

**RECORDING COVER SHEET**

AFTER RECORDING, RETURN TO:

William L. Rodgers  
Stoel Rives LLP  
900 SW 5<sup>th</sup> Avenue, #2600  
Portland, OR 97204

State of Oregon, County of Klamath

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Linda Smith, County Clerk

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**PORTLAND GENERAL ELECTRIC COMPANY**

**TO**

**HSBC BANK USA**  
**(FORMERLY THE MARINE MIDLAND TRUST**  
**COMPANY OF NEW YORK)**  
*Trustee*

**Forty-Eighth Supplemental Indenture**  
**Dated June 1, 2002**

**First Mortgage Bonds,**  
**Collateral Series due 2003**

**Supplemental to Indenture of Mortgage and Deed of Trust,**  
**Dated July 1, 1945 of Portland General Electric Company**

*Recorded in Book M-66, Page 4024*  
*Klamath County, Oregon*

**THIS INSTRUMENT GRANTS A SECURITY INTEREST BY A TRANSMITTING UTILITY.**  
**THIS INSTRUMENT CONTAINS AFTER-ACQUIRED PROPERTY PROVISIONS.**

PortInd1-2094559.2 0032758-00007

This **FORTY-EIGHTH SUPPLEMENTAL INDENTURE** (hereafter this "Supplemental Indenture"), dated June 1, 2002, is made by and between Portland General Electric Company, an Oregon corporation (hereinafter called the "Company"), and HSBC Bank USA (formerly The Marine Midland Trust Company of New York), a New York banking corporation and trust company (hereinafter called the "Trustee").

WHEREAS, the Company has heretofore executed and delivered its Indenture of Mortgage and Deed of Trust (herein sometimes referred to as the "Original Indenture"), dated July 1, 1945, to the Trustee to secure an issue of First Mortgage Bonds of the Company ("Bonds"); and

WHEREAS, Bonds in the aggregate principal amount of \$34,000,000 have heretofore been issued under and in accordance with the terms of the Original Indenture as Bonds of an initial series designated "First Mortgage Bonds, 3 1/8% Series due 1975" (herein sometimes referred to as the "Bonds of the 1975 Series"); and

WHEREAS, the Company has heretofore executed and delivered to the Trustee several supplemental indentures which provided, among other things, for the creation or issuance of several new series of First Mortgage Bonds under the terms of the Original Indenture as follows:

<u>Supplemental Indenture</u>	<u>Dated</u>	<u>Series Designation</u>	<u>Principal Amount</u>
First	11-1-47	3-1/2 % Series due 1977	\$ 6,000,000 (1)
Second	11-1-48	3-1/2 % Series due 1977	4,000,000 (1)
Third	5-1-52	3-1/2 % Second Series due 1977	4,000,000 (1)
Fourth	11-1-53	4-1/8 % Series due 1983	8,000,000 (2)
Fifth	11-1-54	3-3/8 % Series due 1984	12,000,000 (1)
Sixth	9-1-56	4-1/4 % Series due 1986	16,000,000 (1)
Seventh	6-1-57	4-7/8 % Series due 1987	10,000,000 (1)
Eighth	12-1-57	5-1/2 % Series due 1987	15,000,000 (3)
Ninth	6-1-60	5-1/4 % Series due 1990	15,000,000 (1)
Tenth	11-1-61	5-1/8 % Series due 1991	12,000,000 (1)
Eleventh	2-1-63	4-5/8 % Series due 1993	15,000,000 (1)
Twelfth	6-1-63	4-3/4 % Series due 1993	18,000,000 (1)
Thirteenth	4-1-64	4-3/4 % Series due 1994	18,000,000 (1)
Fourteenth	3-1-65	4.70 % Series due 1995	14,000,000 (1)
Fifteenth	6-1-66	5-7/8 % Series due 1996	12,000,000 (1)

<u>Supplemental Indenture</u>	<u>Dated</u>	<u>Series Designation</u>	<u>Principal Amount</u>
Sixteenth	10-1-67	6.60 % Series due October 1, 1997	24,000,000 (1)
Seventeenth	4-1-70	8-3/4 % Series due April 1, 1977	20,000,000 (1)
Eighteenth	11-1-70	9-7/8 % Series due November 1, 2000	20,000,000 (4)
Nineteenth	11-1-71	8 % Series due November 1, 2001	20,000,000 (4)
Twentieth	11-1-72	7-3/4 % Series due November 1, 2002	20,000,000 (4)
Twenty-first	4-1-73	7.95 % Series due April 1, 2003	35,000,000 (4)
Twenty-second	10-1-73	8-3/4 % Series due October 1, 2003	17,000,000 (4)
Twenty-third	12-1-74	10-1/2 % Series due December 1, 1980	40,000,000 (1)
Twenty-fourth	4-1-75	10 % Series due April 1, 1982	40,000,000 (1)
Twenty-fifth	6-1-75	9-7/8 % Series due June 1, 1985	27,000,000 (1)
Twenty-sixth	12-1-75	11-5/8 % Series due December 1, 2005	50,000,000 (4)
Twenty-seventh	4-1-76	9-1/2 % Series due April 1, 2006	50,000,000 (4)
Twenty-eighth	9-1-76	9-3/4 % Series due September 1, 1996	62,500,000 (4)
Twenty-ninth	6-1-88	8-3/4 % Series due June 1, 2007	50,000,000 (4)
Thirtieth	10-1-78	9.40 % Series due January 1, 1999	25,000,000 (4)
Thirty-first	11-1-78	9.80 % Series due November 1, 1998	50,000,000 (4)
Thirty-second	2-1-80	13-1/4 % Series due February 1, 2000	55,000,000 (4)
Thirty-third	8-1-80	13-7/8 % Series due August 1, 2010	75,000,000 (4)
Thirty-sixth	10-1-82	13-1/2 % Series due October 1, 2012	75,000,000 (4)
Thirty-seventh	11-15-84	11-5/8 % Extendable Series A due November 15, 1999	75,000,000 (4)
Thirty-eighth	6-1-85	10-3/4 % Series due June 1, 1995	60,000,000 (4)
Thirty-ninth	3-1-86	9-5/8 % Series due March 1, 2016	100,000,000 (4)
Fortieth	10-1-90	Medium Term Note Series	200,000,000
Forty-first	12-1-91	Medium Term Note Series I	150,000,000
Forty-second	4-1-93	7-3/4 % Series due April 15, 2023	150,000,000
Forty-third	7-1-93	Medium Term Notes Series II	75,000,000
Forty-fourth	8-1-94	Medium Term Notes Series III	75,000,000 (1)
Forty-fifth	5-1-95	Medium Term Notes Series IV	75,000,000
Forty-sixth	8-1-96	Medium Term Notes Series V	50,000,000 (1)

