversion Agent shall forward to the Trustee any Debentures surrendered to them for registration of transfer, exchange, payment or conversion. The Trustee shall cancel all Debentures surrendered for registration of transfer, exchange, payment, conversion or cancellation and shall dispose of cancelled Debentures as the Corporation directs. The Corporation may not issue new Debentures to replace Debentures that it has paid or delivered to the Trustee for cancellation or that any Debentureholder has converted pursuant to Article 11.

Section 2.12. Defaulted Interest.

Any interest on any Debenture which is payable, but is not punctually paid, on any interest payment date (herein called "Defaulted Interest") shall forthwith cease to be payable to the Debentureholder on the relevant record date solely by virtue of such Debentureholder having been a Debentureholder; and such Defaulted Interest may be paid by the Corporation, at its election in each case, as provided in subsection (a) or (b) below:

(a) The Corporation may elect to make payment of any Defaulted Interest on the Debentures to the persons in whose names such Debentures (or their respective predecessor Debentures) are registered at the close of business on a special record date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Corporation shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Debenture and the date of the proposed payment (which date shall be such as will enable the Corporation to comply with the next sentence hereof), and at the same time the Corporation shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be

paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this subsection provided. Thereupon the Corporation shall fix a special record date for the payment of such Defaulted Interest which shall not be more than 15 nor less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Corporation, at its expense, shall cause notice of the proposed payment of such Defaulted Interest and the special record date therefor to be mailed, first-class postage prepaid, to each Holder of a Debenture at his address as it appears in the Debenture register not less than 10 days prior to such special record date. Notice of the proposed payment of such Defaulted Interest and the special record date therefore having been mailed as aforesaid, such Defaulted Interest shall be paid to the persons in whose names the Debentures (or their respective predecessor Debentures) are registered on such special record date and shall no longer be payable pursuant to the following subsection (b).

(b) The Corporation may make payment of any Defaulted Interest on the Debentures in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Debentures may be listed and upon such notice as may be required by such exchange if, after notice given by the Corporation to the Trustee of the proposed payment pursuant to this subsection, such payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section, each Debenture delivered under this Indenture upon transfer of or in exchange for or in lieu of any other Debenture shall carry all the rights to interest accrued and unpaid, and to accrue, which were carried by such other Debenture and each such Debenture shall bear interest from such date that neither gain nor loss in interest shall result from such transfer, exchange or substitution.

ARTICLE 3 REDEMPTION OF DEBENTURES AT CORPORATION'S OPTION

Section 3.01. Redemption Right at Corporation's Option.

The Corporation has the right to redeem the Debentures at its sole option, in whole or in part, at any time and from time to time on or after March 1, 1988, at the following Redemption Prices (expressed in percentages of principal amount of the Debentures), plus unpaid accrued interest to the Redemption Date, subject to the terms and conditions set forth in this Article 3.

If redeemed during the 12-month period beginning
March 1:

<u>Year</u>	<u>Percentage</u>	<u>Year</u>	<u>Percentage</u>
1988	106.0	1995	102.5
1989	105.5	1996	102.0
1990	105.0	1997	101.5
1991	104.5	1998	101.0
1992	104.0	1999	100.5
1993	103.5	2000 until	100.0
1994	103.0	stated maturity	

The election of the Corporation to redeem any Debenture shall be evidenced by a Board Resolution.

Section 3.02. Notices to Trustee.

If the Corporation wishes to redeem Debentures pursuant to this Article, it shall notify the Trustee of the Redemption Date and the principal amount of Debentures to be redeemed. The Corporation shall give the notice provided for in this Section not less than 45 days prior to the Redemption Date.

Section 3.03. Selection of Debentures to be Redeemed.

If less than all the Debentures are to be redeemed, the Trustee shall select the Debentures to be redeemed by lot. The Trustee shall make the selection not more than 60 days before the Redemption Date from Debentures then outstanding that have not been previously called for redemption. The Trustee may select for redemption portions of the principal of Debentures that have denominations larger than \$1,000. Debentures and portions of Debentures that the Trustee selects shall be in amounts of \$1,000 or integral multiples of \$1,000. Provisions of this Indenture that apply to Debentures called for redemption also apply to portions of Debentures called for redemption.

Section 3.04. Notice of Redemption.

At least 30 days but not more than 60 days before a Redemption Date, the Corporation shall mail notice of redemption to each Holder whose Debentures are to be redeemed.

The notice shall state:

- (1) the Redemption Date;
- (2) the Redemption Price;
- (3) the Conversion Price;

- (4) the name and address of the Paying Agent and Conversion Agent;
- (5) that Debentures called for redemption may be converted at any time prior to the close of business on the Redemption Date;
- (6) that Holders who wish to convert must satisfy the requirements of Section 11.02 hereof;
- (7) that Debentures called for redemption must be surrendered to the Paying Agent to collect the Redemption Price;
- (8) that interest on Debentures called for redemption ceases to accrue on and after the Redemption Date (unless the Corporation shall default in the payment of the Redemption Price); and
- (9) if less than all of the Debentures outstanding are to be redeemed, the identification (and, in the case of partial redemption, the respective principal amounts) of the Debentures to be redeemed.

At the Corporation's request, the Trustee shall give notice of redemption in the Corporation's name and at its expense.

Section 3.05. Effect of Notice of Redemption.

Once notice of redemption is mailed, Debentures called for redemption become due and payable on the Redemption Date at the Redemption Price.

Section 3.06. Deposit of Redemption Price.

On or before the Redemption Date, the Corporation shall deposit with the Paying Agent cash sufficient to pay the Redemption Price and accrued interest on all Debentures to be redeemed. The Paying Agent shall return to the Corporation any money not required due to the conversion of Debentures called for redemption.

Section 3.07. Debentures Redeemed in Part.

Upon surrender of a Debenture that is redeemed in part, the Trustee shall authenticate for the Holder a new Debenture equal in principal amount to the unredeemed portion of the Debenture surrendered.

Section 3.08. Conversion Arrangements on Call for Redemption.

Notwithstanding anything to the contrary contained in this Indenture, in connection with any redemption of Debentures pursuant to this Article 3, the Corporation, by an agreement with one or more investment bankers or other purchasers, may arrange for such purchasers to purchase all Debentures called for redemption (the "Called Debentures") which are either (i) surrendered for redemption or (ii) not duly surrendered for redemption or conversion prior to the close of business on the Redemption Date, and to convert the same into shares of Common Stock, by the purchasers' depositing with the Trustee (acting as Paying Agent with respect to the deposit of such amount and as Conversion Agent with respect to the conversion of such Called Debentures), in trust for the Holders of the Called Debentures, on or prior to the Redemption Date in the manner agreed to by the Corporation and such purchasers, an amount sufficient to pay the Redemption Price, payable by the Corporation on redemption of such Called Debentures. In connection with any such arrangement for purchase and conversion, the Trustee as Paying Agent shall pay on or after the Redemption Date such amounts so deposited by the purchasers in exchange for Called Debentures surrendered for redemption prior to the close of business on the Redemption Date and for all Called Debentures surrendered after such Redemption Date. Notwithstanding anything to the contrary contained in this Article 3, the obligation of the Corporation to pay the Redemption Price of such Called Debentures shall be satisfied and discharged to the extent such amount is so paid by such purchasers, provided, however, that nothing in this Section 3.08 shall in any way relieve the Corporation of the obligation to pay such Redemption Price on all Called Debentures to the extent such amount is not so paid by said purchasers. For all purposes of this Indenture, any Called Debentures surrendered by the Holders for redemption, and any Called Debentures not duly surrendered for redemption or conversion prior to the close of business on the Redemption Date, shall be deemed acquired by such purchasers from such Holders and surrendered by such purchasers for conversion and shall in all respects be deemed to have been converted, all as of immediately prior to the close of business on the Redemption Date, subject to the deposit by the purchasers of the above amount as aforesaid. Nothing in this Section 3.08 shall in any way limit the right of any Holder of a Debenture to convert such Debenture pursuant to the terms of this Indenture any time prior to the close of business on the Redemption Date.

ARTICLE 4 REDEMPTION OF DEBENTURES UPON DEATH OF
THE DEBENTUREHOLDER OR BENEFICIAL OWNER

Section 4.01. Redemption Right.

The Corporation will redeem a Debenture, or a portion of a Debenture (in the principal amount of \$1,000 or integral multiples thereof) within 60 days following receipt by the Trustee of a request in accordance with Section 4.02 therefor from a Qualified Institution holding such Debenture for a deceased beneficial owner or from a deceased Debentureholder's personal representative, or surviving joint tenant, tenant by the entirety or tenant in common, subject to the limitations that the Corporation will not be obligated to redeem during any twelve-month period ending on any March 1: (i) the portion of a Debenture or Debentures presented on behalf of a deceased beneficial owner or deceased Debentureholder exceeding an aggregate principal amount of \$25,000 or (ii) Debentures presented on behalf of all deceased beneficial owners and deceased Debentureholders exceeding \$600,000 in aggregate principal amount. If the Corporation, although not obligated to do so, chooses to redeem Debentures of any deceased beneficial owner or deceased Debentureholder in any such twelve-month period in excess of the \$25,000 limitation, such redemption, to the extent that it exceeds the \$25,000 limitation for any deceased beneficial owner or deceased Debentureholder, shall not be included in the computation of the \$600,000 limitation for such period or any succeeding period.

Section 4.02. Redemption Procedure.

Debentures will be redeemed in the order of their receipt by the Trustee, except as hereinafter provided. Debentures not redeemed in any such twelve-month period because of the \$25,000 or \$600,000 limitations will be held for redemption during the following twelve-month period(s) until redeemed unless sooner withdrawn by the person presenting the Debenture for redemption.

Debentures may be presented on behalf of a deceased beneficial owner or a deceased Debentureholder for redemption by delivering to the Trustee: (1) a written request for redemption signed by an authorized officer of a Qualified Institution or by the deceased Debentureholder's personal representative or surviving joint tenant, tenant by the entirety, or tenant in common, (2) the Debenture(s) to be redeemed and (3) appropriate evidence of death of the Debentureholder and appropriate evidence of authority in the case of a request by a personal representative. No particular forms of request for redemption or evidence of death or authority to request redemption are required but each must be in a form satisfactory to the Trustee. The price to be paid by the Corporation for all Debentures presented to it pursuant to the

provisions described in this Section is 100% of the principal amount thereof plus unpaid accrued interest to the date of payment. Any acquisition of Debentures by the Corporation or its Subsidiaries other than by redemption upon the death of a Debentureholder pursuant to this Section shall not be included in the computation of either the \$25,000 or \$600,000 limitations for any period.

For purposes of this Section 4.02, a Debenture held in joint tenancy, tenancy by the entirety, or tenancy in common will be deemed to be held by a single Debentureholder and the death of any joint tenant, tenant by the entirety or tenant in common will be deemed the death of a Debentureholder. The death of a person, who, during his lifetime, was entitled to substantially all of the beneficial ownership interest of a Debenture will be deemed the death of the Debentureholder, regardless of the registered Debentureholder, if such beneficial interest can be established to the satisfaction of the Trustee. Such beneficial interest shall be deemed to exist in typical cases of street name or nominee ownership, ownership under the Uniform Gifts to Minors Act, community property or other joint ownership arrangements between a husband and wife (including individual retirement account or Keogh [H.R. 10] plans maintained solely by or for the decedent, or by or for the decedent and his spouse), and trust and certain other arrangements where one person has substantially all of the beneficial ownership interest in the Debenture during his lifetime. Beneficial interest shall include the power to sell, transfer or otherwise dispose of a Debenture and the right to receive the proceeds therefrom, as well as interest and principal payable with respect thereto.

In the case of a Debenture presented for redemption by a Qualified Institution on behalf of a deceased beneficial owner, the \$25,000 limitation shall apply to each such beneficial owner and the death of such beneficial owner shall entitle a Qualified Institution to seek redemption of such Debentures as if the deceased beneficial owner were the registered Debentureholder. A Qualified Institution, in its request for redemption on behalf of a deceased beneficial owner, must submit evidence, satisfactory to the Trustee, that it holds the Debenture on behalf of such beneficial owner and must certify that the aggregate requests for redemption tendered by such Qualified Institution on behalf of each such beneficial owner in any such twelve-month period does not exceed \$25,000. In addition, any request for redemption made by a Qualified Institution on behalf of a deceased beneficial owner must be delivered to the Trustee by registered mail, return receipt requested.

In the case of any Debenture which is presented for redemption in part only, upon such partial redemption, the Corporation shall execute and the Trustee shall authenticate

and deliver to, or on the order of, the presenting person a new Debenture in the principal amount equal to the unredeemed portion of the principal of the Debenture so presented.

In the case of any Debenture or portion thereof which is presented for redemption pursuant to this Article 4 and which has not been redeemed at the time the Corporation gives notice of its election to redeem Debentures pursuant to Article 3, such Debenture or portion thereof shall first be subject to redemption pursuant to Article 3 and if any such Debenture is not redeemed pursuant to Article 3 it shall then be subject to redemption pursuant to Article 4.

Nothing herein shall prohibit the Corporation from redeeming, in acceptance of tenders made pursuant hereto, Debentures in excess of the principal amount that the Corporation is obligated to redeem, nor from purchasing any Debentures in the open market. However, the Corporation may not use any Debentures purchased in excess of its obligation to redeem or in the open market as a credit against its redemption obligation hereunder.

Section 4.03. Withdrawal.

Any Debentures presented for redemption upon the death of the Debentureholder or the beneficial owner thereof may be withdrawn by the person presenting the same upon delivery of a written request for such withdrawal given to the Trustee prior to the issuance of a check in payment thereof.

Section 4.04. Redemption Register.

The Trustee shall maintain at its corporate trust office a register (the "Redemption Register") in which it shall record, in order of receipt, all presentations for redemption received by the Trustee in accordance with Section 4.02. Unless withdrawn, all such requests shall remain in effect, during the period in which they are received and thereafter from period to period, until the Debentures which are the subject of such request have been redeemed.

ARTICLE 5 COVENANTS

Section 5.01. Payment of Debentures.

The Corporation shall pay the principal of and interest on the Debentures on the dates and in the manner provided herein. Principal and interest shall be considered paid on the date due if the Trustee or any Paying Agent holds on that date money sufficient to pay all principal and interest then due, provided that if the Debentures are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made.

The Corporation shall pay interest on overdue principal at the rate borne by the Debentures; it shall pay interest on overdue installments of interest at the same rate to the extent lawful.

Section 5.02. Reporting.

The Corporation shall file with the Trustee within 15 days after it files them with the SEC copies of the annual reports and of such information, documents, and other reports (or copies of such portions of any of the foregoing as the SEC may by rules and regulations prescribe) which the Corporation is required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act. The Corporation also shall comply with the other provisions of TIA §314(a). The Corporation shall furnish to the Holder of Debentures upon request of such Holder, annual financial statements and quarterly reports containing unaudited financial statements.

Section 5.03. Corporate Existence.

Subject to Article 6, the Corporation will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence and the rights (charter and statutory) of the Corporation; provided, however, that the Corporation shall not be required to preserve any such right, if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Corporation and its Subsidiaries taken as a whole and that the loss thereof is not, and will not be, adverse in any material respect to the Holders.

Section 5.04. Compliance Certificate.

The Corporation shall deliver to the Trustee within 120 days after the end of each fiscal year of the Corporation an Officers' Certificate stating whether or not the signers know of any Default that occurred during the fiscal year. If they do, the certificate shall describe the Default and its status. The certificate need not comply with Section 12.05.

ARTICLE 6 SUCCESSORS

Section 6.01 When Corporation May Merge, etc.

The Corporation shall not consolidate or merge into, or transfer or lease all or substantially all of its assets to any person unless:

- (1) the person is a corporation organized and existing under the laws of the United States, or any State thereof or the District of Columbia;

- (2) the person assumes by supplemental indenture all the obligations of the Corporation under the Debentures and this Indenture, except that it need not assume the obligations of the Corporation as to conversion of the Debentures, if pursuant to Section 11.15, an Affiliate of the surviving, transferee or lessee corporation obligates itself by supplemental indenture to deliver securities, cash or other assets upon conversion of the Debentures;
- (3) immediately after the transaction no Default exists; and
- (4) the Corporation has delivered to the Trustee an Officers' Certificate and Opinion of Counsel, each stating that the transaction and supplemental indenture comply with this Article and Section 11.15.

The surviving, transferee or lessee corporation shall be the successor Corporation, but the predecessor Corporation in the case of a transfer or lease shall not be released from the obligation to pay the principal of and interest on the Debentures.

ARTICLE 7 DEFAULTS AND REMEDIES

Section 7.01. Events of Default.

An "Event of Default" occurs if:

- (1) the Corporation defaults in the payment of interest on any Debenture when the same becomes due and payable and the Default continues for a period of 30 days;
- (2) the Corporation defaults in the payment of the principal of any Debenture when the same becomes due and payable at maturity, upon redemption or otherwise;
- (3) the Corporation fails to comply with any of its other agreements in the Debenture or this Indenture and the Default continues for the period and after the notice specified below;
- (4) the Corporation defaults in the payment of any indebtedness having an outstanding principal balance of \$10,000,000 or more, whether such indebtedness now exists or shall hereafter be created, and any period of grace with respect thereto shall have expired, which default shall

result in such indebtedness being declared due and payable prior to the date on which it would otherwise become due and payable, and such default in payment is not cured, or such acceleration shall not be rescinded, annulled or obviated through payment, within thirty days after written notice to the Corporation from the Trustee or to the Corporation and to the Trustee from the Holders of not less than 25% in principal amount of the Debentures then outstanding under the Indenture, provided that no default shall occur hereunder if there shall have been delivered to the Trustee an Officers' Certificate stating that the Corporation is contesting in good faith the existence of such default in payment or event of default;

- (5) the Corporation pursuant to or within the meaning of any Bankruptcy Law:
 - (A) commences a voluntary case,
 - (B) consents to the entry of an order for relief against it in an involuntary case,
 - (C) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
 - (D) makes a general assignment for the benefit of its creditors; or
- (6) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law, and the order or decree remains unstayed and in effect for 60 days, that:
 - (A) is for relief against the Corporation in an involuntary case,
 - (B) appoints a Custodian of the Corporation or for all or substantially all of its property, or
 - (C) orders the liquidation of the Corporation.

The term "Bankruptcy Law" means title 11, U.S. Code, or any similar Federal or State law for the relief of debtors. The term "Custodian" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

A Default under clause (3) is not an Event of Default until the Trustee or the Holders of at least 25% in principal

amount of the Debentures then outstanding notify the Corporation of the Default and the Corporation does not cure the Default within 90 days after receipt of the notice. The notice must specify the Default, demand that it be remedied and state that the notice is a "Notice of Default." The Trustee shall, if requested to do so by the Holders of 25% in principal amount of the Debentures, notify the Corporation of the Default pursuant to this Section.

Subject to the provisions of Sections 8.01 and 8.02, the Trustee shall not be charged with knowledge of any Event of Default unless written notice thereof shall have been given to a Trust Officer of the Trustee at the Corporate Trust Office by the Corporation, the Paying Agent, the Holder of a Debenture or an agent of such Holder.

Section 7.02. Acceleration.

If an Event of Default occurs, and is continuing, the Trustee, by notice to the Corporation, or the Holders of at least 25% in principal amount of the Debentures then outstanding, by notice to the Corporation and the Trustee, may declare the principal of, and accrued interest on, all the Debentures to be due and payable. Upon such declaration the principal and interest shall be due and payable immediately.

The Holders of a majority in principal amount of the Debentures then outstanding, by notice to the Trustee, may rescind an acceleration of all the Debentures and its consequences if (i) all existing Events of Default have been cured or waived except nonpayment of the principal and interest that has become due solely because of the acceleration and (ii) if the rescission would not conflict with any judgment or decree of a court of competent jurisdiction. No such rescission shall affect any subsequent Default or impair any right consequent thereon.

Section 7.03. Other Remedies.

If an Event of Default occurs and is continuing, the Trustee may pursue any available remedy to collect the payment of principal or interest on the Debentures or to enforce the performance of any provision of the Debenture or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Debentures or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Debentureholder in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in such Event of Default. All remedies are cumulative to the extent permitted by law.

Section 7.04. Waiver of Past Defaults.

The Holders of a majority in principal amount of the Debentures, by notice to the Trustee, may waive an existing Default and its consequences, except a Default in the payment of the principal of or interest on any Debenture or a Default under Article 11 hereof, an uncured failure to make any redemption payment or an uncured default with respect to a provision which cannot be modified under the terms of this Indenture without the consent of each Holder affected.

Section 7.05. Control by Majority.

The Holders of a majority in principal amount of the Debentures then outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on it. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture, is unduly prejudicial to the rights of other Debentureholders, or would involve the Trustee in personal liability; provided, that the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

Section 7.06. Limitation on Suits.

A Debentureholder may pursue a remedy with respect to this Indenture or the Debenture only if:

- (1) the Holder gives to the Trustee notice of a continuing Event of Default;
- (2) the Holders of at least 25% in principal amount of the Debentures then outstanding make a written request to the Trustee to pursue the remedy;
- (3) such Holder or Holders offer to the Trustee indemnity satisfactory to the Trustee against any loss, liability or expense;
- (4) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and
- (5) during such 60-day period the Holders of a majority in principal amount of the Debentures then outstanding do not give the Trustee a direction inconsistent with the request.

A Debentureholder may not use this Indenture to prejudice the rights of another Debentureholder or to obtain a preference or priority over another Debentureholder.

Section 7.07. Rights of Holders to Receive Payment.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Debenture to receive payment of principal and interest on the Debenture, on or after the respective due dates expressed in the Debenture, or to bring suit for the enforcement of any such payment on or after such respective dates, is absolute and unconditional and shall not be impaired or affected without the consent of the Holder.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Debenture to bring suit for the enforcement of the right to convert the Debenture shall not be impaired or affected without the consent of the Holder.

Section 7.08. Collection Suit by Trustee.

If an Event of Default in payment of interest or principal specified in Section 7.01(1) or (2) occurs and is continuing, the Trustee may recover judgment in its own name and as trustee of an express trust against the Corporation for the whole amount of unpaid principal and accrued interest remaining unpaid. The Trustee may file such action to recover judgment based upon an Event of Default in the payment of interest or principal in a court of competent jurisdiction located in the State of Missouri. The Corporation hereby consents to subject itself to the jurisdiction of such courts located in the State of Missouri and hereby agrees to enter an appearance in such proceeding, provided the Trustee shall notify the Corporation of the commencement of such proceeding as herein provided generally with respect to the giving of notices.

Section 7.09. Trustee May File Proofs of Claim.

The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Debentureholders allowed in any judicial proceedings relative to the Corporation, its creditors or its property, and shall be entitled and empowered to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same, and any Custodian in any such judicial proceeding is hereby authorized by each Debentureholder to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Debentureholders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses and disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 8.07.

Section 7.10. Priorities.

If the Trustee collects any money pursuant to this Article, it shall pay out the money in the following order:

First: to the Trustee for amounts due under Section 8.07;

Second: to Debentureholders for amounts due and unpaid on the Debentures for principal and interest, ratably, without preference or priority of any kind, according to the amounts due and payable on the Debentures for principal and interest, respectively; and

Third: to the Corporation.

The Trustee may fix a record date and payment date for any payment to Debentureholders pursuant to this Article.

Section 7.11. Undertaking for Costs.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section does not apply to a suit by the Trustee, a suit by a Holder pursuant to Section 7.07 or a suit by Holders of more than 10% in principal amount of the Debentures.

Section 7.12. Waiver of Stay or Extension Laws.

The Corporation covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of the Indenture; and the Corporation (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

Section 7.13. Restoration of Rights and Remedies.

If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under the Indenture

and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case the Corporation, the Trustee and the Holders shall, subject to any determination in such proceeding, be restored severally and respectively to their former positions hereunder, and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

ARTICLE 8 TRUSTEE

Section 8.01. Duties of Trustee.

- (a) If an Event of Default has occurred and is continuing, the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.
- (b) Except during the continuance of an Event of Default:
 - (1) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others.
 - (2) In the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. However, the Trustee shall examine the certificates and opinions to determine whether or not they conform to the requirements of this Indenture.
- (c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:
 - (1) This paragraph does not limit the effect of paragraph (b) of this Section;
 - (2) The Trustee shall not be liable for any error of judgment made in good faith by a Trust Officer, unless it is proved

that the Trustee was negligent in ascertaining the pertinent facts; and

- (3) The Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 7.05.
- (d) Every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b) and (c) of this Section.
- (e) The Trustee may refuse to perform any duty or exercise any right or power unless it receives indemnity satisfactory to it against any loss, liability or expense.
- (f) The Trustee shall not be liable for interest on any money received by it except as otherwise agreed with the Corporation. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

Section 8.02. Rights of Trustee.

Except as otherwise provided in Section 8.01:

- (a) The Trustee may rely on any document believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.
- (b) Before the Trustee acts or refrains from acting, it may require an Officers' Certificate or an Opinion of Counsel. The Trustee shall not be liable for any action it takes or omits to take in good faith in reliance on an Officers' Certificate or Opinion of Counsel.
- (c) The Trustee may act through agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care.
- (d) The Trustee shall not be liable for any action it takes or omits to take in good faith which it believes to be authorized or within its rights or powers.

Section 8.03. Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Debentures and may otherwise deal with the Corporation or an Affiliate with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights. However, the Trustee is subject to Sections 8.10 and 8.11.

Section 8.04. Trustee's Disclaimer.

The Trustee makes no representation as to the validity or adequacy of this Indenture or the Debenture, it shall not be accountable for the Corporation's use of the proceeds from the Debentures, and it shall not be responsible for any statement in the Debenture other than its authentication.

Section 8.05. Notice of Events of Defaults.

If an Event of Default occurs and is continuing and if it is known to the Trustee, the Trustee shall mail to Debentureholders a notice of the Event of Default within 90 days after it occurs. Except in the case of a Event of Default in payment on any Debenture, the Trustee may withhold the notice if and so long as a committee of its Trust Officers in good faith determines that withholding the notice is in the interests of Debentureholders.

Section 8.06. Reports by Trustee to Holders.

Within 60 days after each March 1 following the date of this Indenture, the Trustee shall mail to Debentureholders a brief report dated as of such reporting date that complies with TIA §313(a). The Trustee also shall comply with TIA §313(b)(2).

A copy of each report at the time of its mailing to Debentureholders shall be filed with the SEC and each stock exchange on which the Debentures are listed. The Corporation shall notify the Trustee when the Debentures are listed on any stock exchange.

Section 8.07. Compensation and Indemnity.

The Corporation shall pay to the Trustee from time to time reasonable compensation for its services. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Corporation shall reimburse the Trustee upon request for all reasonable out-of-pocket expenses incurred by it. Such expenses shall include the reasonable compensation and out-of-pocket expenses of the Trustee's agents and counsel.

The Corporation shall indemnify the Trustee against any loss or liability incurred by it. The Trustee shall notify the Corporation promptly of any claim for which it may seek indemnity. The Corporation shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have separate counsel and the Corporation shall pay the reasonable fees and expenses of such counsel. The Corporation need not pay for any settlement made without its consent which shall not be unreasonably withheld.

The Corporation need not reimburse any expense or indemnify against any loss or liability incurred by the Trustee through negligence or bad faith.

To secure the Corporation's payment obligations in this Section, the Trustee shall have a lien prior to the Debentures on all money or property held or collected by the Trustee, except that held in trust to pay principal and interest on particular Debentures.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 7.01(4) or (5) occurs, the expenses and the compensation for the services are intended to constitute expenses of administration under any Bankruptcy Law.

Section 8.08. Replacement of Trustee.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment as provided in this Section.

The Trustee may resign by so notifying the Corporation. The Holders of a majority in principal amount of the Debentures may remove the Trustee by so notifying the Trustee and the Corporation. The Corporation may remove the Trustee if:

- (1) the Trustee fails to comply with Section 8.10;
- (2) the Trustee is adjudged a bankrupt or an insolvent;
- (3) a receiver or public officer takes charge of the Trustee or its property; or
- (4) the Trustee become incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Corporation shall promptly appoint a successor Trustee. Within one year after the successor Trustee assumes office, the Holders of a majority in principal amount of the Debentures may appoint a

successor Trustee to replace the successor Trustee appointed by the Corporation.

If a successor Trustee does not take office within 60 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Corporation or the Holders of at least 10% in principal amount of the Debentures then outstanding may petition any court of competent jurisdiction for the appointment of a successor Trustee.

If the Trustee fails to comply with Section 8.10, any Debentureholder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Corporation. Thereupon the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall mail a notice of its succession to Debentureholders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, subject to the lien provided for in Section 8.07.

Section 8.09. Successor Trustee by Merger, etc.

If the Trustee consolidates, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the surviving or transferee corporation without any further act shall be the successor Trustee.

Section 8.10. Eligibility; Disqualification.

This Indenture shall always have a Trustee who satisfies the requirements of TIA §310(a)(1). The Trustee shall always have a combined capital and surplus of at least \$10,000,000 as set forth in its most recent published annual report of condition. The Trustee is subject to TIA §310(b), including the optional provision permitted by the second sentence of TIA §310(b)(9).

Section 8.11. Preferential Collection of Claims Against Corporation.

The Trustee is subject to TIA §311(a), excluding any creditor relationship listed in TIA §311(b). A Trustee who has resigned or been removed is subject to TIA §311(a) to the extent indicated.

Section 8.12. Appointment of Co-Trustee.

It is the purpose of this Indenture that there shall be no violation of any law of any jurisdiction denying or restricting the right of banking corporations or associations to transact business as trustee in such jurisdiction. It is recognized that in case of litigation under this Indenture, and in particular in case of the enforcement on an Event of Default, or in case the Trustee deems that by reason of any present or future law of any jurisdiction it may not exercise any of the powers, rights or remedies herein granted to the Trustee in trust, as herein granted, or take any other action which may be desirable or necessary in connection therewith, it may be necessary that the Trustee appoint an additional individual or institution as a separate or Co-Trustee.

The Trustee may appoint an additional individual or institution as a separate or Co-Trustee, in which event each and every remedy, power, right, claim, demand, cause of action, immunity, estate, title, interest and lien expressed or intended by this Indenture, to be exercised by or vested in or conveyed to the Trustee with respect thereto shall be exercisable by and vest in such separate or Co-Trustee but only to the extent necessary to enable such separate or Co-Trustee to exercise such powers, rights and remedies, and every covenant and obligation necessary to the exercise thereof by such separate or Co-Trustee shall run to and be enforceable by either of them.

Should any deed, conveyance or instrument in writing from the Corporation be required by the separate or Co-Trustee so appointed by the Trustee for more fully and certainly vesting in and confirming to it such properties, rights, powers, trusts, duties and obligations, including particularly the right to be paid its fees and expenses for services rendered, any and all such deeds, conveyances and instruments in writing shall, on request, be executed, acknowledged and delivered by the Corporation. In case any separate or Co-Trustee, or a successor to either, shall die, become incapable of acting, resign or be removed, all the estates, properties, rights, powers, trusts, duties and obligations of such separate or Co-Trustee, so far as permitted by law, shall vest in and be exercised by the Trustee until the appointment of a new Trustee or successor to such separate or Co-Trustee.

ARTICLE 9 DISCHARGE OF INDENTURE

Section 9.01. Termination of Corporation's Obligations.

The Corporation may at any time terminate all of its obligations under this Indenture if:

- (1) the Corporation irrevocably deposits in trust with the Trustee money or U. S. Government Obligations sufficient to pay principal and interest on the Debentures at maturity or on redemption, as the case may be; and
- (2) if such deposit shall be sufficient to pay principal, premium, if any, and interest on the Debentures only to a specified redemption date, the Corporation shall have given to the Trustee irrevocable instructions to call the Debentures for redemption on such date.

However, the Corporation's obligations in Sections 2.03, 2.04, 2.05, 2.06, 2.07, 5.01, 8.07, 8.08 and 9.03 and in Article 11, shall survive until the Debentures are no longer outstanding. Thereafter, the Corporation's obligations in Sections 8.07 and 9.03 shall survive.

After a deposit, the Trustee upon request shall acknowledge in writing the discharge of the Corporation's obligations under this Indenture except for those surviving obligations specified above.

In order to have money available on a payment date to pay principal or interest on the Debentures, the U. S. Government Obligations shall be payable as to principal or interest on or before such payment date in such amounts as will provide the necessary money. The U. S. Government Obligations shall not be callable at the issuer's option.

"U. S. Government Obligations" means direct obligations of the United States or those obligations for the payment of which the full faith and credit of the United States is pledged.

Section 9.02. Application of Trust Money.

The Trustee shall hold in trust money or U. S. Government Obligations deposited with it pursuant to Section 9.01. It shall apply the deposited money and the money from the U. S. Government Obligations through the Paying Agent and in accordance with this Indenture to the payment of principal and interest on the Debentures.

Section 9.03. Repayment to Corporation.

The Trustee and the Paying Agent shall promptly pay to the Corporation upon request any excess money or securities held by them at any time. The obligation of the Trustee and the Paying Agent to pay such excess money or securities to the Corporation shall survive the payment, conversion and/or cancellation of all the Debentures until all such excess money and securities have been so paid.

The Trustee and the Paying Agent shall pay to the Corporation upon request any money held by them for the payment of principal or interest that remains unclaimed for two years. After payment to the Corporation, Debentureholders entitled to the money must look to the Corporation for payment as general creditors unless an applicable abandoned property law designates another person.

ARTICLE 10 AMENDMENTS, SUPPLEMENTS AND WAIVERS

Section 10.01. Without Consent of Holders.

The Corporation and the Trustee may amend or supplement this Indenture or the Debenture without the consent of any Debentureholder:

- (1) to cure any ambiguity, omission, defect or inconsistency;
- (2) to comply with Section 6.01 and Section 11.15;
- (3) to provide for uncertificated Debentures in addition to certificated Debentures; or
- (4) to make any change that does not adversely affect the rights of any Debentureholder.

Section 10.02. With Consent of Holders.

The Corporation and the Trustee may amend or supplement this Indenture or the Debentures with the written consent of the Holders of at least a majority in principal amount of the Debentures then outstanding. Without the consent of each Debentureholder affected, however, an amendment under this Section may not:

- (1) reduce the amount of Debentures whose Holders must consent to an amendment or waiver;
- (2) reduce the rate of or change the time for payment of interest on any Debenture;
- (3) reduce the principal of or change the maturity of any Debenture;
- (4) waive a Default in the payment of the principal of or interest on any Debenture;
- (5) make any Debenture payable in money other than that stated in the Debenture; or
- (6) modify the provisions of Sections 7.04, 7.07 and 10.02 (second sentence).

After an amendment or supplement under this Section becomes effective, the Corporation shall mail to Debenture-holders a notice briefly describing the amendment.

Section 10.03. Compliance with Trust Indenture Act.

Every amendment or supplement to this Indenture or the Debenture shall be set forth in a supplemental indenture that complies with the TIA as then in effect.

Section 10.04. Revocation and Effect of Consents.

Until an amendment, supplement or waiver becomes effective, a consent to it by a Holder of a Debenture is a continuing consent by the Holder and every subsequent Holder of a Debenture or portion of a Debenture that evidences the same debt as the consenting Holder's Debenture, even if notation of the consent is not made on any Debenture. However, any such Holder or subsequent Holder may revoke the consent as to his Debenture or portion of a Debenture if the Trustee receives the notice of revocation before the date the amendment, supplement or waiver becomes effective.

Section 10.05. Notation on or Exchange of Debentures.

The Trustee may place an appropriate notation about an amendment, supplement or waiver on any Debenture thereafter authenticated. The Corporation in exchange for all Debentures may issue and the Trustee shall authenticate new Debentures that reflect the amendment, supplement or waiver.

Section 10.06. Trustee Protected.

The Trustee need not sign any supplemental indenture that adversely affects its rights.

ARTICLE 11 CONVERSION

Section 11.01. Conversion Privilege; Conversion Price.

A Holder of a Debenture, at his sole option, may convert such Debenture into Common Stock at any time prior to the close of business on March 1, 2012. If a Debenture is called for redemption by the Corporation, the Holder thereof may convert such Debenture into Common Stock at any time prior to the close of business on the Redemption Date. The number of shares of Common Stock issuable upon conversion of a Debenture is determined by dividing the principal amount to be converted by the Conversion Price in effect on the Conversion Date.

The initial Conversion Price is \$29.85 per share. The Conversion Price is subject to adjustment as described in this Article 11.

A Holder may convert a portion of a Debenture if the portion to be converted is \$1,000 or an integral multiple thereof. Provisions in this Indenture which apply to the conversion of all of a Debenture also apply to a portion of such Debenture.

Section 11.02. Conversion Procedure.

To convert a Debenture, a Holder must:

- (i) complete and sign the conversion notice on the back of the Debenture;
- (ii) surrender the Debenture to the Conversion Agent;
- (iii) furnish appropriate endorsements and transfer documents if required by the Registrar or the Conversion Agent; and
- (iv) pay any transfer or similar tax required by Section 11.04.

The date on which the Holder satisfies all such requirements is the Conversion Date. As soon as practicable thereafter, the Corporation shall deliver through the Conversion Agent a certificate for the number of full shares of Common Stock issuable upon the conversion and a check for any fractional share. The person in whose name the certificate is registered shall be treated as a stockholder of record of the Corporation on and after the Conversion Date.

No payment or adjustment will be made for accrued interest on a converted Debenture.

If a Holder converts more than one Debenture at the same time, the number of full shares issuable upon the conversion shall be based on the total principal amount of the Debentures converted.

Upon surrender of a Debenture that is converted in part, the Trustee shall authenticate for the Holder a new Debenture equal in principal amount to the unconverted portion of the Debenture surrendered.

If the last day on which a Debenture may be converted is a Legal Holiday in a place where a Conversion Agent is located, the Debenture may be surrendered to that Conversion Agent on the next succeeding day that is not a Legal Holiday.

Section 11.03. Fractional Shares.

The Corporation will not issue a fractional share of Common Stock upon conversion of a Debenture. Instead the

Corporation will deliver its check for the current market value of the fractional share. The current market value of a fraction of a share is determined by multiplying the current market price of a full share by the fraction and rounding the result to the nearest cent.

The current market price of a share of Common Stock is the Quoted Price of the Common Stock on the last trading day prior to the Conversion Date. In the absence of such a quotation, the Corporation shall determine the current market price on the basis of such quotations as it considers appropriate.

Section 11.04. Taxes on Conversion.

If a Holder of a Debenture converts it, the Corporation shall pay any documentary, stamp or similar issue or transfer tax due on the issue of shares of Common Stock upon the conversion. However, the Holder shall pay any such tax which is due because the shares are issued in a name other than the Holder's name.

Section 11.05. Corporation to Provide Stock.

The Corporation shall at all times reserve and have available, free from preemptive rights out of its authorized but unissued Common Stock or its Common Stock held in treasury, enough shares of Common Stock to permit the conversion of the Debentures.

All shares of Common Stock which may be issued upon conversion of the Debentures shall be fully paid and nonassessable.

Before taking any action that would cause an adjustment reducing the Conversion Price below the then par value (if any) of the shares of Common Stock issuable upon conversion of the Debentures, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of such Common Stock at such Conversion Price.

The Corporation will endeavor to comply with all securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Debentures and will endeavor to list such shares on each national securities exchange, if any, on which its Common Stock is then listed.

Section 11.06. Adjustment for Change in Capital Stock.

If the Corporation:

- (1) pays a dividend or makes a distribution on its Common Stock in shares of its Common Stock;

- (2) subdivides its outstanding shares of Common Stock into a greater number of shares;
- (3) combines its outstanding shares of Common Stock into a smaller number of shares;
- (4) makes a distribution on its Common Stock in shares of its Capital Stock other than Common Stock; or
- (5) issues by reclassification of its Common Stock any shares of its Capital Stock,

then the conversion privilege and the Conversion Price in effect immediately prior to such action shall be adjusted so that the Holder of a Debenture thereafter converted may receive the number of shares of Capital Stock of the Corporation which he would have owned immediately following such action if he had converted the Debenture immediately prior to such action.

Subject to Section 11.10, the adjustment shall become effective immediately after the record date in the case of a dividend or distribution and immediately after the effective date in the case of a subdivision, combination or reclassification.

If, after an adjustment, a Holder of a Debenture, upon conversion of such Debenture may receive shares of two or more classes of Capital Stock of the Corporation, the Board of Directors shall determine the allocation of the adjusted Conversion Price between the classes of Capital Stock. After such allocation, the conversion privilege and the Conversion Price with respect to each class of Capital Stock shall thereafter be subject to adjustment on terms comparable to those with respect to Common Stock in this Article.

Section 11.07. Adjustment for Rights Issue.

If the Corporation distributes any rights or warrants to all holders of its Common Stock entitling them for a period expiring within 60 days after the record date mentioned below to purchase shares of Common Stock at a price per share less than the current market price per share on that record date, the Conversion Price shall be adjusted in accordance with the formula:

$$C' = C \times \frac{0 + \frac{(N \times P)}{M}}{0 + N}$$

where:

C' = the adjusted Conversion Price.

- C = the current Conversion Price.
- O = the number of shares of Common Stock outstanding on the record date.
- N = the number of additional shares of Common Stock offered.
- P = the offering price per share of the additional shares.
- M = the current market price per share of Common Stock on the record date.

Subject to Section 11.10, the adjustment shall become effective immediately after the record date for the determination of stockholders entitled to receive the rights or warrants.

Section 11.08. Adjustment for Other Distributions.

If the Corporation distributes to all holders of its Common Stock any of its assets or debt securities or any rights or warrants to purchase securities of the Corporation, the Conversion Price shall be adjusted in accordance with the formula:

$$C' = C \times \frac{M - F}{M}$$

where:

- C' = the adjusted Conversion Price.
- C = the current Conversion Price.
- M = the current market price per share of Common Stock on the record date mentioned below.
- F = the fair market value on the record date of the assets, securities, rights or warrants applicable to one share of Common Stock. The Corporation shall determine the fair market value.

Subject to Section 11.10, the adjustment shall become effective immediately after the record date for the determination of stockholders entitled to receive the distribution.

This Section does not apply to cash dividends or cash distributions paid out of consolidated current or retained earnings as shown on the books of the Corporation. Also, this Section does not apply to rights or warrants referred to in Section 11.07.

Section 11.09. Current Market Price.

In Sections 11.07 and 11.08, the current market price per share of Common Stock on any date is the average of the Quoted Prices of the Common Stock for 30 consecutive trading days commencing 45 trading days before the date in question. In the absence of one or more such quotations, the Board of Directors shall determine the current market price on the basis of such quotations as it considers appropriate.

Section 11.10. When Adjustment May Be Deferred.

No adjustment in the Conversion Price need be made pursuant to Section 11.06 unless the adjustment would require an increase or decrease of at least 1% in the Conversion Price. No adjustment in the Conversion Price need be made pursuant to Sections 11.07 or 11.08 unless the adjustment would require an increase or decrease of at least 5% in the Conversion Price. Any adjustments that are not made pursuant to Section 11.06 shall be carried forward and taken into account in the calculation of any subsequent adjustment pursuant to Section 11.06. Any adjustments that are not made pursuant to either Section 11.07 or 11.08 shall be carried forward and taken into account in the calculation of any subsequent adjustment pursuant to Section 11.07 or 11.08.

All calculations under this Article shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be.

Section 11.11. When No Adjustment Required.

No adjustment need be made for a transaction referred to in Section 11.06, 11.07 or 11.08 if Debentureholders are to participate in the transaction on a basis and with notice that the Board of Directors determines to be fair and appropriate in light of the basis and notice on which holders of Common Stock participate in the transaction.

No adjustment need be made for rights to purchase Common Stock pursuant to a Corporation plan for reinvestment of dividends or interest or pursuant to an employees' stock purchase or stock option plan.

No adjustment need be made for a change in the par value of the Common Stock or from par value Common Stock to no par value Common Stock.

To the extent the Debentures become convertible into cash, no adjustment need be made thereafter as to the cash. Interest will not accrue on the cash.

Section 11.12. Notice of Adjustment.

Whenever the Conversion Price is adjusted, the Corporation shall promptly mail to Debentureholders a notice of the adjustment. The Corporation shall file with the Trustee a certificate from the Corporation's independent public accountants briefly stating the facts requiring the adjustment and the manner of computing it. The certificate shall be conclusive evidence that the adjustment is correct.

Section 11.13. Voluntary Reduction.

The Corporation, at its option, from time to time may reduce the Conversion Price by any amount for any period of time if the period is at least 20 days and if the reduction is irrevocable during the period.

Whenever the Conversion Price is reduced, the Corporation shall mail to Debentureholders a notice of the reduction. The Corporation shall mail the notice at least 15 days before the date that the reduced Conversion Price takes effect. The notice shall state the reduced Conversion Price and the period it will be in effect.

A reduction of the Conversion Price does not change or adjust the Conversion Price otherwise in effect for purposes of Sections 11.06 through 11.08.

Section 11.14. Notice of Certain Transactions.

If:

- (1) the Corporation takes any action that would require an adjustment in the Conversion Price pursuant to Section 11.06, 11.07 or 11.08 and if the Corporation does not allow Debentureholders to participate pursuant to Section 11.11;
- (2) the Corporation takes any action that would require a supplemental indenture pursuant to Section 11.15; or
- (3) there is a liquidation or dissolution of the Corporation,

the Corporation shall cause to be filed with the Trustee and Conversion Agent and shall mail to Debentureholders a notice stating the proposed record date (or other applicable determination date) for a dividend or distribution or the proposed effective date of a subdivision, combination, reclassification, consolidation, merger, transfer, lease, liquidation or dissolution and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange

their shares of Common Stock for securities or other property deliverable in connection with such transaction. The Corporation shall mail the notice at least 20 days before such date. Failure to mail the notice or any defect in it shall not affect the validity of the transaction.

Section 11.15. Reorganization of Corporation.

If the Corporation is a party to a transaction subject to Section 6.01 or a merger which reclassifies or changes its outstanding Common Stock, the person obligated to deliver securities, cash or other assets upon conversion of Debentures shall enter into a supplemental indenture. If the issuer of securities deliverable upon conversion of Debentures is an Affiliate of the surviving, transferee or lessee corporation, that issuer shall join in the supplemental indenture.

The supplemental indenture shall provide that the Holder of a Debenture may convert it into the kind and amount of securities, cash or other assets which he would have owned immediately after the consolidation, merger, transfer or lease if he had converted the Debenture immediately before the effective date of the transaction. The supplemental indenture shall provide for adjustments which shall be as nearly equivalent as may be practical to the adjustments provided for in this Article. The surviving transferee or lessee Corporation shall mail to Debentureholders a notice briefly describing the supplemental indenture.

If this Section applies, Section 11.06 does not apply.

Section 11.16. Corporation Determination Final.

Any determination that the Corporation or the Board of Directors must make pursuant to Section 11.03, 11.06, 11.07, 11.08, 11.09 or 11.11 is conclusive.

Section 11.17. Trustee's Disclaimer.

The Trustee has no duty to determine when an adjustment under this Article should be made, how it should be made or what it should be. The Trustee has no duty to determine whether any provisions of a supplemental indenture under Section 11.15 are correct. The Trustee makes no representation as to the validity or value of any securities or assets issued upon conversion of Debentures. The Trustee shall not be responsible for the Corporation's failure to comply with this Article. Each Conversion Agent other than the Corporation shall have the same protection under this Section as the Trustee.

ARTICLE 12 MISCELLANEOUS

Section 12.01. Trust Indenture Act Controls.

If any provision of this Indenture limits, qualifies, or conflicts with another provision which is required to be included in this Indenture by the TIA, the required provision shall control.

Section 12.02. Notice.

Any notice or communication by the Corporation or the Trustee to the other is duly given if in writing and delivered in person or mailed by first-class mail addressed as follows:

if to the Corporation:

NORTHWEST NATURAL GAS COMPANY
One Pacific Square
220 N.W. Second Avenue
Portland, Oregon 97209
Attn: Secretary

if to the Trustee:

CENTERRE TRUST COMPANY OF ST. LOUIS
510 Locust Street
St. Louis, Missouri 63101
Attn: Corporate Trust Division

The Corporation or the Trustee by notice to the other may designate additional or different addresses for subsequent notices or communications.

Any notice or communication to a Debentureholder shall be mailed by first-class mail to his address shown on the register kept by the Registrar. Failure to mail a notice or communication to a Debentureholder or any defect in it shall not affect its sufficiency with respect to other Debentureholders.

