

**RECORDED AT THE REQUEST OF AND  
AFTER RECORDING RETURN TO:**

Stoel Rives LLP  
760 SW Ninth Avenue, Suite 3000  
Portland, OR 97205  
Attn: Eugene A. Frassetto

**SKAMANIA COUNTY RECORDING COVER SHEET**

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Document Title: TWENTY-SECOND SUPPLEMENTAL INDENTURE

Reference Numbers: 2012181913

Grantor: NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke  
Company), an Oregon corporation

Grantee: DEUTSCHE BANK TRUST COMPANY AMERICAS (formerly known as  
BANKERS TRUST COMPANY) as Trustee under the Mortgage and  
Deed of Trust, dated as of July 1, 1946, of Portland Gas & Coke Company  
(now Northwest Natural Gas Company)

Legal Description:

Abbreviated: Pt of E1/2 NE1/4 NW1/4 NE1/4, Sec 28, T3N, R8E, W.M, Skamania  
County, Washington.

Assessor's Property Tax Parcel Account Number:  
03-08-28-1-0-0600-00

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NORTHWEST NATURAL GAS COMPANY

TO

DEUTSCHE BANK TRUST COMPANY AMERICAS  
(FORMERLY KNOWN AS BANKERS TRUST COMPANY),

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

TWENTY-SECOND SUPPLEMENTAL INDENTURE  
PROVIDING, AMONG OTHER THINGS, FOR  
AMENDMENTS TO THE MORTGAGE

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DATED AS OF NOVEMBER 1, 2016

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## TWENTY-SECOND SUPPLEMENTAL INDENTURE

INDENTURE, dated as of the 1st day of November, 2016, made and entered into by and between NORTHWEST NATURAL GAS COMPANY (formerly Portland Gas & Coke Company), an Oregon corporation, with offices at One Pacific Square, 220 N.W. Second Avenue, Portland, Oregon 97209 (hereinafter sometimes called the Company), and DEUTSCHE BANK TRUST COMPANY AMERICAS (formerly known as BANKERS TRUST COMPANY), a New York banking corporation, with offices at 60 Wall Street, 27th Floor, New York, New York 10005 (hereinafter sometimes called the Corporate Trustee or the Trustee), as Trustee under the Mortgage and Deed of Trust, dated as of July 1, 1946 (hereinafter called the Mortgage), executed and delivered by Portland Gas & Coke Company (now Northwest Natural Gas Company) to secure the payment of bonds issued or to be issued under and in accordance with the provisions of the Mortgage, this indenture (hereinafter called Twenty-second Supplemental Indenture) being supplemental thereto;

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

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

WHEREAS the Company executed and delivered to the Trustee its First Supplemental Indenture, dated as of June 1, 1949 (hereinafter called its First Supplemental Indenture), its Second Supplemental Indenture, dated as of March 1, 1954 (hereinafter called its Second Supplemental Indenture), its Third Supplemental Indenture, dated as of April 1, 1956 (hereinafter called its Third Supplemental Indenture), its Fourth Supplemental Indenture, dated as of February 1, 1959 (hereinafter called its Fourth Supplemental Indenture), its Fifth Supplemental Indenture, dated as of July 1, 1961 (hereinafter called its Fifth Supplemental Indenture), its Sixth Supplemental Indenture, dated as of January 1, 1964 (hereinafter called its Sixth Supplemental Indenture), its Seventh Supplemental Indenture, dated as of March 1, 1966 (hereinafter called its Seventh Supplemental Indenture), its Eighth Supplemental Indenture, dated as of December 1, 1969 (hereinafter called its Eighth Supplemental Indenture), its Ninth Supplemental Indenture, dated as of April 1, 1971 (hereinafter called its Ninth Supplemental Indenture), its Tenth Supplemental Indenture, dated as of January 1, 1975 (hereinafter called its Tenth Supplemental Indenture), its Eleventh Supplemental Indenture, dated as of December 1, 1975 (hereinafter called its Eleventh Supplemental Indenture), its Twelfth Supplemental Indenture, dated as of July 1, 1981 (hereinafter called its Twelfth Supplemental Indenture), its Thirteenth Supplemental Indenture, dated as of June 1, 1985 (hereinafter called its Thirteenth Supplemental Indenture), its Fourteenth Supplemental Indenture, dated as of November 1, 1985 (hereinafter called its Fourteenth Supplemental Indenture), its Fifteenth Supplemental Indenture, dated as of July 1, 1986 (hereinafter called its Fifteenth Supplemental Indenture), its Sixteenth

Supplemental Indenture, dated as of November 1, 1988 (hereinafter called its Sixteenth Supplemental Indenture), its Seventeenth Supplemental Indenture, dated as of October 1, 1989 (hereinafter called its Seventeenth Supplemental Indenture), its Eighteenth Supplemental Indenture, dated as of July 1, 1990 (hereinafter called its Eighteenth Supplemental Indenture), its Nineteenth Supplemental Indenture, dated as of June 1, 1991 (hereinafter called its Nineteenth Supplemental Indenture), and its Twentieth Supplemental Indenture, dated as of June 1, 1993 (hereinafter called its Twentieth Supplemental Indenture); and

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

WHEREAS the Company executed and delivered to the Trustee its Twenty-first Supplemental Indenture, dated as of October 15, 2012 (hereinafter called its Twenty-first Supplemental Indenture); and

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

#### IN THE STATE OF OREGON

##### Real Property Mortgage Records

	County	Recordation Date	Document No.
1	Benton	10/29/12	2012-498581
2	Clackamas	10/29/12	2012-070543
3	Clatsop	10/30/12	2012-08835
4	Columbia	10/30/12	2012-008408
5	Coos	10/30/12	2012-9310
6	Douglas	10/29/12	2012-017139
7	Hood River	10/30/12	2012-03785
8	Lane	10/29/12	2012-055545
9	Lincoln	10/30/12	2012-10566
10	Linn	10/30/12	2012-16819
11	Marion	10/30/12	Reel 3439, Page 71
12	Multnomah	10/29/12	2012-138566
13	Polk	10/29/12	2012-011086
14	Tillamook	10/30/12	2012-006117
15	Wasco	10/30/12	2012-004085
16	Washington	10/29/12	2012-091133
17	Yamhill	10/30/12	2012-15633

**Filed as a Financing Statement**

	<b>Office</b>	<b>Date Filed</b>	<b>File No.</b>
18	Secretary of State	6/23/1993	R61325

**IN THE STATE OF WASHINGTON****Real Property Mortgage Records**

	<b>County</b>	<b>Recordation Date</b>	<b>Document No.</b>
19	Clark	10/29/12	4906220
20	Klickitat	10/30/12	1100058
21	Skamania	10/30/12	2012181913

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

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

WHEREAS, Section 103 of the Mortgage provides, among other things, that if for any reason it shall not be necessary, in the opinion of counsel, that there shall be a Co-Trustee and the Company shall file with the Corporate Trustee and also with the Co-Trustee, an Opinion of Counsel to that effect and a written request for the removal of the Co-Trustee, the Co-Trustee shall forthwith cease to be a Trustee under the Mortgage, and all powers of the Co-Trustee shall forthwith terminate, as shall his right, title or interest in and to the trust estate and, unless and until there shall be appointed a new Trustee or successor to the Co-Trustee, all the right, title and powers of the Trustees shall devolve upon the Corporate Trustee and its successors alone; and

WHEREAS, the Company having filed with the Corporate Trustee and the Co-Trustee such Opinion of Counsel and such written request; and

WHEREAS, pursuant to Sections 103 of the Mortgage, the Company and the Corporate Trustee have agreed that Stanley Burg has ceased to be a Trustee under the Mortgage, and all powers of the Co-Trustee have terminated, as has his right, title or interest in and to the trust estate; and, unless and until there shall be appointed a new Trustee or successor to the Co-Trustee, all the right, title and powers of the Trustees has devolved upon the Corporate Trustee and its successors alone; and

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

WHEREAS, the Company has heretofore issued, in accordance with the provisions of the Mortgage, as supplemented, and on the date hereof there remain outstanding, the following series of First Mortgage Bonds:

<u>Series</u>	<u>Principal Amount Outstanding</u>
Secured Medium-Term Notes, Series A	\$ 10,000,000
Secured Medium-Term Notes, Series B (bonds of the Twenty-first Series)	\$541,700,000
4.00% Series due 2042 (bonds of the Twenty-second Series)	\$ 50,000,000

; and

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

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



conveyance of real estate to record in all of the states in which any property at the time subject to the lien of the Mortgage shall be situated; and

WHEREAS the Company now desires (pursuant to the provisions of Section 120 of the Mortgage) to add to its covenants and agreements contained in the Mortgage, as heretofore supplemented, certain other covenants and agreements to be observed by it, to cure certain ambiguities contained in the Mortgage or in certain supplemental indentures, and to alter and amend in certain respects the covenants and provisions contained in the Mortgage, as heretofore supplemented and amended; and

WHEREAS the execution and delivery by the Company of this Twenty-second Supplemental Indenture, and the terms of the bonds of the Twenty-first Series hereinafter referred to, have been duly authorized by the Board of Directors of the Company by appropriate resolutions of the Board of Directors;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

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

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

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

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

TO HAVE AND TO HOLD all such properties, real, personal and mixed, granted, bargained, sold, released, conveyed, assigned, transferred, mortgaged, pledged, set over or confirmed by the Company as aforesaid, or intended so to be, to Deutsche Bank Trust Company Americas, as Trustee, and its successors and assigns forever.

