EXHIBIT NO. \_\_\_(RJR-9)
DOCKETS UE-17\_\_\_/UG-17\_\_
2017 PSE GENERAL RATE CASE
WITNESS: RONALD J. ROBERTS

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	
Complainant,	Docket UE-17
<b>v.</b>	Docket UG-17
PUGET SOUND ENERGY,	
Respondent.	

# EIGHTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF

**RONALD J. ROBERTS** 

ON BEHALF OF PUGET SOUND ENERGY

**JANUARY 13, 2017** 

## AMENDED AND RESTATED

# TRANSMISSION AGREEMENT

executed by the

# **UNITED STATES OF AMERICA**

# **DEPARTMENT OF ENERGY**

Acting by and through the

## **BONNEVILLE POWER ADMINISTRATION**

And

# MONTANA INTERTIE USERS

(Colstrip Project)

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This TRANSMISSION AGREEMENT, executed April 17, 1981, by the UNITED STATES OF AMERICA (Government), Department of Energy, acting by and through the BONNEVILLE POWER ADMINISTRATION (Bonneville); THE MONTANA POWER COMPANY (Montana), a corporation; PACIFIC POWER & LIGHT COMPANY (Pacific), a corporation; PORTLAND GENERAL ELECTRIC COMPANY (PGE), a corporation; PUGET SOUND POWER & LIGHT COMPANY (Puget), a corporation; THE WASHINGTON WATER POWER COMPANY (WWP), a corporation; and BASIN ELECTRIC POWER COOPERATIVE (Basin Electric), a cooperative. Montana, Pacific, PGE, Puget, WWP and Basin Electric are all collectively referred to herein as "the companies" and individually may be referred to as "Company";

#### WITNESSETH:

WHEREAS the rights of the Government hereunder apply to transmission facilities in the service areas of two Federal Power Marketing Administrations, Bonneville and Western Area Power Administration (Western), the rights of the Government to use the

Government's transmission capacity specified in this agreement in the Montana Intertie shall be available to the Federal Power Marketing Administration in whose service area the facilities are located, and exchanges of capacity rights will be made at Townsend as agreed between Bonneville and Western; and

WHEREAS the Companies collectively own the output of Units 3 and 4 of the Colstrip Thermal Generating Plant; and

WHEREAS Puget and Montana collectively own the output of Units 1 and 2 of the Colstrip Thermal Generating Plant; and

WHEREAS Bonneville and the Companies except Basin Electric plan to execute firm transmission agreements (Contract Nos. DE-MS79-81BP90165, DE-MS79-81BP90166, DE-MS79-81BP90167, DE-MS79-81BP90168, and DE-MS79-81BP90169, referred to herein as the Colstrip Transmission Agreements) to transmit their shares of Colstrip power over the Federal Transmission System to points of delivery specified in the Colstrip Transmission Agreements; and

WHEREAS Bonneville and Basin Electric have agreed that any portion of Basin Electric's share of Colstrip power that is to be delivered to the purchaser of such power utilizing the Federal Transmission System shall be delivered in accordance with a contract to be negotiated between such purchaser and Bonneville; and

WHEREAS Bonneville and the Companies have agreed to build a regional transmission intertie (Montana Intertie) between the Companies' Broadview Substation (Broadview) and a new substation (Garrison) in the vicinity of Deer Lodge, Montana; such Garrison Substation will join the Montana Intertie to the existing Federal Transmission System; and

WHEREAS Bonneville plans to construct the section of the Montana Intertie between Garrison and a point near Townsend, Montana (Townsend) and recover the costs thereof as a separately identified portion of the Federal Transmission System, and the Companies plan to construct the section of the Montana Intertie between Townsend and Broadview pursuant to an agreement among the Companies (Colstrip Project

Transmission Agreement); and

WHEREAS Bonneville is authorized pursuant to law to dispose of electric power and energy generated at various Federal hydroelectric projects in the Pacific Northwest, or acquired from other resources, to construct and operate transmission facilities, to provide transmission and other services, and to enter into agreements to carry out such authority;