If a notice or communication is mailed in the manner provided above within the time prescribed, it is duly given, whether or not the addressee receives it.

If the Corporation mails a notice or communication to Debentureholders, it shall mail a copy to the Trustee and each Agent at the same time.

All notices or communications shall be in writing except as set forth below.

In case by reason of the suspension of regular mail service, or by reason of any other cause, it shall be impossible to mail any notice required by this Indenture, then such method of notification as shall be made with the approval of the Trustee shall constitute a sufficient mailing of such notice.

Section 12.03. Communication by Holders with Other Holders.

Debentureholders may communicate pursuant to TIA §312(b) with other Debentureholders with respect to their rights under this Indenture or the Debenture. The Corporation, the Trustee, the Registrar and anyone else shall have the protection of TIA §312(c).

Section 12.04. Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Corporation to the Trustee to take any action under this Indenture, the Corporation shall furnish to the Trustee:

- (1) an Officers' Certificate stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and
- (2) an Opinion of Counsel stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

Section 12.05. Statements Required in Certificate or Opinion.

Each Officers' Certificate or Opinion of Counsel with respect to compliance with a condition or covenant provided for in this Indenture shall include:

- (1) a statement that the person making such Officers' Certificate or Opinion of Counsel has read such covenant or condition;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such Officers' Certificate or Opinion of Counsel are based;
- (3) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and

- (4) a statement as to whether or not, in the opinion of such person, such condition or covenant has been complied with.

Section 12.06. Rules by Trustee and Agents.

The Trustee may make reasonable rules for action by or a meeting of Debentureholders. The Registrar, Paying Agent or Conversion Agent may make reasonable rules and set reasonable requirements for its functions.

Section 12.07. Legal Holidays.

A "Legal Holiday" is a Saturday, a Sunday, or a day on which banking institutions in the relevant jurisdiction are not required to be open. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period.

Section 12.08. No Recourse Against Others.

No liability under the Debentures shall inure to any director, officer, employee or stockholders, as such, of the Corporation and each Debentureholder, by accepting the Debenture, waives and releases all such liability.

Section 12.09. Duplicate Originals.

The parties may sign any number of copies of this Indenture. One signed copy is enough to prove this Indenture.

Section 12.10. Governing Law.

The laws of the State of Oregon shall govern this Indenture and the Debenture.

Section 12.11. Table of Contents, Headings, etc.

The table of contents, cross-reference sheet and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be

considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

SIGNATURES

Dated: January 15, 1987

NORTHWEST NATURAL GAS COMPANY
("Corporation")

(SEAL)

By: Wesley E. Radford
Its Vice President & Treasurer

Attest: C. J. Rue
Its Secretary

Dated: January 15, 1987

CENTERRE TRUST COMPANY OF ST. LOUIS
("Trustee")

(SEAL)

By: J. Rector
Its Assistant Treasurer

Attest: H. Whelan
Its Assistant Secretary

EXHIBIT A
(Face of Debenture)

NORTHWEST NATURAL GAS COMPANY

7-1/4% Convertible Debenture due 2012

No. _____ \$ _____

NORTHWEST NATURAL GAS COMPANY, an Oregon corporation for value received, hereby promises to pay to _____, or registered assigns the principal sum of _____ DOLLARS on March 1, 2012, and to pay interest on said principal sum at the rate of 7-1/4% per annum calculated on the basis of a 360-day year of twelve 30-day months.

The interest so payable on any interest payment date will, subject to certain exceptions provided in the Indenture hereafter referred to, be paid to the person in whose name this Debenture is registered at the close of business (whether or not a business day) on the following respective record date, as the case may be, next preceding such interest payment date.

Interest Payment Dates: March 1 and September 1.

Record Dates: February 15 and August 15.

ADDITIONAL PROVISIONS OF THIS DEBENTURE ARE SET FORTH ON THE REVERSE HEREOF.

Dated:

NORTHWEST NATURAL GAS COMPANY

By: _____
Its President

(SEAL)

ATTEST:

By: _____
Its Secretary

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This Debenture is one of the Debentures provided for
in the within-mentioned Indenture.

CENTERRE TRUST COMPANY OF
ST. LOUIS, as Trustee

By: _____
Authorized Signature

(Back of Debenture)

NORTHWEST NATURAL GAS COMPANY
7-1/4% Convertible Debenture due 2012

1. Interest.

NORTHWEST NATURAL GAS COMPANY ("Corporation"), an Oregon corporation, promises to pay interest on the principal amount of this Debenture at the rate per annum shown above. The Corporation will pay interest semi-annually on March 1 and September 1, of each year, commencing September 1, 1987. Interest on this Debenture will accrue from the most recent date to which interest has been paid, or, if no interest has been paid previously, from the date of original issuance of this Debenture; provided that, if there is no existing default in the payment of interest, and if this Debenture is authenticated between a record date referred to on the face hereof and the next succeeding interest payment date, interest shall accrue from the next interest payment date.

2. Method of Payment.

The Corporation will pay interest on the Debentures (except defaulted interest) to the persons who are registered holders of Debentures at the close of business on the record date next preceding the interest payment date. The Corporation will pay interest to such holders on the next interest payment date even though Debentures are cancelled after the record date but on or before the interest payment date. Holders must surrender Debentures to a Paying Agent to collect principal payments. The Corporation will pay principal and interest in money of the United States that at the time of payment is legal tender for payment of public and private debts. However, the Corporation may pay principal and interest by check payable in such money. Payment of principal will be made at the offices of the Trustee. The Corporation may mail an interest check to a holder's registered address.

3. Paying Agent, Registrar, Conversion Agent.

Initially, Centerre Trust Company of St. Louis ("Trustee"), 510 Locust Street, St. Louis, Missouri, 63101, will act as Paying Agent, Registrar and Conversion Agent. The Corporation may change any Paying Agent, Registrar, Conversion Agent or Co-Registrar without notice. The Corporation or any of its Subsidiaries may act in any such capacity.

4. Indenture.

The Corporation issued the Debentures under an Indenture dated as of January 15, 1987 ("Indenture"), between the

Corporation and the Trustee. The terms of the Debenture include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939 (15 U.S.C. §§77aaa-77bbb) as in effect on the date of the Indenture. The Debentures are subject to all such terms, and Debentureholders are referred to the Indenture and the Act for a statement of such terms. The Debentures are unsecured general obligations of the Corporation limited to \$15,000,000 in the aggregate principal amount.

5. Redemption at Corporation's Option.

The Corporation may, at its option, at any time on or after March 1, 1988, redeem all the Debentures or some of them from time to time after issuance at the following redemption prices (expressed in percentages of principal amount of the Debenture) plus unpaid accrued interest to the redemption date.

If redeemed during the 12-month period beginning March 1:

<u>Year</u>	<u>Percentage</u>	<u>Year</u>	<u>Percentage</u>
1988	106.0	1995	102.5
1989	105.5	1996	102.0
1990	105.0	1997	101.5
1991	104.5	1998	101.0
1992	104.0	1999	100.5
1993	103.5	2000 until	100.0
1994	103.0	stated maturity	

6. Notice of Redemption.

Notice of redemption at the Corporation's option will be mailed at least 30 days but not more than 60 days before the redemption date to each holder of Debentures to be redeemed at his registered address as set forth in the register. Debentures in denominations larger than \$1,000 may be redeemed in part but only in integral multiples of \$1,000. On and after the redemption date (if there is no default in the payment of the redemption price by the Corporation), interest ceases to accrue on Debentures or portions thereof called for redemption.

7. Redemption Upon Death of Debentureholder or Beneficial Owner.

The Corporation will redeem a Debenture or a portion of a Debenture (in the principal amount of \$1,000 or integral multiples thereof) within 60 days following receipt by the Trustee of a request therefor from a Qualified Institution on behalf of a deceased beneficial owner or a deceased Debentureholder's personal representative, or surviving joint tenant, tenant by the entirety or tenant in common, subject to the limitations that the Corporation will not be obligated to redeem during any twelve-month period ending on any March 1:

(1) Debentures presented on behalf of any deceased beneficial owner or deceased Debentureholder exceeding an aggregate principal amount of \$25,000 or (2) Debentures presented by all deceased beneficial owners and deceased Debentureholders exceeding \$600,000 in aggregate principal amount. If the Corporation, although not obligated to do so, chooses to redeem Debentures of any deceased beneficial owner or deceased Debentureholder in any such twelve-month period in excess of the \$25,000 limitation, such redemption, to the extent that it exceeds the \$25,000 limitation for any deceased beneficial owner or deceased Debentureholder shall not be included in the computation of the \$600,000 limitation for such period or any succeeding period.

Debentures presented on behalf of a deceased beneficial owner or a deceased Debentureholder will be redeemed in the order of their receipt by the Trustee. Debentures presented on behalf of a deceased beneficial owner or a deceased Debentureholder not redeemed in a period because of the \$25,000 or \$600,000 limitations will be held for redemption during the following twelve-month period(s) until redeemed, unless sooner withdrawn by the person presenting the Debenture for redemption.

8. Redemption Procedure.

Debentures may be presented for redemption on behalf of a deceased beneficial owner or a deceased Debentureholder by delivering to the Trustee: (1) a written request for redemption signed by an authorized officer of a Qualified Institution holding such Debenture on behalf of such deceased Debentureholder or by such deceased Debentureholder's personal representatives or surviving joint tenant, or tenant by the entirety, or tenant in common, (2) the Debenture to be redeemed, and (3) appropriate evidence of death and, if the request is made by a personal representative of a deceased Debentureholder, appropriate evidence of authority. No particular forms of request for redemption or evidence of death or authority to request redemption are required but each must be in a form satisfactory to the Trustee. The price to be paid by the Corporation for all Debentures presented to it pursuant to the provisions described in this paragraph is 100% of the principal amount thereof plus accrued unpaid interest to the date of payment. Any acquisition of Debentures by the Corporation or its Subsidiaries in excess of the limitations described herein or made on the open market shall not be included in the computation of either the \$25,000 or \$600,000 limitations for any period.

For purposes of this paragraph, a Debenture held in joint tenancy, tenancy by the entirety, or tenancy in common will be deemed to be held by a single Debentureholder and the death of a joint tenant, tenant by the entirety or tenant in common will be deemed to be the death of a Debentureholder. The death of a person, who, during his lifetime, was entitled

to substantially all of the beneficial ownership interest of a Debenture will be deemed the death of the Debentureholder, regardless of the registered Debentureholder, if such beneficial interest can be established to the satisfaction of the Trustee. Such beneficial interest shall be deemed to exist in typical cases of street name or nominee ownership, ownership under the Uniform Gifts to Minors Act, community property or other joint ownership arrangements between a husband and wife (including individual retirement accounts or Keogh [H.R. 10] plans maintained solely by or for the decedent, or by or for the decedent and his or her spouse), and trust and certain other arrangements where one person has substantially all of the beneficial ownership interest in the Debenture during his lifetime. Beneficial interest shall include the power to sell, transfer or otherwise dispose of a Debenture and the right to receive the proceeds therefrom, as well as interest and principal payable with respect thereto.

In the case of a Debenture presented for redemption by a Qualified Institution (as such term is defined in the Indenture), on behalf of deceased beneficial owners, the \$25,000 limitation shall apply to each such beneficial owner and the death of such beneficial owner shall entitle a Qualified Institution to seek redemption of such Debentures as if the deceased beneficial owner were the Debentureholder. A Qualified Institution, in its request for redemption on behalf of such beneficial owners, must submit evidence, satisfactory to the Trustee, that it holds Debentures on behalf of such beneficial owners and must certify that the aggregate requests for redemption tendered by such Qualified Institution on behalf of each such beneficial owner in any such twelve-month period does not exceed \$25,000. In addition, any request for redemption made by a Qualified Institution on behalf of a beneficial owner must be delivered to the Trustee by registered mail, return receipt requested.

In the case of a Debenture which is presented for redemption in part only, upon such redemption, the Corporation shall execute and the Trustee shall authenticate and deliver to, or on order of, the presenting person a new Debenture in the principal amount equal to the unredeemed portion of the principal of the Debenture so presented.

In the case of any Debenture which is presented for redemption pursuant to this paragraph and which has not been redeemed at the time the Corporation gives notice of its election to redeem Debentures pursuant to paragraph 5, such Debenture shall first be subject to redemption pursuant to paragraph 5 and if any such Debenture or portion thereof is not redeemed pursuant to paragraph 5 it shall remain subject to redemption pursuant to this paragraph.

Any Debenture presented for redemption upon the death of the Debentureholder or beneficial owner thereof may be withdrawn by the person presenting the same upon delivery of a written request for such withdrawal given to the Trustee prior to issuance of the check in redemption of the Debenture.

9. Conversion.

A holder of a Debenture may convert it into Common Stock of the Corporation at any time before the close of business on March 1, 2012. If the Debenture is called for redemption, the holder may convert the Debenture at any time before the close of business on the redemption date. The initial conversion price is \$29.85 per share, subject to adjustments due to certain events set forth in the Indenture. The number of shares of Common Stock issuable upon conversion of a Debenture is determined by dividing the principal amount to be converted by the conversion price in effect on the conversion date. On conversion, no payment or adjustment for interest will be made. The Corporation will issue a check in lieu of the issuance of a fraction of a share.

To convert a Debenture, a holder must (1) complete and sign the conversion notice on the back of the Debenture, (2) surrender the Debenture to the Conversion Agent, (3) furnish appropriate endorsements and transfer documents if required by the Registrar and the Conversion Agent, and (4) pay any transfer or similar tax if required. A holder may convert a portion of a Debenture if the portion is \$1,000 or an integral multiple thereof.

The conversion price will be adjusted for dividends or distributions on Common Stock payable in the Corporation's stock; subdivisions, combinations and certain reclassifications of Common Stock; distributions to all holders of Common Stock of certain rights to purchase Common Stock at less than the then current market value; and distributions to such holders of assets or debt securities of the Corporation or certain rights to purchase securities of the Corporation (excluding cash dividends or distributions from current or retained earnings). However, (1) no adjustment will be made unless the cumulative effect on the conversion price of all such dividends, distributions, subdivisions, combinations and reclassifications shall exceed 1% or the cumulative effect of all such distributions shall exceed 5%, and (2) no adjustment need be made if holders may participate in the transaction or in certain other cases set forth in the Indenture. The Corporation may, from time to time, voluntarily reduce the conversion price for a period of time.

If the Corporation is a party to a consolidation or merger or a transfer or lease of all or substantially all of its assets, the right to convert a Debenture into Common Stock

may be changed into a right to convert the Debenture into securities, cash or other assets of the Corporation or another corporation.

10. Denominations, Transfer, Exchange.

The Debentures are in registered form without coupons in denominations of \$1,000 and integral multiples thereof. The transfer of Debentures may be registered and Debentures may be exchanged as provided in the Indenture. The Registrar may require a holder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Indenture. The Registrar need not exchange or register the transfer of any Debenture or portion of a Debenture selected for redemption. Also, it need not exchange or register the transfer of any Debentures for a period of 15 days before a selection of Debentures to be redeemed.

11. Persons Deemed Owners.

The registered holder of a Debenture may be treated as its owner for all purposes.

12. Amendments, Supplements and Waivers.

Subject to certain exceptions, the Indenture or the Debenture may be amended or supplemented, and any existing default may be waived, with the consent of holders of a majority in principal amount of the Debentures then outstanding. Without the consent of any Debentureholder, the Indenture or the Debentures may be amended to cure any ambiguity, defect or inconsistency, to provide for assumption of the Corporation's obligations to Debentureholders or to make any change that does not adversely affect the rights of any Debentureholder.

13. Defaults and Remedies.

The principal hereof may be declared due prior to the maturity date hereinbefore named upon the occurrence of an Event of Default as the Indenture provides.

An Event of Default is: default for 30 days in payment of interest on the Debentures; default in payment of principal on the Debentures; failure by the Corporation for 90 days after notice to it to comply with any of its other agreements in the Indenture or the Debentures; default in the payment of indebtedness having an outstanding principal balance of \$10,000,000 or more under certain circumstances; and certain events of bankruptcy or insolvency. If an Event of Default occurs and is continuing, the Trustee or the holders of at least 25% in principal amount of the Debentures may declare all

the Debentures to be due and payable immediately. Debentureholders may not enforce the Indenture or the Debentures except as provided in the Indenture. The Trustee may require indemnity satisfactory to it before it enforces the Indenture or the Debenture. Subject to certain limitations, holders of a majority in principal amount of the Debentures may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Debentureholders notice of any continuing default (except a default in payment of principal or interest) if it determines that withholding notice is in their interests. The Corporation must furnish an annual compliance certificate to the Trustee.

14. Trustee Dealings with Corporation.

Centerre Trust Company of St. Louis, the Trustee under the Indenture, in its individual or any other capacity, may make loans to, accept deposits from, and perform services for the Corporation or its Affiliates, and may otherwise deal with the Corporation or its Affiliates, as if it were not the Trustee.

15. No Recourse Against Others.

A director, officer, employee or stockholder, as such, of the Corporation shall not have any liability for any obligations of the Corporation under the Debenture or the Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. Each Debentureholder by accepting a Debenture waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Debentures.

16. Authentication.

This Debenture shall not be valid until authenticated by the manual signature of the Trustee or an authenticating agent.

17. Abbreviations.

Customary abbreviations may be used in the name of a Debentureholder or an assignee, such as TEN COM (= tenants in common), TEN ENT (= tenants by the entireties), JT TEN (= joint tenants with right of survivorship and not as tenants in common), CUST (= Custodian), and U/G/M/A (= Uniform Gifts to Minors Act).

The Corporation will furnish to any Debentureholder upon written request and without charge a copy of the Indenture, which has in it the text of this Debenture in larger type. Requests may be made to: Corporate Secretary, NORTHWEST NATURAL GAS COMPANY, One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209.

ASSIGNMENT FORM

I/We assign and transfer this Debenture to
[_____]
(Insert assignee's social security or tax I.D. number)

(Print or type name, address and zip code of assignee)

and irrevocably appoint _____ agent to transfer this Debenture on the books of the Corporation. The agent may substitute another to act for him.

Date: _____

Signature _____
(Sign exactly as your name appears on the other side of this Debenture)

CONVERSION NOTICE

I/We convert \$ _____ in principal amount of the Debenture(s) into Common Stock of the Corporation at the current conversion price.

I/We request that the stock certificate be prepared in the same manner as is this Debenture or, alternatively, in the name of the person specified below:

[_____]
(Insert other person's social security or tax I. D. number)

(Print or type name, address and zip code of other person)

Date: _____

Signature _____
(Sign exactly as your name appears on the front side of this Debenture)

EXECUTED IN 40 COUNTERPARTS OF
WHICH THIS IS COUNTERPART NO. 36

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

SIXTEENTH SUPPLEMENTAL INDENTURE

providing among other things for
First Mortgage Bonds, 9.80% Series due 2018

Dated as of November 1, 1988

SIXTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of November, 1988, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Sixteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Sixteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

-2-

February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture) and its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture); and

WHEREAS said First through Fourteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Sixteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture); and

WHEREAS said Fifteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	July 3, 1986	M-78662-86	-
Clackamas	July 7, 1986	86 24733	-
Clatsop	July 3, 1986	658	288
Columbia	July 3, 1986	197	114
Coos	July 7, 1986	86-3-2413	-
Douglas	July 3, 1986	951	551
Hood River	July 3, 1986	861198	-
Lane	July 21, 1986	1411R (#8627177)	-
Lincoln	July 7, 1986	172	809
Linn	July 3, 1986	414	743
Marion	July 3, 1986	472	468
Multnomah	July 3, 1986	1918	305
Polk	July 3, 1986	195	731
Tillamook	July 3, 1986	304	575
Wasco	July 3, 1986	861538	-
Washington	July 3, 1986	86028953	-
Yamhill	July 7, 1986	204	1510

Filed as a Financing Statement

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

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	July 3, 1986	399	1
Klickitat	July 3, 1986	138	112
Skamania	July 3, 1986	101	752

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 3, 1986	86-188-0036

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
4-3/4% Series due 1989.....	\$ 4,200,000
5-3/4% Series due 1991.....	\$ 9,765,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$12,951,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	None
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$50,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First

-5-

Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Sixteenth Supplemental Indenture, and the terms of the bonds of the Seventeenth Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

-6-

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat

-7-

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

-8-

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

-9-

in the Mortgage, as heretofore supplemented, this Sixteenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Seventeenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9.80% Series due 2018" (herein sometimes referred to as the "Seventeenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Article I and in Articles II and III specified. Bonds of the Seventeenth Series shall be limited to \$25,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on November 1, 2018, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Seventeenth Series shall bear interest at the rate of 9.80% per annum, the first interest payment to be made May 1, 1989 for the period from the date of first authentication by the Corporate Trustee of bonds of the Seventeenth Series to May 1, 1989, with subsequent interest payments to be made semi-annually on November 1 and May 1 of each year; and the principal of, premium, if any, and interest on each

-10-

said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Seventeenth Series shall be dated as in Section 10 of the Mortgage provided.

Interest on bonds of the Seventeenth Series will also be payable on any interest payment date by electronic funds transfer to the account of any holder of bonds of said series in the aggregate principal amount of \$1,000,000 or more at a commercial bank located in the United States; provided that such bondholder requests electronic funds transfer and provides the Corporate Trustee with wire transfer instructions no later than ten days prior to such interest payment date.

Notice shall be given by or on behalf of the Company by first class mail, not less than thirty (30) days nor more than forty-five (45) days before the maturity date of the bonds of the Seventeenth Series, of such maturity date. Such notice shall be sent to each bondholder at his address appearing upon the registry books.

Bonds of the Seventeenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending October 31,

1989.....105.00%	1999.....102.00%	2009.....100.00%
1990.....105.00%	2000.....101.50%	2010.....100.00%
1991.....105.00%	2001.....101.00%	2011.....100.00%
1992.....105.00%	2002.....100.50%	2012.....100.00%
1993.....105.00%	2003.....100.50%	2013.....100.00%
1994.....104.50%	2004.....100.00%	2014.....100.00%
1995.....104.00%	2005.....100.00%	2015.....100.00%
1996.....103.50%	2006.....100.00%	2016.....100.00%
1997.....103.00%	2007.....100.00%	2017.....100.00%
1998.....102.50%	2008.....100.00%	2018.....100.00%

-11-

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Seventeenth Series may be redeemed at said general redemption prices prior to November 1, 1993, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 10.29% per annum.

Bonds of the Seventeenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Seventh, Eighth or Tenth Series remain Outstanding) or with the Proceeds of Released Property, at the following special redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending October 31,

1989.....100.00%	1999.....100.00%	2009.....100.00%
1990.....100.00%	2000.....100.00%	2010.....100.00%
1991.....100.00%	2001.....100.00%	2011.....100.00%
1992.....100.00%	2002.....100.00%	2012.....100.00%
1993.....100.00%	2003.....100.00%	2013.....100.00%
1994.....100.00%	2004.....100.00%	2014.....100.00%
1995.....100.00%	2005.....100.00%	2015.....100.00%
1996.....100.00%	2006.....100.00%	2016.....100.00%
1997.....100.00%	2007.....100.00%	2017.....100.00%
1998.....100.00%	2008.....100.00%	2018.....100.00%

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

ARTICLE II.

Redemption of Bonds of the Seventeenth Series upon Death of the Bondholder or Beneficial Owner.

SECTION 2.01. The Company shall redeem any bond of the Seventeenth Series, or a portion of a bond (in the principal amount of \$1,000 or integral multiples thereof), within sixty (60) days following receipt by the Corporate

-12-

Trustee of a request therefor, in accordance with Section 2.02, (A) from a bank, trust company or broker-dealer, which represents in writing that it is a member of a national securities exchange or the National Association of Securities Dealers, Inc. (each hereinafter referred to as a "Qualified Institution"), holding such bond for a deceased beneficial owner, (B) from a registered holder of a bond (other than a Qualified Institution) holding such bond for a deceased beneficial owner or (C) from a deceased bondholder's personal representative, surviving joint tenant, tenant by the entirety or tenant in common, subject to the limitations that the Company shall not be obligated to redeem during any twelve-month period ending on any October 31: (i) the portion of a bond or bonds presented on behalf of a deceased beneficial owner or deceased bondholder exceeding an aggregate principal amount of \$25,000 or (ii) bonds presented on behalf of all deceased beneficial owners and deceased bondholders exceeding \$1,000,000 in aggregate principal amount. If the Company, although not obligated to do so, chooses to redeem a portion of a bond or bonds of any deceased beneficial owner or deceased bondholder in any such twelve-month period in excess of the \$25,000 limitation, such redemption, to the extent that it exceeds such \$25,000 limitation, shall not be included in the computation of the \$1,000,000 limitation for such period or any succeeding period or the \$25,000 limitation for any succeeding period. Any acquisition of bonds by the Company, other than by redemption upon the death of a beneficial owner or bondholder pursuant to this Article II, shall not be included in the computation of either the \$25,000 or the \$1,000,000 limitation for any period.

SECTION 2.02. Bonds of the Seventeenth Series which are to be redeemed pursuant to this Article II shall be redeemed in accordance with the provisions set forth in this Article II, notwithstanding anything to the contrary in the Mortgage; provided, however, that the provisions of Section 56 of the Mortgage shall apply to bonds redeemed pursuant to this Article II. Bonds shall be redeemed in the order of their receipt by the Corporate Trustee, except as hereinafter provided. Any bond or portion thereof not redeemed in any such twelve-month period because of the \$25,000 or \$1,000,000 limitation shall be held in order of receipt for redemption during the following twelve-month period(s) until redeemed unless sooner withdrawn in accordance with Section 2.03.

Bonds may be presented on behalf of a deceased beneficial owner or a deceased bondholder for redemption by delivering to the Corporate Trustee: (1) a written

-13-

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-

-14-

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.

-15-

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.

-16-

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.

-17-

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 23rd day of November, 1988, as of November 1, 1988, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 28th day of November, 1988, as of November 1, 1988.

NORTHWEST NATURAL GAS COMPANY

By *Bruce R. DeBarr*
Senior Vice President,
Finance and Administration

Attest:

Virginia Maloney
Assistant Secretary

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

Susan R. Beauchamp

Leslie K. Aldrin

BANKERS TRUST COMPANY, as Trustee,

By *Barbara A. Green*
Assistant Vice President

Attest:

Wala Feller
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

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

E. Richard Contant
Eric M. Hawner

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

November 23, A.D. 1988.

Before me personally appeared ^{Senior} BRUCE R. DEBOLT, who, being duly sworn, did say that he is Vice President, Finance and Administration, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

^{Senior} On this 23rd day of November, 1988, before me personally appeared BRUCE R. DEBOLT, to me known to be Vice President, Finance and Administration of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Delores J. Thrasher
DELORES J. THRASHER
Notary Public, State of Oregon
My Commission Expires October 8, 1989

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

November 28, A.D. 1988.

Before me personally appeared BARBARA A. JOINER, who, being duly sworn, did say that she is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and she acknowledged said instrument to be its voluntary act and deed.

On this 28th day of November, 1988, before me personally appeared BARBARA A. JOINER, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



DESIREE MARSHALL

Notary Public, State of New York

No. 24-4885294

Qualified in Kings County

Certificate Filed in New York County

Commission Expires February 17, 1989

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

November 28, A.D. 1988.

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 28th day of November, 1988.



DESIREE MARSHALL
Notary Public, State of New York
No. 24-4885294
Qualified in Kings County
Certificate Filed in New York County
Commission Expires February 17, 1989

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

SEVENTEENTH SUPPLEMENTAL INDENTURE

providing among other things for
First Mortgage Bonds, 9 1/8% Series due 2019

Dated as of October 1, 1989

SEVENTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of October, 1989, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Seventeenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Seventeenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

-2-

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:

-3-

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	December 1, 1988	M-106910-88	-
Clackamas	December 1, 1988	88 50344	-
Clatsop	December 1, 1988	707	470
Columbia	December 1, 1988	88-6204	-
Coos	December 2, 1988	88-12-0109	-
Douglas	December 2, 1988	1042	119
Hood River	December 2, 1988	882808	-
Lane	December 1, 1988	1546R (8850420)	-
Lincoln	December 1, 1988	199	0823
Linn	December 1, 1988	487	472
Marion	December 2, 1988	659	370
Multnomah	December 2, 1988	2160	667
Polk	December 1, 1988	218	448
Tillamook	December 1, 1988	318	943
Wasco	December 1, 1988	883474	-
Washington	December 2, 1988	88-53799	-
Yamhill	December 1, 1988	F228PO068	-

Filed as a Financing Statement

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

WASHINGTON

Real Property Mortgage Records

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

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	December 2, 1988	88-337-0063

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
4-3/4% Series due 1989.....	None
5-3/4% Series due 1991.....	\$ 9,518,000
9-3/8% Series due 1974.....	None
8-5/8% Series due 1996.....	\$11,739,000
12 % Series due 1984.....	None
10-1/2% Series due 1986.....	None
14-3/4% Series due 1989.....	None
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$48,000,000
9.80% Series due 2018.....	\$24,989,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First

-5-

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;

-6-

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

-7-

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

-8-

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

-9-

in the Mortgage, as heretofore supplemented, this Seventeenth Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Eighteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9 1/8% Series due 2019" (herein sometimes referred to as the "Eighteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Article I and in Article II specified. Bonds of the Eighteenth Series shall be limited to \$25,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on October 1, 2019, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Eighteenth Series shall bear interest at the rate of 9 1/8% per annum, payable semi-annually on April 1 and October 1 of each year; and the principal of, and premium, if any, and interest on each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for

-10-

public and private debts. Bonds of the Eighteenth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Eighteenth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following general redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

GENERAL REDEMPTION PRICES

If redeemed during the 12 months period ending September 30,

1990.....108.43%	2000.....104.22%	2010..... 100.00%
1991.....108.01%	2001.....103.80%	2011..... 100.00%
1992.....107.59%	2002.....103.37%	2012..... 100.00%
1993.....107.17%	2003.....102.95%	2013..... 100.00%
1994.....106.74%	2004.....102.53%	2014..... 100.00%
1995.....106.32%	2005.....102.11%	2015..... 100.00%
1996.....105.90%	2006.....101.69%	2016..... 100.00%
1997.....105.48%	2007.....101.27%	2017..... 100.00%
1998.....105.06%	2008.....100.85%	2018..... 100.00%
1999.....104.64%	2009.....100.43%	2019..... 100.00%

in each case, together with accrued interest to the date fixed for redemption; provided, however, that no bonds of the Eighteenth Series may be redeemed at said general redemption prices prior to October 1, 1996, as part of any refunding operation involving, directly or indirectly, the incurring of indebtedness by the Company having a cost (calculated in accordance with acceptable financial practice) lower than 9.24% per annum.

(II) Bonds of the Eighteenth Series shall also be redeemable in whole at any time, or in part from time to time, prior to maturity, upon like notice, by the application (either at the option of the Company or pursuant to the requirements of the Mortgage) of cash deposited with the Corporate Trustee pursuant to the provisions of Section 64 of the Mortgage (so long as any bonds of the Seventh, Eighth or Tenth Series remain Outstanding), or of Section 2 hereof, or with the Proceeds of Released Property; provided, however, that in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof, if the date fixed for such redemption shall be prior to January 1 of the calen-

-11-

dar year in which such deposit of cash shall become due under the provisions of Section 2 hereof, they shall be redeemable at the general redemption prices set forth in subdivision (I) of this Section, together with accrued interest to the date fixed for redemption; and provided further, that

(1) in the case of application of cash deposited with the Corporate Trustee pursuant to the provisions of Section 2 hereof if the date fixed for such redemption shall be on or after January 1 of the calendar year in which such deposit of cash shall become due in accordance with the Total Special Redemption Fund Requirement for said calendar year, or

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

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

SPECIAL REDEMPTION PRICES

If redeemed during the 12 months period ending
September 30,

1990.....100.00%	2000.....100.00%	2010.....100.00%
1991.....100.00%	2001.....100.00%	2011.....100.00%
1992.....100.00%	2002.....100.00%	2012.....100.00%
1993.....100.00%	2003.....100.00%	2013.....100.00%
1994.....100.00%	2004.....100.00%	2014.....100.00%
1995.....100.00%	2005.....100.00%	2015.....100.00%
1996.....100.00%	2006.....100.00%	2016.....100.00%
1997.....100.00%	2007.....100.00%	2017.....100.00%
1998.....100.00%	2008.....100.00%	2018.....100.00%
1999.....100.00%	2009.....100.00%	2019.....100.00%

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

(III) At the option of the registered owner, any bonds of the Eighteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of

-12-

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

-13-

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

-14-

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-

-15-

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

-16-

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.

-17-

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 19th day of October, 1989, as of October 1, 1989, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, all in The City of New York, on the 23rd day of October, 1989, as of October 1, 1989.

NORTHWEST NATURAL GAS COMPANY

[CORPORATE SEAL]

By Bruce R. DeBolt
Senior Vice President,
Finance and Administration

Attest:

C.J. Rue
SecretaryExecuted, sealed and delivered by
NORTHWEST NATURAL GAS COMPANY in
the presence of:Lou-Wayne SteigerLeslie K. Alldrin

BANKERS TRUST COMPANY, as Trustee,

[CORPORATE SEAL]

By Barbara A. Joiner
Vice President

Attest:

Y. Petras Blue
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

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

Todd A. Gasper

Eric M. Hawner

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

-22-

SUMMARY OF RECORDING DATA
IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
12	Benton	October 27, 1989	M-116844-89	-
13	Clackamas	October 30, 1989	89 48562	-
14	Clatsop	October 30, 1989	726	580
15	Columbia	October 27, 1989	89-6310	-
16	Coos	October 31, 1989	89-10-1993	-
17	Douglas	October 27, 1989	1079	129
18	Hood River	October 30, 1989	892994	-
19	Lane	October 27, 1989	8948696	-
20	Lincoln	October 27, 1989	210	0933
21	Linn	October 27, 1989	514	812
22	Marion	October 27, 1989	726	415
23	Multnomah	October 30, 1989	2248	1890
24	Polk	October 27, 1989	227	957
25	Tillamook	October 30, 1989	324	615
26	Wasco	October 27, 1989	893143	-
27	Washington	October 30, 1989	89-52457	-
28	Yamhill	October 31, 1989	F237P1391	-

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
10	Secretary of State	October 27, 1989	N 59689

-23-

IN THE STATE OF WASHINGTON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
30	Clark	October 27, 1989	399	1
31	Klickitat	October 27, 1989	258	214
32	Skamania	October 30, 1989	116	503

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
29	Secretary of State	October 30, 1989	89-303-0651

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

EIGHTEENTH SUPPLEMENTAL INDENTURE

providing among other things for
First Mortgage Bonds, 9 3/4% Series due 2015

Dated as of July 1, 1990

EIGHTEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of July, 1990, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10015 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Eighteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Eighteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

-2-

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:

-3-

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	October 27, 1989	M-116844-89	-
Clackamas	October 30, 1989	89 48562	-
Clatsop	October 30, 1989	726	580
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

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

WASHINGTON

Real Property Mortgage Records

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

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	October 30, 1989	89-303-0651

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. Kennedy as Co-Trustee in succession to said R. G. Page (resigned) under the Mortgage and by J. C. Kennedy accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. Page, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture Stanley Burg accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. Kennedy; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
5-3/4% Series due 1991.....	\$ 9,368,000
8-5/8% Series due 1996.....	\$11,668,000
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$48,000,000
9.80% Series due 2018.....	\$24,989,000
9-1/8% Series due 2019.....	\$25,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Di-

-5-

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

-6-

by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the trans-

-7-

mission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Eighteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus,

-8-

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.

-9-

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Nineteenth Series of Bonds.

SECTION 1.01. There shall be a series of bonds designated "9 3/4% Series due 2015" (herein sometimes referred to as the "Nineteenth Series"), each of which shall also bear the descriptive title First Mortgage Bond, and the form thereof, which shall be established by Resolution of the Board of Directors of the Company, shall contain suitable provisions with respect to the matters hereinafter in this Article I specified. Bonds of the Nineteenth Series shall be limited to \$50,000,000, in aggregate principal amount at any one time Outstanding except as provided in Section 16 of the Mortgage and shall mature on July 1, 2015, and shall be issued as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Nineteenth Series shall bear interest at the rate of 9 3/4% per annum, payable semi-annually on January 1 and July 1 of each year; and the principal of, and premium, if any, and interest on, each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Nineteenth Series shall be dated as in Section 10 of the Mortgage provided.

-10-

(I) Bonds of the Nineteenth Series shall be redeemable on and after July 1, 2000, either at the option of the Company or pursuant to the requirements of the Mortgage including Section 64 thereof, in whole at any time, or in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, at the following redemption prices, expressed in percentages of the principal amount of the bonds to be redeemed:

REDEMPTION PRICES

If redeemed during the 12 months period ending June 30,

2001.....104.63%	2009.....100.93%
2002.....104.17%	2010.....100.47%
2003.....103.70%	2011.....100.00%
2004.....103.24%	2012.....100.00%
2005.....102.78%	2013.....100.00%
2006.....102.32%	2014.....100.00%
2007.....101.85%	2015.....100.00%
2008.....101.39%	

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

(II) At the option of the registered owner, any bonds of the Nineteenth Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Nineteenth Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Nineteenth Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Nineteenth Series.

-11-

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

-12-

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

-13-

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

-14-

(or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost), in the opinion of the signers, of any portion thereof that is Funded Property;"

To amend the first six lines of subdivision (4) of Section 59 of the Mortgage to read as follows:

"(4) an amount in cash, to be held by the Corporate Trustee as part of the Mortgaged and Pledged Property, equivalent to the amount, if any, by which the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost) of the property to be released, as specified in the Engineer's Certificate provided for in subdivision (3) above, exceeds the aggregate of the following items:"

To amend Section 60 of the Mortgage by inserting "(I)" before the word "Unless" in the first line thereof, and by adding the following Subsection (II) after Section 60 (I).

"(II) Unless the Company is in default in the payment of the interest on any bonds then Outstanding hereunder or one or more of the Defaults defined in Section 65 hereof shall have occurred and be continuing, the Company may obtain the release of any of the Mortgaged and Pledged Property which is not Funded Property, except cash then held by the Corporate Trustee (provided, however, that Qualified Lien Bonds deposited with the Corporate Trustee shall not be released except as provided in Article IX hereof and obligations secured by purchase money mortgage deposited with the Corporate Trustee shall not be released except as provided in Section 61 hereof), and the Trustees or the Corporate Trustee shall release all the right, title and interest of the Trustees in and to the same from the Lien hereof upon the application of the Company and receipt by the Corporate Trustee of the following (in lieu of complying with the requirements of Section 59 hereof):

(1) an Officers' Certificate complying with the requirements of Section 121 hereof and describing in reasonable detail the property to be released and requesting such release, and stating:

-15-

(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

-16-

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

-17-

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

-18-

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 Trustee,

[CORPORATE SEAL]

By Barbara A. Joiner
Vice President

Attest:

Rosemary Melendez
Assistant Secretary

Stanley Burg
STANLEY BURG, as Trustee

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

John M. Stuart

Maria Ross

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

-24-

SUMMARY OF RECORDING DATA
IN THE STATE OF OREGON

Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
12	Benton	July 5, 1990	M-124638-90	-
13	Clackamas	July 5, 1990	90 32191	-
14	Clatsop	July 5, 1990	740	116
15	Columbia	July 6, 1990	90-3628	-
16	Coos	July 5, 1990	90-7-0187	-
17	Douglas	July 5, 1990	1103	916
18	Hood River	July 5, 1990	901847	-
19	Lane	July 5, 1990	9031527	-
20	Lincoln	July 5, 1990	218	2391
21	Linn	July 5, 1990	535	950
22	Marion	July 9, 1990	783	40
23	Multnomah	July 5, 1990	2320	0466
24	Polk	July 6, 1990	233	1777
25	Tillamook	July 5, 1990	329	220
26	Wasco	July 5, 1990	902494	-
27	Washington	July 5, 1990	90-35190	-
28	Yamhill	July 6, 1990	F245P0613	-

Filed as a Financing Statement

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

-25-

IN THE STATE OF WASHINGTON
Real Property Mortgage Records

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

File as a Financing Statement

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

[CONFORMED COPY]

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

NINETEENTH SUPPLEMENTAL INDENTURE
providing among other things for
First Mortgage Bonds, designated
Secured Medium-Term Notes, Series A

Dated as of June 1, 1991

NINETEENTH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of June, 1991, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Nineteenth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Nineteenth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of

-2-

February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), and its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture); and

WHEREAS said First through Seventeenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Nineteenth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Eighteenth Supplemental Indenture, dated as of July 1, 1990 (hereinafter called its Eighteenth Supplemental Indenture); and

WHEREAS said Eighteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

-3-

OREGON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	July 5, 1990	M-124638-90	--
Clackamas	July 5, 1990	90 32191	--
Clatsop	July 5, 1990	740	116
Columbia	July 6, 1990	90-3628	--
Coos	July 5, 1990	90-7-0187	--
Douglas	July 5, 1990	1103	916
Hood River	July 5, 1990	901847	--
Lane	July 5, 1990	9031527	--
Lincoln	July 5, 1990	218	2391
Linn	July 5, 1990	535	950
Marion	July 9, 1990	783	40
Multnomah	July 5, 1990	2320	0466
Polk	July 6, 1990	233	1777
Tillamook	July 5, 1990	329	220
Wasco	July 5, 1990	902494	--
Washington	July 5, 1990	90-35190	--
Yamhill	July 6, 1990	F245P0613	--

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	July 10, 1990	P03266

WASHINGTON

Real Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Clark	July 5, 1990	9007050038	
Klickitat	July 5, 1990	264	877
Skamania	July 5, 1990	119	651

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File Number</u>
Secretary of State	July 19, 1990	90-200-0195

; and

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
8-5/8% Series due 1996.....	\$11,658,000
10-1/8% Series due 1995.....	\$15,000,000
10.35% Series due November 1, 1997.....	\$15,000,000
9-3/8% Series due 2011.....	\$46,000,000
9.80% Series due 2018.....	\$24,938,000
9-1/8% Series due 2019.....	\$25,000,000
9-3/4% Series due 2015.....	\$50,000,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Di-

- 5 -

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

-6-

by the Trustees at or before the en sealing and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Bankers Trust Company, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the trans-

- 7 -

mission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Nineteenth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus,

- 8 -

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.

-9-

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

-10-

1 of each year and at maturity (each an interest payment date); and interest on bonds of the Twentieth Series which bear interest at a variable rate shall be payable on the dates which shall be established on the Issue Date with respect to such bonds and set forth in such bonds (each also an interest payment date). Notwithstanding the foregoing, so long as there is no existing default in the payment of interest on the bonds of the Twentieth Series, all bonds of the Twentieth Series authenticated by the Corporate Trustee after the Record Date hereinafter specified for any interest payment date, and prior to such interest payment date (unless the Issue Date is after such Record Date), shall be dated the date of authentication, but shall bear interest from such interest payment date, and the person in whose name any bond of the Twentieth Series is registered at the close of business on any Record Date with respect to any interest payment date shall be entitled to receive the interest payable on such interest payment date, notwithstanding the cancellation of such bond of the Twentieth Series, upon any transfer or exchange thereof subsequent to the Record Date and on or prior to such interest payment date; provided, that, (i) if the Issue Date of bonds of the Twentieth Series of a designated interest rate and maturity is after a Record Date and prior to the corresponding interest payment date, such bonds shall bear interest from the Issue Date but payment of interest shall commence on the second interest payment date succeeding the Issue Date, and (ii) interest payable on the maturity date will be payable to the person to whom the principal thereof shall be payable. "Record Date" for bonds of the Twentieth Series which bear interest at a fixed rate shall mean May 15 for interest payable June 1 and November 15 for interest payable December 1, and for bonds of the Twentieth Series which bear interest at a variable rate, the date 15 calendar days prior to any interest payment date. "Issue Date" with respect to bonds of the Twentieth Series of a designated interest rate and maturity shall mean the date of first authentication of bonds of such designated interest rate and maturity. The principal of, and premium, if any, and interest on, each said bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twentieth Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Twentieth Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage, in whole at any time, or, if specified on the face of any bond of the Twentieth

-11-

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

-12-

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

- 13 -

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 delivered by
NORTHWEST NATURAL GAS COMPANY in
the presence of:

 Susana M. Jordan

 Lou-Wayne Steiger

BANKERS TRUST COMPANY, as Trustee,

By Jerry Olivo, Jr.
Assistant Vice President

Attest:

 Nancy L. Wilson
Assistant Secretary

 Stanley Burg
STANLEY BURG, as Trustee

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

 Eric Hawner

 Shikha Dombek

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

June 10, A.D. 1991.

Before me personally appeared BRUCE R. DEBOLT, who, being duly sworn, did say that he is Senior Vice President and Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 10th day of June, 1991, before me personally appeared BRUCE R. DEBOLT, to me known to be Senior Vice President and Chief Financial Officer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

C.J. Rue
C.J. Rue
Notary Public, State of Oregon
My Commission Expires January 11, 1992

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
Notary Public, State of New York
No. 41-4847807
My Commission Expires May 31, 1993

-18-

IN THE STATE OF OREGON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
5	Benton	June 14, 1991	M-135990-91	--
6	Clackamas	June 14, 1991	91-28344	--
7	Clatsop	June 14, 1991	760	836
8	Columbia	June 14, 1991	91-3499	--
9	Coos	June 14, 1991	91-06-0532	--
10	Douglas	June 14, 1991	1140	373
11	Hood River	June 18, 1991	911493	--
12	Lane	June 17, 1991	9127918	--
13	Lincoln	June 14, 1991	230	2261
14	Linn	June 14, 1991	566	2
15	Marion	June 14, 1991	861	37
16	Multnomah	June 14, 1991	2424	970
17	Polk	June 14, 1991	242	1891
18	Tillamook	June 14, 1991	335	496
19	Wasco	June 14, 1991	912001	--
20	Washington	June 14, 1991	91030895	--
21	Yamhill	June 14, 1991	F255P2185	--

Filed as a Financing Statement

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

-19-

IN THE STATE OF WASHINGTON
Real Property Mortgage Records

<u>Counterpart No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
23	Clark	June 14, 1991	9106140143	--
24	Klickitat	June 14, 1991	273	904
25	Skamania	June 18, 1991	123	757

Filed as a Financing Statement

<u>Counterpart No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
22	Secretary of State	June 17, 1991	91-168-0134

NORTHWEST NATURAL GAS COMPANY

TO

BANKERS TRUST COMPANY

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and
Deed of Trust, dated as of July 1,
1946, of Portland Gas & Coke Company
(now Northwest Natural Gas Company)

TWENTIETH SUPPLEMENTAL INDENTURE
providing, among other things, for
First Mortgage Bonds, designated
Secured Medium-Term Notes, Series B

Dated as of June 1, 1993

-1-

TWENTIETH SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of June, 1993, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), a corporation of the State of Oregon, whose post office address is One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), party of the first part, and BANKERS TRUST COMPANY, a corporation of the State of New York, whose post office address is Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), whose post office address is c/o Bankers Trust Company, Four Albany Street, New York, New York 10006 (hereinafter sometimes called the Co-Trustee), parties of the second part (the Corporate Trustee and the Co-Trustee being hereinafter together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twentieth Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twentieth Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter

-2-

called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture), and its Eighteenth Supplemental Indenture, dated as of July 1, 1990 (hereinafter called its Eighteenth Supplemental Indenture); and

WHEREAS said First through Eighteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twentieth Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Nineteenth Supplemental Indenture, dated as of June 1, 1991 (hereinafter called its Nineteenth Supplemental Indenture); and

WHEREAS said Nineteenth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

-3-

OREGONReal Property Mortgage Records

<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
Benton	June 14, 1991	M-135990-91	--
Clackamas	June 14, 1991	91-28344	--
Clatsop	June 14, 1991	760	836
Columbia	June 14, 1991	91-3499	--
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
Wasco	June 14, 1991	912001	--
Washington	June 14, 1991	91030895	--
Yamhill	June 14, 1991	F255P2185	--

Filed as a Financing Statement

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

-4-

WASHINGTONReal Property Mortgage Records

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

Filed as a Financing Statement

<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
Secretary of State	June 17, 1991	91-168-0134

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to the said R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to said J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, and on the date hereof there remain outstanding, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
8-5/8% Series due 1996.....	\$11,658,000
9-3/8% Series due 2011.....	\$46,000,000
9.80% Series due 2018.....	\$24,938,000
9-1/8% Series due 2019.....	\$25,000,000
9-3/4% Series due 2015.....	\$50,000,000
Secured Medium-Term Notes, Series A.....	\$50,000,000
; and	

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by said Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

-6-

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twentieth Supplemental Indenture, and the terms of the bonds of the Twenty-First Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of said Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the premises and of One Dollar to it duly paid by the Trustees at or before the ensembling and delivery of these presents, the receipt whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the

-7-

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,

-8-

product and profits thereof, and all the estate, right, title and interest and claim whatsoever, at law as well as in equity, which the Company now has or may hereafter acquire in and to the aforementioned property and franchises and every part and parcel thereof.