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

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

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



ARTICLE I.  
AMENDMENTS OF CERTAIN PROVISIONS OF THE MORTGAGE

SECTION 1.01 *Meetings and Consents of Bondholders.*

Pursuant to the reservation of right in Section 6 of Article III of the Ninth Supplemental Indenture, the Company hereby amends Article XIX of the Mortgage to read as set forth in Section 6 of Article III of the Ninth Supplemental Indenture.

SECTION 1.02 *Release and Substitution of Property.*

Pursuant to the reservation of right in Section 2.03 of Article II of the Eighteenth Supplemental Indenture, the Company hereby

(A) amends subdivision (1) of Section 59 of the Mortgage to read as follows:

“(1) an Officers’ Certificate describing in reasonable detail the property to be released and requesting such release;”

(B) amends subdivisions (3)(b) and (c) of Section 59 of the Mortgage to read as follows:

“(b) the fair value, and the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost), in the opinion of the signers, of the property (or securities) to be released; (c) the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost), in the opinion of the signers, of any portion thereof that is Funded Property;”

and

(C) amends the first six lines of subdivision (4) of Section 59 of the Mortgage to read as follows:

“(4) an amount in cash, to be held by the Corporate Trustee as part of the Mortgaged and Pledged Property, equivalent to the amount, if any, by which the Cost (or as to Property Additions constituting Funded Property of which the fair value to the Company at the time the same became Funded Property was less than the Cost, then such fair value in lieu of Cost) of the property to be released, as specified in the Engineer’s Certificate provided for in subdivision (3) above, exceeds the aggregate of the following items:”

### SECTION 1.03 *Net Earning Certificate.*

*Annual Interest Requirements for Variable Rate Bonds.* Pursuant to the reservation of right in Section 2.01 of Article II of the Eighteenth Supplemental Indenture, the Company hereby amends subdivision (B) of Section 7 of the Mortgage and the first paragraph following such subdivision (B) to read as set forth in such Section 2.01.

### SECTION 1.04 *Bonding Ratio.*

Pursuant to the reservation of right in Section 2.02 of Article II of the Eighteenth Supplemental Indenture, the Company hereby amends Sections 25, 26, 59 and 61 of the Mortgage by substituting the phrase “seventy per centum (70%)” for the phrase “sixty per centum (60%)” and substituting the phrase “ten-sevenths (10/7ths)” for the phrase “ten-sixths (10/6ths)” each time such phrase or phrases occur in said Sections.

### SECTION 1.05 *Deductions for Retired Automotive Equipment.*

Pursuant to the reservation of right in Section 3 of the Third Supplemental Indenture, the Company hereby amends the Mortgage, as amended and supplemented, to delete clause (ii) of Section 4(H)(A) of the Mortgage, as amended and supplemented.

### SECTION 1.06 *Releases of Unfunded Property.*

Pursuant to the reservation of right in Section 2.03 of Article II of the Eighteenth Supplemental Indenture, the Company hereby amends (A) Section 60 of the Mortgage as provided in such Section 2.03 and (B) the definition of “Engineer’s Certificate” in Section 3 of the Mortgage to read as provided in such Section 2.03.

### SECTION 1.07 *Excepted Property.*

The term “Excepted Property” shall mean the property described in clauses (1) through (6) of the paragraph on pages 10-11 of the Mortgage, as amended and supplemented from time to time (and the corresponding provision in each supplemental indenture thereto).

Clause (1) of the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) is hereby amended to read:

“(1) all cash on hand or in banks or other financial institutions, deposit accounts, securities accounts, shares of stock, interests in business trusts, general or limited partnerships or limited liability companies, bonds, notes, mortgages, other evidences of indebtedness and other securities, security entitlements, commodities accounts and other investment property of whatsoever kind and nature, not hereafter specifically pledged, paid, deposited, delivered or held hereunder or covenanted so to be;”

Clause (3) of the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) is hereby amended to read:

“(3) bills, notes and accounts receivable, judgments, demands and choses in action (including payment intangibles, commercial tort claims and tax credits), and all contracts, leases and operating agreements (including policies of insurance, chattel paper, cooperative interests, warehouse receipts, and contract rights granted by statute or governmental action, including rights to bill and collect revenues or other amounts from customers or others) not specifically pledged hereunder or hereinafter covenanted so to be;

Clause (6) of the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) is hereby amended to read:

“(6) the Company’s franchise to be a corporation; and all properties, real, personal and mixed, which subsequent to November 1, 2016 have been released from the Lien of this Indenture, and any improvements, extensions and additions to such properties and renewals, replacements and substitutions of or for any parts thereof;”

#### SECTION 1.08 *Additional Definitions.*

Section 3 of the Mortgage is hereby amended to add the following definitions:

“The term “Authorized Officer” means the President, any Vice President, the Treasurer, any Assistant Treasurer, or any other officer, manager or agent of the Company duly authorized pursuant to a Resolution to act in respect of matters relating to this Indenture.

The term “Bonding Ratio” shall mean the percentage stated in Section 25 of the Mortgage, as amended and supplemented, and the term “Reciprocal of the Bonding Ratio” shall mean the reciprocal of such percentage.

The term “Business Day”, when used with respect to a place of payment for the bonds or any other particular location specified in the bonds or this Indenture, means any day, other than a Saturday or Sunday, which is not a day on which banking institutions or trust companies in such place of payment or other location are required by law, regulation or executive order to remain closed, or a day on which the corporate trust office of the Corporate Trustee is closed for business.

The term “Company Order” means a written order or request signed in the name of the Company by an Authorized Officer of the Company and delivered to the Corporate Trustee.

The term “corporation” means a corporation, association, company, limited liability company, partnership, limited partnership, joint stock company or business trust,

and references to “corporate” and other derivations of “corporation” herein shall be deemed to include appropriate derivations of such entities.

The term “Fair Value”, with respect to property, means the fair value of such property as determined in the reasonable judgment of the Person certifying to such value, such determination to be based on any one or more factors deemed relevant by such Person, including, without limitation, (a) the amount which would be likely to be obtained in an arm’s-length transaction with respect to such property between an informed and willing buyer and an informed and willing seller, under no compulsion, respectively, to buy or sell, (b) the amount of investment with respect to such property which, together with a reasonable return thereon, would be likely to be recovered through ordinary business operations or otherwise, (c) the Cost, accumulated depreciation, and replacement cost with respect to such property and/or (d) any other relevant factors; provided, however, that (x) the Fair Value of property shall be determined without deduction for any Liens on such property prior to the Lien of this Indenture (except that the Fair Value of property to be released from the Lien of this Indenture shall be determined with deduction for any Liens on such property prior to the Lien of this Indenture) and (y) the Fair Value to the Company of Property Additions may be of less value to a Person which is not the owner or operator of the Mortgaged and Pledged Property or any portion thereof than to a Person which is such owner or operator. Fair Value may be determined, without physical inspection, by the use of accounting and engineering records and other data maintained by the Company or otherwise available to the Engineer certifying the same.

The term “Governmental Authority” means the government of the United States or of any State or Territory thereof or of the District of Columbia or of any county, municipality or other political subdivision of any thereof, or any department, agency, authority or other instrumentality of any of the foregoing.

The term “Holder” means a Person in whose name a bond is registered pursuant to Section 13 of the Mortgage, as amended and supplemented.

The term “Issue Date”, when used with respect to the bonds of the Twenty-first Series, shall have the meaning specified in the Twentieth Supplemental Indenture.

The term “Lien” means any mortgage, deed of trust, pledge, security interest, encumbrance, easement, lease, reservation, restriction, servitude, charge or similar right and any other lien of any kind, including, without limitation, any conditional sale or other title retention agreement, any lease in the nature thereof, and any defect, irregularity, exception or limitation in record title.

The term “Person” means any individual, corporation, joint venture, trust or unincorporated organization or any Governmental Authority.

The term "Permitted Liens" shall mean as of any particular time, any of the following:

(a) Liens for taxes, assessments and other governmental charges or requirements which are not delinquent or which are being contested in good faith by appropriate proceedings or of which at least ten (10) Business Days notice has not been given to the general counsel of the Company or to such other Person designated by the Company to receive such notices;

(b) mechanics', workmen's, repairmen's, materialmen's, warehousemen's, and carriers' Liens, other Liens incident to construction, Liens or privileges of any employees of the Company for salary or wages earned, but not yet payable, and other Liens, including without limitation Liens for worker's compensation awards, arising in the ordinary course of business for charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten (10) Business Days notice has not been given to the general counsel of the Company or to such other Person designated by the Company to receive such notices;

(c) Liens in respect of attachments, judgments or awards arising out of judicial or administrative proceedings (i) in an amount not exceeding the greater of (A) Ten Million Dollars (\$10,000,000) and (B) three percent (3%) of the principal amount of the bonds then Outstanding or (ii) with respect to which the Company shall (X) in good faith be prosecuting an appeal or other proceeding for review and with respect to which the Company shall have secured a stay of execution pending such appeal or other proceeding or (Y) have the right to prosecute an appeal or other proceeding for review or (Z) have not received at least ten (10) Business Days notice given to the general counsel of the Company or to such other Person designated by the Company to receive such notices;