<u>Supplemental Indenture</u>	<u>Dated</u>	<u>Series Designation</u>	<u>Principal Amount</u>
Forty-seventh	12-14-01	Second Series due 2002	150,000,000

- (1) Paid in full at maturity.
- (2) This entire issue of Bonds was redeemed out of proceeds from the sale of First Mortgage Bonds, 3-3/8% Series due 1984.
- (3) This entire issue of Bonds was redeemed out of proceeds from the sale of First Mortgage Bonds, 4-5/8% Series due 1993.
- (4) Redeemed in full prior to maturity.

which bonds are sometimes referred to herein as the "Bonds of the 1977 Series", "Bonds of the 1977 Second Series", "Bonds of the 1983 Series", "Bonds of the 1984 Series", "Bonds of the 1986 Series", "Bonds of the 4 $\frac{7}{8}$ % Series due 1987", "Bonds of the 5 $\frac{1}{2}$ % Series due 1987", "Bonds of the 1990 Series", "Bonds of the 1991 Series", "Bonds of the 4 $\frac{1}{4}$ % Series due 1993", "Bonds of the 4 $\frac{3}{4}$ % Series due 1993", "Bonds of the 1994 Series", "Bonds of the 1995 Series", "Bonds of the 1996 Series", "Bonds of the 1997 Series", "Bonds of the 1977 Third Series", "Bonds of the 2000 Series", "Bonds of the 2001 Series", "Bonds of the 2002 Series", "Bonds of the 2003 Series", "Bonds of the 2003 Second Series", "Bonds of the 1980 Series", "Bonds of the 1982 Series", "Bonds of the 1985 Series", "Bonds of the 2005 Series", "Bonds of the 2006 Series", "Bonds of the 1996 Second Series", "Bonds of the 2007 Series", "Bonds of the 1999 Series", "Bonds of the 1998 Series", "Bonds of the 2000 Second Series", "Bonds of the 2010 Series", "Bonds of the 2012 Series", "Bonds of the Extendable Series A", "Bonds of the 1995 Second Series", "Bonds of the 2016 Series", "Bonds of the Medium Term Note Series", "Bonds of the Medium Term Note Series I", "Bonds of the 2023 Series", "Bonds of the Medium Term Note Series II", "Bonds of the Medium Term Note Series III", "Bonds of the Medium Term Note Series IV", "Bonds of the Medium Term Note Series V", and "Bonds of the 2002 Second Series", respectively; and

WHEREAS, the Original Indenture provides that the Company and the Trustee, subject to the conditions and restrictions in the Original Indenture contained, may enter into an indenture or indentures supplemental thereto, which shall thereafter form a part of said Original Indenture, among other things, to mortgage, pledge, convey, transfer or assign to the Trustee and to subject to the lien of the Original Indenture with the same force and effect as though included in the granting clauses thereof, additional properties acquired by the Company after the execution and delivery of the Original Indenture, and to provide for the creation of any series of Bonds (other than the Bonds of the 1975 Series), designating the series to be created and specifying the form and provisions of the Bonds of such series as therein provided or permitted, and to provide a sinking, amortization, replacement or other analogous fund for the benefit of all or any of the Bonds of any one or more series, of such character and of such amount, and upon such terms and conditions as shall be contained in such supplemental indenture; and

WHEREAS, the Company has heretofore executed and delivered to the Trustee forty-seven supplemental indentures amending in certain respects the Original Indenture (such Original Indenture as so supplemented and amended is hereinafter referred to as the "Mortgage"); and

WHEREAS, the Company desires to further amend the Mortgage in certain respects pursuant to Section 17.01 of the Original Indenture, and the Trustee has agreed to such amendments; and

WHEREAS, the Company desires to provide for the creation of a new series of Bonds to be known as "First Mortgage Bonds, Collateral Series due 2003" (sometimes herein referred to as the "Bonds of the Collateral Series"), and to specify the form and provisions of the Bonds of the Collateral Series, and to mortgage, pledge, convey, transfer or assign to the Trustee and to subject to the lien of the Mortgage certain additional properties acquired by the Company since the execution and delivery of the Original Indenture; and

WHEREAS, the Company intends at this time to issue \$72,000,000 aggregate principal amount of Bonds of the Collateral Series under and in accordance with the terms of the Mortgage and this Supplemental Indenture; and

WHEREAS, the Bonds of the Collateral Series and the Trustee's authentication certificate to be executed on the Bonds of the Collateral Series are to be substantially in the following forms, respectively:

(Form of Bond of the Collateral Series)  
[Face of Bond]