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Twentieth Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies consumable in the operation of any of the properties of the Company; all aircraft, tractors, rolling stock, trolley coaches, buses, motor coaches, automobiles, motor trucks, and other vehicles and materials and supplies held for the purpose of repairing or replacing (in whole or in part) any of the same; (3) bills, notes and accounts receivable, judgments, demands and choses in action, and all contracts, leases and operating agreements not specifically pledged under the Mortgage, as heretofore supplemented, or covenanted so to be; (4) the last day of the term of any lease or leasehold which may be or become subject to the lien of the Mortgage; (5) gas, petroleum, carbon, chemicals, light oils, tar products, electric energy, steam, water, ice, and other materials or products, manufactured, stored, generated, produced, purchased or acquired by the Company for sale, distribution or use in the ordinary course of its business; all timber, minerals, mineral rights and royalties and all Natural Gas and Oil Production Property, as defined in Section 4 of the Mortgage; and (6) the Company's franchise to be a corporation; provided, however, that the property and rights expressly excepted from the lien and operation of this Twentieth Supplemental Indenture and from the lien and operation of the

-9-

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

-10-

respect to the matters hereinafter in this Article I specified. Bonds of the Twenty-first Series shall be issued from time to time as fully registered bonds in denominations of One Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof); each bond of the Twenty-first Series shall mature on such date, shall bear interest at such rate or rates (which may be either fixed or variable) and have such other terms and provisions not inconsistent with the Mortgage as the Board of Directors may determine in accordance with a Resolution filed with the Corporate Trustee referring to this Twentieth Supplemental Indenture; interest on each bond of the Twenty-first Series which bears interest at either a fixed rate or a variable rate shall be payable on the dates which shall be established prior to the date of first authentication of such bond and set forth in such bond and at maturity (each an interest payment date). Notwithstanding the foregoing, so long as there shall be no existing default in the payment of interest on the bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity, each of such bonds authenticated by the Corporate Trustee after the Record Date for any interest payment date for such bonds, and prior to such interest payment date (unless the Issue Date is after such Record Date), shall be dated the date of authentication, but shall bear interest from such interest payment date, and the person in whose name such bond shall have been registered at the close of business on such Record Date shall be entitled to receive the interest payable on such interest payment date, notwithstanding the cancellation of such bond upon any transfer or exchange thereof subsequent to such Record Date and on or prior to such interest payment date; provided, that, (i) if the Issue Date of bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity shall be after a Record Date and prior to the corresponding interest payment date, such bonds shall bear interest from the Issue Date, but payment of interest shall commence on the second interest payment date succeeding the Issue Date, and (ii) interest payable on the maturity date will be payable to the person to whom the principal thereof shall be payable. "Record Date" for bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity shall mean (A) the date which shall be established prior to the date of first authentication of such bonds and set forth in such bonds, or (B) if no such date shall be established with respect to such bonds, the date 15 calendar days prior to any interest payment date for such bonds. "Issue Date" with respect to bonds of the Twenty-first Series having the same designated interest rate, interest payment dates and maturity shall mean (a) the date which shall be established prior to the date of first authentication of such bonds and set forth in such bonds, or (b) if no such date shall be established with respect to such bonds, the

-11-

date of first authentication of such bonds. The principal of, and premium, if any, and interest on, each bond of the Twenty-first Series shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twenty-first Series shall be dated as in Section 10 of the Mortgage provided.

(I) Bonds of the Twenty-first Series shall be redeemable either at the option of the Company or pursuant to the requirements of the Mortgage, in whole at any time, or, if specified on the face of any bond of the Twenty-first Series, in part from time to time, prior to maturity, upon notice, as provided in Section 52 of the Mortgage, mailed at least thirty (30) days prior to the date fixed for redemption, as the Board of Directors may determine in accordance with a Resolution filed with the Corporate Trustee referring to this Twentieth Supplemental Indenture; provided, however, that bonds of the Twenty-first Series shall not be redeemable pursuant to Section 64 of the Mortgage.

(II) At the option of the registered owner, any bonds of the Twenty-first Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate principal amount of bonds of the same series of other authorized denominations which have the same Issue Date, maturity date, and redemption provisions, if any, and which bear interest at the same rate.

Transfers of bonds of the Twenty-first Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Twenty-first Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Twenty-first Series.

ARTICLE II.

Miscellaneous Provisions.

SECTION 2.0.1. Subject to the amendments provided for in this Twentieth Supplemental Indenture, the terms defined in the

-12-

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

-13-

Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twentieth Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 2.0.6. Except to the extent specifically provided herein, no provision of this Twentieth Supplemental Indenture is intended to reinstate any provisions in the Mortgage which were amended and superseded by the amendments to the Trust Indenture Act of 1939 effective as of November 15, 1990.

SECTION 2.0.7. This Twentieth Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, party hereto of the first part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 14th day of June, 1993, as of June 1, 1993, in Portland, Oregon; Bankers Trust Company, one of the parties hereto of the second part, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by one of its Vice Presidents or one of its Assistant Vice Presidents and its corporate seal to be attested by one of its Assistant Secretaries on the 14th day of June, 1993, as of June 1, 1993, in The City of New York; and Stanley Burg, one of the parties hereto of the second part, has hereunto set his hand and affixed his seal, in The City of New York, on the 14th day of June, 1993, as of June 1, 1993.

NORTHWEST NATURAL GAS COMPANY

By *Bruce R. Williams*
Senior Vice President and
Chief Financial Officer

UG-_____

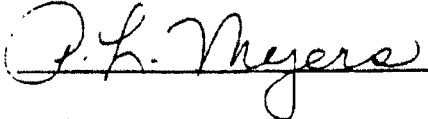
-14-

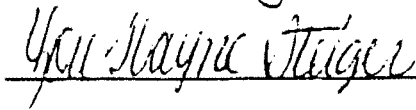
Attest:



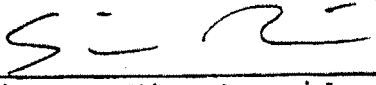
Secretary

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



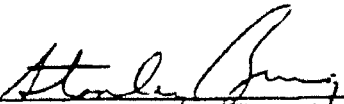


BANKERS TRUST COMPANY, as Trustee,

By 
Assistant Vice President

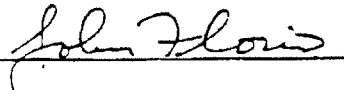
Attest:


Assistant Secretary


STANLEY BURG, as Trustee

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


KENWYN HACKSHAW


JOHN FLORIO

UG-_____

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

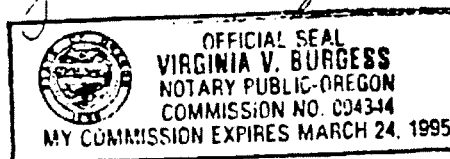
June 14, A.D. 1993.

Before me personally appeared BRUCE R. DEBOLT, who, being duly sworn, did say that he is Senior Vice President and Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 14th day of June, 1993, before me personally appeared BRUCE R. DEBOLT, to me known to be Senior Vice President and Chief Financial Officer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

Virginia V. Burgess



UG-_____

-17-

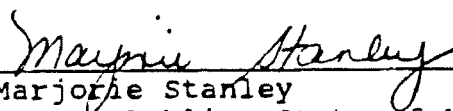
STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

June 14, A.D. 1993.

Before me personally appeared SAMIR PANDIRI, who, being duly sworn, did say that he is an Assistant Vice President of BANKERS TRUST COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 14th day of June, 1993, before me personally appeared SAMIR PANDIRI, to me known to be an Assistant Vice President of BANKERS TRUST COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.



Marjorie Stanley
Notary Public, State of New York
No. 41-4986405
My Commission Expires 9/16/93

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

Marjorie Stanley
Notary Public, State of New York
No. 41-4986405
My Commission Expires 9/16/93

UG-
EX-4.1 2 d431686dex41.htm TWENTY -FIRST SUPPLEMENTAL INDENTURE

Exhibit 4.1

NORTHWEST NATURAL GAS COMPANY

TO

DEUTSCHE BANK TRUST COMPANY AMERICAS
(FORMERLY KNOWN AS BANKERS TRUST COMPANY)

AND

STANLEY BURG (SUCCESSOR TO R. G. PAGE AND J. C. KENNEDY),

As Trustees under the Mortgage and Deed of Trust, dated
as of July 1, 1946, of Portland Gas & Coke
Company (now Northwest Natural Gas Company)

TWENTY-FIRST SUPPLEMENTAL INDENTURE
PROVIDING, AMONG OTHER THINGS, FOR
FIRST MORTGAGE BONDS, 4.00% SERIES DUE 2042

DATED AS OF OCTOBER 15, 2012

TWENTY-FIRST SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 15th day of October, 2012, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), an Oregon corporation, with offices at One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), and DEUTSCHE BANK TRUST COMPANY AMERICAS (formerly known as BANKERS TRUST COMPANY), a New York corporation, with offices at 60 Wall Street, 27th Floor, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee) and STANLEY BURG (successor to R. G. PAGE and J. C. KENNEDY), with offices at c/o Deutsche Bank Trust Company Americas, 60 Wall Street, New York, New York 10005 (hereinafter sometimes called the Co-Trustee) (the Corporate Trustee and the Co-Trustee together sometimes called the Trustees), as Trustees under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twenty-first Supplemental Indenture) being supplemental thereto;

WHEREAS the Mortgage was or is to be recorded in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twenty-first Supplemental Indenture is to be recorded; and

WHEREAS by the Mortgage the Company covenanted that it would execute and deliver such supplemental indenture or indentures and such further instruments and do such further acts as might be necessary or proper to carry out more effectually the purposes of the Mortgage and to make subject to the lien of the Mortgage any property thereafter acquired, made or constructed and intended to be subject to the lien thereof; and

WHEREAS the Company executed and delivered to the Trustees its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth

Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture), its Eighteenth Supplemental Indenture, dated as of July 1, 1990 (hereinafter called its Eighteenth Supplemental Indenture), and its Nineteenth Supplemental Indenture, dated as of June 1, 1991 (hereinafter called its Nineteenth Supplemental Indenture); and

WHEREAS the First through Nineteenth Supplemental Indentures were filed for record, and were recorded and indexed, as a mortgage of both real and personal property, in the official records of various counties in the States of Oregon and Washington which counties include or will include all counties in which this Twenty-first Supplemental Indenture is to be recorded; and

WHEREAS the Company executed and delivered to the Trustees its Twentieth Supplemental Indenture, dated as of June 1, 1993 (hereinafter called its Twentieth Supplemental Indenture); and

WHEREAS said Twentieth Supplemental Indenture was filed for record, and was recorded and indexed, as a mortgage of both real and personal property, and financing statements were filed, in the official records of the several counties and other offices in the States of Oregon and Washington listed below, as follows:

IN THE STATE OF OREGON

Real Property Mortgage Records

<u>No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
11	Benton	June 23, 1993	M-166017-93	-
		June 29, 1993 (re-recorded)	M-166297-93	-
12	Clackamas	June 22, 1993	93-43287	-
13	Clatsop	June 23, 1993	816	534
14	Columbia	June 23, 1993	93-5185	-
15	Coos	June 30, 1993	93061396	-
32	Douglas	June 24, 1993	1241	840
17	Hood River	June 23, 1993	932082	-
18	Lane	June 23, 1993	9338274	-
19	Lincoln	June 23, 1993	263	1293
20	Linn	June 23, 1993	645	804
21	Marion	June 24, 1993	1074	290
22	Multnomah	June 23, 1993	2711	1885
23	Polk	June 25, 1993	270	245
24	Tillamook	June 23, 1993	351	718
25	Wasco	June 23, 1993	932338	-
26	Washington	June 23, 1993	93049394	-
27	Yamhill	June 23, 1993	F288P1700	-

Filed as a Financing Statement

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

IN THE STATE OF WASHINGTONReal Property Mortgage Records

<u>No.</u>	<u>County</u>	<u>Date Recorded</u>	<u>Book, Film or Reel</u>	<u>Page</u>
29	Clark	June 24, 1993	399	1
30	Klickitat	June 23, 1993	297	650
31	Skamania	June 24, 1993	136	172

Filed as a Financing Statement

<u>No.</u>	<u>Office</u>	<u>Date Filed for Record</u>	<u>File No.</u>
28	Secretary of State	June 25, 1993	93-176-0202

WHEREAS an instrument dated as of June 14, 1951, was executed by the Company appointing J. C. KENNEDY as Co-Trustee in succession to said R. G. PAGE (resigned) under the Mortgage and by J. C. KENNEDY accepting the appointment as Co-Trustee under the Mortgage in succession to R. G. PAGE, which instrument was recorded in various counties in the States of Oregon and Washington; and

WHEREAS, in the Ninth Supplemental Indenture STANLEY BURG was appointed by the Company as Co-Trustee under the Mortgage in succession to J. C. KENNEDY (resigned) and in the Ninth Supplemental Indenture STANLEY BURG accepted such appointment as Co-Trustee under the Mortgage in succession to J. C. KENNEDY; and

WHEREAS in addition to the property described in the Mortgage, as heretofore supplemented, the Company has acquired certain other property, rights and interests in property; and

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, and on the date hereof there remain outstanding, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
Secured Medium-Term Notes, Series A	\$ 10,000,000
Secured Medium-Term Notes, Series B	\$ 591,700,000

; and

WHEREAS Section 8 of the Mortgage provides that the form of each series of bonds (other than the First Series) issued thereunder shall be established by Resolution of the Board of Directors of the Company; that the form of such series, as established by the Board of Directors, shall specify the descriptive title of the bonds and various other terms thereof; and that such Series may also contain such provisions not inconsistent with the provisions of the Mortgage as the Board of Directors may, in its discretion, cause to be inserted therein expressing or referring to the terms and conditions upon which such bonds are to be issued and/or secured under the Mortgage; and

WHEREAS Section 120 of the Mortgage provides, among other things, that any power, privilege or right expressly or impliedly reserved to or in any way conferred upon the Company by any provision of the Mortgage, whether such power, privilege or right is in any way restricted or is unrestricted, may (to the extent permitted by law) be in whole or in part waived or surrendered or subjected to any restriction if at the time unrestricted or to additional restriction if already restricted, and the Company may enter into any further covenants, limitations or restrictions for the benefit of any one or more series of bonds issued thereunder, or the Company may cure any ambiguity contained therein or in any supplemental indenture or may (in lieu of establishment by Resolution as provided in Section 8 of the Mortgage) establish the terms and provisions of any series of bonds other than said First Series, by an instrument in writing executed and acknowledged by the

Company in such manner as would be necessary to entitle a conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires to create a new series of bonds and (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twenty-first Supplemental Indenture, and the terms of the bonds of the Twenty-second Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of the Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That Northwest Natural Gas Company, in consideration of the above premises and such other valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and in further assurance of the estate, title and rights of the Trustees, and in order further to secure the payment both of the principal of and interest and premium, if any, on the bonds from time to time issued under the Mortgage, according to their tenor and effect, and the performance of all the provisions of the Mortgage (including any instruments supplemental thereto and any modification made as in the Mortgage provided) and of said bonds, hereby grants, bargains, sells, releases, conveys, assigns, transfers, mortgages, pledges, sets over and confirms (subject, however, to Excepted Encumbrances, as defined in Section 6 of the Mortgage) unto Stanley Burg and (to the extent of its legal capacity to hold the same for the purposes hereof) to Deutsche Bank Trust Company Americas, as Trustees under the Mortgage, and to their successor or successors in said trust, and to said Trustees and their successors and assigns forever, all property, real, personal and mixed, acquired by the Company after the date of the Mortgage, of the kind or nature specifically mentioned in Article XXI of the Mortgage or of any other kind or nature (except any herein or in the Mortgage expressly excepted) now owned or, subject to the provisions of subsection (I) of Section 87 of the Mortgage, hereafter acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) and wheresoever situated, including (without in anywise limiting or impairing by the enumeration of the same the scope and intent of the foregoing) all lands, gas plants, by-product plants, gas holders, gas mains and pipes; all power sites, water rights, reservoirs, canals, raceways, dams, aqueducts, and all other rights or means for appropriating, conveying, storing and supplying water; all rights of way and roads; all plants for the generation of electricity by steam, water and/or other power; all power houses, street lighting systems, standards and other equipment incidental thereto, telephone, radio, television and air-conditioning systems and

equipment incidental thereto, water works, water systems, steam heat and hot water plants, substations, lines, service and supply systems, bridges, culverts, tracts, ice or refrigeration plants and equipment, offices, buildings and other structures and the equipment thereof; all machinery, engines, boilers, dynamos, gas, electric and other machines, regulators, meters, transformers, generators, motors, gas, electrical and mechanical appliances, conduits, cables, gas, water, steam heat or other pipes, service pipes, fittings, valves and connections, pole and transmission lines, wires, cables, tools, implements, apparatus, furniture and chattels; all franchises, consents or permits; all lines for the transmission and distribution of gas, electric current, steam heat or water for any purpose including mains, pipes, conduits, towers, poles, wires, cables, ducts and all apparatus for use in connection therewith; all real estate, lands, easements, servitudes, licenses, permits, franchises, privileges, rights of way and other rights in or relating to public or private property, real or personal, or the occupancy of such property and (except as herein or in the Mortgage, as heretofore supplemented, expressly excepted) all right, title and interest the Company may now have or may hereafter acquire in and to any and all property of any kind or nature wheresoever situated.

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

IT IS HEREBY AGREED by the Company that, subject to the provisions of subsection (I) of Section 87 of the Mortgage, all the property, rights, and franchises acquired by the Company (by purchase, consolidation, merger, donation, construction, erection or in any other way) after the date hereof, except any herein or in the Mortgage, as heretofore supplemented, expressly excepted, shall be and are as fully granted and conveyed hereby and by the Mortgage, and as fully embraced within the lien hereof and the lien of the Mortgage, as supplemented, as if such property, rights and franchises were now owned by the Company and were specifically described herein or in the Mortgage, as heretofore supplemented, and conveyed hereby or thereby. Provided that the following are not and are not intended to be now or hereafter granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed hereunder and are hereby expressly excepted from the lien and operation of this Twenty-first Supplemental Indenture and from the lien and operation of the Mortgage, as heretofore supplemented, viz: (1) cash, shares of stock, bonds, notes and other obligations and other securities not hereafter specifically pledged, paid, deposited, delivered or held under the Mortgage, as heretofore supplemented, or covenanted so to be; (2) merchandise, equipment, apparatus, materials or supplies held for the purpose of sale or other disposition in the usual course of business; fuel, oil and similar materials and supplies

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

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

IN TRUST NEVERTHELESS, for the same purposes and upon the same terms, trusts and conditions and subject to and with the same provisos and covenants as are set forth in the Mortgage, as heretofore supplemented, this Twenty-first Supplemental Indenture being supplemental thereto.

AND IT IS HEREBY COVENANTED by the Company that all the terms, conditions, provisos, covenants and provisions contained in the Mortgage, as heretofore supplemented, shall affect and apply to the property hereinbefore described and conveyed, and to the estates, rights, obligations and duties of the Company and the Trustees and the beneficiaries of the trust with respect to said property, and to the Trustees and their successors in the trust, in the same manner and with the same effect as if the said property had been owned by the Company at the time of the execution of the Mortgage, and had been specifically and at length described in and conveyed to said Trustees by the Mortgage as a part of the property therein stated to be conveyed.

The Company further covenants and agrees to and with the Trustees and their successors in said trust under the Mortgage, as follows:

ARTICLE I.

Twenty-second Series of Bonds.

SECTION 1.01 There shall be a series of bonds designated “4.00% Series due 2042” (herein sometimes referred to as the “Twenty-second Series”), each of which shall also bear the descriptive title “First Mortgage Bond”, and the form thereof attached hereto as Exhibit A, as established by Resolution of the Board of Directors of the Company and shall contain suitable provisions with respect to the matters hereinafter in this Article I specified. Bonds of the Twenty-second Series shall be issued from time to time as fully registered bonds in denominations of One Hundred Thousand Dollars and, at the option of the Company, in any multiple or multiples of One Thousand Dollars (the exercise of such option to be evidenced by the execution and delivery thereof). Bonds of the Twenty-second Series shall mature on October 31, 2042 (the “Stated Maturity”) and bear interest at the rate of 4.00% per annum, payable semi-annually on February 1 and August 1 of each year, commencing February 1, 2013; and the principal of, and premium, if any, and, unless otherwise agreed between the Company and the registered owner of any bonds of the Twenty-second Series registered in the name of such registered owner, interest on, each such bond shall be payable at the office or agency of the Company in the Borough of Manhattan, The City of New York or as otherwise provided in the form of bond of the Twenty-second Series, in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts. Bonds of the Twenty-second Series shall be dated as in Section 10 of the Mortgage provided.

The bonds of the Twenty-second Series shall be payable and have and be subject to such other terms as provided in the form of bond of the Twenty-second Series established by the Board of Directors in a Resolution filed with the Corporate Trustee referring to the Twenty-second Series and shall have and be subject to such other terms as are provided in the Mortgage.

All references in the Mortgage to the principal amount of bonds shall, when used with respect to the bonds of the Twenty-second Series, mean the unpaid principal amount thereof, except that, (a) for the purposes of transfers of fully registered bonds under Section 13 of the Mortgage, the term “like principal amount” shall, when used with respect to the bonds of the Twenty-second Series, mean “like aggregate unpaid principal amount”, and (b) for the purposes of exchanges of temporary bonds under Section 15 of the Mortgage, the term “like aggregate principal amount” shall, when used with respect to the bonds of the Twenty-second Series, mean “like aggregate unpaid principal amount”.

(I) Optional Redemption. At any time prior to April 30, 2042 (six months prior to the Stated Maturity), the Company may, at its option, upon notice as provided below, redeem at any time all, or from time to time any part of, the bonds of the Twenty-second Series at 100% of the principal amount so redeemed, and the Make-Whole Amount determined for the Settlement Date specified by the Company in such notice with respect to such principal amount. The Company will give each registered owner of bonds of the Twenty-second Series written notice (by first class mail or such other method as may be agreed upon by the Company and such registered owner) of each optional redemption under this subsection (I) mailed or otherwise given not less than 30 days and not more than 60 days prior to the date fixed for such redemption, to each such registered owner at his, her or its last address appearing on the bond register. Each such notice shall specify the Settlement Date (which shall be a Business Day), the aggregate principal amount of the bonds of the Twenty-second Series to be redeemed on such date, the principal amount of each bond held by such registered owner to be redeemed (determined in accordance with subsection (II) of this section), and the interest to be paid on the Settlement Date with respect to such principal amount being redeemed, and shall be accompanied by a certificate signed by a Senior Financial Officer as to the estimated Make-Whole Amount due in connection with such redemption (calculated as if the date of such notice were the date of the redemption), setting forth the details of such computation. Two Business Days prior to such Settlement Date, the Company shall send to each registered owner of bonds of the Twenty-second Series (by first class mail or by such other method as may be agreed upon by the Company and such registered owner) a certificate signed by a Senior Financial Officer specifying the calculation of such Make-Whole Amount as of the specified Settlement Date. As promptly as practicable after the giving of the notice and the sending of the certificates provided in this subsection, the Company shall provide a copy of each to the Corporate Trustee. The Trustees shall be under no duty to inquire into, may conclusively presume the correctness of, and shall be fully protected in relying upon the information set forth in any such notice or certificate.

At any time on or after April 30, 2042, the bonds of the Twenty-second Series will be redeemable at the option of the Company, in whole or in part, on not less than 30 nor more than 60 days' notice prior to the Settlement Date, at a redemption price equal to 100% of the principal amount of the bonds of the Twenty-second Series to be redeemed, plus accrued and unpaid interest thereon to the Settlement Date. The bonds of the Twenty-second Series are not otherwise subject to voluntary or optional redemption.

(II) Allocation of Partial Redemptions. In the case of each partial redemption of the bonds of the Twenty-second Series, the principal amount of the bonds of the Twenty-second Series to be redeemed shall be allocated by the Company among all of the bonds of the Twenty-second Series at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof not theretofore called for redemption.

(III) Maturity; Surrender, Etc. In the case of each notice of redemption of bonds of the Twenty-second Series pursuant to this section, if cash sufficient to pay the principal amount to be redeemed on the Settlement Date (which shall be a Business Day), together with interest on such principal amount accrued to such date and the applicable Make-Whole Amount, if any, is not paid as agreed upon by the Company and each registered owner of the affected bonds, or, to the extent that there is no such agreement entered into with one or more such owners, deposited with the Corporate Trustee on or before the Settlement Date, then such notice of redemption shall be of no effect. If such cash is so paid or deposited, such principal amount of the bonds of the Twenty-second Series shall be deemed paid for all purposes and interest on such principal amount shall cease to accrue. In case the Company pays any registered owner pursuant to an agreement with that registered owner, whether in the case of redemption or at maturity or otherwise, the Company shall notify the Corporate Trustee as promptly as practicable of such agreement and payment, and shall furnish the Corporate Trustee with a copy of such agreement and evidence of such payment, which may include a confirmation of wire transfer or other credit to an account designated by the registered owner, cancelled check or a receipt signed by the registered owner; in case the Company deposits any cash with the Corporate Trustee, the Company shall provide therewith a list of the registered owners and the amount of such cash each registered owner is to receive. The Trustees shall be under no duty to inquire into, may conclusively presume the correctness of, and shall be fully protected in relying upon the information set forth in any such notice, evidence of payment, list or agreement, and shall not be chargeable with knowledge of any of the contents of any such agreement. Any bond redeemed in full shall be surrendered to the Company or the Corporate Trustee for cancellation on or before the Settlement Date (unless otherwise agreed between the Company and the registered owner) or, with respect to cash deposited with the Corporate Trustee, before payment of such cash by the Corporate Trustee; any bond redeemed in part shall be surrendered to the Company or the Corporate Trustee on or before the Settlement Date (unless otherwise agreed between the Company and the registered owner) or, with respect to cash deposited with the Corporate Trustee before payment of such cash by the Corporate Trustee, for a substitute bond in the principal amount remaining unpaid.

(IV) Make-Whole Amount.

“Make-Whole Amount” means, with respect to any bond of the Twenty-second Series, an amount equal to the excess, if any, of the Discounted Value of the Remaining Scheduled Payments with respect to the Called Principal of such bond of the Twenty-second Series over the amount of such Called Principal, provided that the Make-Whole Amount may in no event be less than zero. For the purposes of determining the Make-Whole Amount, the following terms have the following meanings:

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

“Called Principal” means, with respect to any bond of the Twenty-second Series, the principal of such bond that is to be redeemed pursuant to subsection (I) of this section.

“Discounted Value” means, with respect to the Called Principal of any bond of the Twenty-second Series, the amount obtained by discounting all Remaining Scheduled Payments with respect to such Called Principal from their respective scheduled due dates to the Settlement Date with respect to such Called Principal, in accordance with accepted financial practice and at a discount factor (applied on the same periodic basis as that on which interest on the bonds of the Twenty-second Series is payable) equal to the Reinvestment Yield with respect to such Called Principal.

“Reinvestment Yield” means, with respect to the Called Principal of any bond of the Twenty-second Series, 0.50% (50 basis points) over the yield to maturity implied by (i) the yields reported as of 10:00 a.m. (New York City time) on the second Business Day preceding the Settlement Date with respect to such Called Principal, on the display designated as “Page PX1” on the Bloomberg Financial Markets Service (or such other display on the Bloomberg Financial Markets Service having the same information as PX1 if PX1 is replaced by the Bloomberg Financial Markets Service) for the most recently issued actively traded on-the-run benchmark U.S. Treasury securities having a maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date, or (ii) if such yields are not reported as of such time or the yields reported as of such time are not ascertainable (including by way of interpolation), the treasury constant maturity series yields reported, for the latest day for which such yields have been so reported as of the second Business Day preceding the Settlement Date with respect to such Called Principal, in Federal Reserve Statistical Release H.15 (519) (or any comparable successor publication) for actively traded U.S. Treasury securities having a constant maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date. Such implied yield will be determined, if necessary, by (a) converting U.S. Treasury bill quotations to bond equivalent yields in accordance with accepted financial practice and (b) interpolating linearly between (1) the most recently issued, actively traded on-the-run benchmark U.S. Treasury security with the maturity closest to and greater than such Remaining Average Life and (2) the most recently issued, actively traded on-the-run benchmark U.S. Treasury security with the maturity closest to and less than such Remaining Average Life. The Reinvestment Yield shall be rounded to the number of decimal places as appears in the interest rate of the applicable bond of the Twenty-second Series.

“Remaining Average Life” means, with respect to any Called Principal, the number of years (calculated to the nearest one-twelfth year) obtained by dividing (i) such Called Principal into (ii) the sum of the products obtained by multiplying (a) the principal component of each Remaining Scheduled Payment with respect to such Called Principal by (b) the number of years (calculated to the nearest one-twelfth year) that will elapse between the Settlement Date with respect to such Called Principal and the scheduled due date of such Remaining Scheduled Payment.

“Remaining Scheduled Payments” means, with respect to the Called Principal of any bond of the Twenty-second Series, all payments of such Called Principal and interest thereon that would be due after the Settlement Date with respect to such Called Principal if no payment of such Called Principal were made prior to its scheduled due date, provided that if such Settlement Date is not a date on which interest payments are due to be made under the terms of the bonds of the Twenty-second Series, then the amount of the next succeeding scheduled interest payment will be reduced by the amount of interest accrued to such Settlement Date and required to be paid on such Settlement Date pursuant to subsection (I) of this section.

“Settlement Date” means, with respect to the Called Principal of any bond of the Twenty-second Series, the date on which such Called Principal is to be redeemed pursuant to subsection (I) of this section.

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

(V) Exchanges and Transfers. At the option of the registered owner, any bonds of the Twenty-second Series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, together with a written instrument of transfer whenever required by the Company duly executed by the registered owner or by his duly authorized attorney, shall (subject to the provisions of Section 12 of the Mortgage) be exchangeable for a like aggregate unpaid principal amount of bonds of the same series of other authorized denominations.

Transfers of bonds of the Twenty-second Series may be registered (subject to the provisions of Section 12 of the Mortgage) at the office or agency of the Company in the Borough of Manhattan, The City of New York.

Upon any registration of transfer or exchange of bonds of the Twenty-second Series, the Company may make a charge therefor sufficient to reimburse it for any tax or taxes or other governmental charge, as provided in Section 12 of the Mortgage, but the Company hereby waives any right to make a charge in addition thereto for any registration of exchange or transfer of bonds of the Twenty-second Series.

ARTICLE II.

Miscellaneous Provisions.

SECTION 2.01 Subject to the amendments provided for in this Twenty-first Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall, for all purposes of this Twenty-first Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 2.02 The holders of bonds of the Twenty-second Series consent that the Company may, but shall not be obligated to, fix a record date for the purpose of determining the holders of bonds of the Twenty-second Series entitled to consent to any amendment, supplement or waiver. If a record date is fixed, those persons who were holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to consent to such amendment, supplement or waiver or to revoke any consent previously given, whether or not such persons continue to be holders after such record date. No such consent shall be valid or effective for more than 90 days after such record date.

SECTION 2.03 The Trustees hereby accept the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

The Trustees shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Twenty-first Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made by the Company solely. In general each and every term and condition contained in Article XVII of the Mortgage shall apply to and form part of this Twenty-first Supplemental Indenture with the same force and effect as if the same were herein set forth in full, with such omissions, variations and insertions, if any, as may be appropriate to make the same conform to the provisions of this Twenty-first Supplemental Indenture.

SECTION 2.04 Whenever in this Twenty-first Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Twenty-first Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustees shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 2.05 Nothing in this Twenty-first Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and

coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Twenty-first Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twenty-first Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 2.06 Except to the extent specifically provided herein, no provision of this Twenty-first Supplemental Indenture is intended to reinstate any provisions in the Mortgage which were amended and superseded by the amendments to the Trust Indenture Act of 1939 effective as of November 15, 1990.

SECTION 2.07 This Twenty-first Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

UG-

STATE OF OREGON)
 : ss.:
COUNTY OF MULTNOMAH)

October 24, A.D. 2012.

Before me personally appeared David H. Anderson, who, being duly sworn, did say that he is the Senior Vice President and Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and he acknowledged said instrument to be its voluntary act and deed.

On this 24th day of October, 2012, before me personally appeared David H. Anderson, to me known to be the Senior Vice President and Chief Financial Officer of NORTHWEST NATURAL GAS COMPANY, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

/s/ Pamela L. Villaloboz
Notary Public—Oregon
Commission No. 453759
My Commission Expires 12/23/14

UG-

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

October 25th, A.D. 2012.

Before me personally appeared Carol Ng, who, being duly sworn, did say that [he/she] is a Vice President of DEUTSCHE BANK TRUST COMPANY AMERICAS and that the seal affixed to the foregoing instrument is the corporate seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors; and [he/she] acknowledged said instrument to be its voluntary act and deed.

On this 25th day of October, 2012, before me personally appeared Carol Ng, David Contino and Renee Cummins, to me known to be, respectively, a Vice President, a Vice President and Associate of DEUTSCHE BANK TRUST COMPANY AMERICAS, one of the corporations that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

/s/ Teddy Banica

Teddy Banica
Notary Public, State of New York
No. 01BA6266801
Qualified in New York County
Commission Expires August 6, 2016

UG-

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

October 24, 2012

Before me personally appeared the above-named STANLEY BURG and acknowledged the foregoing instrument to be his voluntary act and deed.

On this day personally appeared before me STANLEY BURG to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 24 day of October, 2012.

/a/ Annie V. Jaghatspanyan
Annie V. Jaghatspanyan
Notary Public, State of New Jersey
I.D. #2421080
My Commission Expires 5/21/2017

THIS BOND HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES OR "BLUE SKY" LAWS OF ANY OTHER JURISDICTION, AND MAY BE TRANSFERRED ONLY IN COMPLIANCE WITH SUCH REGISTRATION REQUIREMENTS OR UNDER AN EXEMPTION THEREFROM.

IF AGREED BETWEEN THE COMPANY AND THE REGISTERED OWNER OF THIS BOND, THE PRINCIPAL OF THIS BOND MAY BE REDEEMED IN WHOLE OR IN PART WITHOUT SURRENDER OF THIS BOND OR NOTATION ON THIS BOND OF SUCH REDEMPTION. ANY PURCHASER OF THIS BOND, BY ACCEPTANCE HEREOF, AGREES THAT THE UNPAID PRINCIPAL AMOUNT AS OF ANY DATE MAY BE LESS THAN THE PRINCIPAL AMOUNT SHOWN ON THIS BOND. CONFIRMATION OF THE UNPAID PRINCIPAL AMOUNT OF THIS BOND MAY BE OBTAINED FROM THE COMPANY OR THE CORPORATE TRUSTEE.

Registered No.

FORM OF TEMPORARY REGISTERED BOND

NORTHWEST NATURAL GAS COMPANY
First Mortgage Bond
4.00% Series due 2042

CUSIP: 667655 B*4

Interest Payment Dates: February 1 and August 1

Interest Rate: 4.00%

Maturity Date: October 31, 2042

Principal Amount:

Registered Holder:

NORTHWEST NATURAL GAS COMPANY, a corporation of the State of Oregon (hereinafter called the "Company"), for value received, hereby promises to pay to the Registered Holder named above, or assigns in whose name this bond is registered in the bond register, the unpaid portion of the Principal Amount specified above on the Maturity Date specified above, at the office or agency of the Company in the Borough of Manhattan, The City of New York (unless otherwise agreed by the Company and the registered owner), in such coin or currency of the United States of America as at the time of payment is legal tender for public and private debts, and to pay to the registered owner hereof interest on the principal amount

remaining unpaid from time to time from _____, 2012 [Date of initial authentication and delivery of bonds of this series] or from the most recent interest payment date to which interest has been paid, at the Interest Rate specified above in like coin or currency on each interest payment date specified above of each year, commencing February 1, 2013, until the Company's obligation with respect to the payment of such principal shall have been discharged.

This bond is a temporary bond and one of an issue of bonds of the Company issuable in series and is one of a series known as its First Mortgage Bonds, 4.00% Series due 2042, all bonds of all series issued and to be issued under and equally secured (except in so far as any sinking or other fund, established in accordance with the provisions of the Mortgage hereinafter mentioned, may afford additional security for the bonds of any particular series) by a Mortgage and Deed of Trust (herein, together with any indenture supplemental thereto, including the Twenty-first Supplemental Indenture dated as of October 15, 2012, called the Mortgage) dated as of July 1, 1946, executed by Portland Gas & Coke Company (now Northwest Natural Gas Company) to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) and R.G. Page (Stanley Burg, successor), as Trustees. Reference is made to the Mortgage for a description of the property mortgaged and pledged, the nature and extent of the security, the rights of the holders of the bonds and of the Trustees in respect thereof, the duties and immunities of the Trustees, the terms and conditions upon which the bonds are and are to be secured, the circumstances under which additional bonds may be issued and the rights of the Company to amend the Mortgage without any consent or other action by the holders of any series of bonds (including this series). With the consent of the Company and to the extent permitted by and as provided in the Mortgage, the rights and obligations of the Company and/or the rights of the holders of the bonds and/or coupons and/or the terms and provisions of the Mortgage may be modified or altered by the affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding under the Mortgage and, if the rights of the holders of one or more, but less than all, series of bonds then outstanding are to be affected, then also by the affirmative vote of the holders of at least seventy per centum (70%) in principal amount of the bonds then outstanding of each series of bonds so to be affected (excluding in any case bonds disqualified from voting by reason of the Company's interest therein as provided in the Mortgage); provided that, without the consent of the holder hereof, no such modification or alteration shall, among other things, impair or affect the right of the holder to receive payment of the principal of (and premium, if any) and interest on this bond, on or after the respective due dates expressed herein, or permit the creation of any lien equal or prior to the lien of the Mortgage or deprive the holder of the benefit of a lien on the mortgaged and pledged property. The Company has the right, without any consent or other action by the holders of any series of bonds (including this series), to amend the Mortgage so as to change seventy per centum (70%) in the foregoing sentence to sixty-six and two-thirds per centum (66-2/3%).

Capitalized terms used in this bond which are not otherwise defined herein shall have the meanings ascribed thereto in the Mortgage.

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

Except as otherwise agreed between the Company and the registered owner of this bond, payment of the unpaid principal of this bond and interest payable on the Maturity Date will be made when due upon presentation and surrender hereof at the office of the Corporate Trustee or at such other office specified pursuant to Section 35 of the Mortgage and payments of interest (other than that payable on the Maturity Date hereof) shall be made, without presentation or surrender hereof, by check mailed to the registered address of the registered owner of this bond as such address shall appear on the bond register maintained pursuant to the Mortgage.

The transfer of this bond may be registered as prescribed in the Mortgage by the registered owner hereof in person, or by his duly authorized attorney, at the office or agency of the Company in the Borough of Manhattan, The City of New York, upon surrender for cancellation of this bond, together with a written instrument of transfer wherever required by the Company duly executed by the registered owner or by his duly authorized attorney, and, thereupon, a new fully registered bond of the same series for a like unpaid principal amount will be issued to the transferee in exchange herefor as provided in the Mortgage. The Company and the Trustees may deem and treat the person in whose name this bond is registered as the absolute owner hereof for the purpose of receiving payment and for all other purposes and neither the Company nor the Trustees shall be affected by any notice to the contrary.

In the manner prescribed in the Mortgage, any bonds of this series, upon surrender thereof, for cancellation, at the office or agency of the Company in the Borough of Manhattan, The City of New York, are exchangeable for a like aggregate unpaid principal amount of bonds of the same series of other authorized denominations.

At any time prior to April 30, 2042 (six months prior to the Maturity Date), the Company may, at its option, upon notice as provided in the Twenty-first Supplemental Indenture to the Mortgage, redeem at any time all, or from time to time any part of, this bond at 100% of the principal amount so redeemed, and the Make-Whole Amount determined for the Settlement Date specified by the Company with respect to such principal amount, together with accrued and unpaid interest thereon. Reference is made to the Twenty-first Supplemental Indenture for the terms and conditions of such redemption and the definitions of Make-Whole Amount and Settlement Date.

At any time on or after April 30, 2042, this bond will be redeemable at the option of the Company, in whole or in part, on not less than 30 nor more than 60 days' notice prior to the Settlement Date, at a redemption price equal to 100% of the principal amount of this bonds to be redeemed, plus accrued and unpaid interest thereon to the Settlement Date. This bond is not otherwise subject to voluntary or option redemption.

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

The Lien of the Mortgage is subject to being legally discharged prior to the Maturity Date of this bond upon the deposit with the Corporate Trustee of money or certain

obligations of, guaranteed by or backed by securities of, the government of the United States of America sufficient to pay the unpaid principal of, premium (if any) and interest on this bond when due, all in accordance with the terms and conditions of the Mortgage.

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

This bond shall not become obligatory until Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company), the Corporate Trustee under the Mortgage, or its successor thereunder, shall have signed the form of authentication certificate endorsed hereon.

UG-

IN WITNESS WHEREOF, NORTHWEST NATURAL GAS COMPANY has caused this bond to be signed in its corporate name by its President or one of its Vice Presidents by his signature or a facsimile thereof, and its corporate seal to be impressed or imprinted hereon and attested by its Secretary or one of its Assistant Secretaries by his signature or a facsimile thereof.

Dated:

NORTHWEST NATURAL GAS COMPANY

Attest:

[SEAL]

By _____
[Title]

[Title]

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

DEUTSCHE BANK TRUST COMPANY AMERICAS,
(New York)

Corporate Trustee

By _____
Authorized Officer

UG- _____

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto

[please insert social security
or other identifying
number of assignee]

[name and address of
transferee must be printed
or typewritten]

the within bond of NORTHWEST NATURAL GAS COMPANY and does hereby irrevocably constitute and appoint

attorney, to transfer said bond on the books of the within-mentioned Company, with full power of substitution in the premises.

Dated: _____

Exhibit D

Copy of Indenture, dated as of June 1, 1991, between the Company and Deutsche Bank Trust Company Americas, as Trustee.

NORTHWEST NATURAL GAS COMPANY

TO

**BANKERS TRUST COMPANY,
Trustee**

INDENTURE

Dated as of June 1, 1991

TABLE OF CONTENTS

	Page
Parties.....	1
Recital of the Company.....	1

ARTICLE ONE

Definitions and Other Provisions of General Application

Section 101.	Definitions.....	1
	Act.....	2
	Affiliate; control.....	2
	Authenticating Agent.....	2
	Board of Directors.....	2
	Board Resolution.....	2
	Business Day.....	3
	Commission.....	3
	Company.....	3
	Company Request; Company Order...	3
	Corporate Trust Office.....	3
	corporation.....	3
	Defaulted Interest.....	3
	Discount Security.....	3
	Event of Default.....	3
	Government Obligations.....	4
	Holder.....	4
	Indenture.....	4
	interest.....	4
	Interest Payment Date.....	4
	Maturity.....	4
	Officers' Certificate.....	4
	Opinion of Counsel.....	5
	Outstanding.....	5
	Paying Agent.....	6
	Periodic Offering.....	6
	Person.....	6
	Place of Payment.....	6
	Predecessor Security.....	6
	Redemption Date.....	6
	Redemption Price.....	6
	Regular Record Date.....	7
	Responsible Officer.....	7

Note: This table of contents shall not, for any purpose, be deemed to be a part of the Indenture.

	Page
Security; Securities.....	7
Security Register;	
Security Registrar.....	7
Special Record Date.....	7
Stated Maturity.....	7
Tranche.....	7
Trustee.....	7
Trust Indenture Act.....	7
Section 102. Compliance Certificates and Opinions.....	8
Section 103. Form of Documents Delivered to Trustee.....	8
Section 104. Acts of Holders.....	9
Section 105. Notices, Etc. to Trustee and Company.....	11
Section 106. Notice to Holders of Securities; Waiver.....	11
Section 107. Conflict with Trust Indenture Act.....	12
Section 108. Effect of Headings and Table of Contents.....	12
Section 109. Successors and Assigns.....	12
Section 110. Separability Clause.....	12
Section 111. Benefits of Indenture.....	12
Section 112. Governing Law.....	12
Section 113. Legal Holidays.....	12
Section 114. Counterparts.....	13

ARTICLE TWO

Security Forms

Section 201. Forms Generally.....	13
Section 202. Form of Trustee's Certificate of Authentication..	14

Page

ARTICLE THREE**The Securities**

Section 301.	Amount Unlimited; Issuable in Series and in Tranches thereof; Establishment of Series and of Tranches thereof.....	14
Section 302.	Denominations.....	17
Section 303.	Execution; Authentication and Delivery; Dating.....	17
Section 304.	Temporary Securities.....	20
Section 305.	Registration, Registration of Transfer and Exchange.....	20
Section 306.	Mutilated, Destroyed, Lost and Stolen Securities.....	22
Section 307.	Payment of Interest; Interest Rights Preserved.....	22
Section 308.	Persons Deemed Owners.....	24
Section 309.	Cancellation.....	24
Section 310.	Computation of Interest.....	25

ARTICLE FOUR**Redemption of Securities**

Section 401.	Applicability of Article.....	25
Section 402.	Election to Redeem; Notice to Trustee.....	25
Section 403.	Selection of Securities to Be Redeemed.....	26
Section 404.	Notice of Redemption.....	26
Section 405.	Securities Payable on Redemption Date.....	27
Section 406.	Securities Redeemed in Part.....	27

ARTICLE FIVE**Sinking Funds**

Section 501.	Applicability of Article.....	28
Section 502.	Satisfaction of Sinking Fund Payments with Securities.....	28
Section 503.	Redemption of Securities for Sinking Fund.....	29

Page

ARTICLE SIX**Covenants**

Section 601.	Payment of Principal, Premium and Interest.....	29
Section 602.	Maintenance of Office or Agency.....	30
Section 603.	Money for Securities Payments to Be Held in Trust.....	31
Section 604.	Corporate Existence.....	32

ARTICLE SEVEN**Satisfaction and Discharge**

Section 701.	Satisfaction and Discharge of Securities.....	32
Section 702.	Satisfaction and Discharge of Indenture.....	34
Section 703.	Application of Trust Money.....	35

ARTICLE EIGHT**Events of Default; Remedies**

Section 801.	Events of Default.....	36
Section 802.	Acceleration of Maturity; Rescission and Annulment.....	37
Section 803.	Collection of Indebtedness and Suits for Enforcement by Trustee.....	38
Section 804.	Trustee May File Proofs of Claim.....	39
Section 805.	Trustee May Enforce Claims Without Possession of Securities.....	40
Section 806.	Application of Money Collected...	40
Section 807.	Limitation on Suits.....	40
Section 808.	Unconditional Right of Holders to Receive Principal, Premium and Interest.....	41
Section 809.	Restoration of Rights and Remedies.....	41
Section 810.	Rights and Remedies Cumulative...	42

	Page
Section 811. Delay or Omission Not Waiver.....	42
Section 812. Control by Holders of Securities.....	42
Section 813. Waiver of Past Defaults.....	43
Section 814. Undertaking for Costs.....	43
Section 815. Waiver of Stay or Extension Laws.....	44

ARTICLE NINE

The Trustee

Section 901. Corporate Trustee Required; Eligibility.....	44
Section 902. Certain Duties and Responsibilities.....	44
Section 903. Notice of Defaults.....	46
Section 904. Certain Rights of Trustee.....	46
Section 905. Not Responsible for Recitals or Issuance of Securities.....	48
Section 906. May Hold Securities.....	48
Section 907. Preferential Collection of Claims Against Company.....	48
Section 908. Money Held in Trust.....	52
Section 909. Compensation and Reimbursement...	52
Section 910. Disqualification; Conflicting Interests.....	53
Section 911. Resignation and Removal; Appointment of Successor.....	60
Section 912. Acceptance of Appointment by Successor.....	62
Section 913. Merger, Conversion, Consolidation or Succession to Business.....	63
Section 914. Appointment of Authenticating Agent.....	63

ARTICLE TEN**Holders' Lists and Reports by Trustee and Company**

Section 1001.	Company to Furnish Trustee Names and Addresses of Holders.....	65
Section 1002.	Preservation of Information; Communications to Holders.....	66
Section 1003.	Reports by Trustee.....	67
Section 1004.	Reports by Company.....	69

ARTICLE ELEVEN**Consolidation, Merger, Conveyance,
Transfer or Lease**

Section 1101.	Company May Consolidate, Etc., Only on Certain Terms.....	70
Section 1102.	Successor Corporation Substituted.....	71

ARTICLE TWELVE**Supplemental Indentures**

Section 1201.	Supplemental Indentures Without Consent of Holders.....	71
Section 1202.	Supplemental Indentures With Consent of Holders.....	73
Section 1203.	Execution of Supplemental Indentures.....	75
Section 1204.	Effect of Supplemental Indentures.....	75
Section 1205.	Conformity With Trust Indenture Act.....	75
Section 1206.	Reference in Securities to Supplemental Indentures.....	75
Section 1207.	Modification Without Sup- plemental Indenture.....	75

Page

ARTICLE THIRTEEN**Meetings of Holders;
Action Without Meeting**

Section 1301.	Purposes for Which Meetings May Be Called.....	76
Section 1302.	Call, Notice and Place of Meetings.....	76
Section 1303.	Persons Entitled to Vote at Meetings.....	77
Section 1304.	Quorum; Action.....	77
Section 1305.	Attendance at Meetings; Determination of Voting Rights; Conduct and Adjournment of Meetings.....	78
Section 1306.	Counting Votes and Recording Action of Meetings.....	79
Section 1307.	Action Without Meeting.....	80
Section 1308.	Record Date.....	80

ARTICLE FOURTEEN**Immunity of Incorporators, Stockholders,
Officers and Directors**

Section 1401.	Liability Solely Corporate.....	80
Testimonium.....		82
Signatures and Seals.....		82
Acknowledgments.....		83

INDENTURE, dated as of June 1, 1991, from NORTHWEST NATURAL GAS COMPANY, a corporation duly organized and existing under the laws of the State of Oregon (herein called the "Company"), having its principal office at One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209, to Bankers Trust Company, a banking corporation duly organized and existing under the laws of the State of New York, having its principal corporate trust office at Four Albany Street, New York, New York 10006, as Trustee (herein called the "Trustee").