(d) easements, leases, reservations or other rights of others in, on, over and/or across, and laws, regulations and restrictions affecting, and defects, irregularities, exceptions and limitations in title to, the Mortgaged and Pledged Property or any part thereof; provided, however, that such easements, leases, reservations, rights, laws, regulations, restrictions, defects, irregularities, exceptions and limitations do not in the aggregate materially impair the use by the Company of the Mortgaged and Pledged Property considered as a whole for the purposes for which it is held by the Company;

(e) Liens, defects, irregularities, exceptions and limitations in (i) title to real property subject to rights-of-way in favor of the Company or otherwise or used or to be used by the Company primarily for right-of-way purposes; (ii) real property held under lease, easement, license or similar right; or (iii) the rights-of-way, leases, easements, licenses or similar rights in favor of the Company; provided, however, that (A) the Company shall have obtained from the apparent owner or owners of such real property a sufficient right, by the terms of the instrument granting such right-of-way, lease, easement, license or similar right, to the use thereof for the purposes for which the Company acquired the same; (B) the Company has power under eminent domain or similar statutes to remove or subordinate such Liens, defects, irregularities, exceptions or limitations or (C) such defects, irregularities, exceptions and limitations may be otherwise remedied without undue effort or expense; and defects, irregularities, exceptions and limitations in title to flood lands, flooding rights and/or water rights;

(f) Liens securing indebtedness or other obligations neither created, assumed nor guaranteed by the Company nor on account of which it customarily pays interest upon real property or rights in or relating to real property acquired by the Company for the purpose of the transmission or distribution of electric energy, gas or water, for the purpose of telephonic, telegraphic, radio, wireless or other electronic communication or otherwise for the purpose of obtaining rights-of-way;

(g) leases existing on November 1, 2016 affecting properties owned by the Company at said date and renewals and extensions thereof; and leases affecting such properties entered into after such date or affecting properties acquired by the Company after such date which, in either case, (i) have respective terms of not more than ten (10) years (including extensions or renewals at the option of the tenant) or (ii) do not materially impair the use by the Company of such properties for the respective purposes for which they are held by the Company;

(h) Liens vested in lessors, licensors, franchisors or permittees for rent or other amounts to become due or for other obligations or acts to be performed, the payment of which rent or the performance of which other obligations or acts is required under leases, subleases, licenses, franchises or permits, so long as the payment of such rent or other amounts or the performance of such other obligations or acts is not delinquent or is being contested in good faith and by appropriate proceedings;



(i) controls, restrictions, obligations, duties and/or other burdens imposed by federal, state, municipal or other law, or by rules, regulations or orders of Governmental Authorities, upon the Mortgaged and Pledged Property or any part thereof or the operation or use thereof or upon the Company with respect to the Mortgaged and Pledged Property or any part thereof or the operation or use thereof or with respect to any franchise, grant, license, permit or public purpose requirement, or any rights reserved to or otherwise vested in Governmental Authorities to impose any such controls, restrictions, obligations, duties and/or other burdens;

(j) rights which Governmental Authorities may have by virtue of franchises, grants, licenses, permits or contracts, or by virtue of law, to purchase, recapture or designate a purchaser of or order the sale of the Mortgaged and Pledged Property or any part thereof, to terminate franchises, grants, licenses, permits, contracts or other rights or to regulate the property and business of the Company; and any and all obligations of the Company correlative to any such rights;

(k) Liens required by law or governmental regulations (i) as a condition to the transaction of any business or the exercise of any privilege or license, (ii) to enable the Company to maintain self-insurance or to participate in any funds established to cover any insurance risks, (iii) in connection with workmen's compensation, unemployment insurance, social security, any pension or welfare benefit plan or (iv) to share in the privileges or benefits required for companies participating in one or more of the arrangements described in clauses (ii) and (iii) above;

(l) Liens on the Mortgaged and Pledged Property or any part thereof which are granted by the Company to secure duties or public or statutory obligations or to secure, or serve in lieu of, surety, stay or appeal bonds;

(m) rights reserved to or vested in others to take or receive any part of any coal, ore, gas, oil and other minerals, any timber and/or any electric capacity or energy, gas, water, steam and any other products, developed, produced, manufactured, generated, purchased or otherwise acquired by the Company or by others on property of the Company;

(n) (i) rights and interests of Persons other than the Company arising out of contracts, agreements and other instruments to which the Company is a party and which relate to the common ownership or joint use of property; and (ii) all Liens

on the interests of Persons other than the Company in property owned in common by such Persons and the Company if and to the extent that the enforcement of such Liens would not adversely affect the interests of the Company in such property in any material respect;

(o) any restrictions on assignment and/or requirements of any assignee to qualify as a permitted assignee and/or public utility or public service corporation;

(p) any Liens which have been bonded for the full amount in dispute or for the payment of which other adequate security arrangements have been made;

(q) any controls, liens, restrictions, regulations, easements, exceptions or reservations of any public authority or unit applying particularly to any form of space satellites (including but not limited to solar power satellites), space stations and other analogous facilities whether or not in the earth's atmosphere;

(r) easements, ground leases or rights-of-way in, upon, over and/or across the property or rights-of-way of the Company for the purpose of roads, pipe lines, transmission lines, distribution lines, communication lines, railways, removal or transportation of coal, lignite, gas, oil or other minerals or timber, and other like purposes, or for the joint or common use of real property, rights-of-way, facilities and/or equipment; provided, however, that such grant shall not materially impair the use of the property or rights-of-way for the purposes for which such property or rights-of-way are held by the Company;

(s) any Lien of the Trustees granted pursuant to Section 96 of this Indenture; and

(t) any Lien securing indebtedness for the payment of which money in the necessary amount shall have been irrevocably deposited in trust with the trustee or other holder of such Lien; provided, however, that if such indebtedness is to be redeemed or otherwise prepaid prior to the stated maturity thereof, any notice requisite to such redemption or prepayment shall have been given in accordance with the mortgage or other instrument creating such Lien or irrevocable instructions to give such notice shall have been given to such trustee or other holder."

**SECTION 1.09 *Governing Law.*** The Mortgage, as amended and supplemented, shall be governed by and construed in accordance with the law of the State of New York (including

without limitation Section 5-1401 of the New York General Obligations Law or any successor to such statute), without giving effect to its conflicts-of-law principles, except to the extent that the Trust Indenture Act shall be applicable and except to the extent that the law of any jurisdiction wherein any portion of the Mortgaged and Pledged Property is located shall mandatorily govern the creation of a mortgage lien on or security interest in, or perfection, priority or enforcement of the Lien of this Indenture or exercise of remedies with respect to, such portion of the Mortgaged and Pledged Property.

SECTION 1.10 *Effective Date*. Each of the amendments set forth in this Article I shall be effective as of November 1, 2016.

## ARTICLE II.

### THE COMPANY RESERVES THE RIGHT TO AMEND CERTAIN PROVISIONS OF THE MORTGAGE

SECTION 2.01. *Delete Earnings Test*. The Company reserves the right, without any consent, vote or other action by holders of bonds of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend the Mortgage, as amended and supplemented, to delete all provisions in the Mortgage, as amended and supplemented, which require a Net Earning Certificate, whether as a condition precedent to the authentication and delivery of bonds or otherwise, including Section 27, Section 28(6), the penultimate paragraph of Section 29, and Section 30(3) of the Mortgage, as amended and supplemented.

SECTION 2.02. *Delete Requirement for Disposition of Released Property*. The Company reserves the right, without any consent, vote or other action by holders of bonds of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend the Mortgage, as amended and supplemented, (A) to delete clause (a) of subdivision (3) of Section 59 of the Mortgage, as amended and supplemented, and (B) to delete clause (b) of subdivision (1) of Section 60(II) of the Mortgage, as amended and supplemented.

SECTION 2.03. *Redefine Funded Property*. The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 5 of the Mortgage, as amended and supplemented, to replace the first two paragraphs thereof with three paragraphs reading substantially as follows:

“The term “Funded Property Certificate” shall mean an Independent Engineer’s Certificate delivered to the Corporate Trustee, within ninety days after the date thereof,

(A) stating the aggregate principal amount of bonds then Outstanding under this Indenture;

(B) stating the aggregate principal amount of bonds which the Company is then entitled to have authenticated and delivered by compliance with the provisions of Section 29 hereof;

(C) stating an amount equal to the sum of the amounts stated in clauses (A) and (B) above divided by the Bonding Ratio;

(D) describing all or any portion of the Mortgaged and Pledged Property which, in the opinion of the signers, has an aggregate Fair Value not less than the amount stated in clause (C) above.

The term "Funded Property" shall mean:

(1) all Mortgaged and Pledged Property described in the most recent Funded Property Certificate delivered to the Corporate Trustee;

(2) all Property Additions to the extent that the same shall have been made the basis of the authentication and delivery of bonds under this Indenture after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee;

(3) all Property Additions to the extent that the same shall have been made the basis of the release of property from the Lien of this Indenture after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee, subject, however, to the provisions of Section 59 hereof;

(4) all Property Additions to the extent that the same shall have been substituted (otherwise than under the release or cash withdrawal provisions hereof) for Funded Property retired after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee; and

(5) all Property Additions to the extent that the same shall have been made the basis of the withdrawal of any Funded Cash as hereinafter defined after the date of the most recent Funded Property Certificate delivered to the Corporate Trustee, except to the extent that any such Property Additions shall no longer be deemed to be Funded Property in accordance with the provisions of other Sections of this Indenture.