No. \_\_\_\_\_

\$ \_\_\_\_\_

PORTLAND GENERAL ELECTRIC COMPANY  
FIRST MORTGAGE BOND, COLLATERAL SERIES DUE 2003

Portland General Electric Company, an Oregon corporation (hereinafter sometimes called the "Company"), for value received, hereby promises to pay to Bank One, NA, as agent (in such capacity, the "Agent") for the Lenders under and as defined in the 364 Day Credit Agreement dated as of June 12, 2002 among the Company, the Lenders and the Agent (the "Credit Agreement"), or registered assigns, the principal sum of Seventy-two Million Dollars (\$72,000,000) or such lesser principal amount as shall be equal to the aggregate principal amount of the Loans (as defined in the Credit Agreement) and Reimbursement Obligations (as defined in the Credit Agreement) included in the Obligations (as defined in the Credit Agreement) outstanding on September 30, 2003 (the "Maturity Date"), but not in excess, however, of the principal amount of this bond, and to pay interest thereon at the Interest Rate (as defined below) until the principal hereof is paid or duly made available for payment on the Maturity Date, or, in the event of redemption of this bond, until the redemption date, or, in the event of default in the payment of the principal hereof, until the Company's obligations with respect to the payment of such principal shall be discharged as provided in the Indenture. Interest on this bond shall be payable on each Interest Payment Date (as defined below), commencing on the first Interest Payment Date next succeeding June 12, 2002. If the Maturity Date falls on a day which is not a Business Day, as defined below, principal and any interest and/or fees payable with respect to the Maturity Date will be paid on the next succeeding Business Day with the same force and effect as if made on the Maturity Date and no interest shall accrue for the period from and after the Maturity Date. The interest payable, and punctually paid or duly provided for, on any Interest Payment Date will, subject to certain exceptions, be paid to the person in whose name this bond (or one or more predecessor bonds) is registered at the close of business on the Record Date; *provided, however*, that interest payable on the Maturity Date will be payable to the person to whom the principal hereof shall be payable. Should the Company default in the payment of interest ("Defaulted Interest"), the Defaulted Interest shall be paid to the person in whose name this bond (or one or more predecessor bonds) is registered on a subsequent record date fixed by the Company, which subsequent record date shall be fifteen (15) days prior to the payment of such Defaulted Interest. As used herein, (A) "Business Day" shall mean any day, other than a Saturday or Sunday, on which banks generally are open in Chicago, Illinois and New York, New York for the conduct of substantially all of their commercial lending activities, and interbank wire transfers can be made on the Fedwire system; (B) "Interest Payment Date" shall mean each date on which interest and/or fees under the Credit Agreement are due and payable from time to time pursuant to the Credit Agreement; (C) "Interest Rate" shall mean a rate of interest per annum, adjusted as necessary, to result in an interest payment equal to the aggregate amount of interest and fees due under the Credit Agreement on the applicable Interest Payment Date; and

(D) "Record Date" with respect to any Interest Payment Date shall mean the day (whether or not a Business Day) immediately next preceding such Interest Payment Date.

Payment of the principal of and interest on this bond will be made in immediately available funds at the office or agency of the Company maintained for that purpose in the Borough of Manhattan, The City of New York, in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts.

Reference is hereby made to the further provisions of this bond set forth on the reverse hereof, and such further provisions shall for all purposes have the same effect as though fully set forth at this place.

This bond shall not become or be valid or obligatory for any purpose until the authentication certificate hereon shall have been signed by the Trustee.

IN WITNESS WHEREOF, PORTLAND GENERAL ELECTRIC COMPANY has caused this instrument to be executed manually or in facsimile by its duly authorized officers and has caused a facsimile of its corporate seal to be imprinted hereon.

Dated: \_\_\_\_\_

PORTLAND GENERAL ELECTRIC COMPANY

By: \_\_\_\_\_  
[Title]

Attest: \_\_\_\_\_  
Secretary

(Form of Trustee's Authentication Certificate for  
Bonds of the Collateral Series)

This bond is a bond of the series designated herein, described in the within-mentioned Indenture.

HSBC BANK USA, AS TRUSTEE

By: \_\_\_\_\_  
Authorized Officer



## [Reverse of Bond]

This bond is one of the bonds of a series designated as First Mortgage Bonds, Collateral Series due 2003 (sometimes herein referred to as the "Bonds of the Collateral Series") of an authorized issue of bonds of the Company, known as First Mortgage Bonds, not limited as to maximum aggregate principal amount, all issued or issuable in one or more series under and equally secured (except insofar as any sinking fund, replacement fund or other fund established in accordance with the provisions of the Indenture hereinafter mentioned may afford additional security for the bonds of any specific series) by an Indenture of Mortgage and Deed of Trust dated July 1, 1945, duly executed and delivered by the Company to HSBC Bank USA (formerly known as The Marine Midland Trust Company of New York), as Trustee, as supplemented, amended and modified by forty-seven supplemental indentures and by the Forty-eighth Supplemental Indenture (such Indenture of Mortgage and Deed of Trust as so supplemented, amended and modified by such forty-seven supplemental indentures and this Forty-eighth Supplemental Indenture being hereinafter called the "Indenture"), to which Indenture and all indentures supplemental thereto, including the Forty-eighth Supplemental Indenture, reference is hereby made for a description of the property mortgaged and pledged as security for said bonds, the nature and extent of the security, and the rights, duties and immunities thereunder of the Trustee, the rights of the holders of said bonds and of the Trustee and of the Company in respect of such security, and the terms upon which said bonds may be issued thereunder. Capitalized terms used herein and not defined herein shall have the respective meanings specified in the Indenture, unless otherwise noted.

The Bonds of the Collateral Series are not subject to any sinking fund.

The Bonds of the Collateral Series may be redeemed prior to maturity as a whole at any time and in part from time to time (in increments of \$10,000) in the instances provided in the Indenture by the application of proceeds of the sale or disposition substantially as an entirety of the Company's electric properties at Portland, Oregon, upon payment of the principal amount thereof together with interest accrued to the date of such redemption, on notice given not more than 90 nor less than 30 days prior to the date of such redemption.