RECITAL OF THE COMPANY

The Company has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of its unsecured debentures, notes or other evidences of indebtedness to be issued in one or more series as in this Indenture provided (all of such securities authenticated and delivered under this Indenture being herein collectively referred to as the "Securities" and each of such Securities being herein individually referred to as a "Security"); and all other things necessary to make this Indenture a valid agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of series thereof, as follows:

ARTICLE ONE

Definitions and Other Provisions of General Application

SECTION 101. Definitions.

For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

(a) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;

-2-

(b) all other terms used herein which are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein;

(c) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted accounting principles in the United States of America, and, except as otherwise herein expressly provided, the term "generally accepted accounting principles" with respect to any computation required or permitted hereunder shall mean such accounting principles as are generally accepted in the United States of America at the date of such computation; provided, however, that in determining generally accepted accounting principles applicable to the Company, the Company shall, to the extent required, conform to any order, rule or regulation of any administrative agency, regulatory authority or other governmental body having jurisdiction over the Company; and

(d) the words "herein", "hereof" and "hereunder" and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

Certain terms, used principally in Article Nine, are defined in that Article.

"Act", when used with respect to any Holder of a Security, has the meaning specified in Section 104.

"Affiliate" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, "control" when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"Authenticating Agent" means any Person or Persons authorized by the Trustee to act on behalf of the Trustee to authenticate one or more series of Securities.

"Board of Directors" means either the board of directors of the Company or any duly authorized committee thereof.

"Board Resolution" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force

and effect on the date of such certification, and delivered to the Trustee.

"Business Day", when used with respect to a Place of Payment or any other particular location specified in the Securities or this Indenture, means any day, other than a Saturday or Sunday, which is not a day on which banking institutions or trust companies in such Place of Payment or other location are generally authorized or required by law, regulation or executive order to remain closed, except as may be otherwise specified for any series of the Securities, or Tranche thereof, as contemplated by Section 301.

"Commission" means the Securities and Exchange Commission, as from time to time constituted, created under the Securities Exchange Act of 1934, or, if at any time after the execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties at such time.

"Company" means the Person named as the "Company" in the first paragraph of this instrument until a successor Person shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Company" shall mean such successor Person.

"Company Request" or "Company Order" means a written request or order signed in the name of the Company by its Chairman of the Board, its President or a Vice President, and by its Treasurer, an Assistant Treasurer, its Controller, its Secretary or an Assistant Secretary, and delivered to the Trustee.

"Corporate Trust Office" means the Corporate Trust and Agency Group Office of the Trustee in the Borough of Manhattan, The City of New York, New York at which at any particular time its corporate trust business shall be administered, which at the date of this Indenture is at Four Albany Street, New York, New York 10006.

"corporation" means a corporation, association, company, joint stock company or business trust.

"Defaulted Interest" has the meaning specified in Section 307.

"Discount Security" means any Security which provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 802.

"Event of Default" has the meaning specified in Section 801.

"Government Obligations" means:

(a) direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America entitled to the benefit of the full faith and credit thereof; and

(b) certificates, depositary receipts or other instruments which evidence a direct ownership interest in obligations described in clause (a) above or in any specific interest or principal payments due in respect thereof; provided, however, that the custodian of such obligations or specific interest or principal payments shall be a bank or trust company subject to Federal or state supervision or examination with a combined capital and surplus of at least \$50,000,000; and provided, further, that except as may be otherwise required by law, such custodian shall be obligated to pay to the holders of such certificates, depositary receipts or other instruments the full amount received by such custodian in respect of such obligations or specific payments and shall not be permitted to make any deduction therefrom.

"Holder" means a Person in whose name a Security is registered in the Security Register.

"Indenture" means this instrument as originally executed and as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of particular series of Securities established as contemplated by Section 301.

"Interest", when used with respect to a Discount Security which by its terms bears interest only after Maturity, means interest payable after Maturity.

"Interest Payment Date", when used with respect to any Security, means the Stated Maturity of an installment of interest on such Security.

"Maturity", when used with respect to any Security, means the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity, by declaration of acceleration, upon call for redemption or otherwise.

"Officers' Certificate" means a certificate signed by the Chairman of the Board, the President or a Vice President, and by the Treasurer, an Assistant Treasurer, the Controller, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee.

"Opinion of Counsel" means a written opinion of counsel, who may be counsel for the Company, and who shall be acceptable to the Trustee.

"Outstanding", when used with respect to Securities, means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, except:

(a) Securities theretofore cancelled by the Trustee or delivered to the Trustee for cancellation;

(b) Securities deemed to have been paid in accordance with Section 701; and

(c) Securities which have been paid pursuant to Section 306 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it and the Company that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company;

provided, however, that in determining whether or not the Holders of the requisite principal amount of the Securities Outstanding under this Indenture, or the Outstanding Securities of any series or Tranche, have given or concurred in any request, demand, authorization, direction, notice, consent or waiver hereunder or whether or not a quorum is present at a meeting of Holders of Securities,

(x) Securities beneficially owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor (unless the Company, such Affiliate or such obligor owns all Securities Outstanding under this Indenture, or all Outstanding Securities of each such series and each such Tranche, as the case may be, determined without regard to this clause (x)) shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent or waiver or upon any such determination as to the presence of a quorum, only Securities which the Trustee knows to be so owned shall be so disregarded; provided, however, that Securities so owned which have been pledged in good faith may be regarded as Outstanding if the pledgee establishes, to the satisfaction of the Trustee, the pledgee's right so to act with respect to such Securities and that the pledgee is not the Company or any other

-6-

obligor upon the Securities or any Affiliate of the Company or of such other obligor; and

(y) the principal amount of a Discount Security that shall be deemed to be Outstanding for such purposes shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon a declaration of acceleration of the Maturity thereof pursuant to Section 802.

"Paying Agent" means any Person, including the Company, authorized by the Company to pay the principal of, and premium, if any, or interest, if any, on any Securities on behalf of the Company.

"Periodic Offering" means an offering of Securities of a series from time to time, the specific terms of which Securities, including without limitation the rate or rates of interest, if any, thereon, the Stated Maturity or Stated Maturities thereof and the redemption provisions, if any, with respect thereto, are to be determined by the Company or its agents upon the issuance of such Securities.

"Person" means any individual, corporation, partnership, joint venture, trust or unincorporated organization or any government or any political subdivision, instrumentality or agency thereof.

"Place of Payment", when used with respect to the Securities of any series, or tranche thereof, means the place or places, specified as contemplated by Section 301, at which, subject to Section 602, the principal of, and premium, if any, and interest, if any, on, the Securities of such series or tranche are payable upon presentation.

"Predecessor Security" of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 306 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security.

"Redemption Date", when used with respect to any Security to be redeemed, means the date fixed for such redemption by or pursuant to this Indenture.

"Redemption Price", when used with respect to any Security to be redeemed, means the price at which it is to be redeemed pursuant to this Indenture.

"Regular Record Date" for the interest payable on any Interest Payment Date on the Securities of any series means the date specified for that purpose as contemplated by Section 301.

"Responsible Officer", when used with respect to the Trustee, means an officer of the Trustee assigned to the Corporate Trust Office, including any vice president, any assistant vice president, the secretary, any assistant secretary, any trust officer or assistant trust officer or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer of the Trustee to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

"Security" and "Securities" have the meanings stated in the first recital of this Indenture.

"Security Register" and "Security Registrar" have the respective meanings specified in Section 305.

"Special Record Date" for the payment of any Defaulted Interest on the Securities of any series means a date fixed by the Trustee pursuant to Section 307.

"Stated Maturity", when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

"Tranche" means a group of Securities which (a) are of the same series and (b) have identical terms except as to principal amount and/or date of issuance.

"Trustee" means the Person named as the "Trustee" in the first paragraph of this instrument until a successor Trustee shall have become such with respect to one or more series of Securities pursuant to the applicable provisions of this Indenture, and thereafter, "Trustee" shall mean or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, "Trustee" as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

"Trust Indenture Act" means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed, except as contemplated by Section 1201 or as provided in Section 1205.

SECTION 102. Compliance Certificates and Opinions.

Except as otherwise expressly provided in this Indenture, upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee an Officers' Certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished.

Every certificate (other than certificates pursuant to clause (d) of Section 1004) or opinion with respect to compliance with a condition or covenant provided for in this Indenture shall include:

(a) a statement that each individual signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;

(b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

(c) a statement that, in the opinion of each such individual, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(d) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

SECTION 103. Form of Documents Delivered to Trustee.

In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

Any certificate or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon a certificate or opinion of, or representations by, counsel, unless such officer knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which his certificate or opinion is based are erroneous. Any such certificate or Opinion of Counsel may be based, insofar as it relates to factual matters, upon a certificate or opinion of, or representations by, an officer or officers of the Company stating that the information with respect to such factual matters is in the possession of the Company, unless such counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous.

Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

SECTION 104. Acts of Holders.

(a) Any request, demand, authorization, direction, notice, consent, election, waiver or other action provided by this Indenture to be made, given or taken by Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by an agent duly appointed in writing or, alternatively, may be embodied in and evidenced by the record of Holders voting in favor thereof, either in person or by proxies duly appointed in writing, at any meeting of Holders duly called and held in accordance with the provisions of Article Thirteen, or a combination of such instruments and any such record. Except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments or record or both are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments and any such record (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments and so voting at any such meeting. Proof of execution of any such instrument or of a writing appointing any such agent, or of the holding by any Person of a Security, shall be sufficient for any purpose of this Indenture and (subject to Section 901) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section. The record of any meeting of Holders shall be proved in the manner provided in Section 1306.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof or may be proved in any

-10-

other manner which the Trustee and the Company deem sufficient. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of his authority.

(c) The principal amount (except as otherwise contemplated in clause (y) of the proviso to the definition of Outstanding) and serial numbers of Securities held by any Person, and the date of holding the same, shall be proved by the Security Register.

(d) Any request, demand, authorization, direction, notice, consent, election, waiver or other Act of a Holder shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

(e) Until such time as written instruments shall have been delivered to the Trustee with respect to the requisite percentage of principal amount of Securities for the action contemplated by such instruments, any such instrument executed and delivered by or on behalf of a Holder may be revoked by written notice by such Holder or any subsequent Holder, proven in the manner in which such instrument was proven.

(f) Securities of any series, or any Tranche thereof, authenticated and delivered after any Act of Holders may, and shall if required by the Trustee, bear a notation in form approved by the Trustee as to any action taken by such Act of Holders. If the Company shall so determine, new Securities of any series, or any Tranche thereof, so modified as to conform, in the opinion of the Trustee and the Company, to such action may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series or Tranche.

(g) If the Company shall solicit from Holders any request, demand, authorization, direction, notice, consent, waiver or other Act, the Company may, at its option, by Board Resolution, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other Act, but the Company shall have no obligation to do so. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other Act may be given before or after such record date, but only the Holders of record at the close of business on the record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of the Outstanding Securities have authorized or agreed or consented to such request, demand, authorization,

direction, notice, consent, waiver or other Act, and for that purpose the Outstanding Securities shall be computed as of the record date.

SECTION 105. Notices, Etc. to Trustee and Company.

Any request, demand, authorization, direction, notice, consent, election, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(a) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to the Trustee addressed to the attention of its Corporate Trust Department at the address set forth in the introductory paragraph hereof, or at any other address previously furnished in writing to the Company by the Trustee, or

(b) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to the Company addressed to the attention of its Chief Financial Officer at the address set forth in the introductory paragraph hereof, or at any other address previously furnished in writing to the Trustee by the Company.

SECTION 106. Notice to Holders of Securities; Waiver.

Except as otherwise expressly provided herein, where this Indenture provides for notice to Holders of any event, such notice shall be sufficiently given, and shall be deemed given, to Holders if in writing and mailed, first-class postage prepaid, to each Holder affected by such event, at the address of such Holder as it appears in the Security Register, not later than the latest date, and not earlier than the earliest date, prescribed for the giving of such Notice.

In case by reason of the suspension of regular mail service or by reason of any other cause it shall be impracticable to give such notice to Holders by mail, then such notification as shall be made with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder. In any case where notice to Holders is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders.

Any notice required by this Indenture may be waived in writing by the Person entitled to receive such notice, either before

-12-

or after the event otherwise to be specified therein, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

SECTION 107. Conflict with Trust Indenture Act.

This Indenture is intended to comply with the Trust Indenture Act. If any provision of this Indenture limits, qualifies, extends or conflicts with the duties imposed by such Act, such imposed duties shall control.

SECTION 108. Effect of Headings and Table of Contents.

The Article and Section headings in this Indenture and the Table of Contents are for convenience only and shall not affect the construction hereof.

SECTION 109. Successors and Assigns.

All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

SECTION 110. Separability Clause.

In case any provision in this Indenture or the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 111. Benefits of Indenture.

Nothing in this Indenture or the Securities, express or implied, shall give to any Person, other than the parties hereto, their successors hereunder and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

SECTION 112. Governing Law.

This Indenture and the Securities shall be governed by and construed in accordance with the laws of the State of New York.

SECTION 113. Legal Holidays.

In any case where any Interest Payment Date, Redemption Date or Stated Maturity of any Security shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or of the Securities other than a provision in Securities of any series, or any Tranche thereof, or in the Board

Resolution or Officers' Certificate which establishes the terms of such Securities or Tranche, which specifically states that such provision shall apply in lieu of this Section) payment of interest or principal and premium, if any, need not be made at such Place of Payment on such date, but may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date or Redemption Date, or at the Stated Maturity, and, if such payment is made or duly provided for on such Business Day, then no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date, Redemption Date or Stated Maturity, as the case may be, to such Business Day.

SECTION 114. Counterparts.

This instrument may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

ARTICLE TWO

Security Forms

SECTION 201. Forms Generally.

The definitive Securities of each series shall be in substantially the form or forms thereof established (i) in indentures supplemental hereto, Board Resolutions or Officers' Certificates pursuant to Board Resolutions, or (ii) with respect to any Tranche of Securities of a series subject to Periodic Offering, to the extent permitted by any of the documents referred to in (i) above, in a Company Order or Orders or by procedures, acceptable to the Trustee, specified in such Company Order or Orders, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture, and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be required to comply with the rules of any securities exchange or as, to the extent not inconsistent herewith, may be determined by the officers executing such Securities, as evidenced by their execution thereof.

The Securities of each series shall be issuable in registered form without coupons. The definitive Securities shall be produced in such manner as shall be determined by the officers executing such Securities, as evidenced by their execution thereof.

SECTION 202. Form of Trustee's Certificate of Authentication.

The Trustee's certificate of authentication shall be in substantially the following form:

"This is one of the Securities of the series designated in accordance with, and referred to in, the within-mentioned Indenture.

as Trustee

By: _____"
Authorized Officer

ARTICLE THREE**The Securities****SECTION 301. Amount Unlimited; Issuable in Series and in Tranches thereof; Establishment of Series and of Tranches thereof.**

The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series and in one or more Tranches thereof. Each series shall be established by an indenture supplemental hereto, a Board Resolution or an Officers' Certificate pursuant to a Board Resolution, which shall specify whether the Securities of such series shall be subject to a Periodic Offering. With respect to each series so established, there shall be determined (i) by such indenture supplemental hereto, Board Resolution or Officers' Certificate pursuant to a Board Resolution, and (ii) with respect to any Tranche of Securities of a series subject to Periodic Offering, to the extent that any of the documents specified in (i) above both does not establish all of the terms of Securities of such Tranche and provides that such terms may be determined in a Company Order or by an officer or officers of the Company or its agent or agents in accordance with procedures, acceptable to the Trustee, specified in such Company Order, then either by a Company Order or by such specified procedures:

(a) the title of the Securities of such series (which shall distinguish the Securities of such series from Securities of all other series);

(b) any limit upon the aggregate principal amount of the Securities of such series, or any Tranche thereof, which may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 304, 305, 306, 406 or 1206 and, except for any Securities which, pursuant to Section 303, are deemed never to have been authenticated and delivered hereunder);

(c) whether the Securities of such series shall be subject to Periodic Offering;

(d) the date or dates on which, and the manner in which (if other than as provided in Section 601), the principal of the Securities of such series, or any Tranche thereof, is payable;

(e) the rate or rates at which the Securities of such series, or any Tranche thereof, shall bear interest, if any (including the rate or rates at which overdue principal, premium or interest shall bear interest, if any), or the method or methods by which such rate or rates shall be determined, the date or dates from which interest, if any, on the Securities of such series, or any Tranche thereof, shall accrue, the Interest Payment Dates for the payment of such interest, the record date for each such Interest Payment Date (the "Regular Record Date"), the manner in which such interest shall be payable (if other than as provided in Sections 307 and 601 of the Indenture), and the basis of computation of interest (if other than as provided in Section 310);

(f) if other than as provided in Section 602, the place or places where (1) any Securities of such series, or any Tranche thereof, may be surrendered for registration of transfer, (2) Securities of such series, or any Tranche thereof, may be surrendered for exchange and (3) notices and demands to or upon the Company in respect of the Securities of such series, or any Tranche thereof, and this Indenture may be served;

(g) the period or periods within which, the price or prices at which and the terms and conditions upon which the Securities of such series, or any Tranche thereof, may be redeemed, in whole or in part, at the option of the Company;

(h) the obligation, if any, of the Company to redeem or purchase the Securities of such series, or any

-16-

Tranche thereof, pursuant to any sinking fund or analogous provisions or at the option of a Holder thereof and the period or periods within which, the price or prices at which and the terms and conditions upon which such Securities shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(i) the denominations in which Securities of such series, or any Tranche thereof, shall be issuable if other than denominations of \$1,000 and any integral multiple thereof;

(j) if the amount of payments of principal of, or premium, if any, or interest, if any, on, the Securities of such series, or any Tranche thereof, may be determined with reference to an index, the manner in which such amounts shall be determined;

(k) if other than the principal amount thereof, the portion of the principal amount of Securities of such series, or any Tranche thereof, which shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 802;

(l) any Events of Default, in addition to those specified in Section 801, with respect to the Securities of such series, or any Tranche thereof, and any covenants of the Company for the benefit of the Holders of the Securities of such series, or any Tranche thereof, in addition to those set forth in Article Six;

(m) the terms, if any, pursuant to which the Securities of such series, or any Tranche thereof, may be converted into or exchanged for shares of capital stock or other securities of the Company or any other Person;

(n) the Person or Persons (without specific identification) to whom interest on Securities of such series, or any Tranche thereof, shall be payable on any Interest Payment Date, if other than the Person or Persons specified in Section 307;

(o) if a service charge will be made for the registration of transfer or exchange of Securities of such series, or any Tranche thereof, the amount and terms thereof;

(p) any exceptions to Section 113, or variation in the definition of Business Day, with respect to the Securities of such series, or any Tranche thereof;

(q) the terms, if any, required to permit the Securities of such series, or any Tranche thereof, to be registered pursuant to a non-certificated system of registration; and

(r) any other terms of the Securities of such series, or any Tranche thereof, not inconsistent with the provisions of this Indenture.

Except as to denominations and except as may otherwise be determined pursuant to this paragraph, all Securities of any series shall be substantially identical.

SECTION 302. Denominations.

Except as otherwise specified as contemplated by Section 301 with respect to any series of Securities, the Securities of each series shall be issuable in denominations of \$1,000 and any integral multiple thereof.

SECTION 303. Execution; Authentication and Delivery; Dating.

The Securities shall be executed on behalf of the Company by its Chairman of the Board, its President, one of its Vice Presidents, its Treasurer or any other of its duly authorized officers, under its corporate seal affixed thereto or reproduced thereon, and attested by its Secretary, one of its Assistant Secretaries or any other of its duly authorized officers. The signature of any or all of these officers on the Securities may be manual or facsimile. Securities bearing the manual or facsimile signatures of individuals who were, at the time that their signatures were affixed thereto, the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the dates of such Securities or the dates of their authentication and delivery.

From time to time, the Company may deliver Securities of any series executed on behalf of the Company and with its corporate seal affixed thereto to the Trustee for authentication and delivery. Thereafter, upon receipt of (i) an indenture supplemental hereto, a Board Resolution or an Officers' Certificate pursuant to a Board Resolution, in each case establishing such series, (ii) a Company Order requesting the authentication and delivery of any of such Securities and, to the extent permitted by any of the documents referred to in (i) above, establishing the terms of any Tranche of such series or specifying procedures, acceptable to the Trustee, for doing so, and (iii) an Opinion of Counsel with respect to the matters set forth in the following paragraph, the Trustee, in accordance with such documents and, in the case of Securities subject to a Periodic Offering, with such procedures, acceptable to the Trustee, as may be specified in such Company Order, shall authenticate and deliver such

-18-

Securities for original issue, from time to time, in an aggregate principal amount not exceeding the aggregate principal amount, if any, established for such series or Tranche thereof. If such procedures so provide, such Securities may be authorized, authenticated and delivered pursuant to oral or electronic instructions from the Company or its agent or agents, which oral instructions shall be promptly confirmed electronically or in writing.

In authenticating and delivering Securities of any series, the Trustee shall be entitled to receive, and (subject to Section 902) shall be fully protected in relying upon, an Opinion of Counsel stating that:

(a) the forms of such Securities have been duly authorized by the Company and have been established in conformity with the provisions of this Indenture;

(b) the terms of such Securities have been duly authorized by the Company and have been established in conformity with the provisions of this Indenture; and

(c) such Securities, when authenticated and delivered by the Trustee and issued and delivered by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will have been duly issued under this Indenture and will constitute valid and legally binding obligations of the Company, entitled to the benefits provided by this Indenture, and enforceable 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 laws;

provided, however, that, with respect to Securities of a series subject to a Periodic Offering, the Trustee shall be entitled to receive such Opinion of Counsel only once at or prior to the time of the first authentication of Securities of such series and that, in such opinion, the opinions described in clauses (b) and (c) above may state, respectively, that:

(x) when the terms of such Securities, or each Tranche thereof, shall have been established pursuant to a Company Order or Orders or pursuant to such procedures, acceptable to the Trustee, as may be specified by a Company Order or Orders, all as contemplated by and in accordance with a supplemental indenture hereto, a Board Resolution or an Officers' Certificate pursuant to a Board Resolution, such terms will have been duly authorized by the Company and will have been established in conformity with the provisions of this Indenture; and

(y) such Securities, or each Tranche thereof, when authenticated and delivered by the Trustee in accordance with this Indenture and any supplemental indenture hereto, Board Resolution, Officers' Certificate pursuant to a Board Resolution, Company Order or Company Orders and specified procedures referred to in paragraph (x) above and issued and delivered by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will have been duly issued under this Indenture and will constitute valid and legally binding obligations of the Company, entitled to the benefits provided by this Indenture and enforceable 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 laws.

With respect to Securities of a series subject to a Periodic Offering, the Trustee may conclusively rely, as to the authorization by the Company of any of such Securities, the forms and terms thereof and the legality, validity, binding effect and enforceability thereof, upon the Opinion of Counsel and other documents delivered pursuant to this Section at or prior to the time of the first authentication of Securities of such series unless and until such opinion or other documents have been superseded or revoked. In connection with the authentication and delivery of Securities of a series subject to a Periodic Offering, the Trustee shall be entitled to assume that the Company's instructions to authenticate and deliver such Securities do not violate any laws with respect to, or any rules, regulations or orders of, any governmental agency or commission having jurisdiction over the Company.

No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein executed by the Trustee or its agent by manual signature, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder and is entitled to the benefits of this Indenture. Notwithstanding the foregoing, if any Security shall have been authenticated and delivered hereunder but never issued and sold by the Company and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 309, together with a written statement (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) stating that such Security has never been issued and sold by the Company, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits hereof.

Each Security shall be dated the date of its original issue and shall have the date of its authentication noted thereon.

SECTION 304. Temporary Securities.

Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued, with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as evidenced by their execution of such Securities.

If temporary Securities of any series, or any Tranche thereof, are issued, the Company shall cause definitive Securities of such series or Tranche to be prepared without unreasonable delay. After the preparation of such definitive Securities, such temporary Securities shall be exchangeable for such definitive Securities upon surrender of such temporary Securities at the office or agency of the Company maintained pursuant to Section 602 in a Place of Payment for such series or Tranche, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series, or any Tranche thereof, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor definitive Securities of the same series or Tranche, of authorized denominations and of like tenor and aggregate principal amount.

Until exchanged in full as hereinabove provided, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of the same series and Tranche and of like tenor authenticated and delivered hereunder.

SECTION 305. Registration, Registration of Transfer and Exchange.

The Company shall appoint a Security registrar (the "Security Registrar") and cause to be kept at the office of the Security Registrar (which, except as otherwise specified as contemplated by Section 301 for Securities of any series, or Tranche thereof, shall be located in the Borough of Manhattan, The City of New York) a register (the "Security Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Securities and the registration of transfer thereof. If, at any time, there shall not be a Security Registrar acting pursuant to appointment by the Company, the Trustee shall be deemed to be, and shall act as, Security Registrar. The Trustee is hereby initially appointed Security Registrar for the purpose of registration and registration of transfer as herein provided.

Upon surrender for registration of transfer of any Security of any series, or any Tranche thereof, at the office or agency of the Company maintained pursuant to Section 602 in a Place of Payment for such series or Tranche, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Securities of the same series and Tranche, of authorized denominations and of like tenor and aggregate principal amount.

At the option of the Holder, Securities of any series, or any Tranche thereof, may be exchanged for other Securities of the same series and Tranche, of authorized denominations and of like tenor and aggregate principal amount, upon surrender of the Securities to be exchanged at any such office or agency. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

All Securities issued upon any registration of transfer or exchange of Securities shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such registration of transfer or exchange.

Every Security presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee or any transfer agent) be duly endorsed or shall be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar or any transfer agent duly executed by the Holder thereof or his attorney duly authorized in writing.

Except as otherwise specified as contemplated by Section 301 with respect to Securities of any series, or any Tranche thereof, no service charge shall be made for any registration of transfer or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or exchange of Securities, other than exchanges pursuant to Section 304, 406 or 1206 not involving any transfer.

The Company shall not be required (a) to issue, to register the transfer of or to exchange Securities of any series, or any Tranche thereof, during a period of 15 days immediately preceding the date notice is given identifying the serial numbers of the Securities of such series or Tranche called for redemption or (b) to issue, to register the transfer of or to exchange any Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.

SECTION 306. Mutilated, Destroyed, Lost and Stolen Securities.

If any mutilated Security is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and Tranche, and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

If there shall be delivered to the Trustee (a) evidence to its satisfaction of the ownership of and the destruction, loss or theft of any Security and (b) such security or indemnity as it may reasonably require to save it, the Company and their respective agent or agents harmless, then, in the absence of notice to the Company or the Trustee that such Security has been acquired by a bona fide purchaser, the Company shall execute and the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security, a new Security of the same series and Tranche, and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

Notwithstanding the foregoing, in case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, pay such Security.

Upon the issuance of any new Security under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

Every new Security of any series, or any Tranche thereof, issued pursuant to this Section in lieu of any destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security shall be at any time enforceable by anyone, and any such new Security shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of such series or Tranche duly issued hereunder.

The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities.

SECTION 307. Payment of Interest; Interest Rights Preserved.

Except as otherwise specified as contemplated by Section 301 with respect to the Securities of any series, or any Tranche thereof:

(a) interest on any Security which is payable, and is punctually paid or duly provided for, on any Interest Payment Date (except the Interest Payment Date, if any, which coincides with the Stated Maturity of the final payment of the principal of such Security) shall be paid to the Person in whose name that Security (or one or more Predecessor Securities) shall be registered at the close of business on the Regular Record Date for such interest; provided, however, that, if the date of original issue of such Security shall be after a Regular Record Date and before the corresponding Interest Payment Date, payment of interest shall commence on the second Interest Payment Date succeeding such date of original issue and shall be paid to the Person in whose name such Security shall have been registered on the Regular Record Date for such second Interest Payment Date; and

(b) Interest on any Security which is payable, and is punctually paid or duly provided for, on the Interest Payment Date which coincides with the Stated Maturity of the final payment of the principal of such Security shall be paid to the person to whom such final payment of principal shall be paid.

Any interest on any Security of any series which is payable, but is not punctually paid or duly provided for, on any Interest Payment Date (herein called "Defaulted Interest") shall forthwith cease to be payable to the Holder on the related Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (a) or (b) below:

(a) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Security of such series and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more

than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall promptly cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first-class postage prepaid, to each Holder of Securities of such series at the address of such Holder as it appears in the Security Register, not less than 10 days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so mailed, such Defaulted Interest shall be paid to the Persons in whose names the Securities of such series (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date; or

(b) The Company may make payment of any Defaulted Interest on the Securities of any series in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section and Section 305, each Security delivered under this Indenture upon registration of transfer of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

SECTION 308. Persons Deemed Owners.

The Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name any Security is registered in the Security Register as the absolute owner of such Security for the purpose of receiving payment of principal of, and premium, if any, and (subject to Sections 305 and 307) interest, if any, on, such Security and for all other purposes whatsoever, whether or not such Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

SECTION 309. Cancellation.

All Securities surrendered for payment, redemption, registration of transfer or exchange or for credit against any

sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee and, if not theretofore cancelled, shall be promptly cancelled by the Trustee. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever or which the Company shall not have issued and sold, and all Securities so delivered shall be promptly cancelled by the Trustee. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section, except as expressly permitted by this Indenture. All cancelled Securities held by the Trustee shall be destroyed and certification of their destruction delivered to the Company, unless prior to their destruction, the Company, by a Company Order, shall direct that cancelled Securities be returned to it.

SECTION 310. Computation of Interest.

Except as otherwise specified as contemplated by Section 301 for Securities of any series, or Tranche thereof, interest on the Securities of each series shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

ARTICLE FOUR

Redemption of Securities

SECTION 401. Applicability of Article.

Securities of any series, or any Tranche thereof, which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of such series or Tranche) in accordance with this Article.

SECTION 402. Election to Redeem; Notice to Trustee.

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution or an Officers' Certificate. The Company shall, at least 45 days prior to the Redemption Date fixed by the Company (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee in writing of such Redemption Date and of the principal amount of such Securities to be redeemed. In the case of any redemption of Securities (a) prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture or (b) pursuant to an election of the Company which is subject to a condition specified in the terms of such Securities, the Company shall furnish the Trustee with an Officers' Certificate evidencing compliance with such restriction or condition.

SECTION 403. Selection of Securities to Be Redeemed.

If less than all the Securities of any series, or any Tranche thereof, are to be redeemed, the particular Securities to be redeemed shall be selected by the Trustee from the Outstanding Securities of such series or Tranche not previously called for redemption, by such method as the Trustee shall deem fair and appropriate and which may provide for the selection for redemption of portions; provided, however, that no such partial redemption shall reduce the portion of the principal amount of a Security of such series not redeemed to less than the minimum authorized denomination for Securities of such series, if any, established pursuant to Section 301.

The Trustee shall promptly notify the Company in writing of the Securities selected for redemption and, in the case of any Securities selected to be redeemed in part, the principal amount thereof to be redeemed.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Securities redeemed or to be redeemed only in part, to the portion of the principal amount of such Securities which has been or is to be redeemed.

SECTION 404. Notice of Redemption.

Notice of redemption shall be given in the manner provided in Section 106 to the Holders of Securities to be redeemed not less than 30 nor more than 90 days prior to the Redemption Date.

All notices of redemption shall state:

- (a) the Redemption Date,
- (b) the Redemption Price,
- (c) if less than all the Securities of any series or Tranche are to be redeemed, the identification of the particular Securities to be redeemed and the portion of the principal amount of any Security to be redeemed in part,
- (d) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed and, if applicable, that interest thereon will cease to accrue on and after said date,
- (e) the place or places where such Securities are to be surrendered for payment of the Redemption Price, and

(f) that the redemption is for a sinking fund or analogous provisions, if such is the case.

With respect to any notice of redemption of Securities at the election of the Company, unless, upon the giving of such notice, such Securities shall be deemed to have been paid in accordance with Section 701, such notice may state that such redemption shall be conditional upon the receipt by the Trustee, on or prior to the date fixed for such redemption, of money sufficient to pay the Redemption Price of, and accrued interest, if any, on, such Securities and that if such money shall not have been so received such notice shall be of no force or effect and the Company shall not be required to redeem such Securities. In the event that such notice of redemption contains such a condition and such money is not so received, the redemption shall not be made and within a reasonable time thereafter notice shall be given, in the manner in which the notice of redemption was given, that such money was not so received and such redemption was not required to be made.

Notice of redemption of Securities to be redeemed at the election of the Company, and any notice of non-satisfaction of a condition for redemption as aforesaid, shall be given by the Company or, at the Company's request, by the Trustee in the name and at the expense of the Company.

SECTION 405. Securities Payable on Redemption Date.

Notice of redemption having been given as aforesaid, and the conditions, if any, set forth in such notice having been satisfied, the Securities or portions thereof so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified, and from and after such date (unless, in the case of an unconditional notice of redemption, the Company shall default in the payment of the Redemption Price and accrued interest, if any) such Securities or portions thereof, if interest-bearing, shall cease to bear interest. Upon surrender of any such Security for redemption in accordance with such notice, such Security or portion thereof shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date; provided, however, that, except as otherwise specified as contemplated by Section 301 with respect to Securities of any series, or Tranche thereof, any installment of interest on any Security the Stated Maturity of which installment is on or prior to the Redemption Date shall be payable in accordance with Section 601.

SECTION 406. Securities Redeemed in Part.

Any Security which is to be redeemed in part shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly

executed by, the Holder thereof or his attorney duly authorized in writing), and, in exchange therefor, the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security, without service charge, a new Security or Securities of like tenor of the same series, of any authorized denomination requested by such Holder, and in aggregate principal amount equal to the unredeemed portion of the principal of the Security so surrendered.

ARTICLE FIVE

Sinking Funds

SECTION 501. Applicability of Article.

The provisions of this Article shall be applicable to any sinking fund or analogous provisions for the retirement of the Securities of any series, or any Tranche thereof, except as otherwise specified as contemplated by Section 301 for Securities of such series or Tranche.

The minimum amount of any sinking fund payment provided for by the terms of Securities of any series, or any Tranche thereof, is herein referred to as a "mandatory sinking fund payment", and any payment in excess of such minimum amount provided for by the terms of Securities of any series, or any Tranche thereof, is herein referred to as an "optional sinking fund payment". Each sinking fund payment shall be applied to the redemption of Securities of the series or Tranche in respect of which it was made as provided for by the terms of such Securities.

SECTION 502. Satisfaction of Sinking Fund Payments with Securities.

Unless otherwise provided by the terms of Securities of any series, or any Tranche thereof, in respect of which a mandatory sinking fund payment is to be made, the Company (a) may deliver Outstanding Securities (other than those previously called for redemption) of such series or Tranche and (b) may apply as a credit Securities of such series or Tranche which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, in each case in satisfaction of all or any part of such mandatory sinking fund payment; provided, however, that no Securities shall be applied in satisfaction of a mandatory sinking fund payment if such Securities shall have been previously so applied. Securities so applied shall be received and credited for such purpose by the Trustee at the Redemption Price specified in such Securities for redemption through operation of the sinking fund and the amount of such mandatory sinking fund payment shall be reduced accordingly.

SECTION 503. Redemption of Securities for Sinking Fund.

Not less than 60 days prior to each sinking fund payment date for the Securities of any series, or any Tranche thereof (unless shorter notice shall be satisfactory to the Trustee), the Company shall deliver to the Trustee an Officers' Certificate specifying:

(a) the amount of the next succeeding mandatory sinking fund payment for such series or Tranche;

(b) the amount, if any, of the optional sinking fund payment to be made together with such mandatory sinking fund payment;

(c) the aggregate sinking fund payment;

(d) the portion, if any, of such aggregate sinking fund payment which is to be satisfied by the payment of cash;

(e) the portion, if any, of such aggregate sinking fund payment which is to be satisfied by delivering or crediting Securities of such series or Tranche pursuant to Section 502 and stating the basis for such credit and that such Securities have not previously been so credited,

and the Company also shall deliver to the Trustee any Securities to be so delivered. If the Company shall not deliver such Officers' Certificate, the next succeeding sinking fund payment for such series or Tranche shall be made entirely in cash in the amount of the mandatory sinking fund payment. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 403 and cause notice of the redemption thereof to be given in the name of the Company in the manner provided in Section 404. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 405 and 406.

ARTICLE SIX**Covenants****SECTION 601. Payment of Principal, Premium and Interest.**

The Company shall duly and punctually pay the principal of, and premium, if any, and interest, if any, on, the Securities of each series in accordance with the terms of such Securities and this Indenture.

All payments of the principal of, and premium, if any, and interest, if any, on, each Security will be made (i) in such coin or currency of the United States of America as, at the time of payment, shall be legal tender for the payment of public and private debts, and (ii) except as otherwise specified as contemplated by Section 301 for Securities of any series or Tranche thereof, at the office or agency of the Company maintained for such purpose in the Borough of Manhattan and The City of New York; provided, however, that, at the option of the Company, interest on such Security at any Stated Maturity may be paid by check mailed to the Holder thereof at such Holder's address as shown on the Security Register.

SECTION 602. Maintenance of Office or Agency.

The Company shall maintain in each Place of Payment for the Securities of any series, or any Tranche thereof, an office or agency where such Securities may be presented or surrendered for payment, where such Securities may be surrendered for registration of transfer or exchange and where notices and demands to or upon the Company in respect of such Securities and this Indenture may be served. The Company shall give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency and prompt notice to the Holders of any such change in the manner specified in Section 106. If at any time the Company shall fail to maintain any such required office or agency in respect of Securities of any series, or any Tranche thereof, or shall fail to furnish the Trustee with the address thereof, such presentations and surrenders of such Securities may be made and notices and demands may be made or served at the Corporate Trust Office of the Trustee. The Company hereby appoints the Trustee as its initial agent to receive such respective presentations, surrenders, notices and demands.

The Company also may from time to time designate one or more other offices or agencies where the Securities of one or more series, or any Tranche thereof, may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency for such purposes in each Place of Payment for such Securities in accordance with the requirements set forth above. The Company shall give prompt written notice to the Trustee, and prompt notice to the Holders in the manner specified in Section 106, of any such designation or rescission and of any change in the location of any such other office or agency.

Anything herein to the contrary notwithstanding, any office or agency required by this Section may be maintained at an office of the Company, in which event the Company shall perform all functions to be performed at such office or agency.

SECTION 603. Money for Securities Payments to Be Held in Trust.

If the Company shall at any time act as its own Paying Agent with respect to the Securities of any series, or any Tranche thereof, it shall, on or before each due date of the principal of, or premium or interest on, any of such Securities, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay the principal, premium or interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided and shall promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for the Securities of any series, or any Tranche thereof, it shall, prior to each due date of the principal of, and premium and interest on, such Securities, deposit with such Paying Agents sums sufficient (without duplication) to pay the principal, premium and interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium and interest, and (unless such Paying Agent is the Trustee) the Company shall promptly notify the Trustee of its action or failure so to act.

The Company shall cause each Paying Agent for the Securities of any series, or any Tranche thereof, other than the Trustee, to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent shall:

(a) hold all sums held by it for the payment of the principal of, and premium and interest on, Securities of such series or Tranche in trust for the benefit of the Persons entitled thereto until such sums shall be paid to such Persons or otherwise disposed of as herein provided;

(b) give the Trustee notice of any default by the Company (or any other obligor upon the Securities of such series or Tranche) in the making of any payment of principal of, or premium or interest on, the Securities of such series or Tranche; and

(c) at any time during the continuance of any such default, upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such Paying Agent.

The Company may at any time pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same trusts as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any

Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such money.

Any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of, or premium or interest on, any Security and remaining unclaimed for two years after such principal, premium, or interest shall have become due and payable shall be paid to the Company pursuant to a Company Request, or, if then held by the Company, shall be discharged from such trust; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; provided, however, that the Trustee or such Paying Agent, before being required to make any such payment to the Company, may at the expense of the Company cause to be mailed, on one occasion only, notice to such Holder that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such mailing, any unclaimed balance of such money then remaining will be paid to the Company.

SECTION 604. Corporate Existence.

Subject to the rights of the Company under Article Eleven, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence and the rights (charter and statutory) and franchises of the Company; provided, however, that the Company shall not be required to preserve any such right or franchise if, in the judgment of the Company, the preservation thereof is no longer desirable in the conduct of the business of the Company.

ARTICLE SEVEN

Satisfaction and Discharge

Section 701. Satisfaction and Discharge of Securities.

Any Securities, or any portion of the principal amount thereof, shall be deemed to have been paid for all purposes of this Indenture, and the entire indebtedness of the Company in respect thereof shall be deemed to have been satisfied and discharged, if there shall have been irrevocably deposited with the Trustee, in trust:

- (a) money in an amount which shall be sufficient,
- or

(b) in the case of a deposit made prior to the Maturity of such Securities or portions thereof, Government Obligations, which shall not contain provisions permitting the redemption or other prepayment thereof at the option of the issuer thereof, the principal of and the interest on which when due, without any regard to reinvestment thereof, will provide moneys which, together with the money, if any, deposited with or held by the Trustee, shall be sufficient, or

(c) a combination of (a) or (b) which shall be sufficient,

to pay when due the principal of, and premium, if any, and interest, if any, on, such Securities or portions thereof; provided, however, that (i) in the case of the provision for payment of less than all of the Securities, such Securities or portions of the principal amounts thereof shall have been selected by the Security Registrar as provided herein; (ii) in the case of a redemption, the notice requisite to the validity of such redemption shall have been given or irrevocable authority shall have been given by the Company to the Trustee to give such notice; and (iii) the Company shall have delivered to the Trustee:

(x) if such deposit shall have been made prior to the Maturity of such Securities, a Company Order stating that the money and Government Obligations deposited with the Trustee in accordance with this Section shall be held by the Trustee, in trust, as provided in Section 703; and

(y) if Government Obligations shall have been deposited with the Trustee, an Officers' Certificate to the effect that the requirements set forth in clause (b) above have been satisfied.

Upon receipt by the Trustee of money or Government Obligations, or both, in accordance with this Section, together with the documents required by clauses (x) and (y) above, the Trustee shall acknowledge in writing that the Security or Securities or portions thereof with respect to which such deposit was made are deemed to have been paid for all purposes of this Indenture and that the entire indebtedness of the Company in respect thereof is deemed to have been satisfied and discharged.

If payment of less than all of the Securities is to be provided for in the manner and with the effect provided in this Section, the Security Registrar shall select such Securities, or portions of principal amounts thereof, in the manner specified by Section 403 for selection for redemption of less than all the Securities of a series.

In the event that Securities which shall be deemed to have been paid as provided in this Section do not mature and are not to be redeemed within the sixty (60) day period commencing with the date of the deposit with the Trustee of moneys or Government Obligations, as aforesaid, the Company shall, as promptly as practicable, give a notice, in the same manner as a notice of redemption with respect to such Securities, to the Holders of such Securities to the effect that such deposit has been made and the effect thereof.

Notwithstanding the satisfaction and discharge of any Securities as aforesaid, the obligations of the Company and the Trustee in respect of such Securities under Sections 305, 306, 602 and 603 and this Article Seven shall survive.

The Company shall pay, and shall indemnify the Trustee and each Holder of Securities which are deemed to have been paid as provided in this Section against, any tax, fee or other charge imposed on or assessed against the Government Obligations deposited with the Trustee or the principal or interest received by the Trustee in respect of such Government Obligations.

SECTION 702. Satisfaction and Discharge of Indenture.

This Indenture shall upon Company Request cease to be of further effect (except as hereinafter expressly provided), and the Trustee, upon Company Request and at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when

(a) both

(1) all Securities theretofore authenticated and delivered (other than Securities which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 306) have been delivered to the Trustee for cancellation; and

(2) all Securities not theretofore delivered to the Trustee for cancellation shall be deemed to have been paid in accordance with Section 701;

(b) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(c) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that there has been compliance with all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture.

In the event there shall be Securities of two or more series Outstanding hereunder, the Trustee shall be required to execute an instrument acknowledging satisfaction and discharge of this Indenture only if requested to do so with respect to Securities of all series as to which it is Trustee and if the other conditions thereto are met. In the event there shall be two or more Trustees hereunder, then the effectiveness of each such instrument from each Trustee hereunder shall be conditioned upon receipt of such instruments from each other Trustee hereunder.

Notwithstanding the satisfaction and discharge of this Indenture as aforesaid, the obligations of the Company to the Trustee under Section 909 shall survive.

Upon satisfaction and discharge of this Indenture as provided in this Section, the Trustee shall assign, transfer and turn over to the Company, subject to the lien provided by Section 907, any and all money, securities and other property then held by the Trustee under this Indenture, other than money and Government Obligations held by the Trustee pursuant to Section 703.

Section 703. Application of Trust Money.

Neither the Government Obligations nor the money deposited with the Trustee pursuant to Section 701, nor the principal or interest payments on any such Government Obligations, shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of, and premium, if any, and interest, if any, on, the Securities or portions of principal amount thereof in respect of which such deposit was made, all subject, however, to the provisions of Section 603; provided, however, that, so long as there shall not have occurred and be continuing an Event of Default, any cash received from such principal or interest payments on such Government Obligations deposited with the Trustee, if not then needed for such purpose, shall, to the extent practicable, be invested in Government Obligations of the type described in clause (b) in the first paragraph of Section 701 maturing at such times and in such amounts as shall be sufficient to pay when due the principal of, and premium, if any, and interest, if any, on, such Securities or portions thereof on and prior to the Maturity thereof, and interest earned from such reinvestment shall be paid over to the Company as received by the Trustee, free and clear of any trust, lien or pledge under this Indenture except the lien provided by Section 907; and provided, further, that, so long as there shall not have occurred and be continuing an Event of Default, any moneys held by the Trustee in accordance with this Section on the Maturity of all such Securities in excess of the amount required to pay the principal of, and premium, if any, and interest, if any, on, such Securities shall be paid over to the Company free and clear of any trust, lien or pledge under this Indenture except the lien provided by Section 907.