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

The foregoing amendment shall not become effective unless and until the Company elects to deliver, and shall have delivered, a Funded Property Certificate to the Corporate Trustee.

**SECTION 2.04. Insurance.** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016,

to amend Section 37 of the Mortgage, as amended and supplemented, to read substantially as follows:

“Section 37. (a) The Company shall (i) keep or cause to be kept all the Mortgaged and Pledged Property insured against loss by fire, to the extent that property of similar character is usually so insured by companies similarly situated and operating like properties, to a reasonable amount, by reputable insurance companies, the proceeds of such insurance (except as to any loss of Excepted Property and except as to any particular loss less than the greater of (A) Twenty Million Dollars (\$20,000,000) and (B) three percent (3%) of the principal amount of bonds Outstanding on the date of such particular loss) to be made payable, subject to applicable law, to the Corporate Trustee as the interest of the Corporate Trustee may appear, or to the trustee or other holder of any Lien prior hereto upon property subject to the Lien hereof, if the terms thereof require such payment, or to the agent or representative of the owners of jointly-owned property if the terms of such joint ownership require such payment or (ii) in lieu of or supplementing such insurance in whole or in part, adopt some other method or plan of protection against loss by fire at least equal in protection to the method or plan of protection against loss by fire of companies similarly situated and operating properties subject to similar fire hazards or properties on which an equal primary fire insurance rate has been set by reputable insurance companies; and if the Company shall adopt such other method or plan of protection, it shall, subject to applicable law (and except as to any loss of Excepted Property and except as to any particular loss less than the greater of (X) Twenty Million Dollars (\$20,000,000) and (Y) three percent (3%) of the principal amount of bonds Outstanding on the date of such particular loss) pay to the Corporate Trustee on account of any loss covered by such method or plan an amount in cash equal to the amount of such loss less any amounts otherwise paid to the Corporate Trustee in respect of such loss or paid to the trustee or other holder of any Lien prior hereto upon property subject to the Lien hereof in respect of such loss if the terms thereof require such payment or paid to the agent or representative of the owners of jointly-owned property if the terms of such joint ownership require such payment. Any cash so required to be paid by the Company pursuant to any such method or plan shall for the purposes of this Indenture be deemed to be proceeds of insurance. In case of the adoption of such other method or plan of protection, the Company shall furnish to the Corporate Trustee a certificate of an actuary or other qualified person appointed by the Company with respect to the adequacy of such method or plan.

Anything herein to the contrary notwithstanding, the Company may have fire insurance policies with (i) a deductible provision in a dollar amount per occurrence not exceeding the greater of (A) Twenty Million Dollars (\$20,000,000) and (B) three percent (3%) of the principal amount of the bonds Outstanding on the date such policy goes into effect, and/or (ii) co-insurance or self insurance provisions with a dollar amount per occurrence not exceeding thirty percent (30%) of the loss proceeds otherwise payable; provided, however, that the dollar amount described in clause (i) above may be exceeded to the extent such dollar amount per occurrence is below the deductible amount in effect as to fire insurance (X) on property of similar character insured by companies similarly situated and operating like property or (Y) on property as to which an equal primary fire insurance rate has been set by reputable insurance companies.



(b) All moneys paid to the Corporate Trustee by the Company in accordance with this Section or received by the Corporate Trustee as proceeds of any insurance, in either case on account of a loss on or with respect to Funded Property, shall, subject to any Lien prior hereto upon property subject to the Lien hereof, be held by the Corporate Trustee and, subject as aforesaid, shall be paid by it to the Company to reimburse the Company for an equal amount expended or committed for expenditure in the rebuilding, renewal and/or replacement of or substitution for the property destroyed or damaged, upon receipt by the Corporate Trustee of:

(i) a letter signed by an officer of the Company requesting such payment,

(ii) an Engineer's Certificate:

(A) describing the property so damaged or destroyed;

(B) stating the Cost of such property (or, if the fair value to the Company of such property at the time the same became Funded Property was certified to be an amount less than the Cost thereof, then such fair value, as so certified, in lieu of Cost) or, if such damage or destruction shall have affected only a portion of such property, stating the allocable portion of such Cost or fair value;

(C) stating the amounts so expended or committed for expenditure in the rebuilding, renewal, replacement of and/or substitution for such property; and

(D) stating the fair value to the Company of such property as rebuilt or renewed or as to be rebuilt or renewed and/or of the replacement or substituted property, and if

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

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

the Engineer making the statement required by this clause (D) shall be an Independent Engineer, and



(iii) an Opinion of Counsel stating that, in the opinion of the signer, the property so rebuilt or renewed or to be rebuilt or renewed, and/or the replacement property, is or will be subject to the Lien hereof.

Any such moneys not so applied within thirty-six (36) months after its receipt by the Corporate Trustee, or in respect of which notice in writing of intention to apply the same to the work of rebuilding, renewal, replacement or substitution then in progress and uncompleted shall not have been given to the Corporate Trustee by the Company within such thirty-six (36) months, or which the Company shall at any time notify the Corporate Trustee is not to be so applied, shall thereafter be withdrawn, used or applied in the manner, to the extent and for the purposes, and subject to the conditions, provided in Section 61; provided, however, that if the amount of such moneys shall exceed the amount stated pursuant to clause (B) in the Engineer's Certificate referred to above, the amount of such excess shall not be deemed to be Funded Cash, shall not be subject to Section 61 and shall be remitted to or upon the order of the Company upon the withdrawal, use or application of the balance of such moneys pursuant to Section 61.

Anything in this Indenture to the contrary notwithstanding, if property on or with respect to which a loss occurs constitutes Funded Property in part only, the Company may, at its election, obtain the reimbursement of insurance proceeds attributable to the part of such property which constitutes Funded Property under this subsection (b) and obtain the reimbursement of insurance proceeds attributable to the part of such property which does not constitute Funded Property under subsection (c) of this Section.

(c) All moneys paid to the Corporate Trustee by the Company in accordance with this Section or received by the Corporate Trustee as proceeds of any insurance, in either case on account of a loss on or with respect to property which does not constitute Funded Property, shall, subject to the requirements of any Lien prior hereto upon property subject to the Lien hereof, be held by the Corporate Trustee and, subject as aforesaid, shall be paid by it to the Company upon receipt by the Corporate Trustee of:

(i) a letter from an officer of the Company requesting such payment;

(ii) an Engineer's Certificate stating:

(A) that such moneys were paid to or received by the Corporate Trustee on account of a loss on or with respect to property which does not constitute Funded Property; and

(B) if true, either (I) that the aggregate amount of the Cost or fair value to the Company (whichever is less) of all Property Additions which do not constitute Funded Property (excluding, to the extent of such loss, the property on or with respect to which such loss was incurred),

after making deductions therefrom and additions thereto of the character contemplated by Section 4, is not less than zero (0) or (II) that the amount of such loss does not exceed the aggregate Cost or fair value to the Company (whichever is less) of Property Additions acquired, made or constructed on or after the ninetieth (90th) day prior to the date of the request for such payment; or

(C) if neither of the statements contemplated in subclause (B) above can be made, the amount by which zero (0) exceeds the amount referred to in subclause (B)(I) above (showing in reasonable detail the calculation thereof); and

(iii) if the Engineer's Certificate required by clause (ii) above contains neither of the statements contemplated in clause (ii)(B) above, an amount in cash, to be held by the Corporate Trustee as part of the Mortgaged and Pledged Property, equal to the amount shown in clause (ii)(C) above.

To the extent that the Company shall be entitled to withdraw proceeds of insurance pursuant to this subsection (c), such proceeds shall be deemed not to constitute Funded Cash.

(d) Whenever under the provisions of this Section the Company is required to deliver moneys to the Corporate Trustee and at the same time shall have satisfied the conditions set forth herein for payment of moneys by the Corporate Trustee to the Company, there shall be paid to or retained by the Corporate Trustee or paid to the Company, as the case may be, only the net amount."

**SECTION 2.05. *Property Additions.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend subdivision (I) of Section 4 of the Mortgage, as amended and supplemented, to read substantially as follows:

"(I) The term "Property Additions" shall mean Mortgaged and Pledged Property acquired by the Company by purchase, consolidation, merger, donation, construction, erection or in any way whatsoever, subsequent to March 31, 1946, or in the process of construction or erection in so far as actually constructed or erected subsequent to March 31, 1946, and used or useful in any business that the Company may conduct.

At any time and from time to time, the Company may elect, by supplemental indenture, to subject any property that is Excepted Property to the Lien of the Mortgage, as amended and supplemented, and such property shall thereupon cease to be Excepted Property.

The term "Natural Gas and Oil Production Property" shall mean all leases, consolidated leases and operating agreements, fee lands and other mineral interest, gas and oil rights, wells, field compressors, equipment and other properties and rights

whether producing or non-producing, used or useful primarily and principally for the production and gathering of natural gas up to the point of connection with any gas transmission or distribution system or used or useful primarily and principally for the production and gathering of oil.