The Bonds of the Collateral Series are to be issued and delivered to the Agent in order to provide for the obligation of the Company under the Credit Agreement to make payments to the Lenders under the Credit Agreement and to provide the Lenders the benefit of the lien of the Indenture with respect to the Bonds.

The obligation of the Company to make payments with respect to the principal of Bonds of the Collateral Series shall be fully or partially, as the case may be, satisfied and discharged to the extent that, at the time that any such payment shall be due, the then due principal of the Loans and/or Reimbursement Obligations included in the Obligations shall have been fully or partially paid. Satisfaction of any obligation to the extent that payment is made with respect to the Loans and/or Reimbursement Obligations means that if any payment is made on the principal of the Loans and/or Reimbursement Obligations, a corresponding payment obligation with respect to the principal of the Bonds of the Collateral Series shall be deemed discharged in the same amount as the payment with respect to the Loans and/or Reimbursement Obligations

discharges the outstanding obligation with respect to such Loans and/or Reimbursement Obligations. Any such payment of principal shall not reduce the principal amount of the Bonds of the Collateral Series unless the aggregate amount of the Commitments (as defined in the Credit Agreement) is irrevocably reduced concurrently with such payment.

The obligation of the Company to make payments with respect to the interest on Bonds of the Collateral Series shall be fully or partially, as the case may be, satisfied and discharged to the extent that, at the time that any such payment shall be due, the then due interest and/or fees on the Loans and/or Reimbursement Obligations included in the Obligations shall have been fully or partially paid. Satisfaction of any obligation to the extent that payment is made with respect to the Loans and/or Reimbursement Obligations means that if any payment is made on the interest and/or fees on the Loans and/or Reimbursement Obligations, a corresponding payment obligation with respect to the interest on the Bonds of the Collateral Series shall be deemed discharged in the same amount as the payment with respect to the Loans and/or Reimbursement Obligations discharges the outstanding obligation with respect to such Loans and/or Reimbursement Obligations.

If a Default (as defined in the Credit Agreement) with respect to the payment of the principal of any Loans and/or Reimbursement Obligations shall have occurred, it shall be deemed to be a default for purposes of Section 11.01 of the Indenture in the payment of the principal of the Bonds of the Collateral Series equal to the amount of such unpaid principal (but in no event in excess of the principal amount of the Bonds of the Collateral Series). If a Default (as defined in the Credit Agreement) with respect to the payment of interest on any Loans and/or Reimbursement Obligations or fees shall have occurred, it shall be deemed to be a default for purposes of Section 11.01 of the Indenture in the payment of the interest on the Bonds of the Collateral Series equal to the amount of such unpaid interest or fees. The holders of certain specified percentages of the bonds at the time outstanding, including in certain cases specified percentages of bonds of particular series, may in certain cases, to the extent and as provided in the Indenture, waive certain defaults thereunder and the consequences of such defaults.

The Agent shall surrender this bond to the Trustee when all of the principal of and interest on the Loans and Reimbursement Obligations arising under the Credit Agreement, and all of the fees payable pursuant to the Credit Agreement shall have been duly paid, and the Credit Agreement shall have been terminated.

The Indenture contains provisions permitting the Company and the Trustee, with the consent of the holders of not less than seventy-five percent in principal amount of the bonds (exclusive of bonds disqualified by reason of the Company's interest therein) at the time outstanding, including, if more than one series of bonds shall be at the time outstanding, not less than sixty percent in principal amount of each series affected, to effect, by an indenture supplemental to the Indenture, modifications or alterations of the Indenture and of the rights and obligations of the Company and of the holders of the bonds and coupons; provided, however, that no such modification or alteration shall be made without the written approval or consent of the holder hereof which will (a) extend the maturity of this bond or reduce the rate or extend the time of payment of interest hereon or reduce the amount of the principal hereof, (b) permit the creation of any lien, not otherwise permitted, prior to or on a parity with the lien of the Indenture,

or (c) reduce the percentage of the principal amount of the bonds upon the approval or consent of the holders of which modifications or alterations may be made as aforesaid.

The transfer of this bond is registrable by the registered owner hereof in person or by such owner's attorney duly authorized in writing, at the corporate trust office of the Trustee in the Borough of Manhattan, City and State of New York, upon surrender of this bond for cancellation and upon payment of any taxes or other governmental charges payable upon such transfer, and thereupon a new registered bond or bonds of the same series and of a like aggregate principal amount will be issued to the transferee or transferees in exchange therefor; provided, however, that this bond may not be transferred except to a new agent in connection with the replacement of the Agent in accordance with the terms of the Credit Agreement .

The Company, the Trustee and any paying agent may deem and treat the person in whose name this bond is registered as the absolute owner hereof for the purpose of receiving payments of or an account of the principal hereof and interest due hereon, and for all other purposes, whether or not this bond shall be overdue, and neither the Company, the Trustee nor any paying agent shall be affected by any notice to the contrary.

Bonds of this series are issuable only in fully registered form without coupons in denominations of \$10,000 or any integral multiple thereof. The registered owner of this bond at its option may surrender the same for cancellation at said office of the Trustee and receive in exchange therefor the same aggregate principal amount of registered bonds of the same series but of other authorized denominations upon payment of any taxes or other governmental charges payable upon such exchange and subject to the terms and conditions set forth in the Indenture.

No recourse shall be had for the payment of the principal of or the interest on this bond, or for any claim based hereon, or otherwise in respect hereof or of the Indenture, against any incorporator, shareholder, director or officer, past, present or future, as such, of the Company or of any predecessor or successor corporation, either directly or through the Company or such predecessor or successor corporation, under any constitution or statute or rule of law, or by the enforcement of any assessment or penalty, or otherwise, all such liability of incorporators, shareholders, directors and officers, as such, being waived and released by the holder and owner hereof by the acceptance of this bond and as provided in the Indenture.