ARTICLE EIGHT**Events of Default; Remedies****SECTION 801. Events of Default.**

"Event of Default", wherever used herein with respect to Securities of any series, means any one of the following events:

(a) failure to pay any installment of interest on any such Security within 60 days after its Stated Maturity; or

(b) failure to pay the principal of, or premium, if any, on, any such Security within three Business Days after its Maturity; or

(c) failure to perform or breach of any covenant of the Company in this Indenture (other than a covenant a default in the performance of which is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of one or more series of Securities other than such series) for a period of 90 days after there has been given, by registered or certified mail, to the Company by the Trustee, or to the Company and the Trustee by the Holders of at least 33% in principal amount of the Outstanding Securities of such series a written notice specifying such default and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or

(d) the entry by a court having jurisdiction in the premises of a decree or order (1) adjudging the Company a bankrupt or insolvent, (2) approving as properly filed a petition by one or more Persons, other than the Company, seeking reorganization, arrangement, adjustment or composition of or in respect of the Company, (3) appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official for the Company or for any substantial part of its property, or (4) ordering the winding up or liquidation of its affairs; and any such decree or order shall have remained unstayed and in effect for a period of 90 consecutive days; or

(e) (1) the commencement by the Company of a case or proceeding to be adjudicated a bankrupt or insolvent, (2) the consent by it to (A) the entry of a decree or order for relief in respect of the Company, (B) the commencement of any bankruptcy or insolvency case or proceeding against it, or (C) the filing of a petition seeking reorganization or relief, or the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or similar official, of the Company or of any substantial part of its property, (3) the filing by it of a petition or answer or

consent seeking reorganization or relief, or (4) the making by it of an assignment for the benefit of creditors, in each such case described in clauses (1) through (4) above under any applicable Federal or state bankruptcy, insolvency, reorganization or other similar law, (5) the admission by it in writing of its inability to pay its debts generally as they become due, or (6) the authorization of any such action by the Board of Directors; or

(f) any other Event of Default specified with respect to Securities of such series.

SECTION 802. Acceleration of Maturity; Rescission and Annulment.

If an Event of Default shall have occurred and be continuing with respect to Securities of any series at the time Outstanding, either the Trustee or the Holders of not less than 33% in principal amount of the Outstanding Securities of such series may declare the principal amount (or, if any of such Securities are Discount Securities, such portion of the principal amount thereof as may be specified by their terms as contemplated by Section 301) of all of such Securities to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by Holders), and upon receipt by the Company of notice of such declaration, such principal amount (or specified amount thereof) shall become immediately due and payable; provided, however, that if an Event of Default shall have occurred and be continuing with respect to more than one series of Securities, the Trustee or the Holders of not less than 33% in aggregate principal amount of the Outstanding Securities of all such series, considered as one class, may make such declaration of acceleration, and not the Holders of the Securities of any one of such series.

At any time after such a declaration of acceleration with respect to Securities of any series shall have been made and before a judgment or decree for payment of the money due shall have been obtained by the Trustee as hereinafter in this Article provided, the Event or Events of Default giving rise to such declaration of acceleration shall, without further act, be deemed to have been waived, and such declaration and its consequences shall, without further act, be deemed to have been rescinded and annulled, if

(a) the Company shall have paid or deposited with the Trustee a sum sufficient to pay

(1) all overdue interest on all such Securities;

(2) the principal of, and premium, if any, on, all such Securities which have become due, otherwise than by such declaration of acceleration,

and interest thereon at the rate or rates prescribed therefor;

(3) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates prescribed therefor;

(4) all amounts due to the Trustee under Section 909;

and

(b) any other Event or Events of Default with respect to such Securities, other than the non-payment of the principal of Securities of such series which shall have become due solely by such declaration of acceleration, shall have been cured or waived as provided in Section 813.

No such rescission shall affect any subsequent Event of Default or impair any right consequent thereon.

SECTION 803. Collection of Indebtedness and Suits for Enforcement by Trustee.

If an Event of Default described in clause (a) or (b) of Section 801 shall have occurred and be continuing, the Company shall, upon demand of the Trustee, pay to it, for the benefit of the Holders of the Securities with respect to which such Event of Default shall have occurred, the whole amount then due and payable on such Securities for principal, premium, if any, and interest, if any, and, to the extent permitted by law, interest on premium, if any, and on any overdue principal and interest, at the rate or rates prescribed therefor in such Securities or, if no such rate or rates shall be prescribed, at the rate or rates borne by such Securities at the time of such Event of Default, and, in addition thereto, such further amount as shall be sufficient to cover any amounts due to the Trustee under Section 909.

If the Company shall fail to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, may prosecute such proceeding to judgment or final decree and may enforce the same against the Company or any other obligor upon such Securities and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities, wherever situated.

If an Event of Default with respect to any Securities shall have occurred and be continuing, the Trustee may in its

discretion proceed to protect and enforce its rights and the rights of the Holders of such Securities by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

SECTION 804. Trustee May File Proofs of Claim.

In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise,

(a) to file and prove a claim for the whole amount of principal, premium, if any, and interest, if any, owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for amounts due to the Trustee under Section 909) and of the Holders allowed in such judicial proceeding, and

(b) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amounts due it under Section 909.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

SECTION 805. Trustee May Enforce Claims Without Possession of Securities.

All rights of action and claims under this Indenture or the Securities may be prosecuted and enforced by the Trustee without the possession of any of the Securities or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders in respect of which such judgment has been recovered.

SECTION 806. Application of Money Collected.

Any money collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal or premium, if any, or interest, if any, upon presentation of the Securities in respect of which or for the benefit of which such money shall have been collected and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

First: To the payment of all amounts due the Trustee under Section 909;

Second: To the payment of the amounts then due and unpaid upon the Securities for principal of and premium, if any, and interest, if any, in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the amounts due and payable on such Securities for principal, premium, if any, and interest, if any, respectively; and

Third: To the Company.

SECTION 807. Limitation on Suits.

No Holder shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless:

(a) such Holder shall have previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of such series;

(b) the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of all series in

respect of which an Event of Default shall have occurred and be continuing, considered as one class, shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;

(c) such Holder or Holders shall have offered to the Trustee reasonable indemnity against the costs, expenses and liabilities to be incurred in compliance with such request;

(d) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity shall have failed to institute any such proceeding; and

(e) no direction inconsistent with such written request shall have been given to the Trustee during such 60-day period by the Holders of a majority in aggregate principal amount of all Outstanding Securities in respect of which an Event of Default shall have occurred and be continuing, considered as one class;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all of such Holders.

SECTION 808. Unconditional Right of Holders to Receive Principal, Premium and Interest.

Notwithstanding any other provision in this Indenture, the Holder of any Security shall have the right, which is absolute and unconditional, to receive payment of the principal of, and premium, if any, and interest, if any, on, such Security on the Stated Maturity or Maturities therefor (or, in the case of redemption, on the Redemption Date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired or affected without the consent of such Holder.

SECTION 809. Restoration of Rights and Remedies.

If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding shall have been discontinued or abandoned for any reason, or shall have been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Company, and Trustee and such Holder shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the

-42-

Trustee and such Holder shall continue as though no such proceeding had been instituted.

SECTION 810. Rights and Remedies Cumulative.

Except as otherwise provided in the last paragraph of Section 306, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

SECTION 811. Delay or Omission Not Waiver.

No delay or omission of the Trustee or of any Holder to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders, as the case may be.

SECTION 812. Control by Holders of Securities.

If an Event of Default shall have occurred and be continuing in respect of Securities of any series (determined as provided in Section 910(d)), the Holders of a majority in principal amount of such Securities shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee hereby, with respect to such Securities; provided, however, that if an Event of Default shall have occurred and be continuing with respect to more than one such series of Securities, the Holders of a majority in aggregate principal amount of the Outstanding Securities of all such series, considered as one class, shall have the right to make such direction, and not the Holders of the Securities of any one of such series; and provided, further, that

(a) such direction shall not be in conflict with any rule of law or with this Indenture, and would not involve the Trustee in personal liability in circumstances where indemnity, in the Trustee's sole discretion, would not be adequate, and

(b) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

SECTION 813. Waiver of Past Defaults.

The Holders of not less than a majority in principal amount of the Outstanding Securities of any series (determined as provided in Section 910(d)) may on behalf of the Holders of all the Securities of such series waive any past default hereunder with respect to such series and its consequences, except a default

(a) in the payment of the principal of, or premium, if any, or interest, if any, on, such Securities, or

(b) in respect of a covenant or provision hereof which under Section 1202 cannot be modified or amended without the consent of each such Holder;

provided, however, that if any such default shall have occurred and be continuing with respect to more than one such series of Securities, the Holders of a majority in aggregate principal amount of the Outstanding Securities of all such series, considered as one class, shall have the right to waive such default, and not the Holders of the Securities of any one such series.

Upon any such waiver, such default shall cease to exist, and any and all Events of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

SECTION 814. Undertaking for Costs.

The Company and the Trustee agree, and each Holder of each Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken, suffered or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in aggregate principal amount of the Outstanding Securities of all series in respect of which such suit may be brought, considered as one class, or to any suit instituted by any Holder for the enforcement of the payment of the principal of, or premium, if any, or interest, if any, on, any Security on or after the Stated Maturity or Maturities expressed in such Security (or, in the case of the redemption of any Security, on or after its Redemption Date).

SECTION 815. Waiver of Stay or Extension Laws.

The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, which may affect its covenants or its performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

ARTICLE NINE**The Trustee****SECTION 901. Corporate Trustee Required; Eligibility.**

There shall at all times be a Trustee hereunder which shall be a corporation organized and doing business under the laws of the United States of America, any State thereof or the District of Columbia or such other corporation or person permitted to act as Trustee by the Commission, which (i) shall be authorized under such laws to exercise corporate trust powers, (ii) shall have a combined capital and surplus of at least \$10,000,000, (iii) shall be subject to supervision or examination by Federal, state or District of Columbia authority or such other authority as the Commission shall permit, and (iv) shall be qualified and eligible under this Article. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of such supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. Neither the Company nor any Person directly or indirectly controlling, controlled by, or under common control with the Company shall serve as Trustee. If at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article.

SECTION 902. Certain Duties and Responsibilities.

(a) Except during the continuance of an Event of Default with respect to Securities of any series,

(1) the Trustee undertakes to perform, with respect to Securities of such series, such duties and only such duties as are specifically set forth in this Indenture, and no implied

covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of bad faith on its part, the Trustee may, with respect to Securities of such series, conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture.

(b) In case an Event of Default with respect to Securities of any series shall have occurred and be continuing, the Trustee shall exercise, with respect to Securities of such series, such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(c) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own wilful misconduct, except that

(1) this Section 902(c) shall not be construed to limit the effect of Section 902(a);

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer or Officers, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action affecting Outstanding Securities of one or more series taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of a majority in principal amount of such Outstanding Securities relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to such Outstanding Securities; and

(4) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that

repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

(d) Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section.

SECTION 903. Notice of Defaults.

Within 90 days after the occurrence of any default hereunder known to the Trustee with respect to the Securities of any series, the Trustee shall give to all Holders of Securities of such series, in the manner and to the extent provided by Section 1003(c), notice of such default, unless such default shall have been cured and waived; provided, however, that, except in the case of a default in the payment of the principal of, or premium, if any, or interest, if any, on, any Security of such series or in the payment of any sinking or analogous fund installment with respect to Securities of such series, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee or a trust committee of directors or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interest of the Holders of Securities of such series; and provided, further, that in the case of any default of the character specified in Section 801(c) with respect to Securities of such series, no such notice to Holders shall be given until at least 120 days after the occurrence thereof. For the purpose of this Section, the term "default" means any event which is, or after notice or lapse of time or both would become, an Event of Default with respect to Securities of such series.

SECTION 904. Certain Rights of Trustee.

Subject to the provisions of Section 902:

(a) the Trustee may rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;

(b) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order, or as otherwise expressly provided herein, and any action of the Board of Directors may be sufficiently evidenced by a Board Resolution;

(c) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officers' Certificate;

(d) the Trustee may consult with counsel and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(e) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any Holder pursuant to this Indenture, unless such Holder shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;

(f) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, personally or by agent or attorney;

(g) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder; and

(h) the Trustee shall not be charged with knowledge of any Event of Default with respect to the Securities of any series for which it is acting as Trustee unless either (1) a Responsible Officer of the Trustee assigned to the group of the Trustee responsible for corporate trustee administration (or any successor division or department of the Trustee) shall have actual knowledge of the Event of Default or (2) written notice of such Event of Default shall have been given to the Trustee by the Company, any other obligor on such Securities or by any Holder of such Securities.

SECTION 905. Not Responsible for Recitals or Issuance of Securities.

The recitals contained herein and in the Securities (except the Trustee's certificates of authentication) shall be taken as the statements of the Company, and neither the Trustee nor any other agent appointed hereunder assumes any responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities. Neither the Trustee nor any other agent appointed hereunder shall be accountable for the use or application by the Company of Securities or the proceeds thereof.

SECTION 906. May Hold Securities.

The Trustee and any other agent appointed hereunder, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Sections 907 and 910, may otherwise deal with the Company with the same rights it would have if it were not either the Trustee or such agent.

SECTION 907. Preferential Collection of Claims Against Company.

(a) Subject to Section 907(b), if the Trustee shall be or shall become a creditor, directly or indirectly, secured or unsecured, of the Company within three months prior to a default, as defined in Section 907(c), or subsequent to such a default, then, unless and until such default shall be cured, the Trustee shall set apart and hold in a special account for the benefit of the Trustee individually, the Holders and the holders of other indenture securities (as defined in Section 907(c)):

(1) an amount equal to any and all reductions in the amount due and owing upon any claim as such creditor in respect of principal or interest, effected after the beginning of such three months' period and valid as against the Company and its other creditors, except any such reduction resulting from the receipt or disposition of any property described in clause (2) of this Section 907(a), or from the exercise of any right of set-off which the Trustee could have exercised if a petition in bankruptcy had been filed by or against the Company upon the date of such default; and

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

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

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

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

(C) to realize, for its own account, but only to the extent of the claim hereinafter mentioned, upon any property held by it as security for any such claim, if such claim was created after the beginning of such three months' period and such property was received as security therefor simultaneously with the creation thereof, and if the Trustee shall sustain the burden of proving that, at the time such property was so received, the Trustee had no reasonable cause to believe that a default, as defined in Section 907(c), would occur within three months; or

(D) to receive payment on any claim referred to in paragraph (B) or (C) of this Section 907(a), against the release of any property held as security for such claim as provided in such paragraph (B) or (C), as the case may be, to the extent of the fair value of such property.

For the purposes of clauses (B), (C) and (D) of this Section 907(a), property substituted after the beginning of such three months' period for property held as security at the time of such substitution, to the extent of the fair value of the property released, shall have the same status as the property released, and, to the extent that any claim referred to in any of such clauses shall be created in renewal of or in substitution for or for the purpose of repaying or refunding any pre-existing claim of the Trustee as such creditor, such claim shall have the same status as such pre-existing claim.

If the Trustee shall be required to account, the funds and property held in such special account and the proceeds thereof shall be apportioned among the Trustee, the Holders and the holders of other indenture securities in such manner that the Trustee, the Holders and the holders of other indenture securities shall realize, as a result of payments from such special account and payments of

dividends on claims filed against the Company in bankruptcy or receivership or in proceedings for reorganization pursuant to the Federal Bankruptcy Act or applicable state law, the same percentage of their respective claims, figured before crediting to the claim of the Trustee anything on account of the receipt by it from the Company of the funds and property in such special account and before crediting to the respective claims of the Trustee and the Holders and the holders of other indenture securities dividends on claims filed against the Company in bankruptcy or receivership or in proceedings for reorganization pursuant to the Federal Bankruptcy Act or applicable state law, but after crediting thereon receipts on account of the indebtedness represented by their respective claims from all sources other than from such dividends and from the funds and property so held in such special account. As used in this paragraph, with respect to any claim, the term "dividends" shall include any distribution with respect to such claim, in bankruptcy or receivership or proceedings for reorganization pursuant to the Federal Bankruptcy Act or applicable state law, whether such distribution shall be made in cash, securities or other property, but shall not include any such distribution with respect to the secured portion, if any, of such claim. The court in which such bankruptcy, receivership or proceedings for reorganization shall be pending shall have jurisdiction (1) to apportion among the Trustee, the Holders and the holders of other indenture securities, in accordance with the provisions of this paragraph, the funds and property held in such special account and proceeds thereof, or (2) in lieu of such apportionment, in whole or in part, to give to the provisions of this paragraph due consideration in determining the fairness of the distributions to be made to the Trustee, the Holders and the holders of other indenture securities with respect to their respective claims, in which event, it shall not be necessary to liquidate or to appraise the value of any securities or other property held in such special account or as security for any such claim, or to make a specific allocation of such distributions as between the secured and unsecured portions of such claims, or otherwise to apply the provisions of this paragraph as a mathematical formula.

Any Trustee which shall have resigned or been removed after the beginning of such three months' period shall be subject to the provisions of this subsection as though such resignation or removal had not occurred. Any Trustee which shall have resigned or been removed prior to the beginning of such three months' period shall be subject to the provisions of this Section 907(a) if, and only if, the following conditions shall exist:

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

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

(b) There shall be excluded from the operation of Section 907(a) a creditor relationship arising from:

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

(2) advances authorized by a receivership or bankruptcy court of competent jurisdiction or by this Indenture, for the purpose of preserving any property which shall at any time be subject to the lien of this Indenture or of discharging tax liens or other prior liens or encumbrances thereon, if notice of such advances and of the circumstances surrounding the making thereof shall have been given to the Holders at the time and in the manner provided in this Indenture;

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

(4) an indebtedness created as a result of services rendered or premises rented; or an indebtedness created as a result of goods or securities sold in a cash transaction (as defined in Section 907(c));

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

(6) the acquisition, ownership, acceptance or negotiation of any drafts, bills of exchange, acceptances or obligations which fall within the classification of self-liquidating paper (as defined in Section 907(c)).

(c) For the purposes of Section 907:

(1) the term "default" means any failure to make payment in full of the principal of or interest on any of the Securities or other indenture securities when and as such principal or interest becomes due and payable;

(2) the term "other indenture securities" means securities upon which the Company is an obligor outstanding under any indenture, other than this Indenture, (A) under which the

Trustee is also trustee, (B) which contains provisions substantially similar to the provisions of Section 907 and (C) under which a default exists at the time of the apportionment of the funds and property held in the special account created pursuant to Section 907(a);

(3) the term "cash transaction" means any transaction in which full payment for goods or securities sold is made within seven days after delivery of the goods or securities in currency or in checks or other orders drawn upon banks or bankers and payable upon demand;

(4) the term "self-liquidating paper" means any draft, bill of exchange, acceptance or obligation which is made, drawn, negotiated or incurred by the Company for the purpose of financing the purchase, processing, manufacturing, shipment, storage or sale of goods, wares or merchandise and which is secured by documents evidencing title to, possession of, or a lien upon, the goods, wares or merchandise or the receivables or proceeds arising from the sale of the goods, wares or merchandise previously constituting the security, provided the security is received by the Trustee simultaneously with the creation of the creditor relationship with the Company arising from the making, drawing, negotiating or incurring of the draft, bill of exchange, acceptance or obligations;

(5) the term "Company" means any obligor upon the Securities; and

(6) the term "Federal Bankruptcy Act" means the Bankruptcy Act or Title 11 of the United States Code.

SECTION 908. Money Held in Trust.

Money held by the Trustee in trust hereunder need not be segregated from other funds, except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed with the Company.

SECTION 909. Compensation and Reimbursement.

The Company shall

(a) pay to the Trustee from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);

(b) except as otherwise expressly provided herein, reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the

Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the expenses and disbursements of its agents and counsel), except any such expense, disbursement or advance as may be attributable to its negligence, wilful misconduct or bad faith; and

(c) indemnify the Trustee and hold it harmless from and against, any loss, liability or expense reasonably incurred without negligence, willful misconduct or bad faith on its part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder, including liability which the Trustee may incur as a result of failure to withhold, pay or report any tax, assessment or other governmental charges and the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

As security for the performance of the obligations of the Company under this Section, the Trustee shall have a lien prior to the Securities upon all property and funds held or collected by the Trustee as such, except as otherwise provided in Section 703.

SECTION 910. Disqualification; Conflicting Interests.

(a) If a Trustee shall have or acquire any conflicting interest as defined in Section 910(d), then, within 90 days after ascertaining that it has such conflicting interest, and if the Default to which such conflicting interest relates has not been cured or duly waived or otherwise eliminated before the end of such 90-day period, it shall either eliminate such conflicting interest or, except as provided in this Section 910, resign; and the Company shall take prompt steps to have a successor appointed in the manner provided in this Article.

(b) In the event that a Trustee shall fail to comply with the provisions of Section 910(a), it shall, within 10 days after the expiration of such 90-day period, transmit notice of such failure to the Holders of the Conflicted Securities (as hereinafter defined), in the manner and to the extent provided in Section 1003(c).

(c) Subject to the provisions of Section 814, any Holder of any Conflicted Securities who shall have been a bona fide Holder of such Securities for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to such Securities, and the appointment of a successor, if such Trustee shall have failed, after written request thereof by such Holder, to comply with Section 910(a).

(d) For the purposes of Section 910(a), a Trustee shall be deemed to have a conflicting interest with respect to the

Securities of each series for which it shall act as trustee, if any of the Securities of such series shall be in Default (the Securities of each such series being referred to in this Section 910 as the "Conflicted Securities") and

(1) such Trustee is trustee under this Indenture with respect to any Securities other than the Conflicted Securities or is trustee under another indenture under which any other securities, or certificates of interest or participation in any other securities, of the Company are outstanding, unless (i) the Conflicted Securities are collateral trust notes for which the only collateral consists of Securities other than the Conflicted Securities or securities issued under such other indenture, or (ii) such other indenture is a collateral trust indenture under which the only collateral consists of Conflicted Securities; provided, however, that there shall be excluded from the operation of this Section 910(d) all Securities, other than the Conflicted Securities, and any other securities, or certificates of interest or participation in any other securities, of the Company which shall be outstanding under any other indenture, if

(A) this Indenture and such other indenture (and all series of securities issuable thereunder) are wholly unsecured and rank equally, and such other indenture (and such series) is specifically described in this Indenture or is hereafter qualified under the Trust Indenture Act, unless the Commission shall have found and declared by order pursuant to Section 305(b) or Section 307(c) of the Trust Indenture Act that differences exist between the provisions of this Indenture with respect to the Conflicted Securities and the Securities of any other series or the provisions of such other indenture (or such series) which are so likely to involve a material conflict of interest as to make it necessary in the public interest or for the protection of investors to disqualify the Trustee from acting as such under this Indenture with respect to the Conflicted Securities and such other Securities or under such other indenture, or

(B) the Company shall have sustained the burden of proving, on application to the Commission and after opportunity for hearing thereon, that trusteeship under this Indenture with respect to the Conflicted Securities and any other Securities or such other indenture is not so likely to involve a material conflict of interest as to make it necessary in the public interest or for the protection of investors to disqualify such Trustee from acting as such under this Indenture with respect to the Conflicted Securities and any other Securities or under such other indenture;

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

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

(4) such Trustee or any of its directors or executive officers is a director, officer, partner, employee, appointee or representative of the Company, or of an underwriter (other than such Trustee itself) for the Company which is currently engaged in the business of underwriting, except that (A) one individual may be a director or an executive officer, or both, of such Trustee and a director or an executive officer, or both, of the Company, but may not be at the same time an executive officer of both such Trustee and the Company; (B) if and so long as the number of directors of such Trustee in office is more than nine, one additional individual may be a director or an executive officer, or both, of such Trustee and a director of the Company; and (C) such Trustee may be designated by the Company or by any underwriter for the Company to act in the capacity of transfer agent, registrar, custodian, paying agent, fiscal agent, escrow agent or depository, or in any other similar capacity, or, subject to the provisions of paragraph (1) of this Section, to act as trustee, whether under an indenture or otherwise;

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

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

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

-56-

(8) such Trustee is the beneficial owner of, or holds as collateral security for an obligation which is in Default, 10% or more of any class of security of any person who, to the knowledge of the Trustee, owns 50% or more of the voting securities of the Company;

(9) such Trustee owns, on the date of Default upon the Conflicted Securities or any anniversary of such Default while such Default remains outstanding, in the capacity of executor, administrator, testamentary or inter vivos trustee, guardian, committee or conservator, or in any other similar capacity, an aggregate of 25% or more of the voting securities, or of any class of security, of any person, the beneficial ownership of a specified percentage of which would have constituted a conflicting interest under paragraph (6), (7) or (8) of this Section 910(d). As to any such securities of which such Trustee acquired ownership through becoming executor, administrator or testamentary trustee of an estate which included them, the provisions of the preceding sentence shall not apply, for a period of two years from the date of such acquisition, to the extent that such securities included in such estate do not exceed 25% of such voting securities or 25% of any such class of security. Promptly after the date of any such Default and annually in each succeeding year in which such Default shall be continuing, such Trustee shall make a check of its holdings of such securities in any of the above-mentioned capacities as of such date. If the Company shall fail to make payment in full of the principal of, or premium, if any, or interest, if any, on, any of the Securities when and as the same shall become due and payable, and such failure shall continue for 30 days thereafter, such Trustee shall make a prompt check of its holdings of such securities in any of the above-mentioned capacities as of the date of the expiration of such 30-day period, and after such date, notwithstanding the foregoing provisions of this paragraph, all such securities so held by such Trustee, with sole or joint control over such securities vested in it, shall be considered as though beneficially owned by such Trustee for the purposes of paragraphs (6), (7) and (8) of this Section; or

(10) except under the circumstances described in paragraph (1), (3), (4), (5) or (6) of Section 907(b), such Trustee shall be or become a creditor of the Company.

The specification of percentages in paragraphs (5) through (9) of this Section 910(d) shall not be construed as indicating that the ownership of such percentages of the securities of a person is or is not necessary or sufficient to constitute direct or indirect control for the purposes of paragraph (3) or (7) of this Section 910(d).

For the purposes of paragraph (1) of this Section 910(d) and Sections 812 and 813, the terms "series of securities" or "series" means a series, class or group of securities issued under an indenture pursuant to the terms of which the Holders of one such series may vote to direct the indenture trustee therefor, or otherwise take action pursuant to a vote of such Holders, separately from the Holders of another such series, class or group; provided, that neither of such terms shall include any such series, class or group if all of such series, classes and groups rank equally and are wholly unsecured.

For the purposes of paragraphs (6) through (9) of this Section 910(d), (a) the terms "security" and "securities" shall include only such securities as are generally known as corporate securities, but shall not include any note or other evidence of indebtedness issued to evidence an obligation to repay moneys lent to a person by one or more banks, trust companies or banking firms, or any certificate of interest or participation in any such note or evidence of indebtedness; and (b) the Trustee shall not be deemed to be the owner or holder of (i) any security which it holds as collateral security, as trustee or otherwise, for an obligation which is not in default as to payment of principal for 30 days or more, (ii) any security which it holds as collateral security under this Indenture, irrespective of any Default hereunder or (iii) any security which it holds as agent for collection, or as custodian, escrow agent or depositary, or in any similar representative capacity.

(e) For the purpose of this Section 910:

(1) the term "Company" means any obligor upon the Securities;

(2) the term "Conflicted Securities" means the Securities of any series with respect to which the Trustee shall be deemed by virtue of Section 910(d) to have a conflicting interest for purposes of Section 910(a);

(3) the term "Default" means an Event of Default exclusive of any period of grace or requirement of notice, except that, for the purposes of paragraphs (6) through (9) of Section 910(d), the term "Default", when used with respect to a failure to pay the principal of any Security, or any installment thereof, at its Stated Maturity, means a failure to pay such principal or installment, at its Stated Maturity, which failure shall have continued for 30 days or more and shall not have been cured;

(4) the term "director" means any director of a corporation or any individual performing similar functions with respect to any organization, whether incorporated or unincorporated;

(5) the term "executive officer" means the president, every vice president, every trust officer, the cashier, the secretary and the treasurer of a corporation, and any individual customarily performing similar functions with respect to any organization whether incorporated or unincorporated, but shall not include the chairman of the board of directors;

(6) the term "person" means an individual, a corporation, a partnership, an association, a joint-stock company, a trust, an unincorporated organization or a government or political subdivision thereof; and as used in this paragraph, the term "trust" shall include only a trust where the interest or interests of the beneficiary or beneficiaries are evidenced by a security;

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

(8) the term "voting security" means any security presently entitling the owner or holder thereof to vote in the direction or management of the affairs of a person, or any security issued under or pursuant to any trust, agreement or arrangement whereby a trustee or trustees or agent or agents for the owner or holder of such security are presently entitled to vote in the direction or management of the affairs of a person;

(f) The percentages of voting securities and other securities specified in Section 910(d) shall be calculated in accordance with the following provisions:

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

(2) a specified percentage of a class of securities of a person means such percentage of the aggregate amount of securities of the class outstanding;

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

(4) the term "outstanding", as used in this Section 910(f), means issued and not held by or for the account of the issuer; the following securities shall not be deemed outstanding within the meaning of this definition:

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

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

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

(D) securities held in escrow if placed in escrow by the issuer thereof;

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

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

(g) Except in the case of an Event of Default involving the failure to pay principal of or interest on any Security, the Trustee shall not be required to resign as provided by this Section if the Commission declares that the Trustee has sustained the burden of proving, on application to such Commission and after opportunity for hearing thereon, that:

(i) such Event of Default may be cured or waived during a reasonable period and under the procedures described in such application; and

(ii) a stay of the Trustee's duty to resign will not be inconsistent with the interests of holders of the Securities.

The filing of such an application shall automatically stay the performance of the duty to resign until the Commission shall have ordered otherwise.

SECTION 911. Resignation and Removal; Appointment of Successor.

(a) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with Section 912.

(b) The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If the instrument of acceptance by a successor Trustee required by Section 912 shall not have been delivered to the Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(c) The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Trustee and to the Company.

(d) If at any time:

(1) the Trustee shall fail to comply with Section 910(a) after written request therefor by the Company or by any Holder who has been a bona fide Holder for at least six months, or

(2) the Trustee shall cease to be eligible under Section 901 and shall fail to resign after written request therefor by the Company or by any such Holder, or

(3) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, (x) the Company by a Board Resolution may remove the Trustee with respect to all Securities or (y) any Holder who has been a bona fide Holder for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

(e) If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause, with respect to the Securities of one or more series, the Company, by a Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series) and shall comply with the applicable requirements of Section 912. If, within one year after such resignation, removal or incapability, or the occurrence of such vacancy, a successor Trustee with respect to the Securities of any series shall be appointed by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment in accordance with the applicable requirements of Section 911, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders and accepted appointment in the manner required by Section 912, any Holder who has been a bona fide Holder of a Security of such series for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(f) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series by mailing written notice of such event by first-class mail, postage prepaid, to all Holders of Securities of such series as their names and addresses appear in the Security Register. Each notice shall include the name of the successor

Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

SECTION 912. Acceptance of Appointment by Successor.

(a) In case of the appointment hereunder of a successor Trustee with respect to the Securities of all series, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of all sums owed to it, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder.

(b) In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any

successor Trustee, such retiring Trustee, upon payment of all sums owed to it, shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; provided, however, that the retiring Trustee shall not be required to indemnify the successor Trustee against any liability and expense incurred as a result of the appointment of the successor Trustee.

(c) Upon request of any such successor Trustee, the Company shall execute any instruments which fully vest in and confirm to such successor Trustee all such rights, powers and trusts referred to in subsection (a) or (b) of this Section, as the case may be.

(d) No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

SECTION 913. Merger, Conversion, Consolidation or Succession to Business.

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities.

SECTION 914. Appointment of Authenticating Agent.

The Trustee may appoint an Authenticating Agent or Agents with respect to the Securities of one or more series, or any Tranche thereof, which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series or Tranche issued upon original issuance, exchange, registration of transfer or partial redemption thereof or pursuant to Section 306, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication

executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a corporation organized and doing business under the laws of the United States of America, any State or territory thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having a combined capital and surplus of not less than \$10,000,000 and subject to supervision or examination by Federal or state authority. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, provided such corporation shall be otherwise eligible under this Section, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent may resign at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, the Trustee may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall make written notice at such appointment by first-class mail, postage prepaid, to all Holders. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Company agrees to pay to each Authenticating Agent, from time to time, reasonable compensation for its services under this Section and to reimburse each Authenticating Agent, from time to time, for its reasonable out-of-pocket expenses incurred under this Section.

If an appointment with respect to the Securities of one or more series, or any Tranche thereof, shall be made pursuant to this Section, the Securities of such series or Tranche may have endorsed thereon, in addition to the Trustee's certificate of authentication, an alternate certificate of authentication substantially in the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

As Trustee

By: _____
As Authenticating
Agent

By: _____
Authorized Signatory

If all of the Securities of a series may not be originally issued at one time, and if the Trustee does not have an office capable of authenticating Securities upon original issuance located in a Place of Payment where the Company wishes to have Securities of such series authenticated upon original issuance, the Trustee, if so requested by the Company in writing (which writing need not comply with Section 102 and need not be accompanied by an Opinion of Counsel), shall appoint, in accordance with this Section and in accordance with such procedures as shall be acceptable to the Trustee, an Authenticating Agent (which, if so requested by the Company, may be an Affiliate of the Company) having an office in a Place of Payment designated by the Company with respect to such series of Securities.

ARTICLE TEN

Holders' Lists and Reports by Trustee and Company

SECTION 1001. Company to Furnish Trustee Names and Addresses of Holders.

The Company shall furnish or cause to be furnished to the Trustee

(a) semiannually, not later than June 1 and December 1, in each year, a list, in such form as the Trustee may reasonably require, containing all the information in the possession or control of the Company, or any of its Paying Agents other than the Trustee, as to the names and addresses of

the Holders as of the preceding May 15 or November 15, as the case may be, and

(b) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished;

provided, however, the Company may exclude from any such list names and addresses provided by it to the Trustee in its capacity as Security Registrar.

SECTION 1002. Preservation of Information; Communications to Holders.

(a) The Trustee shall preserve, in as current a form as shall be reasonably practicable, the names and addresses of Holders (1) contained in the most recent list furnished to the Trustee as provided in Section 1001 and (2) received by the Trustee in the capacity of Paying Agent. The Trustee may (A) destroy any list furnished to it as provided in Section 1001 upon receipt of a new list so furnished, (B) destroy any information received by it as Paying Agent (if so acting) hereunder with respect to the Securities of any series upon delivering to itself as Trustee, not earlier than forty-five days after the then most recent Interest Payment Date for such Securities, a list containing the names and addresses of the Holders of such Securities obtained from such information since the delivery of the next previous list, if any, and (C) destroy any list delivered to itself as Trustee which was compiled from information received by it as Paying Agent (if so acting) hereunder upon the receipt of a new list so delivered.

(b) If three or more Holders (herein referred to as "applicants") shall apply in writing to the Trustee, and furnish to the Trustee reasonable proof that each such applicant has owned a Security for a period of at least six months preceding the date of such application, and such application shall state that the applicants desire to communicate with other Holders with respect to their rights under this Indenture or under the Securities and is accompanied by a copy of the form of proxy or other communication which such applicants propose to transmit, then the Trustee shall, within five business days after the receipt of such application, at its election, either

(1) afford such applicants access to the information preserved at the time by the Trustee in accordance with Section 1002(a), or

(2) inform such applicants as to the approximate number of Holders whose names and addresses appear in the information preserved at the time by the Trustee in accordance with

Section 1002(a), and as to the approximate cost of mailing to such Holders the form of proxy or other communication, if any, specified in such application.

If the Trustee shall elect not to afford such applicants access to such information, the Trustee shall, upon the written request of such applicants, mail to each Holder whose name and address appear in the information preserved at the time by the Trustee in accordance with Section 1002(a) a copy of the form of proxy or other communication which is specified in such request, with reasonable promptness after a tender to the Trustee by such applicants of the material to be mailed and of payment, or provision for the payment, of the reasonable expenses of mailing, unless within five days after such tender, the Trustee shall mail to such applicants and file with the Commission, together with a copy of the material to be mailed, a written statement to the effect that, in the opinion of the Trustee, such mailing would be contrary to the best interest of the Holders or would be in violation of applicable law. Such written statement shall specify the basis of such opinion. If the Commission, after opportunity for a hearing upon the objections specified in the written statement so filed, shall enter an order refusing to sustain any of such objections or if, after the entry of an order sustaining one or more of such objections, the Commission shall find, after notice and opportunity for hearing, that all the objections so sustained have been met and shall enter an order so declaring, the Trustee shall mail copies of such material to all such Holders with reasonable promptness after the entry of such order and the renewal of such tender by such applicants as aforesaid. Otherwise the Trustee shall be relieved of any obligation or duty to such applicants respecting their application.

(c) Every Holder of Securities, by receiving and holding the same, shall be deemed to have agreed with the Company and the Trustee that neither the Company nor the Trustee, nor any agent of either of them, shall be held accountable by reason of the disclosure of any such information as to the names and addresses of the Holders in accordance with Section 1002(b), regardless of the source from which such information was derived, and that the Trustee shall not be held accountable by reason of mailing any material pursuant to a request made under Section 1002(b).

SECTION 1003. Reports by Trustee.

(a) Within 60 days after March 1 of each year commencing with the year 1992, the Trustee, if any of the following events shall have occurred during the twelve-months ended on such March 1, shall transmit by mail to the Holders, as provided in subsection (c) of this Section, a brief report dated as of such March 1 with respect to:

(1) any change to its eligibility under Section 901;

(2) the creation of or any material change to a relationship specified in clauses (1) through (10) of Section 910(d);

(3) the character and amount of any advances (and if the Trustee elects so to state, the circumstances surrounding the making thereof) made by the Trustee (as such) which remain unpaid on the date of such report, and for the reimbursement of which it claims or may claim a lien or charge, prior to that of the Securities, on any property or funds held or collected by it as Trustee, if such advances so remaining unpaid aggregate more than 1/2 of 1% of the principal amount of the Securities Outstanding on the date of such report;

(4) any change to the amount, interest rate and maturity date of all other indebtedness owing by the Company (or by any other obligor on the Securities) to the Trustee in its individual capacity, on the date of such report, with a brief description of any property held as collateral security therefor, except an indebtedness based upon a creditor relationship arising in any manner described in clauses (2), (3), (4) or (6) of Section 907(b);

(5) any change to the property and funds, if any, physically in the possession of the Trustee as such on the date of such report;

(6) any additional issue of Securities which the Trustee has not previously reported; and

(7) any action taken by the Trustee in the performance of its duties hereunder which it has not previously reported and which, in its opinion, materially affects the Securities, except action in respect of a default, notice of which has been or is to be withheld by the Trustee in accordance with Section 903.

(b) The Trustee shall transmit to the Holders, as provided in Section 1003(c), a brief report with respect to the character and amount of any advances (and if the Trustee elects so to state, the circumstances surrounding the making thereof) made by the Trustee (as such) since the date of the last report transmitted pursuant to Section 1003(a) (or if no such report has yet been so transmitted, since the date of execution of this instrument) for the reimbursement of which it claims or may claim a lien or charge, prior to that of the Securities, on property or funds held or collected by it as Trustee and which it has not previously reported pursuant to this Section, except that the Trustee shall not be required (but may elect) to report such advances if such advances remaining unpaid at

any time aggregate 10% or less of the principal amount of the Securities Outstanding at such time, such report to be transmitted within 90 days after such time.

(c) Reports pursuant to Section 1003 shall be transmitted by mail:

(1) to all Holders, as their names and addresses appear in the Security Register;

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

(3) except in the case of reports pursuant to Section 1003(b), to all Holders whose names and addresses shall be preserved, at the time by the Trustee, as provided in Section 1002(a).

(d) A copy of each such report, at the time of such transmission to Holders, shall be filed by the Trustee with each stock exchange upon which any Securities with respect to which it relates are listed, the Commission and the Company. The Company will notify the Trustee when any Securities are listed on any stock exchange.

SECTION 1004. Reports by Company.

The Company shall:

(a) file with the Trustee, within 30 days after the Company is required to file the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) which the Company may be required to file with the Commission pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934; or, if the Company is not required to file information, documents or reports pursuant to either of such Sections, then it shall file with the Trustee and the Commission, in accordance with the rules and regulations prescribed from time to time by the Commission, such of the supplementary and periodic information, documents and reports which may be required pursuant to Section 13 of the Securities Exchange Act of 1934 in respect of a security listed and registered on a national securities exchange as may be prescribed from time to time in such rules and regulations;

(b) file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to

time by the Commission, such additional information, documents and reports with respect to compliance by the Company with the conditions and covenants of this Indenture as may be required, from time-to-time, by such rules and regulations;

(c) transmit, within 30 days after the filing thereof with the Trustee, to the Holders, in the manner and to the extent provided in Section 1003(c), such summaries of any information, documents and reports required to be filed by the Company pursuant to clauses (a) or (b) of this Section as may be required by rules and regulations prescribed, from time-to-time, by the Commission; and

(d) furnish to the Trustee, not less often than annually, a brief certificate from its principal executive officer, principal financial officer or principal accounting officer as to his knowledge of the Company's compliance with all of the conditions and covenants of this Indenture, such compliance to be determined without regard to any period of grace or requirement of notice.

ARTICLE ELEVEN

Consolidation, Merger, Conveyance, Transfer or Lease

SECTION 1101. Company May Consolidate, Etc., Only on Certain Terms.

The Company shall not consolidate with or merge into any other corporation or convey, transfer or lease its properties and assets substantially as an entirety to any Person, unless

(a) the corporation formed by such consolidation or into which the Company is merged or the Person which acquires by conveyance or transfer, or which leases, the properties and assets of the Company substantially as an entirety shall be a Person organized and existing under the laws of the United States of America, any State thereof or the District of Columbia, and shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, the due and punctual payment of the principal of, and premium, if any, and interest, if any, on, all Outstanding Securities and the performance of every covenant of this Indenture on the part of the Company to be performed or observed; and

(b) the Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and such indenture supplemental hereto complies with this

Article and that all conditions precedent herein provided for relating to such transactions have been complied with.

SECTION 1102. Successor Corporation Substituted.

Upon any consolidation by the Company with or merger by the Company into any other corporation or any conveyance, transfer or lease of the properties and assets of the Company substantially as an entirety in accordance with Section 1101, the successor corporation formed by such consolidation or into which the Company is merged or the Person to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein, and thereafter, the predecessor Person shall be relieved of all obligations and covenants under this Indenture and the Securities Outstanding hereunder.

ARTICLE TWELVE

Supplemental Indentures

SECTION 1201. Supplemental Indentures Without Consent of Holders.

Without the consent of any Holders, the Company and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any of the following purposes:

(a) to evidence the succession of another Person to the Company and the assumption by any such successor of the covenants of the Company herein and in the Securities, all as provided in Article Eleven; or

(b) to add to the covenants of the Company for the benefit of the Holders of all or any series of Securities, or any Tranche thereof (and if such covenants are to be for the benefit of less than all Securities, stating that such covenants are expressly being included solely for the benefit of such series or Tranche) or to surrender any right or power herein conferred upon the Company; or

(c) to add any additional Events of Default with respect to all or any series of Securities; or

(d) to change or eliminate any provision of this Indenture or to add any new provision to this Indenture; provided, however, that if such change, elimination or addition shall adversely affect the interests of the Holders of Securities of any series, or a Tranche thereof, in any material respect, such

change, elimination or addition shall become effective with respect to such series or Tranche only when no Security of such series or Tranche remains Outstanding; or

(e) to provide collateral security for the Securities;
or

(f) to establish the form or terms of Securities of any series or Tranche as contemplated by Sections 201 and 301; or

(g) to evidence and provide for the acceptance of appointment hereunder by a separate or successor Trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, pursuant to the requirements of Section 912(b); or

(h) to provide for the procedures required to permit the Company to utilize, at its option, a non-certificated system of registration for all, or any series or Tranche of, the Securities; or

(i) to change any place or places where (1) the principal of, and premium, if any, and interest, if any, on, all or any series of Securities, or any Tranche thereof, shall be payable, (2) all or any series of Securities, or any Tranche thereof, may be surrendered for registration of transfer, (3) all or any series of Securities, or any Tranche thereof, may be surrendered for exchange and (4) notices and demands to or upon the Company in respect of all or any series of Securities, or any Tranche thereof, and this Indenture may be served; provided, however, that any such place shall be located in New York, New York or Portland, Oregon; or

(j) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture, provided that such other provisions shall not adversely affect the interests of the Holders of Securities of any series or Tranche in any material respect.

Without limiting the generality of the foregoing, if the Trust Indenture Act as in effect at the date of the execution and delivery of this Indenture or at any time thereafter shall be amended and

(x) if any such amendment shall require one or more changes to any provisions hereof or the inclusion herein of any additional provisions, or shall by operation of law be deemed

to effect such changes or incorporate such provisions by reference or otherwise, this Indenture shall be deemed to have been amended so as to conform to such amendment to the Trust Indenture Act, and the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to effect or evidence such changes or additional provisions; or

(y) if any such amendment shall permit one or more changes to, or the elimination of, any provisions hereof which, at the date of the execution and delivery hereof or at any time thereafter, are required by the Trust Indenture Act to be contained herein, this Indenture shall be deemed to have been amended to effect such changes or elimination, and the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to effect such changes or elimination; or

(z) if, by reason of any such amendment, one or more provisions which, at the date of the execution and delivery hereof or at any time thereafter, are required by the Trust Indenture Act to be contained herein shall be deemed to be incorporated herein by reference or otherwise, or otherwise made applicable hereto, and shall no longer be required to be contained herein, the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to effect the elimination of such provisions.

SECTION 1202. Supplemental Indentures With Consent of Holders.

With the consent of the Holders of not less than a majority in aggregate principal amount of the Securities of all series then Outstanding under this Indenture, considered as one class, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to, or changing in any manner or eliminating any of the provisions of, this Indenture; provided, however, that if there shall be Securities of more than one series Outstanding hereunder and if a proposed supplemental indenture shall directly affect the rights of the Holders of Securities of one or more, but less than all, of such series, then the consent only of the Holders of a majority in aggregate principal amount of the Outstanding Securities of all series so directly affected, considered as one class, shall be required; and provided, further, that if the Securities of any series shall have been issued in more than one Tranche and if the proposed supplemental indenture shall directly affect the rights of the Holders of Securities of one or more, but less than all, of such Tranches, then the consent only of the Holders of a majority in aggregate principal amount of the Outstanding Securities of all Tranches so directly affected, considered as one class, shall

be required; and provided, further, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security of each series or Tranche so directly affected,

(a) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Security, or reduce the principal amount thereof or the rate of interest thereon or the method of calculating such rate (or the amount of any installment of interest thereon) or any premium payable upon the redemption thereof, or reduce the amount of the principal of a Discount Security that would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 802, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the Redemption Date), or

(b) reduce the percentage in principal amount of the Outstanding Securities of such series or Tranche, the consent of the Holders of which is required for any such supplemental indenture, or the consent of the Holders of which is required for any waiver of compliance with any provision of this Indenture or of any default hereunder and its consequences, or reduce the requirements of Section 1304 for quorum or voting, or

(c) modify any of the provisions of this Section or Section 813, except to increase the percentages in principal amount referred to in this Section or such other Sections or to provide that other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby; provided, however, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to "the Trustee" and concomitant changes in this Section, or the deletion of this proviso, in accordance with the requirements of Sections 912(b) and 1201(g).

A supplemental indenture which changes or eliminates any covenant or other provision of this Indenture which has expressly been included solely for the benefit of one or more particular series of Securities, or of one or more Tranches thereof, or which modifies the rights of the Holders of Securities of such series or Tranches with respect to such covenant or other provision, shall be deemed not to affect the rights under this Indenture of the Holders of Securities of any other series or Tranche.

It shall not be necessary for any Act of Holders under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof.

SECTION 1203. Execution of Supplemental Indentures.

In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 902) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee's own rights, duties, immunities or liabilities under this Indenture or otherwise.

SECTION 1204. Effect of Supplemental Indentures.

Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, such supplemental indenture shall form a part of this Indenture for all purposes, and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder shall be bound thereby. Any supplemental indenture permitted by this Article may restate this Indenture in its entirety, and, upon the execution and delivery thereof, any such restatement shall supersede this Indenture as theretofore in effect for all purposes.

SECTION 1205. Conformity With Trust Indenture Act.

Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

SECTION 1206. Reference in Securities to Supplemental Indentures.

Securities of any series, or any Tranche thereof, authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of any series, or any Tranche thereof, so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series or Tranche.