SECTION 2.06. *Priority and Authority Opinions.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to restate subdivisions (7) and (9) of Section 28 of the Mortgage, as amended and supplemented, to read substantially as follows:

“(7) either an Opinion of Counsel or an Officers’ Certificate to the effect that:

(a) this Indenture constitutes, or, upon the delivery of, and/or the filing and/or recording in the proper places and manner of, the instruments of conveyance, assignment or transfer, if any, specified in said opinion or certificate, will constitute, a Lien on all the Property Additions to be made the basis of the authentication and delivery of such bonds, subject to no Lien thereon prior to the Lien of this Indenture except Permitted Liens and any other Liens of which the signer of said opinion or certificate has no actual knowledge and which do not appear on a specified lien search report received by said signer not more than five (5) Business Days prior to the date of said opinion or certificate; and

(b) the Company has corporate authority to operate such Property Additions;

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

(9) copies of the instruments of conveyance, assignment and transfer, if any, and the lien search report, if any, specified in the opinion or certificate provided for in clause (7) above.”

SECTION 2.07. *Maintenance.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 38 of the Mortgage, as amended and supplemented, to read substantially as follows:

“Section 38. The Company shall cause (or, with respect to property owned in common with others, make reasonable effort to cause) the Mortgaged and Pledged Property, considered as a whole, to be maintained and kept in good condition, repair and working order and shall cause (or, with respect to property owned in common with others, make reasonable effort to cause) to be made such repairs, renewals, replacements, betterments and improvements thereof, as, in the judgment of the Company, may be necessary in order that the operation of the Mortgaged and Pledged Property, considered as a whole, may be conducted in accordance with common industry practice; provided,

however, that nothing in this Section shall prevent the Company from discontinuing, or causing the discontinuance of, the operation and maintenance of any portion of the Mortgaged and Pledged Property if such discontinuance is in the judgment of the Company desirable in the conduct of its business; and provided, further, that nothing in this Section shall prevent the Company from selling, transferring or otherwise disposing of, or causing the sale, transfer or other disposition of, any portion of the Mortgaged and Pledged Property in compliance with the other provisions of this Indenture.”

SECTION 2.08. *Excepted Property.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend the paragraph on pages 10-11 of the Mortgage (and the corresponding provision in each supplemental indenture thereto) to add any one or more of the following types of property to the list of Excepted Property:

- (a) any vessels, boats, barges, and other marine equipment;
- (b) any personal property of such character that the perfection of a security interest therein or other Lien thereon is not governed by the Uniform Commercial Code as in effect in the jurisdiction in which the Company is organized or the property is located;
- (c) any general intangibles, including computer software;
- (d) any patents, patent licenses and other patent rights, patent applications, trade names, trademarks, copyrights and other intellectual property;
- (e) any governmental and other licenses, permits and franchises (other than the Company’s franchises, permits and licenses that are transferable and necessary for the operation of the Mortgaged and Pledged Property); or
- (f) any unrecorded easements and rights of way.

SECTION 2.09. *Mergers into the Company.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 85 of the Mortgage, as amended and supplemented, to add a new paragraph reading substantially as follows:

“Nothing in this Indenture shall be deemed to prevent or restrict any consolidation or merger after the consummation of which the Company would be the surviving or resulting corporation or any conveyance or other transfer, or lease, of any part of the Mortgaged and Pledged Property which does not constitute the entirety or substantially the entirety of the Mortgaged and Pledged Property. Unless, in the case of a consolidation or merger described in the preceding sentence, an indenture supplemental hereto shall otherwise provide, this Indenture shall not become or be, or be required to become or be, a Lien upon any of the properties acquired by the Company in or as a result of such transaction or any improvements, extensions or additions to such properties or any renewals, replacements or substitutions of or for any part or parts thereof.”

SECTION 2.10. *Transfer of Less than Substantially All.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 85 of the Mortgage, as amended and supplemented, to add a new paragraph reading substantially as follows:

“A conveyance, transfer or lease by the Company of any part of the Mortgaged and Pledged Property shall not be deemed to constitute the conveyance, transfer or lease of all or substantially all of the Mortgaged and Pledged Property as an entirety for purposes of this Indenture if the Fair Value of the Mortgaged and Pledged Property retained by the Company exceeds the Reciprocal of the Bonding Ratio multiplied by the sum of the aggregate principal amount of all Outstanding bonds and any other outstanding debt of the Company secured by a purchase money lien that ranks equally with, or senior to, the bonds with respect to such Mortgaged and Pledged Property. Such Fair Value shall be established by the delivery to the Corporate Trustee of an Independent Engineer’s Certificate stating the Independent Engineer’s opinion of such Fair Value as of a date not more than 90 days before or after such conveyance, transfer or lease. This Article XVI is not intended to limit the Company’s conveyances, transfers or leases of less than substantially the entirety of the Mortgaged and Pledged Property or to create an inference that any conveyance, transfer or lease of any part of the Mortgaged and Pledged Property shall necessarily be deemed to constitute a conveyance, transfer or lease of all or substantially all of the Mortgaged and Pledged Property as an entirety for purposes of this Indenture where the Fair Value of the Mortgaged and Pledged Property retained by the Company is less than the Reciprocal of the Bonding Ratio multiplied by the aggregate principal amount of all Outstanding bonds and any other outstanding debt of the Company secured by a purchase money lien that ranks equally with, or senior to, the bonds with respect to such Mortgaged and Pledged Property.”

SECTION 2.11. *Corporate Trustee Replacement.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 101 of the Mortgage, as amended and supplemented, to add a new paragraph reading substantially as follows:

“So long as no event which is, or after notice or lapse of time, or both, would become, a Default shall have occurred and be continuing, and except with respect to a Corporate Trustee appointed by the bondholders as provided in Section 102 hereof, if the Company shall have delivered to the Corporate Trustee (i) resolutions of the Board of Directors appointing a successor Corporate Trustee, effective as of a date specified therein, and (ii) an instrument of acceptance of such appointment, effective as of such date, by such successor Corporate Trustee in accordance with Section 104 hereof, the Corporate Trustee shall be deemed to have resigned as contemplated in the first sentence of Section 101 hereof, the successor Corporate Trustee shall be deemed to have been appointed by the Company pursuant to Section 102 hereof and such appointment shall be deemed to have been accepted as contemplated in Section 104 hereof, all as of such date, and all other provisions of Sections 101, 102 and 104 hereof shall be applicable to such



resignation, appointment and acceptance except to the extent inconsistent with this paragraph.”

**SECTION 2.12. *Terms of New Series of Bonds.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 8 of the Mortgage, as amended and supplemented,

(A) to add the words “or an Authorized Officer” after the words “Board of Directors of the Company” in the first sentence of Section 8,

(B) to change the words “Resolution of the Board of Directors of the Company” in the second sentence of Section 8 to “Resolution, supplemental indenture or Officers’ Certificate”,

(C) to change the words “the Board of Directors” in the fifth sentence of Section 8 to “Resolution, supplemental indenture or Officers’ Certificate”,

(D) to add the words “or an Authorized Officer” after the words “Board of Directors” in the sixth sentence of Section 8 and in clause (c) of Section 8.

**SECTION 2.13. *Investment of Money Held by Corporate Trustee.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 118 of the Mortgage, as amended and supplemented, (A) to delete the parenthetical in the first sentence of Section 118, (B) to delete the words “evidenced by a Resolution” in the first sentence of Section 118, and (C) to add a sentence after the first sentence in Section 118 reading substantially as follows:

“Any money which is held by the Corporate Trustee for the purpose of effecting the purchase, payment or redemption of any bonds issued hereunder, or the payment of any interest on such bonds, shall only be invested in bonds or other obligations maturing on or before the date specified for such purchase, payment or redemption.”

**SECTION 2.14. *Officer’s Certificates.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, (A) to change the words “Officers’ Certificate” to “Officer’s Certificate” wherever used in the Mortgage and any supplemental indenture thereto, including the amendments described in this Article II, and (B) to restate the definition of “Officers’ Certificate” in Section 3 of the Mortgage, as amended and supplemented, to read substantially as follows:

“The term “Officer’s Certificate” shall mean a certificate signed by an Authorized Officer. If and to the extent required by the provisions of Section 121 hereof, each such certificate shall include the statements provided for in said Section.”

**SECTION 2.15. *Majority Vote or Consent.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second



Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Article XIX of the Mortgage, as amended and supplemented, to read substantially as follows:

## **“ARTICLE XIX.**

### **Meetings and Consents of Bondholders.**

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

SECTION 108. The Corporate Trustee may at any time call a meeting of the holders of bonds of one or more, or all, series and it shall call such a meeting on written request of the Company, given pursuant to a Resolution of its Board of Directors, or a resolution of the holders of a majority or more in principal amount of the bonds of such series Outstanding hereunder, considered as one class, at the time of such request. In the event of the Corporate Trustee's failing for ten (10) days to call a meeting after being thereunto requested by the Company or bondholders as above set forth, holders of Outstanding bonds in the amount above specified in this Section or the Company, pursuant to Resolution of its Board of Directors, may call such meeting. Every such meeting called by and at the instance of the Corporate Trustee shall be held in the Borough of Manhattan, The City of New York, or with the written approval of the Company, at any other place in the United States of America, and written notice thereof, stating the place and time thereof and in general terms the business to be submitted, shall be mailed by the Corporate Trustee not less than thirty (30) days before such meeting (a) to each registered holder of bonds of the series in respect of which such meeting is being called then Outstanding hereunder addressed to him at his address appearing on the registry books, (b) to all other holders of bonds of such series then Outstanding hereunder the names and addresses of whom are preserved by the Corporate Trustee as required by the provisions of Section 43 hereof and (c) to the Company addressed to it at 220 N.W. Second Avenue, Portland, Oregon 97209 (or at such other address as may be designated by the Company from time to time), and, if any bonds of such series shall not be in fully registered form, shall be published by the Corporate Trustee at least once a week for four (4) successive calendar weeks immediately preceding the meeting, upon any secular day of each such calendar week, which need not be the same day of each week, in a Daily Newspaper, printed in the English language, and published and of general circulation in The City of New York; provided, however, that, if such notice by publication shall have been given, the mailing of such notice to any bondholders shall in no case be a condition precedent to the validity of any action taken at such meeting. Any meeting of holders of the bonds of one or more, or all, series shall be valid without notice if the holders of all bonds of such series then Outstanding hereunder are present in person or by proxy and if the Company and the Corporate Trustee are present by duly authorized representatives, or if notice is waived in writing before or after the meeting by the Company, the holders of all bonds of such series Outstanding hereunder and by the Corporate Trustee, or by such of them as are not present in person or by proxy.