The Indenture provides that this bond shall be deemed to be a contract made under the laws of the State of New York, and for all purposes shall be construed in accordance with and governed by the laws of said State.

(End of Form of Bond of the Collateral Series due 2003)

and

WHEREAS, all acts and proceedings required by law and by the charter or articles of incorporation and bylaws of the Company necessary to make the Bonds of the Collateral Series to be issued hereunder, when executed by the Company, authenticated and delivered by the Trustee and duly issued, the valid, binding and legal obligations of the Company, and to

constitute this Supplemental Indenture a valid and binding instrument, have been done and taken; and the execution and delivery of this Supplemental Indenture have been in all respects duly authorized;

NOW, THEREFORE, THIS SUPPLEMENTAL INDENTURE WITNESSETH, that, in order to secure the payment of the principal of, premium, if any, and interest on all Bonds at any time issued and outstanding under the Mortgage and as supplemented and modified by this Supplemental Indenture (such Mortgage as so supplemented and modified is hereinafter referred to as the "Indenture"), according to their tenor, purport and effect, and to secure the performance and observance of all the covenants and conditions therein and herein contained, and for the purpose of confirming and perfecting the lien of the Mortgage on the properties of the Company hereinafter described, or referred to, and for and in consideration of the premises and of the mutual covenants herein contained, and acceptance of the Bonds of the Collateral Series by the holders thereof, and for other valuable consideration, the receipt whereof is hereby acknowledged, the Company has executed and delivered this Supplemental Indenture and by these presents does grant, bargain, sell, warrant, alien, convey, assign, transfer, mortgage, pledge, hypothecate, set over and confirm unto the Trustee the following property, rights, privileges and franchises (in addition to all other property, rights, privileges and franchises heretofore subjected to the lien of the Original Indenture as supplemented by the forty-eight supplemental indentures hereinbefore described and not heretofore released from the lien thereof), to wit:

#### CLAUSE I

Without in any way limiting anything hereinafter described, all and singular the lands, real estate, chattels real, interests in land, leaseholds, ways, rights-of-way, easements, servitudes, permits and licenses, lands under water, riparian rights, franchises, privileges, electric generating plants, electric transmission and distribution systems, and all apparatus and equipment appertaining thereto, offices, buildings, warehouses, garages, and other structures, tracks, machine shops, materials and supplies and all property of any nature appertaining to any of the plants, systems, business or operations of the Company, whether or not affixed to the realty, used in the operation of any of the premises or plants or systems or otherwise, which have been acquired by the Company since the execution and delivery of the Original Indenture and not heretofore included in any indenture supplemental thereto, and now owned or which may hereafter be acquired by the Company (other than excepted property as defined in the Mortgage).

#### CLAUSE II

All corporate, Federal, State, municipal and other permits, consents, licenses, bridge licenses, bridge rights, river permits, franchises, grants, privileges and immunities of every kind and description, owned, held, possessed or enjoyed by the Company (other than excepted property as defined in the Mortgage) and all renewals, extensions, enlargements and modifications of any of them, which have been acquired by the Company since the execution and the delivery of the Original Indenture and not heretofore included in any indenture supplemental thereto, and now owned or which may hereafter be acquired by the Company.

## CLAUSE III

Also all other property, real, personal or mixed, tangible or intangible (other than excepted property as defined in the Mortgage) of every kind, character and description and wheresoever situated, whether or not useful in the generation, manufacture, production, transportation, distribution, sale or supplying of electricity, hot water or steam, which have been acquired by the Company since the execution and delivery of the Original Indenture and not heretofore included in any indenture supplemental thereto, and now owned or which may hereafter be acquired by the Company (other than excepted property as defined in the Mortgage).

## CLAUSE IV

Together with all and singular the plants, buildings, improvements, additions, tenements, hereditaments, easements, rights, privileges, licenses and franchises and all other appurtenances whatsoever belonging or in any wise pertaining to any of the property hereby mortgaged or pledged, or intended so to be, or any part thereof, and the reversion and reversions, remainder and remainders, and the rents, revenues, issues, earnings, income, products and profits thereof, and every part and parcel thereof, and all the estate, right, title, interest, property, claim and demand of every nature whatsoever of the Company at law, in equity or otherwise howsoever, in, of and to such property and every part and parcel thereof (other than excepted property as defined in the Mortgage).

TO HAVE AND TO HOLD all of said property, real, personal and mixed, and all and singular the lands, properties, estates, rights, franchises, privileges and appurtenances hereby mortgaged, conveyed, pledged or assigned, or intended so to be, together with all the appurtenances thereto appertaining and the rents, issues and profits thereof, unto the Trustee and its successors and assigns, forever:

SUBJECT, HOWEVER, to the exceptions, reservations, restrictions, conditions, limitations, covenants and matters contained in all deeds and other instruments whereunder the Company has acquired any of the property now owned by it, and to permitted encumbrances as defined in Subsection B of Section 1.11 of the Mortgage;

BUT IN TRUST NEVERTHELESS, for the equal and proportionate use, benefit, security and protection of those who from time to time shall hold the Bonds authenticated and delivered under the Original Indenture and the forty-seven supplemental indentures hereinbefore described or this Supplemental Indenture, and duly issued by the Company, without any discrimination, preference or priority of any one Bond over any other by reason of priority in the time of issue, sale or negotiation thereof or otherwise, except as provided in Section 11.28 of the Mortgage, so that, subject to said Section 11.28, each and all of said Bonds shall have the same right, lien and privilege under the Original Indenture and the forty-seven supplemental indentures hereinbefore described, or this Supplemental Indenture, and shall be equally secured thereby and hereby and shall have the same proportionate interest and share in the trust estate, with the same effect as if all of the Bonds had been issued, sold and negotiated simultaneously on the date of delivery of the Original Indenture;

AND UPON THE TRUSTS, USES AND PURPOSES and subject to the covenants, agreements and conditions in the Original Indenture and the forty-seven supplemental indentures hereinbefore described and herein set forth and declared.