SECTION 1207. Modification Without Supplemental Indenture.

If the terms of any particular series, or any Tranche thereof, of Securities shall have been established by a Board Resolution, an Officers' Certificate pursuant to a Board Resolution, a Company Order or procedures, acceptable to the Trustee, specified

in a Company Order as contemplated by Section 301, and not in an indenture supplemental hereto, additions to, changes in or the elimination of any of such terms may be effected by means of a further Board Resolution or further Officers' Certificate pursuant to a Board Resolution, as the case may be, delivered to, and accepted by, the Trustee; provided, however, that such Board Resolution or Officers' Certificate shall not be accepted by the Trustee or otherwise be effective unless all conditions set forth in this Indenture which would be required to be satisfied if such additions, changes or elimination were contained in a supplemental indenture shall have been appropriately satisfied. Upon the acceptance thereof by the Trustee, any such Board Resolution or Officers' Certificate shall be deemed to be a "supplemental indenture" for purposes of Section 1204 and 1206.

ARTICLE THIRTEEN

Meetings of Holders; Action Without Meeting

SECTION 1301. Purposes for Which Meetings May Be Called.

A meeting of Holders of Securities of one or more series, or one or more Tranches thereof, may be called, at any time and from time-to-time, pursuant to this Article to make, give or take any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be made, given or taken by Holders of Securities of such series or Tranches.

SECTION 1302. Call, Notice and Place of Meetings.

(a) The Trustee may at any time call a meeting of Holders of Securities of one or more series, or one or more Tranches thereof, for any purpose specified in Section 1301, to be held at such time and at such place in the Borough of Manhattan, The City of New York, as the Trustee shall determine, or, with the approval of the Company, at any other place. Notice of every such meeting, setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting, shall be given, in the manner provided in Section 106, not less than 21 nor more than 360 days prior to the date fixed for the meeting.

(b) If the Trustee shall have been requested to call a meeting of the Holders of Securities of one or more series, or one or more Tranches thereof, by the Company or by the Holders of 33% in aggregate principal amount of all of such series and Tranches, considered as one class, for any purpose specified in Section 1301, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have given the notice of such meeting within 21 days after receipt of such request or shall not thereafter proceed to cause the meeting to be

held as provided herein, the Company or the Holders of Securities of such series and Tranches in the amount above specified, as the case may be, may determine the time and the place in the Borough of Manhattan, The City of New York, or in such other place as shall be determined or approved by the Company, for such meeting and may call such meeting for such purposes by giving notice thereof in the manner provided in Section 106.

(c) Any meeting of Holders of Securities of one or more series, or one or more Tranches thereof, shall be valid without notice if the Holders of all Outstanding Securities of such series or Tranches are present in person or by proxy and if representatives of the Company and the Trustee are present, or if notice is waived in writing before or after the meeting by the Holders of all Outstanding Securities of such series or Tranches, or by such of them as are not present at the meeting in person or by proxy, and by the Company and the Trustee.

SECTION 1303. Persons Entitled to Vote at Meetings.

To be entitled to vote at any meeting of Holders of Securities of one or more series, or one or more Tranches thereof, a Person shall be (a) a Holder of one or more Outstanding Securities of such series or Tranches, or (b) a Person appointed by an instrument in writing as proxy for a Holder or Holders of one or more Outstanding Securities of such series or Tranches by such Holder or Holders. The only Persons who shall be entitled to attend any meeting of Holders of Securities of any series or Tranche shall be the Persons entitled to vote at such meeting and their counsel, any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

SECTION 1304. Quorum; Action.

The Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities of the series and Tranches with respect to which a meeting shall have been called as hereinbefore provided, considered as one class, shall constitute a quorum for a meeting of Holders of Securities of such series and Tranches; provided, however, that if any action is to be taken at such meeting which this Indenture expressly provides may be taken by the Holders of a specified percentage, which is less than a majority, in principal amount of the Outstanding Securities of such series and Tranches, considered as one class, the Persons entitled to vote such specified percentage in principal amount of the Outstanding Securities of such series and Tranches, considered as one class, shall constitute a quorum. In the absence of a quorum within one hour of the time appointed for any such meeting, the meeting shall, if convened at the request of Holders of Securities of such series and Tranches, be dissolved. In any other case the meeting may be adjourned for such period as may be determined by the chairman of the

meeting prior to the adjournment of such meeting. In the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for such period as may be determined by the chairman of the meeting prior to the adjournment of such adjourned meeting. Except as provided by Section 1305(e), notice of the reconvening of any meeting adjourned for more than 30 days shall be given in the manner provided in Section 106 not less than ten days prior to the date on which the meeting is scheduled to be reconvened. Notice of the reconvening of an adjourned meeting shall state expressly the percentage, as provided above, of the principal amount of the Outstanding Securities of such series and Tranches which shall constitute a quorum.

Except as limited by Section 1202, any resolution presented to a meeting or adjourned meeting duly reconvened at which a quorum is present as aforesaid may be adopted only by the affirmative vote of the Holders of a majority in aggregate principal amount of the Outstanding Securities of the series and Tranches with respect to which such meeting shall have been called, considered as one class; provided, however, that, except as so limited, any resolution with respect to any action which this Indenture expressly provides may be taken by the Holders of a specified percentage, which is less than a majority, in principal amount of the Outstanding Securities of such series and Tranches, considered as one class, may be adopted at a meeting or an adjourned meeting duly reconvened and at which a quorum is present as aforesaid by the affirmative vote of the Holders of such specified percentage in principal amount of the Outstanding Securities of such series and Tranches, considered as one class.

Any resolution passed or decision taken at any meeting of Holders of Securities duly held in accordance with this Section shall be binding on all the Holders of Securities of the series and Tranches with respect to which such meeting shall have been held, whether or not present or represented at the meeting.

SECTION 1305. Attendance at Meetings; Determination of Voting Rights; Conduct and Adjournment of Meetings.

(a) Attendance at meetings of Holders of Securities may be in person or by proxy; and, to the extent permitted by law, any such proxy shall remain in effect and be binding upon any future Holder of the Securities with respect to which it was given unless and until specifically revoked by the Holder or future Holder of such Securities before being voted.

(b) Notwithstanding any other provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders of Securities in regard to proof of the holding of such Securities and of the appointment of proxies and in regard to the appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other

evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall deem to be appropriate. Except as otherwise permitted or required by any such regulations, the holding of Securities shall be proved in the manner specified in Section 104 and the appointment of any proxy shall be proved in the manner specified in Section 104. With the consent of the Company, such regulations may provide that written instruments appointing proxies, regular on their face, may be presumed valid and genuine without the proof specified in Section 104 or other proof.

(c) The Trustee shall, by an instrument in writing, appoint a temporary chairman of the meeting, unless the meeting shall have been called by the Company or by Holders as provided in Section 1302(b), in which case the Company or the Holders of Securities calling the meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities of all series and Tranches represented at the meeting, considered as one class.

(d) At any meeting each Holder or proxy shall be entitled to one vote for each \$1,000 principal amount of Securities held or represented by him; provided, however, that no vote shall be cast or counted at any meeting in respect of any Security challenged as not Outstanding and ruled by the chairman of the meeting to be not Outstanding. The chairman of the meeting shall have no right to vote, except as a Holder of a Security or proxy.

(e) Any meeting duly called pursuant to Section 1302 at which a quorum is present may be adjourned, from time to time, by Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities of all series and Tranches represented at the meeting, considered as one class; and the meeting may be held as so adjourned without further notice.

SECTION 1306. Counting Votes and Recording Action of Meetings.

The vote upon any resolution submitted to any meeting of Holders shall be by written ballots on which shall be subscribed the signatures of the Holders or of their representatives by proxy and the principal amounts and serial numbers of the Outstanding Securities, of the series and Tranches with respect to which the meeting shall have been called, held or represented by them. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports of all votes cast at the meeting. A record of the proceedings of each meeting of Holders shall be prepared by the secretary of the meeting and there shall be attached to said record the original reports of the inspectors of votes on any

vote by ballot taken thereat and affidavits by one or more persons having knowledge of the facts setting forth a copy of the notice of the meeting and showing that said notice was given as provided in Section 1302 and, if applicable, Section 1304. Each copy shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one such copy shall be delivered to the Company, and another to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting. Any record so signed and verified shall be conclusive evidence of the matters therein stated.

SECTION 1307. Action Without Meeting.

In lieu of a vote of Holders at a meeting as provided in this Article, any request, demand, authorization, direction, notice, consent, waiver or other action may be made, given or taken by Holders by written instruments as provided in Section 104.

SECTION 1308. Record Date.

The Company may set a record date for the purpose of determining the Holders of the Securities entitled to vote or consent, whether at a meeting thereof or otherwise, to any action authorized or permitted by the Indenture. If the Company should set a record date, that date shall be no less than 15 nor more than 30 days preceding the first solicitation of such vote or consent or notice of such meeting.

ARTICLE FOURTEEN

Immunity of Incorporators, Stockholders, Officers and Directors

SECTION 1401. Liability Solely Corporate.

No recourse shall be had for the payment of the principal of, or premium, if any, or interest, if any, on, any Securities, or any part thereof, or for any claim based thereon or otherwise in respect thereof, or of the indebtedness represented thereby, or upon any obligation, covenant or agreement under this Indenture, against any incorporator, stockholder, officer or director, as such, past, present or future of the Company or of any predecessor or successor corporation (either directly or through the Company or a predecessor or successor corporation), whether by virtue of any constitutional provision, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly agreed and understood that this Indenture and all the Securities are solely corporate obligations, and that no personal liability whatsoever shall attach to, or be incurred by, any incorporator, stockholder, officer or director, past, present or future, of the Company or of

any predecessor or successor corporation, either directly or indirectly through the Company or any predecessor or successor corporation, because of the indebtedness hereby authorized or under or by reason of any of the obligations, covenants or agreements contained in this Indenture or in any of the Securities or to be implied herefrom or therefrom, and that any such personal liability is hereby expressly waived and released as a condition of, and as part of the consideration for, the execution of this Indenture and the issuance of the Securities.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed, and their respective corporate seals to be hereunto affixed and attested, all as of the day and year first above written.

NORTHWEST NATURAL GAS COMPANY

By: *Bruce Adell Bell*
Senior Vice President and
Chief Financial Officer

[SEAL]

ATTEST:

A. J. R...
Secretary

BANKERS TRUST COMPANY, Trustee

By: *J. J. J...*
Assistant Vice President

[SEAL]

ATTEST:

Thomas X. Wilson
Assistant Secretary

NORTHWEST NATURAL GAS COMPANY

**Reconciliation and tie between Trust Indenture Act of 1939
and Indenture, dated as of June 1, 1991**

Trust Indenture Act Section	Indenture Section
§310(a)(1).....	901
(a)(2).....	901
(a)(3).....	Not Applicable
(a)(4).....	Not Applicable
(a)(5).....	901
(b).....	910
	911
§311(a).....	907(a)
(b).....	907(b)
(b)(2).....	1003(c)
(c).....	Not Applicable
§312(a).....	1001
	1002(a)
(b).....	1002(b)
(c).....	1002(c)
§313(a) (except (6)).....	1003(a)
(a)(6).....	Not Applicable
(b)(1).....	Not Applicable
(b)(2).....	1003(b)
(c).....	1003(c)
(d).....	1003(d)
§314(a).....	1004
(b).....	Not Applicable
(c)(1).....	102
(c)(2).....	102
(c)(3).....	Not Applicable
(d).....	Not Applicable
(e).....	102
§315(a).....	902(a)
(b).....	903
	1003(a)(7)
(c).....	902(b)
(d).....	902(c)
(d)(1).....	902(a)
(d)(2).....	902(c)(2)
(d)(3).....	902(c)(3)
(e).....	814
§316(a).....	101- "Outstanding"
(a)(1)(A).....	812
(a)(1)(B).....	813
(a)(2).....	Not Applicable
(b).....	808
(c).....	1308
§317(a)(1).....	803
(a)(2).....	804
(b).....	603
§318(a).....	107

Exhibit E

Distribution Agreement dated as of March 18, 2009, among the Company, Banc of America Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc., Piper Jaffray & Co., Wells Fargo Securities, LLC, U.S. Bancorp Investments, Inc., Mitsubishi UFJ Securities (USA), Inc., RBC Capital Markets, LLC, CIBC World Markets Corp., or TD Securities (USA) LLC, as amended by the Company's Notice dated August 19, 2011.

Northwest Natural Gas Company

\$300,000,000

Medium-Term Notes, Series B

Distribution Agreement

March 18, 2009

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, MN 55402

Ladies and Gentlemen:

Northwest Natural Gas Company, an Oregon corporation (the "**Company**"), proposes to issue and sell from time-to-time not to exceed \$300,000,000 of its First Mortgage Bonds, designated Secured Medium-Term Notes, Series B (the "**Secured Notes**"), and its Unsecured Medium-Term Notes, Series B (the "**Unsecured Notes**"), and, together with the Secured Notes, the "**Securities**"). The Secured Notes will be issued under the Company's Mortgage and Deed of Trust, dated as of July 1, 1946, to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) (the "**Mortgage Trustee**" or the "**Trustee**") and R.G. Page (Stanley Burg, successor), as trustees, as supplemented (such Mortgage and Deed of Trust as supplemented being hereinafter referred to as the "**Mortgage**" or the "**Indenture**"). The Unsecured Notes will be issued under an indenture, dated as of June 1, 1991 (the "**Note Indenture**" or the "**Indenture**"), between the Company and Deutsche Bank Trust Company Americas, as trustee (the "**Indenture Trustee**" or the "**Trustee**"). The Securities shall have the maturities, interest rates, if any, redemption provisions and other terms set forth in the Prospectus referred to below, as it may be amended or supplemented from time-to-time, and any final term sheet relating to an offering of a particular issuance of securities.

containing information that describes the final terms of such Securities or such offering (the “**Term Sheet**”). The Securities will be issued, and the terms thereof established, from time-to-time, by the Company in accordance with the respective Indentures.

The Company represents, warrants, covenants and agrees with each of you and with each other person which shall become a party to this agreement (individually, an “**Agent**,” and collectively, the “**Agents**”) and each Agent, severally and not jointly, covenants and agrees with the Company as follows:

1. Representations and Warranties of the Company. The Company represents and warrants to each Agent that:

- (a) The Company is a corporation duly organized and validly existing under the laws of the State of Oregon, is qualified to do business as a foreign corporation in the State of Washington, with power (corporate and other) to own its properties and conduct its business as described in the Prospectus and the Pricing Disclosure Package (as defined below) (if applicable), each referred to below, and holds valid and subsisting franchises, licenses, permits and consents, free from burdensome restrictions and adequate for the conduct of its business, as described in the Prospectus and the Pricing Disclosure Package;
- (b) A registration statement on Form S-3 (Registration No. 333-148527) (the “**Registration Statement**”), in respect of the Company’s securities (which may include the Company’s First Mortgage Bonds designated Secured Medium-Term Notes, Series B, and Unsecured Medium-Term Notes, Series B) that is an automatic shelf registration statement has been filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Act**”) within three years of the date hereof and on each of the dates referred to in clauses (a)(iv), (v) and (vi) of Section 6, within three years of those dates), in the form heretofore delivered or to be delivered (excluding the exhibits thereto but including the documents incorporated by reference in the prospectus included therein) to such Agent, and such Registration Statement in such form has become effective and no stop order suspending its effectiveness and no notice pursuant to Rule 401(g)(2) of the Act objecting to use of the automatic shelf registration statement form has been issued and no proceeding for those purposes has been initiated or threatened by the Commission (any preliminary prospectus included in the Registration Statement being hereinafter called a “**Preliminary Prospectus**”). The Registration Statement, including all exhibits thereto and including the documents incorporated by reference in the prospectus included therein, and including any prospectus supplement relating to the Securities that is filed with the Commission and deemed by virtue of Rule 430B to be part of the registration statement at the applicable time of effectiveness or deemed effectiveness, but excluding Forms T-1 and T-2, each as amended at the time such part of the registration statement or any post-effective amendment became effective, each is hereinafter called the “**Registration Statement**”; the prospectus included as a part of the Registration Statement (including the Prospectus Supplement, dated March 18, 2009, and any other prospectus supplement relating

to the Securities), in the form in which it most recently has been filed with the Commission on or prior to the date of this Agreement, is hereinafter called the "**Prospectus**"; any reference herein to any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents filed by the Company under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and incorporated therein by reference as of the date of such Preliminary Prospectus or the Prospectus, as the case may be; any reference to any amendment or supplement to any Preliminary Prospectus or the Prospectus, including any supplement to the Prospectus that sets forth only the terms of a particular issue of the Securities (a "**Pricing Supplement**"), shall be deemed to refer to and include the documents filed by the Company under the Exchange Act and incorporated therein by reference as of the date of such amendment or Pricing Supplement; any reference to the Prospectus as amended or supplemented shall be deemed to refer to and include the Prospectus as then amended or supplemented (including the applicable Pricing Supplement) in relation to a particular issue of Securities to be sold pursuant to this Agreement, in the form filed with the Commission pursuant to Rule 424(b) under the Act, including any documents filed by the Company under the Exchange Act and incorporated therein by reference as of the date of such amendment or supplement; "**Pricing Disclosure Package**" means the Prospectus, including all amendments and supplements thereto and any preliminary Pricing Supplement as of the Applicable Time (as defined below), and each Term Sheet prepared pursuant to Section 5(p) and any other free-writing prospectus (as defined in Rule 405 under the Act) that has been prepared by or on behalf of the Company relating to such Securities as of such Applicable Time; and "**Applicable Time**" means the time and date set forth in the Terms Agreement (as defined below) for an issue of Securities, or if the Company does not enter into a Terms Agreement with respect to a sale of Securities, the time and date of each acceptance by the Company of any offer to purchase Securities hereunder (whether through an Agent as agent or to an Agent as principal);

- (c) The documents incorporated by reference in the Prospectus and in the Pricing Disclosure Package (if applicable), when filed with the Commission or, if later, when they became effective, conformed in all material respects with the requirements of the Act or the Exchange Act, as applicable, and the applicable rules and regulations of the Commission thereunder; none of such documents when so filed or when such documents became effective, as the case may be, included an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; any future documents so filed or incorporated by reference in the Prospectus or any Pricing Disclosure Package, or any amendment or supplement to either thereof, when filed with the Commission or, if later, when effective, will conform in all material respects with the applicable requirements of the Act or the Exchange Act, as applicable, and the rules and regulations of the Commission thereunder, and when such documents are filed or become effective, as the case may be, they will not contain an untrue statement of a material fact or omit to state a material

fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from the Prospectus as amended or supplemented or any Pricing Disclosure Package in reliance upon and in conformity with information furnished in writing to the Company by any Agent specifically for use therein;

- (d) The Registration Statement when it became effective conformed, and the Prospectus conforms, and any amendment or supplement thereto will conform, in all material respects, with the provisions of the Act and the Trust Indenture Act of 1939, as amended (the “**Trust Indenture Act**”), and the rules and regulations of the Commission thereunder; and the Registration Statement when it became effective did not (and as of the applicable effective date and on each of the dates and times referred to in clause (a) of Section 6 will not), the Prospectus, the Prospectus (including any preliminary Pricing Supplement) together with the Term Sheet, and the Pricing Disclosure Package (if applicable) does not (and on each of the dates and times referred to in clause (a) of Section 6 will not) and any amendment or supplement to the Prospectus, as of its date and on each of the dates referred to in clause (a) of Section 6, will not, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from any such document in reliance upon and in conformity with information furnished in writing to the Company by any Agent specifically for use therein;
- (e) The Company is not an “ineligible issuer” and is a “well-known seasoned issuer,” in each case as defined under the Act, in each case at the times specified in the Act in connection with the offering of the securities. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Act has been, or will be, filed with the Commission in accordance with the requirements of the Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of the Act and the applicable rules and regulations of the Commission thereunder. Any such free writing prospectus did not or will not, as of its issue date and through the time the Securities are sold by the Agents, include any information that conflicts with the information contained in the Registration Statement and the Prospectus; and any such free writing prospectus, when taken together with the information contained in the Registration Statement and the Prospectus, did not, when issued or filed pursuant to Rule 433, and does not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted

from the free writing prospectus in reliance upon and in conformity with information furnished in writing to the Company by any Agent specifically for use therein; except for any free writing prospectuses furnished to the applicable Agent before first use, the Company has not prepared, used or referred to, and will not, without such Agent's consent, prepare, use or refer to any free writing prospectus.

- (f) Except as set forth in or contemplated by the Prospectus, since the date as of which information is given in the Prospectus (if applicable) (i) there has not been any material adverse change in the condition of the Company and its subsidiaries taken as a whole, financial or otherwise, (ii) there has not been any transaction entered into by the Company or any of its subsidiaries which is material to the Company and its subsidiaries taken as a whole, other than transactions in the ordinary course of business, and (iii) neither the Company nor any of its subsidiaries has incurred any contingent obligation which is material to the Company and its subsidiaries taken as a whole;
- (g) The Securities have been duly authorized, and, when issued and authenticated pursuant to their respective Indentures and delivered pursuant to this Agreement and any Terms Agreement (as defined in Section 3 hereof), will have been duly executed, authenticated, issued and delivered, will constitute valid and legally binding obligations of the Company, enforceable in accordance with their terms, except as their enforceability may be limited by laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including without limitation, bankruptcy and insolvency laws, and will be entitled to the benefits provided by their respective Indentures (which will be substantially in the form filed as exhibits to the Registration Statement); the Indentures have been duly authorized and qualified under the Trust Indenture Act, constitute valid and legally binding instruments, enforceable in accordance with their terms, except as their enforceability may be limited by laws and principles of equity relating to or affecting generally the enforcement of creditors' rights, including without limitation, bankruptcy and insolvency laws; and the Indentures conform, and the Securities of each issue, when issued, will conform, in all material respects, to the descriptions thereof in the Prospectus, as amended or supplemented, and the Pricing Disclosure Package (if applicable) with respect to such issue;
- (h) The issue and sale of the Securities, the compliance by the Company with all of the provisions of the Securities, the Indentures, this Agreement and any Terms Agreement, and the consummation by the Company of the transactions herein and therein contemplated will not result in a breach or violation of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property of the Company is subject, nor will such action result in any violation of the provisions of any statute or the Restated Articles of Incorporation, as amended, or the Bylaws, as amended, of the Company or any order, rule or regulation of any court or any regulatory authority or other governmental agency or body having

jurisdiction over the Company or any of its properties; and no consent, approval, authorization, order, registration, filing or qualification of or with any court or governmental agency or body is required by the Company for the solicitation of offers to purchase Securities and the issue and sale of the Securities or the consummation by the Company of the other transactions contemplated by the Indentures, this Agreement or any Terms Agreement, except (x) such as have been obtained or effected at or prior to the Commencement Date (as defined in Section 4 hereof) under the Act, the Trust Indenture Act and the public utility laws of the State of Oregon, (y) the filing by the Company with the Washington Utilities and Transportation Commission (the "WUTC") of a statement establishing compliance with the applicable statutory notice provisions under the public utility laws of the State of Washington and (z) such as may be required under state securities or Blue Sky laws in connection with the solicitation by such Agent of offers to purchase Securities from the Company and with purchases of Securities by such Agent as principal, as the case may be, in each case in the manner contemplated hereby; and

- (i) Other than as set forth or contemplated in the Prospectus, there are no legal or governmental proceedings pending to which the Company is a party or to which any property of the Company is subject, which, if determined adversely to the Company, would individually or in the aggregate have a material adverse effect on the consolidated financial position, stockholders' equity or consolidated results of operations of the Company, and, to the best of the Company's knowledge, no such proceedings are threatened.
- (j) The Company's internal control over financial reporting includes policies and procedures that are designed to (1) provide for the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions concerning the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles in the United States of America; (3) provide reasonable assurance that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (4) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.
- (k) The Company employs disclosure controls and procedures that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and is accumulated and communicated to the Company's management, including its principal executive and principal financial officer, as appropriate, to allow timely decisions regarding disclosure.

2. Obligations of the Agents and the Company.

- (a) Subject to the terms and conditions hereof and to the reservation by the Company of the right to sell Securities directly on its own behalf, the Company hereby (i) appoints each of Banc of America Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc. and Piper Jaffray & Co., as an agent of the Company for the purpose of soliciting and receiving offers to purchase Securities from the Company and (ii) reserves the right, from time to time, to appoint additional agents for the purpose of soliciting and receiving offers to purchase Securities from the Company; provided that each such additional agent shall be required to become a party to this Agreement and undertake the obligations of an Agent hereunder pursuant to an Additional Agent Appointment Agreement (“**Additional Agent Appointment Agreement**”) substantially in the form of Exhibit 1 hereto.
- (b) On the basis of the representations and warranties herein, and subject to the terms and conditions hereof, each of the Agents, as agent of the Company, severally and not jointly, agrees to use its reasonable best efforts to solicit and receive offers to purchase particular issues of the Securities from the Company upon the terms and conditions set forth in the Prospectus as amended or supplemented with respect thereto and in any applicable Pricing Disclosure Package. Each Agent will promptly advise the Company by telephone or other appropriate means of all reasonable offers to purchase Securities, other than those rejected by such Agent. The Company shall not, without the consent of each Agent, which consent shall not unreasonably be withheld, solicit or accept offers to purchase, or sell, any debt securities with a maturity, at the time of original issuance, of from one year to 30 years, except (i) pursuant to this Agreement, (ii) pursuant to a private placement not constituting a public offering under the Act, or (iii) in connection with a firm commitment underwriting pursuant to an underwriting agreement that does not provide for a continuous offering. However, the Company, subject to Section 5(f) hereof, reserves the right to sell, and may solicit and accept offers to purchase, Securities directly on its own behalf, and, in the case of any such sale not resulting from a solicitation made by an Agent, no commission will be payable with respect to such sale.
- (c) Procedural details relating to the issue and delivery of Securities, the solicitation of offers to purchase Securities and the payment therefor, unless an Agent and the Company shall otherwise agree, shall be as set forth in the Administrative Procedure attached hereto as Annex I (the “**Administrative Procedure**”). The provisions of the Administrative Procedure shall apply to all transactions contemplated hereunder other than those made pursuant to a Terms Agreement. Each Agent and the Company shall perform the respective duties and obligations specifically provided to be performed by each of them in the Administrative Procedure. The Company will furnish to the Trustees a copy of the Administrative Procedure as from time to time in effect.
- (d) The Company reserves the right, in its sole discretion, to instruct the Agents to suspend, at any time, for any period of time or permanently, the solicitation of offers to purchase the Securities. As soon as practicable, but in any event not later than one business day after receipt of instructions from the Company, the

Agents will suspend solicitation of offers to purchase Securities from the Company until such time as the Company has advised the Agents that such solicitation may be resumed.

- (e) The Company agrees to pay each Agent a commission, at the time of settlement (each a “**Settlement Date**”) of any sale of a Security by the Company as a result of a solicitation made by such Agent, in an amount, unless otherwise agreed, equal to the following applicable percentage of the principal amount of such Security sold:

<u>Range of Maturities</u>	<u>Commission (percentage of aggregate principal amount of Securities sold)</u>
From 1 year to less than 18 months	.150%
From 18 months to less than 2 years	.200%
From 2 years to less than 3 years	.250%
From 3 years to less than 4 years	.350%
From 4 years to less than 5 years	.450%
From 5 years to less than 6 years	.500%
From 6 years to less than 7 years	.550%
From 7 years to less than 10 years	.600%
From 10 years to less than 15 years	.625%
From 15 years to less than 20 years	.675%
From 20 years to 30 years	.750%

- (f) Each of the several Agents represents and agrees that it will make no offer that would constitute a Free Writing Prospectus (as defined in Rule 405 under the Securities Act) that is required to be filed by the Company pursuant to Rule 433 under the Securities Act other than a Term Sheet in accordance with Section 5(p), unless the Company and such Agents otherwise agree in connection with a particular offering of Securities.

3. Sales to Agents as Principal. Each sale of Securities to an Agent, as principal, shall be made in accordance with the terms of this Agreement and (unless the Company and such Agent shall otherwise agree) a separate agreement (each a “**Terms Agreement**”), which will provide for the sale of such Securities to, and the purchase thereof by, such Agent, as principal. A Terms Agreement may be either (i) a written agreement substantially in the form of Annex II hereto, or (ii) an oral agreement between any Agent and the Company confirmed in writing by such Agent. A Terms Agreement may also specify certain provisions relating to the reoffering of such Securities by such Agent. Each Terms Agreement shall specify the principal amount of Securities to be purchased by an Agent pursuant thereto, the price to be paid to the Company for such Securities, any provisions relating to the rights of, and defaults by, any underwriters acting together with such Agent in the reoffering of the Securities, the time and date of delivery of and payment for such Securities (each, a “**Time of Delivery**”)

and place of delivery of such Securities, and any requirements for opinions of counsel, accountants' letters and officers' certificates pursuant to Section 5 hereof. Each purchase of Securities, unless otherwise agreed, shall be at a discount equivalent to the commission payable to an Agent, acting as agent, with respect to a sale of Securities of identical maturity, as set forth in Section 2(e) hereof). The Agent may engage the services of any other broker or dealer in connection with the resale of the Securities purchased as principal and may allow any portion of the discount received in connection with such purchase from the Company to be paid to such brokers and dealers. The commitment of an Agent to purchase Securities as principal, whether pursuant to a Terms Agreement or otherwise, shall be deemed to have been made on the basis of the representations and warranties of the Company herein contained and, to the extent not otherwise agreed upon in a Terms Agreement or otherwise, shall be subject to the terms and conditions herein set forth.

4. Commencement. At 12:00 p.m., New York City time, on March 18, 2009, the Distribution Agreement, dated March 18, 2009 ("this Agreement"), among the Company and the Agents was executed (such time and date being referred to herein as the "**Commencement Date**"), and the Agents were furnished at the offices of Morgan, Lewis & Bockius LLP, 101 Park Avenue, New York, New York, with the following:

- (a) An opinion of Simpson Thacher & Bartlett LLP, counsel to the Agents, dated the Commencement Date, with respect to such matters as such Agents reasonably requested, which opinion relied as to all matters governed by Oregon law, upon the opinions of Margaret D. Kirkpatrick, Esq., General Counsel for the Company, and Stoel Rives LLP referred to in Sections 4(b) and 4(d) hereof, respectively, and, as to all matters governed by Washington law, upon the opinion of Stoel Rives LLP referred to in Section 4(d) hereof;
- (b) An opinion of Margaret D. Kirkpatrick, Esq., dated the Commencement Date, in form and substance reasonably satisfactory to such Agents, to the effect set forth in Annex III to this Agreement, which opinion relied, as to all matters governed by New York law, the Act, the Exchange Act and the Trust Indenture Act, upon the opinion of Morgan, Lewis & Bockius LLP referred to in Section 4(c) hereof and, as to all matters governed by Washington law, upon the opinion of Stoel Rives LLP referred to in Section 4(d) hereof;
- (c) An opinion of Morgan, Lewis & Bockius LLP, dated the Commencement Date, in form and substance reasonably satisfactory to such Agents, to the effect set forth in Annex IV to this Agreement, which opinion relied as to all matters governed by Oregon law, upon the opinions of Margaret D. Kirkpatrick, Esq., General Counsel for the Company, and Stoel Rives LLP referred to in Sections 4(b) and 4(d) hereof, respectively, and, as to all matters governed by Washington law, upon the opinion of Stoel Rives LLP referred to in Section 4(d) hereof;
- (d) An opinion of Stoel Rives LLP, dated the Commencement Date, in form and substance reasonably satisfactory to such Agents, to the effect set forth in Annex V to this Agreement;

- (e) A letter from PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm, dated the Commencement Date, in form and substance reasonably satisfactory to such Agents and subject to compliance with the requirements of Statements on Auditing Standards ("SAS") issued by the American Institute of Certified Public Accountants, to the effect set forth in Annex VI to this Agreement; and
- (f) A certificate of the President, Chief Executive Officer, Chief Financial Officer or any Vice President of the Company, dated the Commencement Date, in form reasonably satisfactory to such Agents, (i) as to the accuracy of the representations and warranties of the Company herein at and as of the Commencement Date, (ii) as to the performance by the Company in all material respects of all of its obligations hereunder to be performed at or prior to the Commencement Date, (iii) as to the matters set forth in Section 1(f) hereof, (iv) as to the absence of any stop order of the Commission suspending the effectiveness of the Registration Statement or any pending or contemplated proceedings for such purpose, (v) as to the full force and effect of the authorizing order of the Oregon Public Utility Commission (the "OPUC") referred to in Section 7(a) hereof, and (vi) as to such other matters as such Agents reasonably requested.

5. Covenants of the Company. The Company covenants and agrees with each Agent:

- (a) (i) To make no amendment or supplement to the Registration Statement, the Prospectus or the Pricing Disclosure Package (other than a Pricing Supplement or a free-writing prospectus consisting of a Term Sheet) (A) prior to the Commencement Date, which any Agent shall reasonably disapprove by notice to the Company promptly after receipt of the proposed form thereof or (B) after the date of any agreement by an Agent, pursuant to a Terms Agreement or otherwise, to purchase Securities as principal and prior to the related Time of Delivery which such Agent shall reasonably disapprove by notice to the Company promptly after receipt of the proposed form thereof; (ii) to prepare, with respect to each particular issue of Securities to be sold through or to such Agent pursuant to this Agreement, a Terms Agreement or otherwise, a Pricing Supplement with respect to such Securities in a form reasonably satisfactory to such Agent and to file such Pricing Supplement in accordance with Rule 424(b) under the Act; (iii) to make no amendment or supplement to the Registration Statement, the Prospectus or the Pricing Disclosure Package, other than a Pricing Supplement or a free writing prospectus consisting of a Term Sheet, without affording such Agent a reasonable opportunity for review thereof and comment thereon; (iv) to timely file all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act for so long as the delivery of a prospectus is required (or in lieu thereof the notice referred to in Rule 173(a) under the Act) in connection with the offering or sale of the Securities, and during such same period to advise such Agent, promptly after the Company receives notice thereof, of the time when any amendment to the Registration Statement has been filed or has become effective

or any supplement to the Prospectus or the Pricing Disclosure Package or any amended Prospectus or Pricing Disclosure Package (other than any Pricing Supplement that relates to Securities not purchased through or by such Agent) has been filed with the Commission, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any prospectus relating to the Securities, of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amendment or supplement of the Registration Statement or Prospectus or for additional information; (v) to promptly make every reasonable effort to comply with all requests of the Commission for additional information; and (vi) in the event of the issuance of any such stop order or of any such order preventing or suspending the use of any such prospectus or suspending any such qualification, to use its best efforts to obtain its withdrawal;

- (b) From time-to-time, to take such action as such Agent reasonably may request to qualify the Securities for offering and sale under the securities laws of such jurisdictions as may be approved by the Company and to comply with such laws so as to permit the continuance of sales and dealings therein for as long as may be necessary to complete the distribution or sale of the Securities; provided, however, that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction, or to comply with any other requirement reasonably deemed by the Company to be unduly burdensome; provided, further, that the provisions of this subsection (b) shall not apply so long as the Securities are “covered securities” within the meaning of Section 18 of the Act and any rules and regulations thereunder;
- (c) To furnish such Agent with copies of the Registration Statement and each amendment thereto, the Prospectus and each amendment or supplement thereto, other than any Pricing Supplement (except as provided in the Administrative Procedure), in the form in which it is filed with the Commission pursuant to Rule 424(b) under the Act, and with copies of the documents incorporated by reference therein (other than exhibits incorporated by reference in the Registration Statement), each in such quantities as such Agent may reasonably request from time-to-time; and, if the delivery of a prospectus (or in lieu thereof the notice referred to in Rule 173(a) under the Act) is required at any time in connection with the offering or sale of the Securities to or through an Agent pursuant to this Agreement and if, at such time, any event shall have occurred as a result of which the Prospectus as then amended or supplemented or the Pricing Disclosure Package as then amended or supplemented, as the case may be, would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, or, if for any other reason it shall be necessary during such period to amend or supplement the Prospectus or the Pricing Disclosure Package or to file under the Exchange Act any document incorporated by reference in the Prospectus in order to comply with the Act, the

Exchange Act or the Trust Indenture Act or to ensure that the information included in any free writing prospectus does not conflict with information contained in the Registration Statement or the Prospectus, to notify such Agent and request such Agent, in its capacity as agent of the Company, to suspend solicitation of offers to purchase Securities from the Company (and, if so notified, such Agent shall cease such solicitations as soon as practicable, but in any event not later than one business day later); and if the Company shall decide to amend or supplement the Registration Statement, the Prospectus or the Pricing Disclosure Package, to so advise such Agent promptly by telephone (confirmed in writing) and to prepare and cause to be filed promptly with the Commission an amendment or supplement to the Registration Statement, the Prospectus or the Pricing Disclosure Package or to file any document incorporated by reference in the Prospectus or the Pricing Disclosure Package that will correct such statement or omission or conflict or effect such compliance; provided that, (i) should such event relate solely to activities of any Agent (except any termination of any Agent's services hereunder), such Agent shall assume the expense of preparing and furnishing any such amendment or supplement; (ii) if, during such period, such Agent shall continue to own Securities purchased from the Company as principal or such Agent otherwise shall be required to deliver a prospectus (or the notice referred to in Section 173(a) of the Act) in respect of transactions in the Securities, the Company shall promptly prepare and file with the Commission such an amendment or supplement; and (iii) if such Agent shall be required to deliver a prospectus (or the notice referred to in Section 173(a) of the Act) in connection with sales of any Securities purchased by it as principal at any time nine months or more after the date of such purchase and (A) there shall be, as a result of such purchase, no Securities remaining to be sold under the Registration Statement or (B) the Company, pursuant to Section 2(d) hereof, shall have instructed the Agents, during such nine month period, to suspend permanently the solicitation of offers to purchase the Securities, such Agent shall assume the expense of preparing and furnishing any such amendment or supplement in connection with the sales of any Securities purchased by such Agent as principal. (For the purposes of this Section 5(c), the Company shall be entitled to assume that a Prospectus shall no longer be required to be delivered under the Act from and after the date six months from the date of the purchase by an Agent as principal of the particular issuance of Securities to which it relates, unless it shall have received notice from such Agent to the contrary);

- (d) To make generally available to its security holders as soon as practicable, but in any event not later than eighteen months after (i) the effective date of the Registration Statement, (ii) the effective date of each post-effective amendment to the Registration Statement, and (iii) the date of each filing by the Company with the Commission of an Annual Report on Form 10-K that is incorporated by reference in the Registration Statement, an earning statement of the Company and its subsidiaries (which need not be audited) in accordance with Section 11(a) of the Act and the rules and regulations of the Commission thereunder (including, at the option of the Company, Rule 158):

- (e) For the period ending five years from the date any Securities are sold by the Company pursuant to an offer solicited by such Agent under this Agreement, to furnish to such Agent copies of all reports or other communications (financial or other) furnished to stockholders, and deliver to such Agent (i) as soon as they are available, copies of any reports and financial statements furnished to or filed with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, to the extent not publicly available from the Commission's website, (ii) copies of all registration statements filed under the Act (other than those in respect of shareholder or employee plans and those that are publicly available from the Commission's website), and (iii) such additional information concerning the business and financial condition of the Company as such Agent may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of the Company and its subsidiaries are consolidated in reports furnished to its stockholders generally or to the Commission);
- (f) That, from the date of any Terms Agreement or other agreement with such Agent to purchase Securities as principal and to and including the earlier of (i) the termination of the trading restrictions for the Securities purchased thereunder, as notified to the Company by such Agent and (ii) the related Time of Delivery, the Company, without the prior written consent of such Agent, will not offer, sell, contract to sell or otherwise dispose of any debt securities of the Company in a public offering which both have a maturity of from one year to 30 years and are substantially similar to the Securities;
- (g) That each acceptance by the Company of an offer to purchase Securities procured by such Agent, as agent, and each agreement by the Company, pursuant to a Terms Agreement or otherwise, to sell Securities to such Agent, as principal, shall be deemed to be an affirmation to such Agent that the representations and warranties of the Company contained in or made pursuant to this Agreement are true and correct as of the date of such acceptance or agreement, as the case may be, as though made as of such date, and an undertaking that such representations and warranties will be true and correct as of the Settlement Date for the Securities relating to such acceptance or as of the Time of Delivery relating to such sale, as the case may be, as though made as of such date (except that such representations and warranties shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented relating to such Securities);
- (h) That, reasonably in advance of (i) each date as of which an Agent reasonably requests an opinion or opinions of Simpson Thacher & Bartlett LLP, counsel to the Agents, or other counsel to the Agents reasonably satisfactory to the Company, or (ii) each time that the Company sells Securities to such Agent as principal pursuant to a Terms Agreement or other agreement and such Agent requests an opinion or opinions by Simpson Thacher & Bartlett LLP, counsel to the Agents, or other counsel to the Agents reasonably satisfactory to the Company, the Company shall furnish to such counsel such papers and information as they may reasonably request to enable them to furnish to such Agent a letter in

form reasonably satisfactory to such Agent, to the effect that such Agent may rely on the opinion of such counsel referred to in Section 4(a) hereof, to the same extent as though it was dated the date of such letter (except that the statements in such opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented to the date of such letter and, if such letter is being furnished in connection with clause (ii) above, the applicable Pricing Disclosure Package), or in lieu of such a letter, an opinion of the same tenor as the opinion of such counsel referred to in Section 4(a) hereof, but modified to relate to the Registration Statement and the Prospectus as amended and supplemented to such date and the Pricing Disclosure Package, if applicable;

- (i) That each time that (x) the Registration Statement, the Prospectus or the Pricing Disclosure Package shall be amended or supplemented (other than by a Term Sheet, other free writing prospectus or Pricing Supplement related to the Securities or by an amendment or supplement providing solely for a change in the interest rates of the Securities or similar changes and, unless the Agents shall otherwise specify, other than by an amendment or supplement which relates exclusively to an offering of debt securities other than the Securities), (y) a document incorporated by reference in the Prospectus as amended or supplemented (other than a Current Report on Form 8-K, unless the Agents shall otherwise specify) shall be filed under the Act or Exchange Act (unless waived by the Agents), or (z) the Company sells Securities to such Agent, as principal, pursuant to a Terms Agreement or other agreement and such Terms Agreement or other agreement specifies the delivery of an opinion, letter or certificate under this Section 5(i) as a condition to the purchase of Securities pursuant to such Terms Agreement or other agreement, the Company shall furnish or cause to be furnished to such Agent:

- (i) a letter from Margaret D. Kirkpatrick, Esq., counsel for the Company, or other counsel for the Company reasonably satisfactory to such Agent, dated the date of such amendment, supplement, incorporation or Time of Delivery relating to such sale, as the case may be, in form reasonably satisfactory to such Agent, to the effect that such Agent may rely on the opinion of such counsel referred to in Section 4(b) hereof (which letter shall reflect any modifications to the opinion delivered at the Commencement Date which are reflected in the opinion attached as Annex III hereto) to the same extent as though it were dated the date of such letter (except that the statements in such opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented to the date of such letter, excluding, in the case of the statements in the paragraph next following paragraph 10 of such opinion, all documents filed by the Company under the Exchange Act and incorporated by reference into the Registration Statement and Prospectus during or prior to the fiscal year which is the subject of the Company's most recent Annual Report on Form 10-K) or, in lieu of such a letter, an opinion of the same tenor as the opinion of such counsel referred to in Section 4(b) hereof (which opinion shall reflect any modifications to the opinion delivered at

the Commencement Date which are reflected in the opinion attached as Annex III hereto), but modified to relate to the Registration Statement and the Prospectus as so amended and supplemented to such date (provided that if such letter or opinion is being furnished pursuant to clause (z) above, it shall also address the applicable Pricing Disclosure Package);

- (ii) a letter of Morgan, Lewis & Bockius LLP, New York, New York, counsel for the Company, or other counsel for the Company reasonably satisfactory to such Agent, dated the date of such amendment, supplement, incorporation or Time of Delivery relating to such sale, as the case may be, in form reasonably satisfactory to such Agent, to the effect that such Agent may rely on the opinion of such counsel referred to in Section 4(c) hereof (which letter shall reflect any modifications to the opinion delivered at the Commencement Date which are reflected in the opinion attached as Annex IV hereto) to the same extent as though it were dated the date of such letter (except that the statements in such opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented to the date of such letter, excluding, in the case of the statements in the paragraph next following paragraph 9 of such opinion, all documents filed by the Company under the Exchange Act and incorporated by reference into the Registration Statement and the Prospectus during or prior to the fiscal year which is the subject of the Company's most recent Annual Report on Form 10-K) or, in lieu of such letter, an opinion of the same tenor as the opinion of such counsel referred to in Section 4(c) hereof (which opinion shall reflect any modifications to the opinion delivered at the Commencement Date which are reflected in the opinion attached as Annex IV hereto), but modified to relate to the Registration Statement and the Prospectus as so amended and supplemented to such date (provided that if such letter or opinion is being furnished pursuant to clause (z) above, it shall also address the applicable Pricing Disclosure Package);
- (iii) a letter of Stoel Rives LLP, Portland, Oregon, special Washington and Oregon counsel for the Company, or other special Washington and Oregon counsel for the Company reasonably satisfactory to such Agent, dated the date of such amendment, supplement, incorporation or Time of Delivery relating to such sale, as the case may be, in form reasonably satisfactory to such Agent, to the effect that such Agent may rely on the opinions of such counsel referred to in Sections 4(d) (which letter shall reflect any modifications to the opinion delivered at the Commencement Date which are reflected in the opinion attached as Annex V hereto) and 5(n) hereof to the same extent as though they were dated the date of such letter or, in lieu of such letter, an opinion of the same tenor as the opinions of such counsel referred to in Sections 4(d) (which opinion shall reflect any modifications to the opinion delivered at the Commencement Date which are reflected in the opinion attached as Annex V hereto) and 5(n) hereof; and

- (iv) a certificate executed by the President, Chief Executive Officer, Chief Financial Officer or any Vice President of the Company, dated the date of such supplement, amendment, incorporation or Time of Delivery relating to such sale, as the case may be, in such form as shall be reasonably satisfactory to such Agent, to the effect that the statements contained in the certificate referred to in Section 4(f) hereof are true and correct at such date as though made as of such date (except that such statements shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented to such date and, if such certificate is being furnished pursuant to clause (z) above, the applicable Pricing Disclosure Package) or, in lieu of such certificate, a certificate of the same tenor as the certificate referred to in Section 4(f) hereof, but modified to relate to the Registration Statement and the Prospectus as amended and supplemented to such date and the Pricing Disclosure Package, if applicable;
- (j) That each time that (x) the Registration Statement, the Prospectus or the Pricing Disclosure Package shall be amended or supplemented to include additional financial information (unless waived by the Agents), or (y) the Company sells Securities to such Agent as principal pursuant to a Terms Agreement or other agreement and such Terms Agreement or other agreement specifies the delivery of a letter under this Section 5(j) as a condition to the purchase of Securities pursuant to such Terms Agreement or other agreement, and subject to compliance with the requirements of SAS issued by the American Institute of Certified Public Accountants, the Company shall furnish or cause to be furnished to such Agent a letter of PricewaterhouseCoopers LLP or other independent registered public accounting firm for the Company reasonably satisfactory to the Agent, dated the date of such amendment, supplement, incorporation or Time of Delivery relating to such sale, as the case may be, in form reasonably satisfactory to such Agent, to the effect that such Agent may rely upon the letter of such accountants referred to in Section 4(e) hereof to the same extent as though it were dated the date of such subsequent letter (except the statements in such former letter shall be deemed to relate to the financial statements included or incorporated in the Registration Statement and Prospectus as amended and supplemented to the date of such latter letter and the Pricing Disclosure Package, if applicable), or, in lieu of such latter letter, a letter of the same tenor as the letter referred to in Section 4(e) hereof, but modified to relate to the Registration Statement and the Prospectus as amended or supplemented to the date of such letter and the Pricing Disclosure Package, if applicable, with such changes as may be necessary to reflect changes in the financial statements and other information derived from the accounting records of the Company, to the extent such financial statements and other information are available as of a date not more than five business days prior to the date of such letter;
- (k) To offer to any person who has agreed to purchase Securities as the result of an offer to purchase solicited by such Agent, as agent, the right to refuse to purchase and pay for such Securities if, at the Settlement Date for such Securities, any

condition set forth in Section 6 hereof shall not have been satisfied (it being understood that the judgment of such person with respect to the impracticability or inadvisability of such purchase of Securities shall be substituted, for purposes of this Section 5(k), for the judgment of such Agent with respect thereto);

- (l) To pay or cause to be paid the following: (i) the fees and expenses of the Company's counsel and accountants in connection with the registration of the Securities under the Act and all other expenses in connection with the preparation, printing and filing of the Registration Statement, any Preliminary Prospectus, the Prospectus, each Pricing Disclosure Package, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and any Pricing Supplements and all other amendments and supplements thereto and the mailing and delivering of copies thereof to such Agent; (ii) the fees and expenses of counsel for the Agents in connection with the establishment and update of the program contemplated hereby, any opinions to be rendered by such counsel hereunder and the transactions contemplated hereunder; (iii) the cost of preparing this Agreement, any Terms Agreement and any other documents approved by the Company in connection with the offering, purchase, sale and delivery of the Securities; (iv) the fees, not to exceed \$5,000, and expenses of counsel for the Agents in connection with the qualification of the Securities for offering and sale under state securities laws as provided in Section 5(b) hereof and the preparation of any blue sky and legal investment memoranda; (v) any fees charged by securities rating services for rating the Securities; (vi) any filing fees incident to any required review by the National Association of Securities Dealers, Inc. of the terms of the sale of the Securities; (vii) the cost of preparing the Securities; (viii) the fees and expenses of the Trustees and any agent of any Trustee and any transfer or paying agent of the Company and the fees and disbursements of counsel for any Trustee or any such agent in connection with any Indenture and the Securities; (ix) any advertising expenses connected with the solicitation of offers to purchase and the sale of Securities so long as such advertising expenses have been approved by the Company; and (x) all other costs and expenses incident to the performance of the Company's obligations hereunder which are not otherwise specifically provided for in this Section; provided, however, that, except as provided in Sections 8 and 9 hereof, such Agent shall pay all other expenses it incurs, including any expenses that may be incurred by it or for its account pursuant to the proviso of Section 5(c) hereof;
- (m) To advise each Agent, promptly after the Company receives notice thereof, of the downgrading, or the issuance of a notice of any intended or potential downgrading, of the ratings of the Securities by either Moody's Investors Service or Standard & Poor's Rating Services;
- (n) That prior to the solicitation of offers to purchase any Securities, and the issuance and sale of such Securities, the Company will file with the WUTC one or more statements establishing compliance with the public utility laws of the State of Washington in respect of the issuance and sale of all such Securities in

accordance with the terms and conditions of this Agreement, and the Company shall furnish or cause to be furnished to each Agent and Agents' counsel:

- (i) a copy of such statement;
 - (ii) a certificate of the President, Chief Executive Officer, Chief Financial Officer or any Vice President of the Company dated on or after the date of each such statement, representing and warranting that, in respect of the portion of the Securities to which such statement or statements pertain, no further consent, approval, authorization or order of the WUTC is required for the solicitation of offers to purchase Securities and the issuance and sale of the Securities or the consummation by the Company of the other transactions contemplated by the Indentures, this Agreement or any Terms Agreement in the manner contemplated by such statement or statements; and
 - (iii) a letter of Stoel Rives LLP, Portland, Oregon, special Washington counsel for the Company, or other special Washington counsel for the Company reasonably satisfactory to such Agent, dated on or after the date of each such statement, in form and substance reasonably satisfactory to such Agent, to the effect set forth in Annex VII hereto;
- (o) To pay the required Commission filing fees relating to the Securities within the time required by Rule 456(b)(1) of the Act without regard to the proviso therein and otherwise in accordance with Rules 456(b) and 457(r) of the Act;
 - (p) Unless otherwise agreed to by the Company and such Agent, to prepare a Term Sheet relating to each offering of the Securities hereunder containing information that describes the final terms of the Securities being offered, in the form attached hereto as Annex VIII or as otherwise agreed to by the Company and such Agent and to file such Term Sheet within the period required by Rule 433(d)(5)(ii) under the Act following the date the final terms have been established;
 - (q) To file promptly all material required to be filed by the Company with the Commission pursuant to Rule 433(d) under the Act;
 - (r) If immediately prior to the third anniversary (the "Renewal Deadline") of the initial effective date of the Registration Statement, any Securities issued by the Company remain unsold by the Agents, the Company will prior to the Renewal Deadline file, if it has not already done so and is eligible to do so, a new automatic shelf registration statement relating to the Securities, in a form satisfactory to the Agents. If the Company is no longer eligible to file an automatic shelf registration statement, the Company will prior to the Renewal Deadline, if it has not already done so, file a new shelf registration statement relating to the Securities, in a form satisfactory to the Agents, and will use its best efforts to cause such registration statement to be declared effective within 60 days after the Renewal Deadline. The Company will take all other action necessary or

appropriate to permit the public offering and sale of the Securities to continue as contemplated in the expired registration statement relating to the Securities. References herein to the Registration Statement shall include such new automatic shelf registration statement or such new shelf registration statement, as the case may be; and

- (s) If at any time when Securities issued by the Company remain unsold by the Agents the Company receives from the Commission a notice pursuant to Rule 401(g)(2) or otherwise ceases to be eligible to use the automatic shelf registration statement form, the Company will (i) promptly notify the Agents, (ii) promptly file a new registration statement or post-effective amendment on the proper form relating to the Securities, in a form satisfactory to the Agents, (iii) use its best efforts to cause such registration statement or post-effective amendment to be declared effective and (iv) promptly notify the Agents of such effectiveness. The Company will take all other action necessary or appropriate to permit the public offering and sale of the Securities to continue as contemplated in the registration statement that was the subject of the Rule 401(g)(2) notice or for which the Company has otherwise become ineligible. References herein to the Registration Statement shall include such new registration statement or post-effective amendment, as the case may be.