SECTION 109. Officers and nominees of the Corporate Trustee and of the Company or their or its nominees may attend such meeting, but shall not as such be entitled to vote thereat. Attendance by bondholders may be in person or by proxy. In order that the holder of any bond payable to bearer and his proxy may attend and vote without producing his bond, the Corporate Trustee, with respect to any such meeting, may make and from time to time vary such regulations as it shall think fit for deposit of bonds with, (i) any bank or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State of the United States or any public instrumentality of the United States, any State or Territory, or (iv) any other person or corporation satisfactory to the Corporate Trustee, and for the issue to the persons depositing the same of certificates by such depositaries entitling the holders thereof to be present and vote at any such meeting and to appoint proxies to represent them and vote for them at any such meeting in the same way as if the persons so present and voting, either personally or by proxy, were the actual bearers of the bonds in respect of which such certificates shall have been issued and any regulations so made shall be binding and effective. In lieu of or in addition to providing for such deposit, the Corporate Trustee may, in its discretion, permit such institutions to issue certificates stating that bonds were exhibited to them, which certificates shall entitle the holders thereof to vote at any meeting only if the bonds with respect to which they are issued are not produced at the meeting by any other person and are not at the time of the meeting registered in the name of any other person. Each such certificate shall state the date on which the bond or bonds in respect of which such certificate shall have been issued were deposited with or exhibited to such institution and the series, maturities and serial numbers of such bonds. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf. In the event that two or more such certificates shall be issued with respect to any bond or bonds, the certificate bearing the latest date shall be recognized and be deemed to supersede any certificate or certificates previously issued with respect to such bond or bonds. If any such meeting shall have been called under the provisions of Section 108 hereof, by bondholders or by the Company, and the Corporate Trustee shall fail to make regulations as above authorized, then regulations to like effect for such deposit, or exhibition of bonds and the issue of certificates by (i) any bank or trust or insurance company, or (ii) any trustee, secretary, administrator or other proper officer of any pension, welfare, hospitalization, or similar fund or funds, or (iii) by the United States of America, any Territory thereof, the District of Columbia, any State of the United States, any municipality in any State of the United States or any public instrumentality of the United States, any State or Territory shall be similarly binding and effective for all purposes hereof if adopted or approved by the bondholders calling such meeting or by the Board of Directors of the Company, if such meeting shall have been called by the Company, provided that in either such case copies of such regulations shall be filed with the Corporate Trustee. A bondholder in any of the foregoing categories may sign such a certificate in his own behalf.

SECTION 110. Subject to the restrictions specified in Sections 109 and 113 hereof, any registered holder of bonds Outstanding hereunder and any holder of a certificate (not superseded) provided for in Section 109 hereof relating to bonds

Outstanding hereunder, in either case of the series in respect of which a meeting shall have been called, shall be entitled in person or by proxy to attend and vote at such meeting as a holder of the bonds registered or certified in the name of such holder without producing such bonds. All others seeking to attend or vote at such meeting in person or by proxy must, if required by any authorized representative of the Corporate Trustee or the Company or by any other bondholder, produce the bonds claimed to be owned or represented at such meeting and every one seeking to attend or vote shall, if required as aforesaid, produce such further proof of bond ownership or personal identity as shall be satisfactory to the authorized representative of the Corporate Trustee, or if none be present then to the Inspectors of Votes hereinafter provided for. Proxies shall be witnessed or in the alternative may (a) have the signature guaranteed by a bank or trust company or a registered dealer in securities participating in a recognized signature guarantee medallion program, (b) be acknowledged before a Notary Public or other officer authorized to take acknowledgements, or (c) have their genuineness otherwise established to the satisfaction of the Inspector of Votes. All proxies and certificates presented at any meeting shall be delivered to said Inspectors of Votes and filed with the Corporate Trustee.

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

SECTION 112. The holders of a majority in aggregate principal amount of the bonds Outstanding hereunder of the series with respect to which a meeting shall have been called as hereinbefore provided, considered as one class, shall constitute a quorum for a meeting of holders of bonds of such series; provided, that if any action is to be taken at such meeting which this Indenture expressly provides may be taken by the holders of a specified percentage which is less than a majority in principal amount of the bonds of such series Outstanding hereunder, considered as one class, then the holders of such specified percentage in principal amount of the bonds of such series Outstanding hereunder, considered as one class, shall constitute a quorum. In the absence of a quorum within one hour of the time appointed for any such meeting, the meeting shall, if convened at the request of holders of bonds of such series, be dissolved. In any other

case the meeting may be adjourned for such period or periods as may be determined and announced by the chairman of the meeting prior to the adjournment thereof.

SECTION 113. Any modification or alteration of this Indenture and/or of any indenture supplemental hereto and/or of the rights and obligations of the Company and/or the rights of the holders of bonds and/or coupons issued hereunder in any particular may be made at a meeting of bondholders duly convened and held in accordance with the provisions of this Article, but only by resolution duly adopted by the affirmative vote of the holders of a majority in principal amount of the bonds Outstanding hereunder, considered as one class (or, if such modification or alteration shall materially adversely affect the holders of bonds of one or more, but less than all, series then Outstanding hereunder, then the affirmative vote only of the holders of a majority in aggregate principal amount of the bonds of the series adversely affected in any material respect then Outstanding hereunder, considered as one class), when such meeting is held, and in every case approved by Resolution of the Board of Directors of the Company as hereinafter specified; provided, however, that no such modification or alteration shall, without the consent of the holder of any bond issued hereunder affected thereby, permit (1) the extension of the maturity of the principal of, or interest on, such bond, or (2) the reduction in such principal or the rate of interest thereon or any other modification in the terms of payment of such principal or interest, or (3) the creation of any lien ranking prior to, or on a parity with, the Lien of this Indenture with respect to any of the Mortgaged and Pledged Property, or (4) the deprivation of any non-assenting bondholder of a lien upon the Mortgaged and Pledged Property for the security of his bonds (subject only to Excepted Encumbrances) or (5) the reduction of the percentage required by the provisions of this Section for the taking of any action under this Section with respect to any bond Outstanding hereunder. For all purposes of this Article, the Trustees shall be entitled to rely upon an Opinion of Counsel with respect to the extent, if any, as to which any action taken at such meeting affects the rights under this Indenture or under any indenture supplemental hereto of any holders of bonds then Outstanding hereunder.

Bonds owned and/or held by and/or for account of and/or for the benefit or interest of the Company, or any corporation of which the Company shall own twenty-five per centum (25%) or more of the outstanding voting stock, shall not be deemed Outstanding for the purpose of any vote or of any calculation of bonds Outstanding in Article XVI hereof or in this Article XVIII or for the purpose of the quorum provided for in Section 112 of this Article; provided, however, that bonds so owned or held which have been pledged in good faith may be regarded as Outstanding for purposes of this paragraph if the pledgee establishes to the satisfaction of the Corporate Trustee the pledgee's right to vote or give consents with respect to such bonds and that the pledgee is not the Company or a corporation of which the Company shall own twenty-five per centum (25%) or more of the outstanding voting stock. For all purposes of this Indenture, the Corporate Trustee, the Chairman and Secretary of any meeting held pursuant to the provisions of this Article XIX and the Inspectors of Votes at any such meeting shall (unless the fact is challenged at such meeting by any holder of bonds Outstanding hereunder entitled to vote at such meeting and a contrary fact is established) be entitled conclusively to rely upon a notification in writing by an officer of the Company, specifying the principal amount of bonds Outstanding hereunder owned by or



held by or for the account of or for the benefit or interest of the Company or any corporation of which the Company shall own twenty-five per centum (25%) or more of the outstanding voting stock, or stating that no such bonds are so owned or held. In case the meeting shall have been called otherwise than on the written request of the Company, the Corporate Trustee shall be entitled conclusively to assume that none of the bonds Outstanding hereunder is so owned or held unless a notification by the Company is furnished as in this paragraph provided or unless the fact is challenged at such meeting by any holder of bonds Outstanding hereunder and a contrary fact is established.