ARTICLE ONE.  
BONDS OF THE COLLATERAL SERIES AND  
CERTAIN PROVISIONS RELATING THERETO.

SECTION 1.01. *Definitions Pertaining to Series.* Capitalized terms used in this Supplemental Indenture but not otherwise defined herein shall have the respective meanings given to them in the Mortgage and the following terms shall have the meanings set forth below:

Agent:

The term "Agent" means Bank One, NA, in its capacity as administrative agent under the Credit Agreement.

Business Day:

The term "Business Day" means any day, other than a Saturday or Sunday, on which banks generally are open in Chicago, Illinois and New York, New York for the conduct of substantially all of their commercial lending activities, and interbank wire transfers can be made on the Fedwire system.

Credit Agreement:

The term "Credit Agreement" means the 364 Day Credit Agreement, dated as of June 12, 2002, among the Company, the financial institutions parties thereto ("Lenders"), and Bank One, NA, as administrative agent for the Lenders, as amended, supplemented or otherwise modified from time to time.

Interest Payment Date:

The term "Interest Payment Date" shall mean each date on which interest and/or fees under the Credit Agreement are due and payable from time to time pursuant to the Credit Agreement.

Interest Rate:

The term "Interest Rate" shall mean a rate of interest per annum, adjusted as necessary, to result in an interest payment equal to the aggregate amount of interest and fees due under the Credit Agreement on the applicable Interest Payment Date.

Loans:

The term "Loans" shall have the meaning specified in the Credit Agreement.

**Maturity Date:**

The term "Maturity Date" shall mean September 30, 2003.

**Obligations:**

The term "Obligations" shall have the meaning specified in the Credit Agreement.

**Record Date:**

The term "Record Date" with respect to any Interest Payment Date shall mean the day (whether or not a Business Day) immediately next preceding such Interest Payment Date.

**Reimbursement Obligations:**

The term "Reimbursement Obligations" shall have the meaning specified in the Credit Agreement.

**Sample Bond:**

The term "Sample Bond" shall mean the Form of Bond of the Collateral Series set forth in the recitals to this Supplemental Indenture.

A copy of the Credit Agreement is on file at the office of the Agent at 1 Bank One Plaza, Chicago, IL 60675 and at the office of the Company at 121 SW Salmon Street, Portland, OR 97204.

SECTION 1.02. *Certain Terms of Bonds of the Collateral Series.* There is hereby established a series of First Mortgage Bonds of the Company designated and entitled as "First Mortgage Bonds, Collateral Series due 2003" (sometimes referred to as the "Bonds of the Collateral Series"):

(1) The aggregate principal amount of the Bonds of the Collateral Series shall be limited to Seventy-two Million Dollars (\$72,000,000), excluding, however, any Bonds of the Collateral Series which may be executed, authenticated and delivered in exchange for or in lieu of or in substitution for other Bonds of such Series pursuant to the provisions of the Mortgage or of this Supplemental Indenture.

(2) The definitive Bonds of the Collateral Series shall be issuable only in substantially the form of the Sample Bond and only in fully registered form without coupons in the denomination of \$10,000, or any amount in excess thereof that is an integral multiple of \$10,000. Notwithstanding the provisions of Section 2.05 of the Mortgage, each Bond of the Collateral Series shall be dated as of the date of its authentication, shall mature on the Maturity Date, shall bear interest from the most recent Interest Payment Date to which interest has been paid or duly provided for or, if no interest has been paid, from June 12, 2002. Any Bond of the Collateral Series authenticated between the Record Date for any Interest Payment Date and such Interest Payment Date shall be dated as of the date of its authentication, but shall bear interest from such Interest Payment Date; provided, however, that if and to the extent the Company shall

default in the payment of the interest due on such Interest Payment Date, then any Bond of the Collateral Series so authenticated shall bear interest from the Interest Payment Date next preceding the date of such Bond to which interest has been paid, or if no interest has been paid, then from June 12, 2002. All Bonds of the Collateral Series shall bear interest at the Interest Rate. Interest shall be paid on the Interest Payment Dates, commencing on the first Interest Payment Date next succeeding June 12, 2002, until the payment of the principal of the Bonds of the Collateral Series has been made or duly provided for and the Credit Agreement has terminated. The person in whose name any Bond of the Collateral Series is registered at the close of business on the applicable Record Date with respect to any Interest Payment Date shall be entitled to receive the interest payable thereon on such Interest Payment Date notwithstanding the cancellation of such Bond upon any registration of transfer or exchange thereof subsequent to such Record Date and prior to such Interest Payment Date, unless the Company shall default in the payment of the interest due on such Interest Payment Date ("Defaulted Interest"), in which case such Defaulted Interest shall be paid to the person in whose name such Bond is registered on a subsequent Record Date fixed by the Company, which subsequent Record Date shall be fifteen (15) days prior to the payment of such Defaulted Interest. The principal of the Bonds of the Collateral Series shall be payable in any coin or currency of the United States of America which at the time of payment is legal tender for the payment of public and private debts at the office or agency of the Company in the Borough of Manhattan, City and State of New York, and interest on such Bonds shall be payable in like coin or currency at said office or agency. Upon compliance with the provisions of Section 2.06 of the Mortgage and as provided in this Supplemental Indenture, and upon payment of any taxes or other governmental charges payable upon such exchange, Bonds of the Collateral Series may be exchanged for a new Bond or Bonds of different authorized denominations of like aggregate principal amount.

(3) The Bonds of the Collateral Series are to be issued and delivered to the Agent in order to provide for the obligation of the Company under the Credit Agreement to make payments to the Lenders under the Credit Agreement and to provide the Lenders the benefit of the lien of the Indenture with respect to the Bonds.