6. Conditions to Agents' Obligations. The obligation of an Agent, as agent of the Company, at any time (each a "**Solicitation Time**"), to solicit offers to purchase the Securities and the obligation of an Agent to purchase Securities as principal, pursuant to a Terms Agreement or otherwise, shall be subject, in such Agent's discretion, to the conditions that:

- (a) all of the representations and warranties of the Company herein (and, in the case of an obligation of an Agent under a Terms Agreement or other agreement with an Agent to purchase Securities as principal, in or incorporated in such agreement by reference) were true and correct (i) on the Commencement Date; (ii) each time that the Registration Statement or the Prospectus shall be amended or supplemented, (iii) each time a document incorporated by reference in the Prospectus as amended or supplemented shall be filed by the Company under the Act or Exchange Act, (iv) at each Applicable Time, (v) at each Settlement Date, and (vi) at each Time of Delivery of Securities so to be purchased by such Agent, as principal, as the case may be,
- (b) prior to such Solicitation Time or such Time of Delivery, as the case may be, the Company shall have performed all of its obligations hereunder theretofore to be performed,
- (c) all requests for additional information on the part of the Commission shall have been complied with to the reasonable satisfaction of such Agent,
- (d) there shall be in full force and effect an order of the OPUC which permits the issuance and sale of the Securities in accordance with the terms and conditions of this Agreement,

- (e) no stop order suspending the effectiveness of the Registration Statement and no notice pursuant to Rule 401(g)(2) of the Act objecting to use of the automatic shelf registration form shall have been issued and in effect and no proceedings for those purposes shall be pending before, or to the knowledge of the Company contemplated by, the Commission,
- (f) there shall not have occurred: (i) a suspension or material limitation of trading in securities generally on the New York Stock Exchange or in any securities of the Company on the New York Stock Exchange or any relevant exchange or a material disruption in securities settlement or clearance services in the United States; (ii) a general moratorium on commercial banking activities in New York declared by either Federal or New York State authorities; (iii) any material adverse change in the financial markets in the United States, any outbreak of hostilities or escalation thereof or other calamity or crisis or material adverse change in national financial or economic conditions, in each case, the effect of which, in the reasonable judgment of such Agent, makes it impracticable or inadvisable to proceed with the solicitation of offers to purchase Securities or the purchase of Securities from the Company as principal on the terms and in the manner contemplated by this Agreement and, if applicable, any Terms Agreement or other agreement; or (iv) unless known to such Agent prior to such Solicitation Time, any downgrading, or any notice shall have been given of any intended or potential downgrading, of the Securities by either Moody's Investors Service or Standard & Poor's Rating Services, and
- (g) the Company shall have filed a statement with the WUTC establishing compliance with the applicable Washington statutory provisions with respect to the issuance and sale of such Securities.

In addition to the foregoing, the obligation of an Agent to purchase Securities as principal, pursuant to a Terms Agreement or other agreement, shall be subject, in such Agent's discretion, to the further condition that there shall not have been, since the date of such Terms Agreement or other agreement or since the respective dates as of which information is given in the Registration Statement, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business.

7. Conditions to Company's Obligations.

- (a) The obligation of the Company to sell and deliver any Security pursuant hereto, to a Terms Agreement or otherwise shall be subject to the condition that, after the acceptance by the Company of an offer to purchase such Security procured by an Agent, as agent, or the agreement by the Company, pursuant to a Terms Agreement or otherwise, to sell such Security to an Agent, as principal, and prior to the Time of Delivery or the Settlement Date, as the case may be, with respect to such purchase or sale, the OPUC shall not have issued an order revoking its then existing order permitting, and the WUTC shall not have issued an order prohibiting, the issuance and sale of the Securities through each Agent, as agent,

on the terms set forth herein or to each Agent, as principal, pursuant to a Terms Agreement or other agreement.

- (b) If the condition specified in Section 7(a) hereof shall not have been fulfilled, the obligation of the Company to sell Securities hereunder or under a Terms Agreement or other agreement may be terminated by the Company; and neither the Company nor any Agent shall have any liability to the other, except for (i) the obligation of the Company to pay certain expenses to the extent provided for in Section 5(l) hereof, (ii) the obligation of the Company to pay commissions and hold the Agents harmless as provided in Section 9 hereof (and, for purposes of said Section 9, such a failure of such condition to be fulfilled shall be considered a default by the Company on its obligation to deliver such Securities), and (iii) any liability under Section 8 hereof.

8. Indemnification.

- (a) The Company will indemnify and hold harmless each Agent against any losses, claims, damages or liabilities, joint or several, to which such Agent may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities or actions in respect thereof arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus, the Prospectus as amended or supplemented, any Pricing Disclosure Package, any Issuer Free Writing Prospectus (as defined in Rule 433(h)) or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse such Agent for any legal or other expenses reasonably incurred by it, as incurred, in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability or action in respect thereof arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, the Prospectus, the Prospectus as amended or supplemented, any Pricing Disclosure Package or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by such Agent specifically for use therein.
- (b) Each Agent severally and not jointly will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities or actions in respect thereof arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus, the Prospectus as amended or supplemented, any Pricing Disclosure Package or any Issuer Free Writing Prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or

necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the Prospectus, the Prospectus as amended or supplemented, any Pricing Disclosure Package or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by such Agent specifically for use therein, and will reimburse the Company for any legal or other expenses incurred by the Company, as incurred, in connection with investigating or defending any such loss, claim, damage or liability or action. Each Agent hereby furnishes to the Company in writing expressly for use in the Registration Statement, any Preliminary Prospectus, the Prospectus and the Prospectus as amended or supplemented (i) the first sentence in the fifth paragraph on the cover page of the Prospectus relating to the offerings of Medium-Term Notes by the Agents, as principal, and (ii) under "Plan of Distribution," the second and third paragraphs, the third and last sentences of the seventh paragraph, the eighth, ninth, tenth and eleventh paragraphs and the statements relating to the Agents in the twelfth paragraph.

- (c) Promptly after receipt by an indemnified party under Section 8(a) or Section 8(b) of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such Section, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve it from any liability which it may have to any indemnified party otherwise than under such Section. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party); provided, however, in no event shall such indemnifying parties be obligated to retain more than one counsel (and necessary local counsel), in addition to counsel for such indemnifying parties, to represent the indemnified parties, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such Section for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. Each indemnified party may also participate at its own expense in the defense of any such action. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes (i) an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding and (ii) no statement as to or an admission of fault, culpability or failure to act by or on behalf of an indemnified party.

- (d) If the indemnification provided for in Section 8(a) or Section 8(b) hereof is unavailable or insufficient to hold harmless an indemnified party in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect any relevant equitable considerations including the relative fault of the Company on the one hand and each Agent on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), and relative benefit of the Company on the one hand and each Agent on the other. Relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading relates to information supplied by the Company on the one hand or by any Agent on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The relative benefits received by the Company on the one hand and each Agent on the other shall be deemed to be in the same proportion as the total net proceeds from the sale of Securities (before deducting expenses) received by the Company bear to the total commissions or discounts received by such Agent in respect thereof. The Company and each Agent agree that it would not be just and equitable if contribution pursuant to this Section 8(d) were determined (i) with respect only to any losses, claims, damages or liabilities referred to in Section 8(a) hereof, by per capita allocation (even if all Agents were treated as one entity for such purpose) or (ii) by any method of allocation which does not take account of the equitable considerations referred to above in this Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this Section 8(d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8(d), no Agent shall be required to contribute any amount which exceeds the total price at which the Securities purchased by or through it were offered by it to the public less the amount of any damages which it shall have otherwise paid or become liable to pay by reason or any untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The obligations of each of the Agents under this Section 8(d) to contribute are several and are not joint.
- (e) The obligations of the Company under this Section 8 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls any Agent within the meaning of the Act. The obligations of each Agent under this Section 8 shall be in addition to any liability which such Agent may otherwise have and shall extend, upon the same terms and conditions, to each director of the Company, to

each officer of the Company who has signed the Registration Statement and to each person, if any, who controls the Company within the meaning of the Act.

9. Nonperformance. Each Agent, in soliciting offers to purchase Securities from the Company and in performing the other obligations of such Agent hereunder (other than in respect of any purchase by an Agent as principal pursuant to a Terms Agreement or otherwise), is acting solely as agent for the Company and not as principal. Each Agent will make reasonable efforts to assist the Company in obtaining performance by each purchaser whose offer to purchase Securities from the Company was solicited by such Agent and has been accepted by the Company, but such Agent shall not have any liability to the Company in the event such purchase is not consummated for any reason. If the Company shall default on its obligation to deliver Securities to a purchaser whose offer it has accepted, the Company shall (i) hold each Agent harmless against any loss, claim or damage arising from or as a result of such default by the Company and (ii) notwithstanding such default, pay to the Agent that solicited such offer any commission to which it would be entitled in connection with such sale.

10. Survival of Agreement. The respective indemnities, agreements, representations, warranties and other statements by any Agent and the Company set forth in or made pursuant to this Agreement shall remain in full force and effect regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Agent or any controlling person of any Agent or the Company, or any officer or director or any controlling person of the Company, and shall survive each delivery of and payment for any of the Securities.

11. Suspension or Termination. The provisions of this Agreement relating to the solicitation of offers to purchase Securities from the Company may be suspended or terminated at any time by the Company as to any Agent or by any Agent as to such Agent upon the giving of written notice of such suspension or termination to such Agent or the Company, as the case may be. In the event of such suspension or termination with respect to any Agent, this Agreement shall remain in full force and effect with respect to (i) any Agent as to which such suspension or termination has not occurred, (ii) the rights and obligations of any party which have previously accrued or which relate to Securities which are already issued, agreed to be issued or the subject of a pending offer at the time of such suspension or termination, (iii) Sections 2(e), 5(d), 5(e), 5(l), 8, 9 and 10 hereof, and (iv) the obligations of the Company to amend or supplement the Prospectus, so long as any Agent continues to hold Securities as principal.

12. Notices. Except as otherwise specifically provided herein or in the Administrative Procedure, all statements, requests, notices and advices hereunder shall be in writing or by telephone, if promptly confirmed in writing, if to Banc of America Securities LLC, shall be sufficient in all respects when delivered or sent by facsimile transmission or registered mail to One Bryant Park, NY1-100-18-03, New York, New York 10036, Attention: High Grade Transaction Management/Legal, Facsimile Transmission No. 646-855-5958, and if to UBS Securities LLC, shall be sufficient in all respects when delivered or sent by facsimile transmission or registered mail to 677 Washington Blvd., Stamford, Connecticut 06901, Facsimile Transmission No. 203-719-0495, Attention: Fixed Income Syndicate, if to J.P. Morgan Securities Inc., shall be sufficient in all respects when delivered or sent by facsimile transmission or registered mail to 270 Park Avenue, 8th Floor, New York, New York 10017,

Facsimile Transmission No. 212-834-6081, Attention: Medium Term Notes Desk, if to Piper Jaffray & Co., shall be sufficient in all respects when delivered or sent by facsimile transmission or registered mail to 800 Nicollet Mall, Minneapolis, Minnesota 55402, Facsimile Transmission No. 612-313-3117, Telephone No: 612-303-1824, Attention: Debt Capital Markets, and if to the Company, shall be sufficient in all respects when delivered or sent by facsimile transmission or registered mail to One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209, Attention: Chief Financial Officer, with a copy to the General Counsel, Facsimile Transmission No. 503-220-2584, Telephone No. 503-220-2406; and if to any additional Agent, as set forth in the Additional Agent Appointment Agreement relating to such Agent.

13. Benefit of Agreement. This Agreement, any Additional Agent Appointment Agreement and any Terms Agreement shall be binding upon, and inure solely to the benefit of, each Agent which is a party hereto and thereto and the Company, and to the extent provided in Section 8 and Section 10 hereof, the officers and directors of the Company and any person who controls any Agent or the Company, and their respective personal representatives, successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement, any Additional Agent Appointment Agreement or any Terms Agreement. No purchaser of any of the Securities through or from any Agent hereunder shall be deemed a successor or assign by reason of such purchase.

14. Timing. Time shall be of the essence in this Agreement, any Additional Agent Appointment Agreement and any Terms Agreement. As used herein, the term "business day" shall mean any day when banks in New York City are not authorized or obligated by law or executive order to remain closed.

15. Governing Law. This Agreement, any Additional Agent Appointment Agreement and any Terms Agreement shall be governed by and construed in accordance with the laws of the State of New York.

16. Descriptive Headings. The descriptive headings of the several paragraphs of this Agreement are inserted for convenience only and do not constitute a part of this Agreement.

17. Relationship. The Company acknowledges and agrees that the Agents are acting solely in the capacity of arm's length contractual counterparties to the Company with respect to the offering of the Securities as contemplated by this Agreement and not as financial advisors or fiduciaries to the Company in connection herewith. Additionally, none of the Agents is advising the Company as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction in connection with the offering of the Securities as contemplated by this Agreement. Any review by the Agents of the Company in connection with the offering of the Securities contemplated by this Agreement and the transactions contemplated by this Agreement will not be performed on behalf of the Company.

18. Automatic Updates to this Agreement. The Company may, by delivering to the Agents a written notice substantially in the form of Exhibit 2 hereto, amend and update certain terms used in this Agreement as necessary in order to increase the amount of securities which may be offered pursuant to this Agreement or to reflect the filing with the Commission of

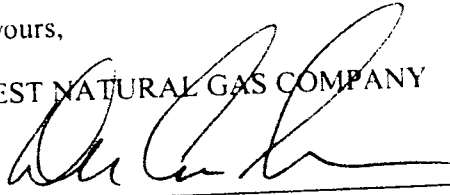
a new registration statement for offering securities hereunder. Effective as of the date of such notice, the references in this Agreement to such terms will thereafter be deemed to refer to the updated terms set forth in such notice.

19. Execution in Counterparts. This Agreement, any Additional Agent Appointment Agreement and any Terms Agreement may be executed by any one or more of the parties hereto and thereto in any number of counterparts, each of which shall be an original, but all of such respective counterparts shall together constitute one and the same instrument.

If the foregoing is in accordance with your understanding, please sign and return to us three counterparts hereof, whereupon this letter and the acceptance by each of you hereof shall constitute a binding agreement between the Company and each of you in accordance with its terms.

Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: 
Title: Senior Vice President & Chief Financial Officer

Accepted as of the date hereof:

BANC OF AMERICA SECURITIES LLC

By: _____
Title:

UBS SECURITIES LLC

By: _____
Title:

By: _____
Title:

J.P. MORGAN SECURITIES INC.

By: _____
Title:

PIPER JAFFRAY & CO.

By: _____
Title:

If the foregoing is in accordance with your understanding, please sign and return to us three counterparts hereof, whereupon this letter and the acceptance by each of you hereof shall constitute a binding agreement between the Company and each of you in accordance with its terms.

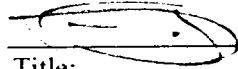
Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: _____
Title:

Accepted as of the date hereof:

BANC OF AMERICA SECURITIES LLC

By:  _____
Title: **ISRAEL F. SCHLOPY**
MANAGING DIRECTOR

UBS SECURITIES LLC

By: _____
Title:

By: _____
Title:

J.P. MORGAN SECURITIES INC.

By: _____
Title:

PIPER JAFFRAY & CO.

By: _____
Title:

BOA

Fax 6468555958

Mar 17 2009 09:25am P001/001

If the foregoing is in accordance with your understanding, please sign and return to us three counterparts hereof, whereupon this letter and the acceptance by each of you hereof shall constitute a binding agreement between the Company and each of you in accordance with its terms.

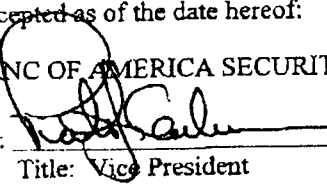
Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: _____
Title:

Accepted as of the date hereof:

BANC OF AMERICA SECURITIES LLC

By:  _____
Title: Vice President

UBS SECURITIES LLC

By: _____
Title:

By: _____
Title:

J.P. MORGAN SECURITIES INC.

By: _____
Title:

PIPER JAFFRAY & CO.

By: _____
Title:

If the foregoing is in accordance with your understanding, please sign and return to us three counterparts hereof, whereupon this letter and the acceptance by each of you hereof shall constitute a binding agreement between the Company and each of you in accordance with its terms.

Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: _____
Title:

Accepted as of the date hereof:

BANC OF AMERICA SECURITIES LLC

By: _____
Title:

UBS SECURITIES LLC

By: Scott Whitney Scott Whitney
Title: Managing Director
UBS Securities LLC

By: Christopher Fernando
Title:

Christopher Fernando
Associate Director
Debt Capital Markets
UBS Securities LLC

J.P. MORGAN SECURITIES INC.

By: _____
Title:

PIPER JAFFRAY & CO.

By: _____
Title:

If the foregoing is in accordance with your understanding, please sign and return to us three counterparts hereof, whereupon this letter and the acceptance by each of you hereof shall constitute a binding agreement between the Company and each of you in accordance with its terms.

Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: _____
Title:

Accepted as of the date hereof:

BANC OF AMERICA SECURITIES LLC

By: _____
Title:

UBS SECURITIES LLC

By: _____
Title:

By: _____
Title:

J.P. MORGAN SECURITIES INC.

By: *Robert Bottemed*
Title: Vice President

PIPER JAFFRAY & CO.

By: _____
Title:

If the foregoing is in accordance with your understanding, please sign and return to us three counterparts hereof, whereupon this letter and the acceptance by each of you hereof shall constitute a binding agreement between the Company and each of you in accordance with its terms.

Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: _____
Title:

Accepted as of the date hereof:

BANC OF AMERICA SECURITIES LLC

By: _____
Title:

UBS SECURITIES LLC


By: _____
Title:

By: _____
Title:

J.P. MORGAN SECURITIES INC.

By: _____
Title:

PIPER JAFFRAY & CO.

By:  _____
Title: *Principal*

ANNEX I

Northwest Natural Gas Company

Administrative Procedure

This Administrative Procedure relates to the Securities defined in the Distribution Agreement, dated March 18, 2009 (the "**Distribution Agreement**"), among Northwest Natural Gas Company (the "**Company**"), on the one hand, and Banc of America Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc., Piper Jaffray & Co. and each other person which shall become a party thereto (each, an "**Agent**" and, together, the "**Agents**"), on the other. Defined terms used herein and not defined herein shall have the meanings given such terms in the Distribution Agreement or the Indentures. An Agent, in relation to a purchase of a Security by a purchaser solicited by such Agent, is referred to herein as the "**Selling Agent**" and, in relation to a purchase of a Security by such Agent as principal other than pursuant to a Terms Agreement, as the "**Purchasing Agent**". As used herein, the term "**business day**" shall mean any day when banks in New York City are not authorized or obligated by law or executive order to remain closed.

The procedures to be followed with respect to the settlement of sales of Securities directly by the Company to purchasers solicited by an Agent, as agent, are set forth below. The terms and settlement details related to a purchase of Securities by an Agent, as principal, from the Company will be set forth in a Terms Agreement, pursuant to the Distribution Agreement, unless the Company and such Agent otherwise shall agree.

The Company will advise each Agent in writing of those persons with whom such Agent is to communicate regarding offers to purchase Securities and the related settlement details.

Prior to the solicitation of offers to purchase any Securities, and the issuance and sale of such Securities, the Company will obtain an order from the Oregon Public Utility Commission (the "**OPUC**") authorizing the issuance and sale of the Securities, subject to the conditions set forth in such order. Prior to the solicitation of offers to purchase any Securities, and the issuance and sale of such Securities, the Company will file with the Washington Utilities and Transportation Commission (the "**WUTC**") a statement establishing compliance with applicable statutory provisions with respect to the issuance and sale of such Securities and establishing conditions with respect thereto.

As stated in the Company's Prospectus Supplement dated March 18, 2009 and the accompanying Prospectus dated January 8, 2008, if the terms of any Security, as determined by the Company, provide that such Security will be redeemable at the option of the Company, such Security will be made redeemable in whole or in part.

Procedure for Rate Changes:

When a decision has been reached to change the interest rate on or other variable terms with respect to any Securities being offered for sale, the Company will promptly advise the

Agents and the Agents will forthwith suspend solicitation of offers to purchase such Securities. The Agent will telephone the Company with recommendations as to the changed interest rates or other variable terms. At such time as the Company advises the Agents of the new interest rates or other variable terms, the Agent may resume solicitation of offers to purchase such Securities. Until such time only "indications of interest" may be recorded.

Acceptance or Rejection of Offers by Company:

Each Agent will promptly advise the Company by telephone or other appropriate means of all reasonable offers to purchase Securities, other than those rejected by such Agent. Each Agent, in its discretion reasonably exercised, may reject any offer received by it, in whole or in part. Each Agent also may make offers to the Company to purchase Securities as a Purchasing Agent. The Company, in its sole discretion, may accept any offer to purchase Securities and may reject any such offer, in whole or in part.

The Company will promptly notify the Selling Agent or Purchasing Agent, as the case may be, of its acceptance or rejection of an offer to purchase Securities. If the Company accepts an offer to purchase Securities, it will confirm such acceptance in writing to the Selling Agent or Purchasing Agent, as the case may be.

Settlement:

The receipt of immediately available funds by the Company in payment for a Security and the authentication and delivery of such Security will, with respect to such Security, constitute "Settlement."

All offers solicited by a Selling Agent or made by a Purchasing Agent and accepted by the Company will be settled on a date (the "**Settlement Date**") which shall be the third business day after the date of acceptance of such offer, unless the Company and the purchaser shall agree to settle (a) on any other business day after the acceptance of such offer or (b) with respect to an offer accepted by the Company prior to 10:00 a.m., New York City time, on the date of such acceptance.

Settlement Procedures:

A. After the acceptance of an offer by the Company, the Selling Agent or Purchasing Agent, as the case may be, will communicate the following details of the terms of such offer (the "**Sale Information**") to the Company by telephone (confirmed in writing) or by facsimile transmission or other acceptable written means:

- (1) Principal amount of Securities to be purchased;
- (2) Issue Price ("**Issue Price**" shall mean (i) in the case of a sale in which an Agent shall act as a Selling Agent, the price to the purchaser or (ii) in the case of a sale to an Agent as Purchasing Agent, that Purchasing Agent's reoffering price);
- (3) Selling Agent's commission or, if applicable, Purchasing Agent's discount (spread between the reoffering price and Purchasing Agent's purchase price);

- (4) Net proceeds to the Company: (2) minus (3);
- (5) Method of and specified funds for payment of purchase price;
- (6) (a) Fixed Rate Securities:
 - (i) interest rate
 - (ii) interest payment dates
 - (iii) regular record dates;
- (b) Floating Rate Securities:
 - (i) interest rate basis
 - (ii) initial interest rate
 - (iii) spread or spread multiplier, if any
 - (iv) interest rate reset dates
 - (v) interest rate reset period
 - (vi) interest payment dates
 - (vii) initial interest payment date
 - (viii) interest payment period
 - (ix) regular record dates
 - (x) index maturity
 - (xi) calculation agent
 - (xii) maximum and minimum interest rates, if any
 - (xiii) calculation date
 - (xiv) interest determination dates;
- (7) (a) Trade Date;
- (b) Interest Commencement Date (Settlement Date unless otherwise noted; "Issue Date" on Secured Notes);
- (c) Time of delivery;
- (8) Closing location;
- (9) Maturity date;
- (10) If redeemable at the Company's option:
 - (a) whether redeemable (i) in whole or (ii) in whole or in part;
 - (b) whether redeemable at (i) fixed redemption prices or (ii) a make-whole redemption price;
 - (c) if redeemable at fixed redemption prices:
 - (i) initial redemption date

- (ii) redemption limitation date
 - (iii) each redemption price and period;
- (d) if redeemable at a make-whole redemption price, the make-whole spread;
- (11) Sinking fund or other retirement provisions;
- (12) If repayable at the holder's option:
 - (a) repayment date;
 - (b) repayment price;
 - (c) election period;
- (13) The name of the Selling Agent or Purchasing Agent, as the case may be;
- (14) Exact name, address and taxpayer identification number of party to be the registered owner;
- (15) Party to whom Securities are to be delivered;
- (16) Denominations of certificates to be delivered at settlement;
- (17) The name of the Company's bank and the account number for payment of the purchase price;
- (18) Whether the Securities to be purchased are Secured Notes or Unsecured Notes; and
- (19) Any other significant terms of the Securities or their offer or sale.

B. After receiving such settlement information from the Agent, the Company will advise the Trustee of the above settlement information. The Company will prepare a Pricing Supplement to the Prospectus and deliver copies to the Agent and will cause the Trustee to issue, authenticate and deliver Securities.

If an identical Pricing Supplement has not been previously filed with the Securities and Exchange Commission (the "SEC"), the Company will arrange to have transmitted promptly via EDGAR one copy of the Pricing Supplement (with the appropriate paragraph under Rule 424(b) and the Registration No. inscribed in the upper right corner) to the SEC, within the applicable time period provided in Rule 424(b).

One copy of the Pricing Supplement (with a copy of the cover letter sent to the SEC if a filing with the SEC is required) will be sent by facsimile to the Agents involved in such issue as soon as practicable but in no event later than 12:00 noon on the second day after the Trade Date at each of the following numbers:

Banc of America Securities LLC
One Bryant Park
NY1-100-03-01
New York, New York 10036
Attention: High Grade MTN Desk
Facsimile No. 646-855-0107
Telephone No. 616-855-6433

and

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901
Attn: Fixed Income Syndicate
Facsimile No: 203-719-0495
Telephone No: 203-719-1088

and

J.P. Morgan Securities Inc.
270 Park Avenue, 8th Floor
New York, New York 10017
Attn: Medium Term Notes Desk
Facsimile No: 212-834-6081

and

Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, Minnesota 55402
Attention: Debt Capital Markets
Facsimile No. 612-313-3117
Telephone No: 612-303-1824

The Company shall supply the Agents as soon as practicable but in no event later than the Settlement Date with an adequate supply of Prospectus Supplements and the accompanying Prospectuses and Pricing Supplements at the above addresses.

In addition, the Company will make any required filings with the OPUC and WUTC in respect of the Securities that are issued.

Suspension of Solicitation; Amendment or Settlement:

Subject to its representations, warranties and covenants contained in the Distribution Agreement, the Company may instruct the Agents to suspend solicitation of purchases at any time. Upon receipt of such instructions, the Agents will forthwith suspend solicitation of offers to purchase from the Company until such time as the Company has advised them that solicitation of offers to purchase may be resumed. If the Company decides to amend

or supplement the Prospectus (other than to change interest rates or other variable terms with respect to the offering of the Securities), it will promptly advise the Agents and will furnish the Agents and their counsel with copies of the proposed amendment or supplement.

In the event that at the time the solicitation of offers to purchase from the Company is suspended (other than to change interest rates or other variable terms) there shall be any orders outstanding which have not been settled, the Company will promptly advise the Agents and the Trustee whether such orders may be settled and whether copies of the Prospectus as theretofore amended and/or supplemented as in effect at the time of the suspension may be delivered in connection with the settlement of such orders. The Company will have the sole responsibility for such decision and for any arrangements which may be made in the event that the Company determines that such orders may not be settled or that copies of such Prospectus may not be so delivered.

Delivery of Confirmation and Prospectus to Purchaser by Selling Agent:

The Selling Agent will deliver to the purchaser of a Security a written confirmation of the sale and delivery and payment instructions. In addition, the Selling Agent will deliver or convey to such purchaser or its agent the Prospectus as amended or supplemented (including the Pricing Supplement) relating to such Security prior to delivery to such purchaser or its agent of, or together with, the earlier to be delivered of (a) the confirmation of sale or (b) the Security.

Instruction from Company to Trustee for Preparation of Securities:

After receiving the Sale Information from the Selling Agent or Purchasing Agent, as the case may be, the Company will communicate such Sale Information to the Mortgage Trustee or the Indenture Trustee, as the case may be, by telephone (confirmed in writing, by facsimile transmission or by other acceptable written means).

The Company will instruct such Trustee by telephone (confirmed in writing, by facsimile transmission or by other acceptable written means) to authenticate and deliver the Securities no later than 2:15 p.m., New York City time, on the Settlement Date. Such instruction will be given by the Company prior to 3:00 p.m., New York City time, on the business day prior to the Settlement Date, unless the Settlement Date is the date of acceptance by the Company of the offer to purchase Securities, in which case such instruction will be given by the Company to the Trustee by 10:00 a.m., New York City time, on the Settlement Date.

Procedures for Book-Entry Securities:

In connection with Securities issued in book-entry form and maintained in the book-entry system of The Depository Trust Company ("DTC"), (i) the Company and the Trustee shall act in accordance with the letters of representation (relating to the Secured Notes and the Unsecured Notes, respectively) from the Company and the Trustee to DTC, as the same may be amended, supplemented or otherwise modified from time to time, and (ii) the Trustee shall act in accordance with one or more Medium-Term Note Certificate Agreements, relating to the Securities, between the Trustee and DTC, as the same may be amended, supplemented or

otherwise modified from time to time, and in accordance with its obligations as a participant in DTC.

The beneficial owner of a Security issued in book-entry form (or one or more indirect participants in DTC designated by such owner) will designate one or more participants in DTC (with respect to such Security issued in book-entry form, the “**Participants**”) to act as agent for such beneficial owner in connection with the book-entry system maintained by DTC, and DTC will record in book-entry form, in accordance with instructions provided by such Participants, a credit balance with respect to such Security issued in book-entry form in the account of such Participants. The ownership interest of such beneficial owner in such Security issued in book-entry form will be recorded through the records of such Participants or through the separate records of such Participants and one or more indirect participants in DTC.

Transfers of a Book-Entry Security will be accomplished by book entries made by DTC and, in turn, by Participants (and in certain cases, one or more indirect participants in DTC) acting on behalf of beneficial transferors and transferees of such Book-Entry Security.

Beneficial interests in the Securities may be purchased, owned and transferred only in denominations of \$1,000 or any integral multiple of \$1,000.

Preparation and Delivery of Securities by Trustee and Receipt of Payment Therefor:

Certificated Securities

The Company will instruct the Mortgage Trustee or the Indenture Trustee, as the case may be, to:

- (i) Prepare each Security and appropriate receipts that will serve as the documentary control of the transaction.
- (ii) In the case of a sale of Securities to a purchaser solicited by a Selling Agent, by 2:15 p.m., New York City time, on the Settlement Date, deliver the Securities to such Selling Agent, at the address listed below, for the benefit of the purchaser of such Securities against delivery by such Selling Agent of a receipt therefor. (On the Settlement Date, such Selling Agent will deliver payment for such Securities in immediately available funds to the Company’s account at a bank designated by the Company and included as a part of the Sale Information provided by the Selling Agent in an amount equal to the net proceeds to the Company; provided that the Selling Agent reserves the right to withhold payment for which it shall not have received funds from the purchaser.)
- (iii) In the case of a sale of Securities to a Purchasing Agent, by 2:15 p.m., New York City time, on the Settlement Date, deliver the Securities to such Purchasing Agent, at the address listed below, against delivery of payment therefor. (On the Settlement Date, such Purchasing Agent will deliver payment for such Securities in immediately available funds to the Company’s account at a bank designated by the Company and included as a part of the Sale Information provided by the Purchasing Agent in an amount equal to the net proceeds to the Company.)

- (iv) Complete the 4-ply Security and deliver three copies thereof as follows:
1. Security with Agent's customer confirmation.
 2. Copy 1 - for Trustee.
 3. Copy 2 - for Agent.
 4. Copy 3 - for Company.
- (v) With respect to each sale, deliver the Securities and Copies 1 and 2 thereof to the appropriate Agent at the following address:

Banc of America Securities LLC
One Bryant Park
NY1-100-03-01
New York, New York 10036
Attention: High Grade MTN Desk
Facsimile No. 646-855-0107
Telephone No. 616-855-6433

or

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901
Attn: Fixed Income Syndicate
Facsimile No: 203-719-0495

or

J.P. Morgan Securities Inc.
270 Park Avenue, 8th Floor
New York, New York 10017
Attn: Medium Term Notes Desk
Facsimile No: 212-834-6081

or

Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, Minnesota 55402
Attention: Debt Capital Markets
Facsimile No. 612-313-3117
Telephone No: 612-303-1824

as the case may be, or to any other Agent as directed by such Agent. (The Agent will acknowledge receipt of the Security, will keep Copy 2 and will return Copy 1 to the Trustee. Delivery of the Security by the Trustee will be made only against such acknowledgment of receipt. Prior to the first settlement date, the Trustee or the Company shall have sent a letter to Banc of Americas Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc., Piper Jaffray & Co. or any other Agent, as the case may be, containing standard wire instructions for the net proceeds of each Security, addressed as follows:

Banc of America Securities LLC
One Bryant Park
NY1-100-03-01
New York, New York 10036
Attention: High Grade MTN Desk
Facsimile No. 646-855-0107
Telephone No. 616-855-6433

or

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901
Attn: Fixed Income Syndicate
Facsimile No: 203-719-0495

or

J.P. Morgan Securities Inc.
270 Park Avenue, 8th Floor
New York, New York 10017

Attn: Medium Term Notes Desk
Facsimile No: 212-834-6081

or

Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, Minnesota 55402
Attention: Debt Capital Markets
Facsimile No. 612-313-3117
Telephone No: 612-303-1824

as the case may be, or as directed by such other Agent.)

- (vi) Send Copy 3 to the Company.

Book-Entry Securities

A. The Company will assign a CUSIP number to the Book-Entry Security representing such Security and then advise the Trustee by electronic transmission of the Sale Information received from the Agent, such CUSIP number and the name of such Agent.

B. The Trustee will communicate to DTC and the Agent through DTC's Participant Terminal System, a pending deposit message specifying the following settlement information:

- (1) The following Sale Information with respect to each Security:
- (a) Taxpayer identification number of the purchaser.
 - (b) Principal amount of the Security.
 - (c) Fixed Rate Securities:
 - (i) interest rate;
 - (ii) interest payment dates; and
 - (iii) regular record dates.
 - (d) Floating Rate Securities:
 - (i) interest rate basis;
 - (ii) initial interest rate;
 - (iii) spread or spread multiplier, if any;
 - (iv) interest rate reset dates;
 - (v) interest rate reset period;
 - (vi) interest payment dates;
 - (vii) interest payment period;
 - (viii) regular record dates;
 - (ix) index maturity;

- (x) calculation agent;
 - (xi) maximum and minimum interest rates, if any;
 - (xii) calculation date; and
 - (xiii) interest determination dates.
- (e) Issue price.
 - (f) Trade date.
 - (g) Interest Commencement Date, which shall be the Settlement Date unless otherwise noted (“**Issue Date**” on Secured Notes).
 - (h) Maturity date.
 - (i) Net proceeds to the Company.
 - (j) Agent’s commission.
 - (k) Redemption provisions, if any.
 - (l) Repayment provisions, if any.
- (2) Identification numbers of the participant accounts maintained by DTC on behalf of the Trustee and the Agent.
 - (3) Identification as a Fixed Rate Book-Entry Security or Floating Rate Book-Entry Security.
 - (4) Initial Interest Payment Date for such Security, number of days by which such date succeeds the related record date for DTC purposes (or, in the case of Floating Rate Securities which reset daily or weekly, the date five calendar days preceding the Interest Payment Date) and, if then calculable, the amount of interest payable on such Interest Payment Date (which amount shall have been confirmed by the Trustee).
 - (5) CUSIP number of the Book-Entry Security representing such Security.
 - (6) Whether such Book-Entry Security represents any other Securities issued or to be issued in book-entry form.

C. The Company will complete and deliver to the Trustee a Book-Entry Security representing such Security in a form that has been approved by the Company, the Agents and the Trustee.

D. The Company will (by telecopy followed by an original copy) provide the Trustee with an opinion regarding the authentication of such Security and certified copies of governmental approvals specified in such opinion.

E. The Trustee will authenticate the Book-Entry Security representing such Security.

F. DTC will credit such Security to the participant account of the Trustee maintained by DTC.

G. The Trustee will enter a Same-Day Funds Settlement System (“SDFS”) deliver order through DTC’s Participant Terminal System instructing DTC (i) to debit such Security to the Trustee’s participant account and credit such Security to the participant account, maintained by DTC, of the Agent which presented to the Company the offer to purchase such Security which was accepted by the Company (the “Presenting Agent”) and (ii) to debit the settlement account of the Presenting Agent and credit the settlement account of the Trustee maintained by DTC, in an amount equal to the price of such Security less such Agent’s commission.

H. The Presenting Agent will enter an SDFS deliver order through DTC’s Participant Terminal System instructing DTC (i) to debit such Security to the Presenting Agent’s participant account and credit such Security to the participant account of the Participants maintained by DTC and (ii) to debit the settlement accounts of such Participants and credit the settlement account of the Presenting Agent maintained by DTC, in an amount equal to the initial public offering price of such Security.

I. Transfer of funds in accordance with SDFS deliver orders described in Settlement Procedures F and G will be settled in accordance with SDFS operating procedures in effect on the Settlement Date.

J. The Trustee will credit to an account of the Company maintained at the Trustee funds available for immediate use in the amount transferred to the Trustee in accordance with Settlement Procedure G.

K. The Trustee will send a copy of the Book-Entry Security by first class mail to the Company together with a statement setting forth the principal amount of Securities Outstanding as of the related Settlement Date after giving effect to such transaction and all other offers to purchase Securities of which the Company has advised the Trustee but which have not yet been settled.

L. The Agent will confirm the purchase of such Security to the purchaser either by transmitting to the Participant with respect to such Security a confirmation order through DTC’s Participant Terminal System or by mailing a written confirmation to such purchaser.

M. Settlement Procedures Timetable:

(I) For orders of Securities accepted by the Company, Settlement Procedures A through K shall be completed as soon as possible but not later than the respective times (New York City time) set forth below:

<u>Settlement Procedure</u>	<u>Time</u>
A	11:00 a.m. on the trade date
B	2:00 p.m. on the trade date
C	3:00 p.m. on the Business Day

	before Settlement Date
D-E	9:00 a.m. on Settlement Date
F	10:00 a.m. on Settlement Date
G-H	No later than 2:00 p.m. on Settlement Date
I	4:45 p.m. on Settlement Date
J-K	5:00 p.m. on Settlement Date

(2) If a sale is to be settled more than one Business Day after trade date, Settlement Procedures A and B may, if necessary, be completed at any time prior to the specified times on the first Business Day after such trade date. In connection with a sale which is to be settled more than one Business Day after the trade date, if the initial interest rate for a Floating Rate Security is not known at the time that the Sale Information is given by the Presenting Agent to the Company, Settlement Procedures A and B shall be completed as soon as such rates have been determined, but no later than 11:00 a.m. and 2:00 p.m., New York City time, respectively, on the second Business Day before the Settlement Date. Settlement Procedure H is subject to extension in accordance with any extension of Fedwire closing deadlines and in the other events specified in the SDFS operating procedures in effect on the Settlement Date.

(3) If settlement of a Security issued in book-entry form is rescheduled or canceled, the Trustee will deliver to DTC, through DTC's Participant Terminal System, a cancellation message to such effect by no later than 2:00 p.m., New York City time, on the Business Day immediately preceding the scheduled Settlement Date.

Failure of Purchaser to Pay Selling Agent:

Certificated Securities

If a purchaser shall fail to make payment to the Selling Agent for any Security, the net proceeds to the Company which, theretofore, shall have been paid by the Selling Agent to the Company, the Selling Agent will promptly notify the Mortgage Trustee or the Indenture Trustee, as the case may be, and the Company of such failure by telephone, promptly confirmed in writing or by facsimile transmission or by other acceptable written means. The Selling Agent promptly will return such Security to such Trustee. Promptly upon receipt of such Security by such Trustee, the Company will return to the Selling Agent an amount equal to the amount previously paid to the Company in respect of such Security. Such Trustee will cancel any Security in respect of which such a failure shall occur, make appropriate entries in its records and, unless otherwise instructed by the Company, destroy such Security.

Book-Entry Securities

If the Trustee fails to enter an SDFS deliver order with respect to a Book-Entry Security issued in book-entry form pursuant to paragraph F above, the Trustee may deliver to DTC, through DTC's Participant Terminal System, as soon as practicable a withdrawal message

instructing DTC to debit such Security to the participant account of the Trustee maintained at DTC. DTC will process the withdrawal message, provided that such participant account contains a principal amount of the Book-Entry Security representing such Security that is at least equal to the principal amount to be debited. If withdrawal messages are processed with respect to all the Securities represented by a Book-Entry Security, the Trustee will mark such Book-Entry Security "canceled", make appropriate entries in its records and send such canceled Book-Entry Security to the Company. The CUSIP number assigned to such Book-Entry Security shall, in accordance with CUSIP Service Bureau procedures, be canceled and not immediately reassigned. If withdrawal messages are processed with respect to a portion of the Securities represented by a Book-Entry Security, the Trustee will exchange such Book-Entry Security for two Book-Entry Securities, one of which shall represent the Book-Entry Securities for which withdrawal messages are processed and shall be canceled immediately after issuance, and the other of which shall represent the other Securities previously represented by the surrendered Book-Entry Security and shall bear the CUSIP number of the surrendered Book-Entry Security.

If the purchase price for any Book-Entry Security is not timely paid to the Participants with respect to such Security by the beneficial purchaser thereof (or a person, including an indirect participant in DTC acting on behalf of such purchaser), such Participants and, in turn, the related Agent may enter SDFS deliver orders through DTC's Participant Terminal System reversing the orders entered pursuant to paragraphs F and G above, respectively. Thereafter, the Trustee will deliver the withdrawal message and take the related actions described in the preceding paragraph. If such failure shall have occurred for any reason other than default by the applicable Agent to perform its obligations hereunder or under the Distribution Agreement, the Company will reimburse such Agent on an equitable basis for its loss of the use of funds during the period when the funds were credited to the account of the Company.

Notwithstanding the foregoing, upon any failure to settle with respect to a Book-Entry Security, DTC may take any actions in accordance with its SDFS operating procedures then in effect. In the event of a failure to settle with respect to a Security that was to have been represented by a Book-Entry Security also representing other Securities, the Trustee will provide, in accordance with paragraphs C and D above, for the authentication and issuance of a Book-Entry Security representing such remaining Securities and will make appropriate entries in its records.