SECTION 114. A record in duplicate of the proceedings of each meeting of bondholders shall be prepared by the permanent Secretary of the meeting and shall have attached thereto the original reports of the Inspectors of Votes, and affidavits by one or more persons having knowledge of the facts showing a copy of the notice of the meeting, and showing that said notice was mailed and published as provided in Section 108 hereof. Such record shall be signed and verified by the affidavit of the permanent Chairman and the permanent Secretary of the meeting, and one duplicate thereof shall be delivered to the Company and the other to the Corporate Trustee for preservation by the Corporate Trustee. Any record so signed and verified shall be proof of the matters therein stated, and if such record shall also be signed and verified by the affidavit of a duly authorized representative of the Corporate Trustee, such meeting shall be deemed conclusively to have been duly convened and held and such record shall be conclusive, and any resolution or proceeding stated in such record to have been adopted or taken, shall be deemed conclusively to have been duly adopted or taken by such meeting. A true copy of any resolution adopted by such meeting shall be mailed by the Corporate Trustee (a) to each registered holder of bonds of the series adversely affected in any material respect by such resolution then Outstanding addressed to him at his address appearing on the registry books, and (b) to all other holders of bonds then Outstanding hereunder, the names and addresses of whom are then preserved by the Corporate Trustee pursuant to the provisions of Section 43 hereof, and proof of such mailing by the affidavit of some person having knowledge of the fact shall be filed with the Corporate Trustee, but failure to mail copies of such resolution as aforesaid shall not affect the validity thereof. No such resolution shall be binding until and unless such resolution is approved by Resolution of the Board of Directors of the Company, of which such Resolution of approval, if any, it shall be the duty of the Company to file a copy certified by the Secretary or an Assistant Secretary of the Company with the Corporate Trustee, but if such Resolution of the Board of Directors of the Company is adopted and a certified copy thereof is filed with the Corporate Trustee, the resolution so adopted by such meeting shall (to the extent permitted by law) be deemed conclusively to be binding upon the Company, the Trustees and the holders of all bonds and coupons issued hereunder, at the expiration of sixty (60) days after such filing, except in the event of a final decree of a court of competent jurisdiction setting aside such resolution, or annulling the action taken thereby in a legal action or equitable proceeding for such purposes commenced within such sixty (60) day period; provided, however, that no such resolution of the bondholders, or of the Company, shall in any manner be so construed as to change or modify any of the rights, immunities, or obligations of the Trustees or either of them without their, its or his written assent thereto.

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

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

SECTION 116. (A) Anything in this Article XIX contained to the contrary notwithstanding, the Corporate Trustee shall receive the written consent (in any number of instruments of similar tenor executed by bondholders or by their attorneys appointed in writing or in the supplemental indenture or supplemental indentures creating such series of bonds) of the holders of a majority in principal amount of the bonds Outstanding hereunder, considered as one class (or, if any action proposed to be taken shall materially adversely affect the holders of bonds of one or more, but less than all, series then Outstanding hereunder, then the consent only of the holders of a majority in aggregate principal amount of bonds of the series so adversely affected in any material respect then Outstanding hereunder, considered as one class), at the time the last such needed consent is delivered to the Corporate Trustee, in lieu of the holding of a meeting pursuant to this Article XIX and in lieu of all action at such a meeting and with the same force and effect as a resolution duly adopted in accordance with the provisions of Section 113 hereof.

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



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

Each such certificate shall be dated and shall state in effect that as of the date thereof a coupon bond or bonds bearing a specified serial number or numbers was exhibited to the signer of such certificate. The holding by the person named in any such certificate of any bonds specified therein shall be presumed to continue unless (1) any certificate bearing a later date issued in respect of the same bond shall be produced, (2) the bond specified in such certificate (or any bond or bonds issued in exchange or substitution for such bond) shall be produced, or (3) the bond specified in such certificate shall be registered as to principal in the name of another holder or shall have been surrendered in exchange or a fully registered bond registered in the name of another holder. The Corporate Trustee may nevertheless in its discretion require further proof in cases where it deems further proof desirable. The ownership of registered bonds shall be proved by the registry books.

(C) Until such time as the Corporate Trustee shall receive the written consent of the necessary per centum in principal amount of the bonds required by the provisions of subsection (A) above for action contemplated by such consent, any holder of a bond, the serial number of which is shown by the evidence to be included in the bonds the holders of which have consented to such action, may, by filing written notice with the Corporate Trustee at its principal office and upon proof of holding as provided in subsection (B) above, revoke such consent so far as it concerns such bond unless such consent states that it shall be irrevocable or is set forth in the supplemental indenture creating such series of bonds. Except as aforesaid, any such action taken by the holder of any bond shall be conclusive and binding upon such holder and upon all future holders of such bond (and any bond issued in lieu thereof or exchanged therefor), irrespective of whether or not any notation of such consent is made upon such bond, and in any event any action taken by the holders of the percentage in aggregate principal amount of the bonds specified in subsection (A) above in connection with such action shall be conclusively binding upon the Company, the Corporate Trustee and the holders of all the bonds."

**SECTION 2.16. *Amendments without the Consent of Bondholders.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with

an Issue Date subsequent to November 1, 2016, to amend Section 120 of the Mortgage, as amended and supplemented, to read substantially as follows:

“SECTION 120. Anything in this Indenture to the contrary notwithstanding, without the consent of any holders of bonds, the Company and the Trustees, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustees, for any of the following purposes:

(a) to evidence the succession of another corporation to the Company and the assumption by any such successor of the covenants of the Company herein and in the bonds, all as provided in Article XVI hereof, or

(b) to add one or more covenants of the Company or other provisions for the benefit of all holders of the bonds or for the benefit of the holders of, or to remain in effect only so long as there shall be Outstanding, bonds of one or more specified series, and to make the occurrence of a default in the performance of any of such additional covenants an additional “Default” under Section 65 permitting the enforcement of all or any of the several remedies provided in this Indenture, as herein set forth; provided, however, that in respect of any such additional covenant, such supplemental indenture may provide for a particular period of grace after default (which period may be shorter or longer than those allowed in the case of other defaults) or may provide for an immediate enforcement upon such default, or may (subject to the provisions of applicable law) limit the remedies available to the Trustees upon such default; or to provide that the occurrence of one or more specified events shall constitute additional “Defaults” under Section 65 as if set forth therein, or to surrender any right or power herein conferred upon the Company, which additional “Default” or surrender may be limited so as to remain in effect only so long as bonds of one or more specified series shall remain Outstanding; or

(c) to correct or amplify the description of any property at any time subject to the Lien of this Indenture, or better to assure, convey and confirm unto the Trustees any property subject or required to be subjected to the Lien of this Indenture, or to subject to the Lien of this Indenture additional property; or

(d) to change or eliminate any provision of this Indenture or to add any new provision to this Indenture; provided, however, that no such change, elimination or addition shall adversely affect the interests of the holders of bonds of any series in any material respect; or

(e) to establish the form or terms of bonds of any series as contemplated by Article II of this Indenture; or

(f) to provide for the procedures required to permit the Company to utilize, at its option, a non-certificated system of registration for all or any series of bonds; or

(g) to change any place or places (within the United States of America) where (1) the principal of and premium, if any, and interest, if any, on all or any series of bonds shall be payable, (2) all or any series of bonds may be surrendered for registration of transfer, (3) all or any series of bonds may be surrendered for exchange and (4) notices and demands to or upon the Company in respect of all or any series of bonds and this Indenture may be served; or

(h) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein; or to make any other changes to the provisions hereof or to add other provisions with respect to matters or questions arising under this Indenture, provided that such other changes or additions shall not adversely affect the interests of the holders of bonds of any series in any material respect.

Without limiting the generality of the foregoing, if the Trust Indenture Act of 1939, as in effect at any time and from time to time,

(x) shall require one or more changes to any provisions hereof or the inclusion herein of any additional provisions, or shall by operation of law be deemed to effect such changes or incorporate such provisions by reference or otherwise, this Indenture shall be deemed to have been amended so as to conform to the Trust Indenture Act of 1939 as then in effect, and the Company and the Trustees may, without the consent of any holders of bonds, enter into an indenture supplemental hereto to evidence such amendment hereof; or

(y) shall permit one or more changes to, or the elimination of, any provisions hereof which shall theretofore have been required by the Trust Indenture Act of 1939 to be contained herein or are contained herein to reflect any provisions of the Trust Indenture Act of 1939, this Indenture shall be deemed to have been amended to effect such changes or elimination, and the Company and the Trustees may, without the consent of any holders of bonds, enter into an indenture supplemental hereto to evidence such amendment hereof, provided that the Indenture shall not be amended as provided in this clause (y) so as to adversely affect the interests of the holders of bonds of any series in any material respect.”

**SECTION 2.17. *Excepted Encumbrances.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, (A) to delete the definition of “Excepted Encumbrances” in Section 6 of the Mortgage, as amended and supplemented, and (B) to change the words “Excepted Encumbrances” wherever used in the Mortgage or in any supplemental indenture, including the amendments described in this Article II, to “Permitted Liens”.

**SECTION 2.18. *Release of Company after Transfer of Substantially All of the Mortgaged Property.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds

of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 86 of the Mortgage to add a new paragraph reading substantially as follows:

“In case the Company, as permitted by Section 85 hereof, shall convey or transfer, subject to the Lien of this Indenture, all or substantially all of the Mortgaged and Pledged Property as an entirety to a successor corporation, the indenture described above in this Section may also provide for the release and discharge of the Company from all obligations under this Indenture or any bonds issued hereunder which are assumed by such successor corporation.”