(4) The obligation of the Company to make payments with respect to the principal of Bonds of the Collateral Series shall be fully or partially, as the case may be, satisfied and discharged to the extent that, at the time that any such payment shall be due, the then due principal of the Loans and/or Reimbursement Obligations included in the Obligations shall have been fully or partially paid. Satisfaction of any obligation to the extent that payment is made with respect to the Loans and/or Reimbursement Obligations means that if any payment is made on the principal of the Loans and/or Reimbursement Obligations, a corresponding payment obligation with respect to the principal of the Bonds of the Collateral Series shall be deemed discharged in the same amount as the payment with respect to the Loans and/or Reimbursement Obligations discharges the outstanding obligation with respect to such Loans and/or Reimbursement Obligations. Any such payment of principal shall not reduce the principal amount of the Bonds of the Collateral Series unless the aggregate amount of the Commitments (as defined in the Credit Agreement) is irrevocably reduced concurrently with such payment.

(5) The obligation of the Company to make payments with respect to the interest on Bonds of the Collateral Series shall be fully or partially, as the case may be, satisfied and discharged to the extent that, at the time that any such payment shall be due, the then due interest



and/or fees on the Loans and/or Reimbursement Obligations included in the Obligations shall have been fully or partially paid. Satisfaction of any obligation to the extent that payment is made with respect to the Loans and/or Reimbursement Obligations means that if any payment is made on the interest and/or fees on the Loans and/or Reimbursement Obligations, a corresponding payment obligation with respect to the interest on the Bonds of the Collateral Series shall be deemed discharged in the same amount as the payment with respect to the Loans and/or Reimbursement Obligations discharges the outstanding obligation with respect to such Loans and/or Reimbursement Obligations.

(6) If a Default (as defined in the Credit Agreement) with respect to the payment of the principal of any Loans and/or Reimbursement Obligations shall have occurred, it shall be deemed to be a default for purposes of Section 11.01 of the Indenture in the payment of the principal of the Bonds of the Collateral Series equal to the amount of such unpaid principal (but in no event in excess of the principal amount of the Bonds of the Collateral Series). If a Default (as defined in the Credit Agreement) with respect to the payment of interest on any Loans and/or Reimbursement Obligations or fees shall have occurred, it shall be deemed to be a default for purposes of Section 11.01 of the Indenture in the payment of the interest on the Bonds of the Collateral Series equal to the amount of such unpaid interest or fees.

(7) The Trustee shall be entitled to presume that the obligation of the Company to pay the principal of and interest on the Bonds of the Collateral Series, as the same shall become due and payable, shall have been fully satisfied and discharged unless and until it shall have received a written notice from the Agent, signed by an authorized officer thereof, stating that the principal of and/or interest on the Bonds of the Collateral Series has become due and payable and has not been fully paid, and specifying the amount of funds required to make such payment.

(8) The Bonds of the Collateral Series may not be transferred except to a new agent in connection with the replacement of the Agent in accordance with the Credit Agreement.

(9) The Trustee hereunder shall, by virtue of its office as such Trustee, be the registrar and transfer agent of the Company for the purpose of registering permitted transfers of Bonds of the Collateral Series.

(10) Notwithstanding the provisions of Section 2.11 of the Mortgage, no service charge shall be made for any exchange or registration of transfer of Bonds of the Collateral Series, but the Company at its option may require payment of a sum sufficient to cover any tax or other governmental charge incident thereto.

SECTION 1.03. *Redemption of the Collateral Series.* The Bonds of the Collateral Series may be redeemed prior to maturity as a whole at any time and in part from time to time (in increments of \$10,000) in the instances provided in the Indenture by the application of proceeds of the sale or disposition substantially as an entirety of the Company's electric properties at Portland, Oregon, upon payment of the principal amount thereof together with interest accrued to the date of such redemption, on notice given not more than 90 nor less than 30 days prior to the date of such redemption.

SECTION 1.04. *Sections 4.04, 4.05 and 4.06 to Remain in Effect.* Notwithstanding the provisions of Section 4.07 of the Mortgage, the provisions of Sections 4.04, 4.05 and 4.06 of the Mortgage shall remain in full force and effect and shall be performed by the Company so long as any Bonds of the Collateral Series remain outstanding.

SECTION 1.05. *Certain Requirements to Remain Applicable.* The requirements which are stated in the next to the last paragraph of Section 1.13 and in Clause (9) of Paragraph A of Section 3.01 of the Mortgage to be applicable so long as any of the Bonds of the 1975 Series are outstanding shall remain applicable so long as any of the Bonds of the Collateral Series are outstanding.

SECTION 1.06. *Certain Exceptions to Sections 2.06 and 2.10 of the Mortgage.* Notwithstanding the provisions of Section 2.06 or Section 2.10 of the Mortgage, the Company shall not be required (a) to issue, register, discharge from registration, exchange or register the transfer of any Bond of the Collateral Series for a period of fifteen (15) days next preceding any selection by the Trustee of Bonds of the Collateral Series to be redeemed or (b) to register, discharge from registration, exchange or register the permitted transfer of any Bond of the Collateral Series so selected for redemption in its entirety or (c) to exchange or register the permitted transfer of any portion of a Bond of the Collateral Series which portion has been so selected for redemption.

SECTION 1.07. *Reference to Minimum Provision for Depreciation in Certificate of Available Additions.* So long as any Bonds of the Collateral Series remain outstanding, all references to the minimum provision for depreciation in the form of certificate of available additions set forth in Section 3.03 of the Mortgage shall be included in any certificate of available additions filed with the Trustee, but whenever Bonds of the Collateral Series shall no longer be outstanding, all references to such minimum provisions for depreciation may be omitted from any such certificate.

SECTION 1.08. *Duration of Article Two.* This Article shall be of force and effect only so long as any Bonds of the Collateral Series are outstanding.