ANNEX II

Northwest Natural Gas Company

Medium-Term Notes

Terms Agreement

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, MN 55402

[Name of additional Agents, if any]

Ladies and Gentlemen:

Subject to the terms and conditions set forth herein and, to the extent provided below, in the Distribution Agreement, dated March 18, 2009 (the "**Distribution Agreement**"), among Northwest Natural Gas Company (the "**Company**"), on the one hand, and Banc of America Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc., Piper Jaffray & Co. and each other person which shall become a party to the Distribution Agreement (each an "Agent" and, together, the "Agents"), on the other, the Company proposes to issue and sell to [Banc of America Securities LLC,] [UBS Securities LLC,] [J.P. Morgan Securities Inc.,] [Piper Jaffray & Co.,] [Name of other Agent] the Securities (as defined in the Distribution Agreement) specified in the Schedule hereto (the "**Purchased Securities**"), at the time, place and purchase price and upon the terms and conditions set forth in such Schedule. Each of the provisions of the Distribution Agreement not specifically related to the solicitation by the Agents, as agents of the Company, of offers to purchase Securities is incorporated herein by reference, and shall be deemed to be part of this Terms Agreement to the same extent as if such provisions had been set forth herein. Each reference in the Distribution Agreement to the Pricing Disclosure Package shall be deemed to refer to the items specified next to the caption "Pricing Disclosure Package" in the Schedule hereto.

Each of the representations and warranties set forth in the Distribution Agreement shall be deemed to have been made by the Company at and as of the date of this Terms

Agreement, except that each such representation and warranty which makes reference to the Prospectus shall be deemed to be a representation and warranty as of the date of the Distribution Agreement in relation to the Prospectus (as therein defined), and also a representation and warranty as of the date of this Terms Agreement in relation to the Prospectus as amended and supplemented with respect to the Purchased Securities.

A supplement to the Prospectus relating to the Purchased Securities, in the form heretofore delivered to and approved by you, is now proposed to be filed with the Commission in accordance with Rule 424(b) under the Act and the Term Sheet [and _____] specified next to the caption "Pricing Disclosure Package" in the Schedule hereto is now proposed to be filed with the Commission in accordance with Rule 433 under the Act.

Subject to the terms and conditions set forth herein and to those of the Distribution Agreement incorporated herein by reference, the Company agrees to issue and sell to [Banc of America Securities LLC,] [UBS Securities LLC,] [J.P. Morgan Securities Inc.,] [Piper Jaffray & Co.,] [Name of other Agent] and [Banc of America Securities LLC,] [UBS Securities LLC,] [J.P. Morgan Securities Inc.,] [Piper Jaffray & Co.,] [Name of other Agent] agrees to purchase from the Company the Purchased Securities, at the time and place, in the principal amount and at the purchase price set forth in the Schedule hereto.

If the foregoing is in accordance with your understanding, please sign and return to us three counterparts hereof, whereupon this letter, including those provisions of the Distribution Agreement incorporated herein by reference, shall constitute a binding agreement between you and the Company.

NORTHWEST NATURAL GAS COMPANY

By: _____
Title:

Accepted as of the date hereof:

[BANC OF AMERICA SECURITIES LLC

By: _____
Title:]

[UBS SECURITIES LLC

By: _____
Title:]

By: _____
Title:]

[J.P. MORGAN SECURITIES INC.

By: _____
Title: _____]

[PIPER JAFFRAY & CO.

By: _____
Title: _____]

[Name of other Agent, if any]

Schedule to Annex II

Title of Purchased Securities:Aggregate Principal Amount: \$Price to Public:Purchase Price by [Banc of America Securities LLC,] [UBS Securities LLC,] [J.P. Morgan Securities Inc.,] [Piper Jaffray & Co.,] [Name of other Agent]:% of the principal amount of the Purchased Securities [, plus accrued interest from
to] [and accrued amortization of discount from to]Method of and Specified Funds for Payment of Purchase Price:[By certified or official bank check or checks, payable to the order of the
Company, in [[New York Clearing House] [immediately available] funds][By wire transfer to a bank account specified by the Company in [next day]
[immediately available] funds]Indenture: [Mortgage] [Note Indenture]Interest Commencement Date which shall be the Settlement Date unless otherwise noted (“**Issue Date**” on Secured Notes):Pricing Disclosure Package:

1. Prospectus, dated January 8, 2008
2. Prospectus Supplement, dated March 18, 2009
3. [Preliminary Pricing Supplement, dated _____]
4. [Term Sheet, dated _____]
5. [Other]

Applicable Time:Time of Delivery:Closing Location:Stated Maturity Date:Interest Rate or Rates (or Method of Determining Interest):Interest Payment Dates: [months and dates]Initial Interest Payment Date:Regular Record Dates:

Redeemable at Company's Option: Yes ___ No ___

In Whole: Yes ___ No ___

In Part: Yes ___ No ___

Fixed Redemption Prices ___ / Make-Whole Redemption Price ___

Fixed Redemption Prices:

Initial Redemption Date:

Redemption Limitation Date:

Initial Redemption Price:

Reduction Percentage:

Make-Whole Redemption Price:

Make-Whole Spread:

Sinking Fund or Other Retirement Provisions, if any:

Repayable at Option of Holder: Yes ___ No ___

Repayment Date:

Repayment Price:

Election Period:

Documents to be Delivered as a Condition to the Closing:

- [(1) The opinion of counsel to the Agents referred to in Section 5(h)]
- [(2) The opinion of counsel to the Company referred to in Section 5(i)(i)]
- [(3) The opinion of counsel to the Company referred to in Section 5(i)(ii)]
- [(4) The opinion of counsel to the Company referred to in Section 5(i)(iii)]
- [(5) The accountants letter referred to in Section 5(j)]
- [(6) The officers certificate referred to in Section 5(i)(iv)]

Other Provisions (including Syndicate Provisions,
if applicable):

ANNEX III

[Letterhead of Margaret D. Kirkpatrick, Esq.]

[Date]

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
111 SW Fifth Avenue, Suite 1900
Portland, Oregon 97204

Ladies and Gentlemen:

With reference to the issuance and sale from time-to-time by Northwest Natural Gas Company (the "**Company**"), pursuant to the Distribution Agreement, dated March 18, 2009 (the "**Agreement**"), between the Company and each of you, of not to exceed \$300,000,000 in aggregate principal amount of (i) the Company's First Mortgage Bonds, designated Secured Medium-Term Notes, Series B (the "**Secured Notes**") to be issued under the Company's Mortgage and Deed of Trust, dated as of July 1, 1946, to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) (the "**Corporate Trustee**") and R.G. Page (Stanley Burg, successor), as trustees, as supplemented by twenty supplemental indentures (such Mortgage and Deed of Trust, as so supplemented, being hereinafter called the "**Mortgage**"), and (ii) the Company's Unsecured Medium-Term Notes, Series B (the "**Unsecured Notes**"), to be issued under the Company's Indenture, dated as of June 1, 1991 (the "**Indenture**"), to Deutsche Bank Trust Company Americas, as trustee (the "**Indenture Trustee**") (the Secured Notes and the Unsecured Notes being hereinafter collectively referred to as the "**Notes**"), and the appointment of each of you as agents of the Company pursuant to the Agreement for the purposes of soliciting and receiving offers to purchase Notes, as agents, and purchasing Notes, as principals, from the Company, please be advised that, as counsel for the Company, I have participated in the preparation of or reviewed (a) the Restated Articles of Incorporation, as amended, and Bylaws, as amended, of the Company; (b) the Mortgage; (c) the Indenture; (d) the Agreement; (e) the registration statement (File No. 333-148527) (the "**Registration**

Statement”), filed by the Company with the Securities and Exchange Commission (the “**SEC**”) for the registration under the Securities Act of 1933, as amended (the “1933 Act”), of the Company’s securities (which may include the Notes), and for the qualification under the Trust Indenture Act of 1939, as amended (the “**Trust Indenture Act**”), of the Mortgage and the Indenture, which Registration Statement became effective on January 8, 2008; (f) the prospectus, dated January 8, 2008, constituting a part of the Registration Statement in the form in which the Registration Statement became effective, or if such prospectus has been amended or supplemented subsequent to such effectiveness, as so amended and supplemented, including the documents incorporated therein by reference pursuant to Item 12 of Form S-3, as supplemented by the prospectus supplement relating to the Notes, dated March 18, 2009, filed with the Commission pursuant to Rule 424(b) under the Securities Act (together, the “**Prospectus**”); (g) the proceedings before the Oregon Public Utility Commission (the “**OPUC**”) and the Washington Utilities and Transportation Commission (the “**WUTC**”) relating to the issuance and sale of the Notes; and (h) the records of various corporate and other proceedings relating to the authorization, issuance and sale of the Notes. I have also examined such other documents and satisfied myself as to such other matters as I have deemed necessary in order to render this opinion. I have not examined the Notes, except specimens thereof.

In preparation of this opinion, I have examined originals or photostatic certified copies of such certificates, agreements, documents and other papers, and have made such inquiries and investigations of law, as I deemed appropriate and necessary for the opinion hereinafter set forth. In my examination, I have assumed the authenticity of all documents submitted to me as certified or photostatic copies and the authenticity of the originals of such latter documents. As to certain matters of fact material to the opinion expressed herein, I have relied upon certificates of various corporate officers of the Company and public officials. I assume the accuracy of the material and factual matters contained therein.

I am of the opinion that:

1. The Company is a validly organized and existing corporation under the laws of the State of Oregon, and has corporate power to own its properties and conduct its business as described in the Prospectus.
2. The Agreement has been duly and validly authorized, executed and delivered by the Company.
3. The Mortgage and the Indenture have been duly and validly authorized by all necessary corporate action, have been duly and validly executed and delivered, and are valid and binding instruments enforceable 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.
4. The form of the Secured Notes has been duly authorized and has been established in conformity with the provisions of the Mortgage; the form of the Unsecured Notes bearing interest at a fixed rate, has been duly authorized and has been established in conformity with the provisions of the Indenture; and the form of the Unsecured Notes, bearing interest at a variable rate or not bearing interest, when set forth in a Company Order or Orders (as defined in

the Indenture) or established by procedures acceptable to the Indenture Trustee specified in a Company Order or Orders, will have been duly authorized and will have been established in conformity with the provisions of the Indenture.

5. The Secured Notes have been duly authorized by the resolutions adopted by the Company's Board of Directors on May 27, 1993, September 26, 1996, April 24, 1997, February 26, 1998, April 27, 2000, April 25, 2002, December 18, 2003 and December 20, 2007 (the "**Board Resolutions**"), and when the terms of the Secured Notes shall have been determined as contemplated by and in accordance with the Mortgage, the Board Resolutions and written orders or instructions evidencing determinations by officers of the Company, such terms will have been duly authorized by the Company and will have been established in conformity with the terms of the Mortgage.

6. The Unsecured Notes have been duly authorized by the Board Resolutions, and when the terms of the Unsecured Notes shall have been determined as contemplated by and in accordance with the Indenture, the Board Resolutions and, to the extent required by the Indenture and the Board Resolutions, by Officers' Certificates (as defined in the Indenture), Company Orders and procedures acceptable to the Indenture Trustee specified in such Company Orders, such terms will have been duly authorized by the Company and will have been established in conformity with the terms of the Indenture.

7. The Notes, when (a) executed by the Company, (b) completed, authenticated and delivered by the Corporate Trustee or the Indenture Trustee, as the case may be, (c) issued and delivered by the Company and (d) paid for, all as contemplated by and in accordance with the Mortgage, in the case of Secured Notes, the Indenture, in the case of Unsecured Notes, the Board Resolutions, and (to the extent required by the Mortgage or the Indenture and the Board Resolutions) Officers' Certificates, Company Orders, procedures acceptable to the Indenture Trustee specified in such Company Orders, written orders or instructions evidencing determinations by the officers of the Company, the Agreement, the Administrative Procedure (as defined in the Agreement), and Terms Agreements (as defined in the Agreement), if any, will be duly issued under the Mortgage or the Indenture, as the case may be, and will constitute valid and legally binding obligations of the Company, entitled to the benefits provided by the Mortgage or the Indenture, as the case may be, and enforceable 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, and, in the case of the Secured Notes, entitled to the benefit of the security afforded by the Mortgage.

8. The issuance and sale of the Notes, the compliance by the Company with all of the provisions of the Notes, the Mortgage, the Indenture 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, any indenture, mortgage, deed of trust or other agreement or instrument known to me 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, the Company's Restated Articles of Incorporation, as amended, or Bylaws, as amended, or any order, rule or regulation known to me of any court or governmental agency or body having jurisdiction over the Company or any of its properties.

9. The statements of Oregon and Federal law (other than the 1933 Act, the Securities Exchange Act of 1934 and the Trust Indenture Act), and legal conclusions based thereon, contained in, or in the documents incorporated by reference in, the Prospectus have been reviewed by me and are correct (except to the extent that any statement contained in a document incorporated or deemed to be incorporated by reference in the Prospectus may be deemed to be modified or superseded in the Prospectus or in any other subsequently filed document which also is or is deemed to be incorporated by reference in the Prospectus).

10. Except as described in the Prospectus, there are no pending material legal or governmental proceedings and, to my knowledge, no material threatened legal or governmental proceedings, to which the Company is a party or of which any of the property of the Company is the subject, other than ordinary routine litigation incidental to the kind of business conducted by the Company.

In the course of the preparation by the Company of the Registration Statement and the Prospectus, I had conferences with certain officers and employees of the Company, but I have made no independent verification of the accuracy or completeness of the representations and statements made to me by such person or the information included by the Company in the Registration Statement and the Prospectus, and take no responsibility therefor, except as set forth in paragraph 9 hereof. However, my examination of the Registration Statement and the Prospectus and my discussions in the above-mentioned conferences did not disclose to me any information which causes me to believe that, when the Registration Statement became effective, it contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or that, as of the date of this opinion, the Prospectus includes an untrue statement of a material fact or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, that I do not express any belief as to the financial statements or other financial or statistical data contained in the Registration Statement or the Prospectus, or as to the Forms T-1 or T-2, or as to any information contained therein furnished to the Company in writing by any of you expressly for use therein.

This opinion is limited to the facts and law at the date hereof. In rendering the opinions set forth in paragraphs 7 and 8 above, I have necessarily assumed that, at the time of any issuance, sale and delivery of a Note (i) the Board of Directors of the Company (or any committee thereof acting pursuant to authority properly delegated to such committee by the Board of Directors) has not taken any action to rescind or otherwise reduce its prior authorization of the issuance of the Notes and an officer of the Company, as stated in the resolutions of the Board of Directors (or any such committee) relating to the Notes, has executed and delivered such Notes, (ii) the Company has filed a statement with the WUTC establishing compliance with the applicable Washington statutory provisions with respect to the issuance and sale of such Note and the Company has complied with the terms of such statement, (iii) the order of the OPUC with respect to the Notes being sold remains in full force and effect and has not been modified or amended by the OPUC, and the Company complies with the terms of such order, (iv) the Registration Statement remains effective under the 1933 Act, and (v) the Mortgage and the Indenture remain qualified under the Trust Indenture Act.

I do not express any opinion herein concerning any law other than the laws of the State of Oregon and the Federal laws of the United States. In rendering this opinion, I have relied, with your consent, as to certain matters of Washington and Oregon law, upon the opinion of even date herewith addressed to you by Stoel Rives LLP, special Washington and Oregon counsel to the Company, and, as to all matters governed by the laws of the State of New York, the 1933 Act, the Securities Exchange Act of 1934 and the Trust Indenture Act, upon the opinion of even date herewith addressed to you by Morgan, Lewis & Bockius LLP, New York, New York, counsel for the Company.

You, the Trustees and, as to matters governed by the laws of the State of Oregon, Morgan, Lewis & Bockius LLP and your counsel, Simpson Thacher & Bartlett LLP, may rely upon this opinion in connection with the issuance and sale of the Notes. Neither you nor any of them may rely upon this opinion for any other purpose, and no other person may rely upon this opinion for any purpose without, in each case, my prior written consent.

Very truly yours,

Margaret D. Kirkpatrick, Esq.

ANNEX IV

[Letterhead of Morgan, Lewis & Bockius LLP]

[Date]

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
111 SW Fifth Avenue, Suite 1900
Portland, Oregon 97204

Ladies and Gentlemen:

With reference to the issuance and sale from time-to-time by Northwest Natural Gas Company (the "**Company**"), pursuant to the Distribution Agreement, dated March 18, 2009 (the "**Agreement**"), between the Company and each of you, of not to exceed \$300,000,000 in aggregate principal amount of (i) the Company's First Mortgage Bonds, designated Secured Medium-Term Notes, Series B (the "**Secured Notes**"), to be issued under the Company's Mortgage and Deed of Trust, dated as of July 1, 1946, to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) (the "**Corporate Trustee**") and R.G. Page (Stanley Burg, successor), as trustees, as supplemented by twenty supplemental indentures (such Mortgage and Deed of Trust, as so supplemented, being hereinafter called the "**Mortgage**"), and (ii) the Company's Unsecured Medium-Term Notes, Series B (the "**Unsecured Notes**"), to be issued under the Company's Indenture, dated as of June 1, 1991 (the "**Indenture**"), to Deutsche Bank Trust Company Americas, as trustee (the "**Indenture Trustee**") (the Secured Notes and the Unsecured Notes being hereinafter collectively referred to as the "**Notes**"), and the appointment of each of you as agents of the Company pursuant to the Agreement for the purposes of soliciting and receiving offers to purchase Notes, as agents, and purchasing Notes, as principals, from the Company, please be advised that, as counsel to the Company, we have participated in the preparation of or reviewed (a) the Restated Articles of Incorporation, as amended, and Bylaws, as amended, of the Company; (b) the Mortgage; (c) the Indenture; (d) the Agreement; (e) the registration statement (File No. 333-148527) (the "**Registration Statement**"), filed by the Company with the Securities and Exchange Commission (the "**SEC**")

NY #1209122 v4

for the registration under the Securities Act of 1933, as amended (the “1933 Act”), of the Company’s securities (which may include the Notes), and for the qualification under the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act”), of the Mortgage and the Indenture, which Registration Statement became effective on January 8, 2008; (f) the prospectus, dated January 8, 2008, constituting a part of the Registration Statement in the form in which the Registration Statement became effective, or if such prospectus has been amended or supplemented subsequent to such effectiveness, as so amended and supplemented, including the documents incorporated therein by reference pursuant to Item 12 of Form S-3, as supplemented by the prospectus supplement relating to the Notes, dated March 18, 2009, filed with the Commission pursuant to Rule 424(b) under the Securities Act (together, the “Prospectus”); (g) the records of the proceedings before the Oregon Public Utility Commission (the “OPUC”) and the Washington Utilities and Transportation Commission (the “WUTC”) relating to the issuance and sale of the Notes; and (h) the records of various corporate and other proceedings relating to the authorization, issuance and sale of the Notes. We have also examined such other documents and satisfied ourselves as to such other matters as we have deemed necessary in order to render this opinion. We have not examined the Notes, except specimens thereof.

In the preparation of this opinion, we have examined originals or photostatic or certified copies of such certificates, agreements, documents and other papers, and have made such inquiries and investigations of law, as we deemed appropriate and necessary for the opinion hereinafter set forth. In our examination, we have assumed the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such latter documents. As to certain matters of fact material to the opinion expressed herein, we have relied upon certificates of various corporate officers of the Company and public officials. We assume the accuracy of the material and factual matters contained therein.

We are of the opinion that:

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, executed and delivered by the Company.
3. The Mortgage and the Indenture have been duly and validly authorized by all necessary corporate action, have been duly and validly executed and delivered, have been duly qualified under the Trust Indenture Act, and are valid and binding instruments enforceable 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.
4. The form of the Secured Notes has been duly authorized and has been established in conformity with the provisions of the Mortgage and conforms to the description thereof contained in the Prospectus; the form of the Unsecured Notes, bearing interest at a fixed rate, has been duly authorized and has been established in conformity with the provisions of the Indenture and conforms to the description thereof contained in the Prospectus; and the form of

the Unsecured Notes, bearing interest at a variable rate or not bearing interest, when set forth in a Company Order or Orders (as defined in the Indenture) or established by procedures acceptable to the Indenture Trustee specified in a Company Order or Orders, will have been duly authorized and will have been established in conformity with the provisions of the Indenture.

5. The Secured Notes have been duly authorized by the resolutions adopted by the Company's Board of Directors on May 27, 1993, September 26, 1996, April 24, 1997, February 26, 1998, April 27, 2000, April 25, 2002, December 18, 2003 and December 20, 2007 (the "Board Resolutions"), and when the terms of the Secured Notes shall have been determined as contemplated by and in accordance with the Mortgage, the Board Resolutions and written orders or instructions evidencing determinations by Officers of the Company, such terms will have been duly authorized by the Company and will have been established in conformity with the terms of the Mortgage.

6. The Unsecured Notes have been duly authorized by the Board Resolutions, and when the terms of the Unsecured Notes shall have been determined as contemplated by and in accordance with the Indenture, the Board Resolutions and, to the extent required by the Indenture and the Board Resolutions, by Officers' Certificates (each, as defined in the Indenture), Company Orders and procedures acceptable to the Indenture Trustee specified in such Company Orders, such terms will have been duly authorized by the Company and will have been established in conformity with the terms of the Indenture.

7. The Notes, when (a) executed by the Company, (b) completed, authenticated and delivered by the Corporate Trustee or the Indenture Trustee, as the case may be, (c) issued and delivered by the Company and (d) paid for, all as contemplated by and in accordance with the Mortgage, in the case of the Secured Notes, the Indenture, in the case of Unsecured Notes, the Board Resolutions, and (to the extent required by the Mortgage or the Indenture and the Board Resolutions) Officers' Certificates, Company Orders, procedures acceptable to the Indenture Trustee specified in such Company Orders, written orders or instructions evidencing determinations by the officers of the Company, the Agreement, the Administrative Procedure (as defined in the Agreement) and Terms Agreements (as defined in the Agreement), if any, will be duly issued under the Mortgage or the Indenture, as the case may be, and will constitute valid and legally binding obligations of the Company, entitled to the benefits provided by the Mortgage or the Indenture, as the case may be, and enforceable 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, and, in the case of the Secured Notes, entitled to the benefit of the security afforded by the Mortgage.

8. The issuance and sale of the Notes, the compliance by the Company with all of the provisions of the Notes, the Mortgage, the Indenture 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 and the Indenture or the Company's Restated Articles of Incorporation, as amended, or Bylaws, as amended.

9. The Registration Statement is an automatic shelf registration statement that became effective upon filing under the 1933 Act within three years of the date hereof, and, to our knowledge, no stop order suspending the effectiveness thereof has been issued and no proceedings for that purpose are pending before or have been proposed by the SEC; the Mortgage and the Indenture have been duly qualified under the Trust Indenture Act; the Registration Statement at the time it became effective complied, and the Prospectus (excluding the documents incorporated therein by reference) as of the date of this opinion complies, as to form, in all material respects with the requirements of the 1933 Act, the Trust Indenture Act (except with respect to the Forms T-1 and Form T-2, upon which we express no opinion) and the rules and regulations of the SEC thereunder; and the documents incorporated by reference in the Prospectus pursuant to Item 12 of Form S-3 (other than the financial statements and other financial or statistical data contained therein, upon which we express no opinion), as of their respective dates of filing, complied as to form in all material respects with the requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations of the SEC thereunder.

In the course of the preparation by the Company of the Registration Statement and the Prospectus, we had conferences with certain officers and employees of the Company, with the counsel for the Company and with you and your counsel, but we made no independent verification of the accuracy or completeness of the representations and statements made to us by such persons or the information included by the Company in the Registration Statement and the Prospectus and take no responsibility therefor, except insofar as set forth in paragraph 4 hereof. In passing upon the form of the Registration Statement and the Prospectus we have, therefore, assumed the accuracy and completeness of such representations, statements and information, except as aforesaid. However, our examination of the Registration Statement and the Prospectus and our discussions in the above-mentioned conferences did not disclose to us any information which gives us reason to believe that, when the Registration Statement became effective, it contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or that, as of the date of this opinion, the Prospectus includes an untrue statement of a material fact or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, that we do not express any belief as to the financial statements or other financial or statistical data contained in the Registration Statement or the Prospectus, or as to the Forms T-1 or T-2, or as to any information contained therein furnished to the Company in writing by any of you expressly for use therein.

This opinion is limited to the facts and law at the date hereof. In rendering the opinions set forth in paragraphs 7 and 9 above, we have necessarily assumed that, at the time of any issuance, sale and delivery of a Note (i) the Board of Directors of the Company (or any committee thereof acting pursuant to authority properly delegated to such committee by the Board of Directors) has not taken any action to rescind or otherwise reduce its prior authorization of the issuance of the Notes and an officer of the Company, as stated in the resolutions of the Board of Directors (or any such committee) relating to the Notes, has executed and delivered such Notes, (ii) the Company has filed a statement with the WUTC establishing compliance with the applicable Washington statutory provisions with respect to the issuance and sale of such Note and the Company has complied with the terms of such statement, (iii) the order of the OPUC with respect to the Notes being sold remains in full force and effect and has not been modified or

amended by the OPUC, and the Company complies with the terms of such order, (iv) the Registration Statement remains effective under the 1933 Act, and (v) the Mortgage and the Indenture remain qualified under the Trust Indenture Act.

We do not express any opinion herein concerning any law other than the laws of the State of New York, the State of Oregon, the State of Washington and the Federal laws of the United States. Accordingly, in rendering this opinion, we have relied, with your consent, as to all matters governed by the laws of the State of Oregon, upon the opinions of even date herewith addressed to you by Margaret D. Kirkpatrick, Esq., counsel for the Company, and Stoel Rives LLP, special Washington and Oregon counsel to the Company, and, as to all matters governed by the laws of the State of Washington, upon the opinion of Stoel Rives LLP, special Washington and Oregon counsel to the Company. We understand that you are relying upon the opinions of Margaret D. Kirkpatrick, Esq., and Stoel Rives LLP as to all matters governed by the laws of the States of Oregon and Washington, as the case may be, including, in the case of the opinion of Stoel Rives LLP, titles to property and the lien of the Mortgage, upon which we express no opinion.

You, the Trustees, and as to matters governed by the laws of the State of New York and the 1933 Act, the Exchange Act and the Trust Indenture Act, Margaret D. Kirkpatrick, Esq., may rely upon this opinion in connection with the issuance and sale of the Notes. Neither you nor any of them may rely upon this opinion for any other purpose, and no other person may rely upon this opinion for any purpose without, in each case, our prior written consent.

Very truly yours,

MORGAN, LEWIS & BOCKIUS LLP

ANNEX V

[Letterhead of Steel Rives LLP]

[Date]

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
111 SW Fifth Avenue, Suite 1900
Portland, Oregon 97204

Ladies and Gentlemen:

With reference to the issuance and sale from time-to-time by Northwest Natural Gas Company (the "**Company**"), pursuant to the Distribution Agreement, dated March 18, 2009 (the "**Agreement**"), between the Company and each of you, of not to exceed \$300,000,000 in aggregate principal amount of (i) the Company's First Mortgage Bonds, designated Secured Medium-Term Notes, Series B (the "**Secured Notes**") to be issued under the Company's Mortgage and Deed of Trust, dated as of July 1, 1946, to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) (the "**Corporate Trustee**") and R.G. Page (Stanley Burg, successor), as trustees, as supplemented by twenty supplemental indentures (such Mortgage and Deed of Trust, as so supplemented, being hereinafter called the "**Mortgage**"), and (ii) the Company's Unsecured Medium-Term Notes, Series B (the "**Unsecured Notes**"), to be issued under the Company's Indenture, dated as of June 1, 1991 (the "**Indenture**"), to Deutsche Bank Trust Company Americas, as trustee (the "**Indenture Trustee**") (the Secured Notes and the Unsecured Notes being hereinafter collectively referred to as the "**Notes**"), and the appointment of each of you as agents of the Company pursuant to the Agreement for the purposes of soliciting and receiving offers to purchase Notes, as agents, and purchasing Notes, as principals, from the Company, please be advised that, as special Oregon and Washington counsel to the Company, we have reviewed (a) the Mortgage; (b) the Indenture; (c) the Agreement; and (d) the proceedings before the Washington Utilities and Transportation Commission (the "**WUTC**") relating to the issuance and sale of the Notes. We have also

NY #1209122 v4

examined such other documents and satisfied ourselves as to such other matters as we have deemed necessary in order to render this opinion. We have not examined the Notes, except for forms thereof.

In preparation of this opinion, we have examined originals or photostatic copies of such certificates, agreements, documents and other papers, and have made such inquiries and investigations of law, as we deemed appropriate and necessary for the opinion hereinafter set forth. In our examination, we have assumed the authenticity of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such latter documents. We have also assumed that the Mortgage, the Indenture and the Agreement have been duly authorized, executed and delivered by, and are legally binding on, each of the parties thereto.

As to certain matters of fact material to the opinion expressed herein, we have relied upon certificates of various corporate officers of the Company and public officials. We assume the accuracy of the material and factual matters contained therein.

Based upon the foregoing and subject to the following qualifications, we are of the opinion that:

1. The Company is authorized to transact business in the State of Washington.
2. The Mortgage constitutes a first security interest on all of the personal properties and fixtures owned by the Company that are described in the Mortgage and are intended to be subject to the lien thereof, subject only to Excepted Encumbrances (as defined in the Mortgage); and the description in the Mortgage of such properties and fixtures is adequate to constitute the Mortgage a security interest thereon.
3. 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 3.
4. The issuance and sale of the Notes, the compliance by the Company with all of the provisions of the Notes, the Mortgage, the Indenture and the Agreement and the consummation of the transactions contemplated by the Agreement will not violate any law, rule or regulation of the State of Oregon and the State of Washington or any political subdivision thereof known to us to be applicable to the Company.
5. The OPUC has issued orders authorizing the issuance and sale by the Company of the Notes; 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 Notes through each of you, as agent, on the terms and conditions set forth in the Agreement.

This opinion is limited to the facts and law at the date hereof. In rendering the opinions set forth above, we have necessarily assumed that, at the time of any issuance, sale and delivery of a Note (i) the Board of Directors of the Company (or any committee thereof acting pursuant to authority properly delegated to such committee by the Board of Directors) has not taken any action to rescind or otherwise reduce its prior authorization of the issuance of the Notes and an officer of the Company, as stated in the resolutions of the Board of Directors (or any such committee) relating to the Notes, has executed and delivered such Notes, (ii) the Company has filed a statement with the WUTC establishing compliance with the applicable Washington statutory provisions with respect to the issuance and sale of such Note and the Company has complied with the terms of such statement, and (iii) the orders of the OPUC with respect to the Notes being sold remain in full force and effect and have not been modified or amended by the OPUC, and the Company complies with the terms of such order.

We do not express any opinion herein concerning any laws other than the laws of the State of Oregon and the State of Washington.

In giving the foregoing opinions, we express no opinion as to any securities or blue sky laws of any jurisdiction.

You, the Trustees, Margaret D. Kirkpatrick, Esq., counsel for the Company, Morgan, Lewis & Bockius LLP, counsel to the Company, and your counsel, Simpson Thacher & Bartlett LLP, as to matters governed by the laws of the State of Oregon and the State of Washington, may rely upon this opinion in connection with the issuance and sale of the Notes. Neither you nor any of them may rely upon this opinion for any other purpose, and no other person may rely upon this opinion for any purpose without, in each case, our prior written consent.

Very truly yours,

STOEL RIVES LLP

ANNEX VI

[Contents of Letter of Independent Registered Public Accounting Firm]

The letter of each independent registered public accounting firm will state in effect that, for the periods during which such firm was the independent registered public accounting firm for the Company:

1. They are an independent registered public accounting firm with respect to the Company within the meaning of the Act and the applicable published Rules and Regulations;

2. In their opinion, the consolidated financial statements and financial statement schedule examined by them and incorporated by reference in the Registration Statement comply as to form in all material respects with the applicable accounting requirements of the Act, the Exchange Act and the published rules and regulations adopted by the SEC;

3. On the basis of limited procedures, not constituting an examination made in accordance with generally accepted auditing standards, including a reading of the latest available interim financial statements of the Company, if any, a reading of certain other unaudited financial data, a reading of the minute books of the Company since December 31, 2008, inquiries of officials of the Company responsible for financial and accounting matters and such other inquiries and procedures as may be specified in such letter, nothing came to their attention that caused them to believe that:

(a)(1) the latest interim consolidated financial statements included or incorporated by reference in the Registration Statement do not comply as to form in all material respects with the applicable accounting requirements of the Exchange Act and the published rules and regulations thereunder as they apply to Form 10-Q or (2) said interim consolidated financial statements are not in conformity with generally accepted accounting principles applied on a basis substantially consistent with that of the audited consolidated financial statements incorporated by reference in the Registration Statement;

(b) at the date of the latest available interim balance sheet of the Company and at a subsequent specified date not more than five business days prior to the Time of Delivery, there has been any change in the capital stock (except for (i) shares of the Company's Common Stock issued under the Company's Dividend Reinvestment Plan, Restated Stock Option Plan or Employee Stock Purchase Plan and (ii) shares of Common Stock repurchased pursuant to the Company's Repurchase Program), any increase in the long-term debt or net current liabilities of the Company, or any decrease in net assets, working capital or shareholders' equity, in each case as compared with amounts shown in the balance sheet as of the date of the latest financial statements incorporated by reference in the Registration Statement, except in each case for changes, increases or decreases which the Registration Statement discloses have occurred or may occur, which were occasioned by the declaration of dividends or which are described in such letter: or

(c) for the latest period for which financial information is available subsequent to the latest financial statements included or incorporated by reference in the

Prospectus, there were any decreases in net sales, net income and total or per share amounts of income before extraordinary items, as compared to the corresponding period in the prior year, except in each case for decreases which the Registration Statement discloses have occurred or may occur, which were occasioned by the declaration of dividends or which are described in such letter; and

4. They have performed certain other specified procedures with respect to certain amounts and percentages set forth in the Registration Statement or in the documents incorporated by reference therein, as have been requested by your counsel and approved by the Company, and have found them to be in agreement with the records of the Company and the computations to be arithmetically correct.

ANNEX VII

[Letterhead of Stoel Rives LLP]

[Date]

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
111 SW Fifth Avenue, Suite 1900
Portland, Oregon 97204

Ladies and Gentlemen:

With reference to the issuance and sale from time-to-time by Northwest Natural Gas Company (the "**Company**"), pursuant to the Distribution Agreement, dated March 18, 2009 (the "**Agreement**"), between the Company and each of you, of not to exceed \$300,000,000 in aggregate principal amount of (i) the Company's First Mortgage Bonds, designated Secured Medium-Term Notes, Series B (the "**Secured Notes**") to be issued under the Company's Mortgage and Deed of Trust, dated as of July 1, 1946, to Deutsche Bank Trust Company Americas (formerly known as Bankers Trust Company) (the "**Corporate Trustee**") and R.G. Page (Stanley Burg, successor), as trustees, as supplemented by twenty supplemental indentures (such Mortgage and Deed of Trust, as so supplemented, being hereinafter called the "**Mortgage**"), and (ii) the Company's Unsecured Medium-Term Notes, Series B (the "**Unsecured Notes**"), to be issued under the Company's Indenture, dated as of June 1, 1991 (the "**Indenture**"), to Deutsche Bank Trust Company Americas, as trustee (the "**Indenture Trustee**") (the Secured Notes and the Unsecured Notes being hereinafter collectively referred to as the "**Notes**"), and the appointment of each of you as agents of the Company pursuant to the Agreement for the purposes of soliciting and receiving offers to purchase Notes, as agents, and purchasing Notes, as principals, from the Company, please be advised that, as special Washington counsel to the Company, we have reviewed (a) the Mortgage; (b) the Indenture; (c) the Agreement; and (d) the proceedings before the Washington Utilities and Transportation Commission (the "**WUTC**") relating to the issuance and sale of the Notes. We have also

examined such other documents and satisfied ourselves as to such other matters as we have deemed necessary in order to render this opinion. We have not examined the Notes, except for forms thereof.

In preparation of this opinion, we have examined originals or photostatic copies of such certificates, agreements, documents and other papers, and have made such inquiries and investigations of law, as we deemed appropriate and necessary for the opinion hereinafter set forth. In our examination, we have assumed the authenticity of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such latter documents. We have also assumed that the Mortgage, the Indenture and the Agreement have been duly authorized, executed and delivered by, and are legally binding on, each of the parties thereto.

As to certain matters of fact material to the opinion expressed herein, we have relied upon certificates of various corporate officers of the Company and public officials. We assume the accuracy of the material and factual matters contained therein.

Based upon the foregoing and subject to the following qualifications, we are of the opinion that the Company has filed a statement with the WUTC, dated _____, 200_ in Docket __-_____, establishing compliance with applicable statutory provisions with respect to the issuance and sale by the Company of up to \$_____ aggregate principal amount of the Notes; the statement complied with the terms of the Revised Code of Washington 80.08.040; and under the laws of the State of Washington, no further approval, authorization, consent or other order of, or filing with, any public board or body is legally required for the issuance and sale of such Notes through each of you, as agent, on the terms and conditions set forth in the Agreement.

This opinion is limited to the facts and law at the date hereof. In rendering the opinions set forth above, we have necessarily assumed that, at the time of any issuance, sale and delivery of a Note (i) the Board of Directors of the Company (or any committee thereof acting pursuant to authority properly delegated to such committee by the Board of Directors) has not taken any action to rescind or otherwise reduce its prior authorization of the issuance of the Notes as stated in the resolutions of the Board of Directors (or any such committee) relating to the Notes, and an officer of the Company has executed and delivered such Notes and (ii) the Company complies with the terms of each statement filed with the WUTC establishing compliance with the applicable Washington statutory provisions with respect to the issuance and sale of such Note.

We are members of the bar of the State of Washington and do not express any opinion herein concerning any laws other than the laws of the State of Washington.

In giving the foregoing opinions, we express no opinion as to any securities or blue sky laws of any jurisdiction.

You, the Trustees, Margaret D. Kirkpatrick, Esq., counsel for the Company, Morgan, Lewis & Bockius LLP, counsel to the Company, and your counsel, Simpson Thacher & Bartlett LLP, as to matters governed by the laws of the State of Washington, may rely upon this opinion in connection with the issuance and sale of the Notes. Neither you nor any of them may

rely upon this opinion for any other purpose, and no other person may rely upon this opinion for any purpose without, in each case, our prior written consent.

Very truly yours,

STOEL RIVES LLP

ANNEX VIII

Filing under Rule 433
Dated _____
Registration No. 333-148527

\$300,000,000
NORTHWEST NATURAL GAS COMPANY
Secured Medium-Term Notes, Series B
(A Series of First Mortgage Bonds)
and
Unsecured Medium-Term Notes, Series B
Due from One Year to 30 Years from Date of Issue

CUSIP No.: 66765R ____	Stated interest rate (%): ____%
Secured ____ Unsecured ____	Maturity date:
Principal amount (\$): \$	Original issue date:
Issue price (%):	Interest payment dates: _____ and _____, commencing _____
Net proceeds to Company (\$):	Redeemable: Yes ___ No ___ In whole ___ In whole or in part ___
Repayable at the option of holder: Yes ___ No ___	Fixed redemption price: Yes ___ No ___
Repayment Date:	Initial redemption date:
Repayment Price:	Initial redemption price:
Election Period:	Reduction Percentage:
Selling Agent(s):	Redemption limitation date:
Type of Transaction:	Make-Whole Redemption Price: Yes ___ No ___
[Agency Transaction] [Principal Transaction]	Make-Whole Spread:

[The issuer has filed a registration statement (including a prospectus) with the Securities and Exchange Commission for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the Securities and Exchange Commission for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the Securities and Exchange Commission's Web site at www.sec.gov. Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling [Banc of America Securities LLC toll-free at 1-800-294-1322] [UBS Securities LLC toll-free at 1-877-827-6444, ext. 561-3884.] [J.P. Morgan Securities Inc. collect at 1-212-834-4533] [Piper Jaffray & Co. toll-free at _____]]

Exhibit 1

Northwest Natural Gas Company

\$ _____

Medium-Term Notes, Series B

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
111 SW Fifth Avenue, Suite 1900
Portland, Oregon 97204

[Insert Names of Additional Existing Agents, if any]

[Insert Name of New Agent]

Ladies and Gentlemen:

Reference is hereby made to the Distribution Agreement, dated March 18, 2009 (the "**Distribution Agreement**"), a copy of which has previously been delivered to you, between Northwest Natural Gas Company, an Oregon corporation (the "Company"), and each of Banc of America Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc., Piper Jaffray & Co. and [Insert Names of Additional Existing Agents, if any], with respect to the issue and sale by the Company of its First Mortgage Bonds, designated Secured Medium-Term Notes, Series B, and its Unsecured Medium-Term Notes, Series B (collectively, the "**Securities**"). Capitalized terms used herein without definition shall have the meanings assigned to them in the Distribution Agreement.

Subject to the terms and conditions set forth in the Distribution Agreement, the Company hereby appoints [Insert Name of New Agent] as agent of the Company for the purpose of soliciting and receiving offers to purchase the Securities. In connection with such appointment, [Insert Name of New Agent] is hereby entitled to the benefits and subject to the duties of an Agent under the terms and conditions of the Distribution Agreement (including the Administrative Procedures) and by its execution hereof is hereby made a party to the Distribution Agreement. In connection with such appointment, [Insert Name of New Agent] shall receive as of the date hereof: [To be agreed upon by the Company and the New Agent]

Any communication under the Distribution Agreement will be made in accordance with Section 12 of the Distribution Agreement, and if to [Insert Name of New Agent] shall be sufficient in all respects when delivered or sent by facsimile transmission or registered mail to

[Insert Address of New Agent], attention: [Insert Name], facsimile transmission number [Insert New Agent Number].

This Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

If the foregoing correctly sets forth our agreement, please indicate your acceptance hereof in the space provided for that purpose below.

Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: _____
Title:

The foregoing Agreement is hereby confirmed and accepted as of the date hereof.

[INSERT NAME OF NEW AGENT]

By: _____

Title: _____

Exhibit 2

Northwest Natural Gas Company
Medium-Term Notes, Series B

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
111 SW Fifth Avenue, Suite 1900
Portland, Oregon 97204

Ladies and Gentlemen:

Reference is hereby made to Section 18 of the Distribution Agreement, dated March 18, 2009 (the "**Distribution Agreement**"), between Northwest Natural Gas Company, an Oregon corporation (the "**Company**"), and each of Banc of America Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc., Piper Jaffray & Co., and [Insert Names of Additional Existing Agents, if any], with respect to the issue and sale by the Company of its First Mortgage Bonds, designated Secured Medium-Term Notes, Series B, and its Unsecured Medium-Term Notes, Series B (collectively, the "**Securities**"). Capitalized terms used herein without definition shall have the meanings assigned to them in the Distribution Agreement.

As provided for in Section 18 of the Distribution Agreement, the Company hereby provides notice to the Agents of the following amendments to the Distribution Agreement: [Insert the appropriate item or items from the list contained below]

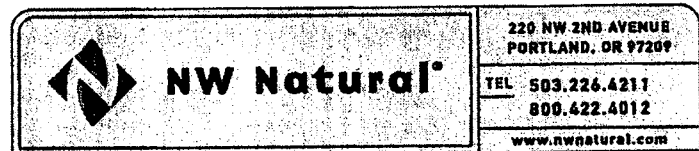
- 1) The principal amount of Securities that may be issued from time to time is hereby amended to be \$[_____].
- 2) The term "Registration Statement" is hereby amended to refer to Registration Statement No. 333-[_____], filed with the Securities and Exchange Commission on [_____], as the same may be amended and supplemented from time to time.
- 3) All references in the Distribution Agreement to the "Preliminary Prospectus," and the "Prospectus" are hereby deemed to refer to those documents as they are included in the Registration Statement referred to in paragraph 2 above.

Very truly yours,

NORTHWEST NATURAL GAS COMPANY

By: _____

Title:



**Northwest Natural Gas Company
Medium Term Notes, Series B**

August 19, 2011

Banc of America Securities LLC
One Bryant Park
New York, New York 10036

UBS Securities LLC
677 Washington Blvd.
Stamford, Connecticut 06901

J.P. Morgan Securities Inc.
270 Park Avenue, 9th Floor
New York, New York 10017

Piper Jaffray & Co.
111 SW Fifth Avenue, Suite 1900
Portland, Oregon 97204

Wells Fargo Securities, LLC
301 S. College Street, NAC D1053-060
Charlotte, North Carolina 28288-0613

Ladies and Gentlemen:

Reference is hereby made to Section 18 of the Distribution Agreement, dated March 18, 2009 (the "Distribution Agreement"), between Northwest Natural Gas Company, an Oregon corporation (the "Company"), and each of Banc of America Securities LLC, UBS Securities LLC, J.P. Morgan Securities Inc., Piper Jaffray & Co., and Wells Fargo Securities, LLC, with respect to the issue and sale by the Company of its First Mortgage Bonds, designated Secured Medium Term Notes, Series B, and its Unsecured Medium Term Notes, Series B (collectively, the "Securities"). Capitalized terms used herein without definition shall have the meanings assigned to them in the Distribution Agreement.

As provided for in Section 18 of the Distribution Agreement, the Company hereby provides notice to the Agents of the following amendments to the Distribution Agreement:

1) The term "Registration Statement" is hereby amended to refer to Registration Statement No. 333-171596, filed with the Securities and Exchange Commission on January 7, 2011, as the same may be amended and supplemented from time to time.

2) All references in the Distribution Agreement to the "Preliminary Prospectus" and the Prospectus are hereby deemed to refer to the preliminary prospectus and the prospectus, respectively, included in the Registration Statement referred to in paragraph 1) above, and the term "Prospectus" shall, in any event, include the Company's Prospectus Supplement, dated August 19, 2011.

Very truly yours,
NORTHWEST NATURAL GAS COMPANY

By: 

Title: Senior Vice President and
Chief Financial Officer

Exhibit F

Certified excerpts of minutes of the Board of Directors meetings held December 20, 2007 and September 23, 2010, approving the issuance of up to \$300,000,000 of Medium-Term Notes.



SECRETARY'S CERTIFICATE
OF
NORTHWEST NATURAL GAS COMPANY

I, Shawn M. Filippi, the duly elected and acting Assistant 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.

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.

IN WITNESS WHEREOF, I have hereunto signed my name this 9th day of August, 2013.




Shawn M. Filippi, Assistant Corporate Secretary

Executive Offices



SECRETARY'S CERTIFICATE
OF
NORTHWEST NATURAL GAS COMPANY

I, Shawn M. Filippi, the duly elected and acting Assistant 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 23rd day of September 2010, 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.

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, for the purpose of registering an unspecified amount of (i) First Mortgage Bonds (which may be in the form of secured Medium-Term Notes, which includes the \$175,000,000 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 \$175,000,000 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 (including DRIP Plan 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"), under the Securities Act of 1933 ("Securities Act"), and the rules and regulations of the Commission thereunder; and further

RESOLVED, that the officers of the Company be, and each of them, acting singly, hereby is, authorized and empowered to prepare, execute and file one or more registration statements under the Securities Exchange Act of 1934, as amended, in connection with an offering of the Securities or otherwise, as such officer may deem necessary or desirable in connection with the sale of all or a portion of the Securities; 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 Gregg S. Kantor, David H. Anderson, Margaret D. Kirkpatrick, Mardilyn Saathoff 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 the officers of the Company be, and each of them, acting singly, hereby is, authorized and directed, in the name and on behalf of the Company, to prepare, execute, if required, and file with the Commission, supplements to the prospectus or prospectuses contained in the Registration Statement (including free writing prospectuses), and other filings with the Commission, or authorize (in writing or otherwise) such preparation and filing, and any and all exhibits and documents relating thereto as in the judgment of such officer are deemed to be necessary or appropriate.

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 Medium-Term Notes, Series B 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, which amount includes the previously authorized Medium-Term Notes, Series B which remain unsold; 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 necessary amendments or supplements to the Distribution Agreement, dated March 18, 2009, related to Medium-Term Notes, Series B, filed with the Commission as Exhibit 1.1 to the Company's Form 8-K dated March 23, 2009 (the "Current Distribution Agreement"), or one or more new distribution agreements, in substantially the form of the Company's Current Distribution Agreement, 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, 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.

General

RESOLVED, that each of the officers of the Company be, and each of them, acting singly, hereby is, authorized and empowered, in the name and on behalf of the Company,

to execute, deliver and file all such other instruments and documents and take all such actions as any officer shall determine to be necessary or appropriate to carry out the intent and purposes of the foregoing resolutions (such determination to be conclusively, but not exclusively, evidenced by the execution and delivery of such instruments and documents or the taking of such actions); and further

RESOLVED, that all actions taken and all agreements, instruments, reports and documents executed, delivered or filed through the date hereof by any officer of the Company, in the name and on behalf of the Company, in connection with the transactions described in or contemplated by the foregoing resolutions are hereby approved, ratified and confirmed in all respects.

IN WITNESS WHEREOF, I have hereunto signed my name this 9th day of August, 2013.



Shawn M. Filippi, Assistant Corporate Secretary