SECTION 2.19. *Easements, Ground Leases, Rights-of-Way.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 58 of the Mortgage, as amended and supplemented, to restate clause (2) thereof to read substantially as follows:

“(2) (a) cancel or make changes or alterations in or substitutions of any and all right of way grants; (b) sell or otherwise dispose of, free from the Lien of this Indenture, cancel, make changes or alterations in or substitutions of any and all contracts, leases, operating agreements, obligations, securities, accounts receivable, choses in action, and other rights, interests and property not constituting Property Additions; and (c) grant, free from the Lien of this Indenture, easements, ground leases or rights-of-way in, upon, over and/or across the property or rights-of-way of the Company for the purpose of roads, pipe lines, transmission lines, distribution lines, communication lines, railways, removal or transportation of coal, lignite, gas, oil or other minerals or timber, and other like purposes, or for the joint or common use of real property, rights-of-way, facilities and/or equipment; provided, however, that such grant shall not materially impair the use of the property or rights-of-way for the purposes for which such property or rights-of-way are held by the Company; and”

SECTION 2.20. *Elimination of Five Year Limit on Property Additions Used for Releases.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend clause (b) of subdivision (4) of Section 59 of the Mortgage, as amended and supplemented, to delete the words “that no such application for release may be based in whole or in part upon Property Additions acquired, made or constructed more than five years prior to the last day of the calendar month immediately preceding the date of such application, and provided, further,”:

SECTION 2.21. *Releases Based on Retired Bonds.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend clause (c) of subdivision (4) of Section 59 of the Mortgage, as amended and supplemented, to read substantially as follows:

“(c) the principal amount of each bond or fraction of bond to the authentication and delivery of which the Company shall be entitled under the provisions of Section 26



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

The term "Corresponding Retired Bond" shall mean the bond or fraction of a bond selected by the Company to serve as the basis under the provisions of Section 29 of the Mortgage for such right to the authentication and delivery of bond(s) or fraction of a bond so waived; and

The term "Corresponding Qualified Lien Bond" shall mean the Qualified Lien Bond selected by the Company to serve as the basis under the provisions of Section 26 of the Mortgage for such right to the authentication and delivery of bond(s) or fraction of a bond so waived."

**SECTION 2.22. *Releases Based on Purchase Money Mortgage Obligations.*** The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 59 of the Mortgage, as amended and supplemented, to delete the clause at the end of subdivision (4) beginning with the words "provided, however, that (i) no obligations ...." and ending with the words "... at such time Outstanding under this Indenture" and substituting therefor substantially the following:

"provided, however, that no obligations secured by a purchase money mortgage upon any property being released from the Lien hereof shall be used as a credit in any application for such release unless the Company shall deliver to the Trustees a certificate or opinion of an engineer, appraiser or other expert as to the fair value of such purchase money mortgage obligations to the Company, and provided further, that if the fair value to the Company of such purchase money mortgage obligations and of all other securities (other than bonds authenticated and delivered hereunder) made the basis of any authentication and delivery of bonds hereunder, the withdrawal of any cash constituting part of the trust estate hereunder, or the release of any property or securities from the Lien hereof since the commencement of the then calendar year, as set forth in the certificates or opinions required by this clause, is ten per centum (10%) or more of the aggregate principal amount of the bonds at the time Outstanding under this Indenture, such certificate or opinion shall be made by an independent engineer, appraiser, or other expert; but such a certificate of an independent engineer, appraiser, or other expert shall not be required with respect to any purchase money mortgage obligations so deposited, if the fair value



thereof to the Company as set forth in the certificate or opinion required by this clause is less than twenty-five thousand Dollars (\$25,000) or less than one per centum (1%) of the aggregate principal amount of bonds at the time Outstanding under this Indenture.”

SECTION 2.23. *Mineral Rights.* The Company reserves the right, without any consent, vote or other action by holders of any series of bonds subsequent to the Twenty-second Series or by holders of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, to amend Section 3 of the Mortgage, as amended and supplemented, to add the following definition:

The term “mineral rights”, for purposes of the Mortgage, as amended and supplemented, shall mean rights to extract minerals that naturally exist under or on real property (and associated express and implied rights), but shall exclude any rights or other property constructed, acquired or held by the Company primarily for the purpose of storing and withdrawing gas that has been injected into, or may from time to time be injected into, storage reservoirs or other facilities located on or under real property, whether or not such rights or other property constitute “mineral rights” under applicable law, whether or not such storage reservoirs or other facilities are naturally existing or were constructed, and whether or not such storage reservoirs or other facilities contain some gas that naturally exists in such reservoir or facility.

### ARTICLE III.

#### Consent to Amendments.

SECTION 3.01 Each initial and future holder of bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, by its acquisition of an interest in such bonds, irrevocably (a) consents to the amendments set forth in Article II of this Twenty-second Supplemental Indenture, in each case without any other or further action by any holder of such bonds, and (b) designates the Corporate Trustee, and its successors, as its proxy with irrevocable instructions to vote and deliver written consents on behalf of such holder in favor of such amendments at any bondholder meeting, in lieu of any bondholder meeting, in any consent solicitation or otherwise. The terms of the bonds of the Twenty-first Series with an Issue Date subsequent to November 1, 2016, as set forth in the Twentieth Supplemental Indenture, are hereby amended to include such consent and designation.

### ARTICLE IV.

#### Miscellaneous Provisions.

SECTION 4.01 Subject to the amendments provided for in this Twenty-second Supplemental Indenture, the terms defined in the Mortgage, as heretofore supplemented, shall,

for all purposes of this Twenty-second Supplemental Indenture, have the meanings specified in the Mortgage, as heretofore supplemented.

SECTION 4.02 The Trustee hereby accepts the trusts hereby declared, provided, created or supplemented, and agree to perform the same upon the terms and conditions herein and in the Mortgage, as heretofore supplemented, set forth, including the following:

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

SECTION 4.03 Whenever in this Twenty-second Supplemental Indenture any of the parties hereto is named or referred to, this shall, subject to the provisions of Articles XVI and XVII of the Mortgage, be deemed to include the successors or assigns of such party, and all the covenants and agreements in this Twenty-second Supplemental Indenture contained by or on behalf of the Company or by or on behalf of the Trustee shall bind and inure to the benefit of the respective successors and assigns of such parties whether so expressed or not.

SECTION 4.04 Nothing in this Twenty-second Supplemental Indenture, expressed or implied, is intended, or shall be construed, to confer upon, or to give to, any person, firm or corporation, other than the parties hereto and the holders of the bonds and coupons outstanding under the Mortgage, any right, remedy, or claim under or by reason of this Twenty-second Supplemental Indenture or any covenant, condition, stipulation, promise or agreement hereof, and all the covenants, conditions, stipulations, promises and agreements by or on behalf of the Company as set forth in this Twenty-second Supplemental Indenture shall be for the sole and exclusive benefit of the parties hereto, and of the holders of the bonds and of the coupons outstanding under the Mortgage.

SECTION 4.05 Except to the extent specifically provided herein, no provision of this Twenty-second Supplemental Indenture is intended to reinstate any provisions in the Mortgage which were amended and superseded by the amendments to the Trust Indenture Act of 1939 effective as of November 15, 1990.

SECTION 4.06 This Twenty-second Supplemental Indenture has been executed in several identical counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, Northwest Natural Gas Company, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its President or one of its Vice Presidents, and its corporate seal to be attested by its Secretary or one of its Assistant Secretaries for and in its behalf on the 1st day of November, 2016, as of November 1, 2016, in Portland, Oregon; Deutsche Bank Trust Company Americas, has caused its corporate name to be hereunto affixed, and this instrument to be signed and sealed by its Vice Presidents or its Assistant Vice Presidents and its corporate seal to be attested by one of its Vice Presidents, Assistant Vice Presidents, one of its Assistant Secretaries or one of its Associates on the 1st day of November, 2016, as of November 1, 2016, in The City of New York.

NORTHWEST NATURAL GAS COMPANY

By

  
Mardi Lyn Sathoff

Senior Vice President, Regulation and General Counsel


Attest:

  
Shawn M. Filippi

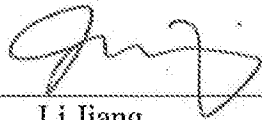
Vice President, Chief Compliance Officer  
and Corporate Secretary


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

  
Chu Lee

  
Elissa Ann Twombly

DEUTSCHE BANK TRUST COMPANY  
AMERICAS, as Trustee,

By   
Li Jiang  
Vice President

By   
Nigel Luke  
Vice President

Attest:

  
Jackson Hui  
Associate

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

  
Oneaka Hendricks  
Vice President

  
Jin Choi  
Associate

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

November 1, A.D. 2016.

Before me personally appeared MardiLyn Saathoff, who, being duly sworn, did say that she is the Senior Vice President, Regulation and General Counsel, 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; and she acknowledged said instrument to be its voluntary act and deed.

On this 1st day of November, 2016, before me personally appeared Shawn M. Filippi, to me known to be the Vice President, Chief Compliance Officer and Corporate Secretary 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 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.



Name of notary (printed): Ronna Coulter Newsom  
Notary Public - Oregon  
Commission No. 941024  
My Commission Expires July 19, 2019




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

November 1, A.D. 2016.

Before me personally appeared Li Jiang, 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; and [he/she] acknowledged said instrument to be its voluntary act and deed.

On this 1st day of November, 2016, before me personally appeared Li Jiang, Nigel Luke and Jackson Hui, 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.

  
 Name of notary (printed): Julia Engel  
 Notary Public, State of New York  
 No. 02EN6194015  
 My Commission Expires 9/29/20

**JULIA ENGEL**  
 Notary Public-State of New York  
 No. 02EN6194015  
 Qualified in New York County  
 Commission Expires 09/29/2020