## ARTICLE TWO. TRUSTEE.

SECTION 2.01. *Duties of Trustee.* The Trustee hereby accepts the trust hereby created. The Trustee undertakes, prior to the occurrence of an event of default and after the curing of all events of default which may have occurred, to perform such duties and only such duties as are specifically set forth in the Indenture, on and subject to the terms and conditions set forth in the Indenture, and in case of the occurrence of an event of default (which has not been cured) to exercise such of the rights and powers vested in it by the Indenture, and to use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or the Bonds of the Collateral Series issued hereunder or the due execution thereof by the Company. The Trustee shall be under no

obligation or duty with respect to the filing, registration or recording of this Supplemental Indenture or the re-filing, re-registration or re-recording thereof. The recitals of fact contained herein or in the Bonds of the Collateral Series (other than the Trustee's authentication certificate) shall be taken as the statements solely of the Company, and the Trustee assumes no responsibility for the correctness thereof.

ARTICLE THREE.  
MISCELLANEOUS PROVISIONS.

SECTION 3.01. *Date of this Supplemental Indenture.* Although this Supplemental Indenture, for convenience and for the purpose of reference, is dated June 1, 2002, the actual date of execution by the Company and by the Trustee is as indicated by their respective acknowledgments hereto annexed.

SECTION 3.02. *Relation to Original Indenture.* This Supplemental Indenture is executed and shall be construed as an indenture supplemental to the Mortgage, as supplemented and modified hereby. The Mortgage is in all respects ratified and confirmed, and the Mortgage, as hereby supplemented and modified, shall be read, taken and construed as one and the same instrument. All terms used in this Supplemental Indenture shall be taken to have the same meaning as in the Mortgage, as hereby supplemented and modified, except in cases where the context clearly indicates otherwise.

SECTION 3.03. *Invalid, Illegal or Unenforceable Provisions.* In case any one or more of the provisions contained in this Supplemental Indenture or in the Bonds of the Collateral Series shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Supplemental Indenture, but this Supplemental Indenture shall be construed as if such invalid or illegal or unenforceable provision had never been contained herein.

SECTION 3.04. *Counterparts.* This Supplemental Indenture may be executed in any number of counterparts, and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts, or as many of them as the Company and the Trustee shall preserve undestroyed, shall together constitute but one and the same instrument.

SECTION 3.05. *Conflicting Provision.* If any provision of this Supplemental Indenture conflicts with another provision of the Mortgage required to be included in indentures qualified under the Trust Indenture Act of 1939 (as enacted prior to the date of this Supplemental Indenture) by any of the provisions of said Act, such required provision shall control.

IN WITNESS WHEREOF, Portland General Electric Company has caused this Supplemental Indenture to be signed in its corporate name by its President or one of its Senior Vice Presidents or one of its Vice Presidents and its corporate seal to be hereunto affixed and attested by its Secretary or one of its Assistant Secretaries, and in token of its acceptance of the trusts created hereunder, HSBC Bank USA has caused this Supplemental Indenture to be signed in its corporate name by one of its Vice Presidents or one of its Assistant Vice Presidents or one of its Corporate Trust Officers and its corporate seal to be hereunto affixed and attested by one of its Corporate Trust Officers, all as of the day and year first above written.

PORTLAND GENERAL ELECTRIC COMPANY

By: 

Name: James F. Lobdell

Title: Vice President

Attest: 

Title: Secretary

(Seal)

HSBC BANK USA

By: 

Name:

Title: Deirdra N. Ross

Assistant Vice President

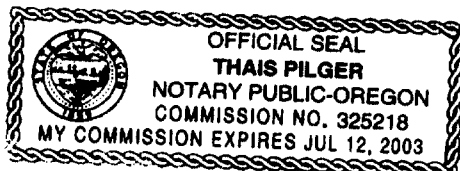
Attest: 

Title: Vice President

(Seal)

State of Oregon       §  
                                   §  
 County of Multnomah §

The foregoing instrument was acknowledged before me on this 10<sup>th</sup> day of June <sup>2002</sup> by James F. Lobdell, a Vice President of PORTLAND GENERAL ELECTRIC COMPANY, an Oregon corporation, on behalf of said corporation.



[NOTARIAL SEAL]

Thais Pilger  
 Notary Public for Oregon  
 My Commission Expires 7/12/03

State of New York §

County of New York §

The foregoing instrument was acknowledged before me on this 12<sup>th</sup> day of June 2002 by Dendra N. Ross, a(an) Asst Vice President of HSBC BANK USA, a New York banking corporation and trust company, on behalf of said corporation.

FRANCINE M. CALCAGNO  
Notary Public, State of New York  
No. 41-4878313  
Qualified in Queens County  
Certificate Filed in Nassau County  
Commission Expires January 12, 2003

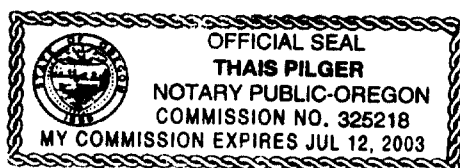
Francine M. Calcagno  
Notary Public, State of New York  
No. 41-4878313  
My Commission Expires Jan 12, 2003

[NOTARIAL SEAL]

State of Oregon       §  
                                   §  
 County of Multnomah §

James F. Lobdell and Douglas R. Nichols, a Vice President and Secretary, respectively, of PORTLAND GENERAL ELECTRIC COMPANY, an Oregon corporation, the mortgagor in the foregoing mortgage named, being first duly sworn, on oath depose and say that they are the officers above named of said corporation and that this affidavit is made for and on its behalf by authority of its Board of Directors and that the aforesaid mortgage is made by said mortgagor in good faith, and without any design to hinder, delay or defraud creditors.

Subscribed and sworn to before me this 10<sup>th</sup> day of June, 2002.



Thais Pilger  
 Notary Public for Oregon  
 My Commission Expires 7/12/03

[NOTARIAL SEAL]