NOW, THEREFORE, the parties hereto mutually agree as follows:

- 1. <u>Definition and Explanation of Terms</u>.
- (a) "Intertie Charge" means the charge or charges specified in Exhibit D, which is the monthly charge for transmission services on the Government-owned section of the Montana Intertie. Such charge shall be calculated pursuant to the provisions of Exhibits B and E.
- (b) "Project" means the Colstrip Thermal Generating Plant consisting of a site and generating units, and related transformation and transmission facilities. Such generating units shall include units number 1 through 4.
- (c) "Project Output" means the electric power and energy produced at the Project, less Montana's share of units number 1 and 2, and less Project station service requirements.
- (d) "Project Scheduled Power" means the amount of electric power each Company schedules on an hour over the Montana Intertie to the Garrison Substation 500 kV bus, not to exceed such Company's east to west Transmission Demand. Such power shall be (1) the Company's share of Project Output, less amounts (i) used by any Company to serve its loads outside the Pacific Northwest, (ii) used by Montana to serve its own loads, (iii) used by Basin Electric to serve the loads of a Basin Electric member, or (iv) disposed of to another entity; provided, however, such power is not concurrently returned to such Company west of Garrison, and that such disposition is not to an entity in the Pacific Northwest (excluding the Companies, Idaho Power Company, and Utah Power and Light Company) to serve such entity's loads in the Pacific Northwest; or (2)

other power owned by such Company. A party shall not transmit power which is owned by another entity as Project Scheduled Power.

- (e) "Transmission Demand" means the amounts specified in Exhibit D, expressed in kilowatts, which are equal to the maximum hourly amounts of electric energy which may be made available under this agreement at Garrison Substation 500-kV bus.
  - (f) "Unamortized Investment" means:
    - (i) for Bonneville, the original investment less amount amortized; and
  - (ii) for the Companies, the original cost less accumulated book depreciation.
- (g) "Eastern Intertie Facilities" means the segment of the Federal Columbia River Transmission System which consists of the Townsend-Garrison double-circuit 500 kV transmission line segment including related terminals at Garrison and associated access road and bridge.
- (h) "Fiscal Year" means the year commencing October 1 of one calendar year and ending September 30 of the next calendar year.
- (i) "Montana Intertie" means the Eastern Intertie Facilities plus the Townsend-Broadview Facilities.
- (j) "Decommissioning Costs" means the costs (including direct, indirect and overhead costs) for salaries, wages, employee benefits, overtime pay, travel, service contracts, consulting contracts, materials, spare parts, transportation of spare parts, tools, direct support services (including equipment use activities, general shops activities, and heavy mobile equipment maintenance) and other costs, each of which is reasonably incurred in connection with the performance of decommissioning activities (such as the razing of structures, disposal of debris, site restoration, and meeting requirements of federal, state or local law applicable to the foregoing activities) similar to those undertaken by utilities in the Western Systems Coordinating Council in connection with the decommissioning of their similar facilities.

- (k) "Salvage value" means:
- (i) the net revenues (i.e. gross revenues reduced by any applicable taxes, costs of preparing the property for sale, costs of delivering the property upon sale and other costs incurred in connection with the sale) received from the sale of any property that is sold; or
- (ii) if any property is retained, the amount of the Unamortized Investment in such property.
- (l) "Settlement Period" means the period from the date when the Montana Intertie first became available for scheduling power (i.e. October 10, 1983) through and including September 30, 1994.
- (m) "Share" means the ratio of a party's Transmission Demand to the total Transmission Demands as set forth in Exhibit D.
- (n) "Townsend-Broadview Facilities" means the Companies' Townsend-Broadview dual single-circuit 500 kV transmission line segment including the related terminals at Montana's Broadview Substation.
- 2. Term of Agreement. This agreement shall be effective at 2400 hours on the date of execution by all parties (Effective Date), and shall continue in effect, subject to the provisions of section 11, until 2400 hours, September 30, 2027; provided, however, that all liabilities incurred hereunder shall be preserved until satisfied. Two years prior to the termination date hereof, Bonneville shall offer to each Company to extend the services provided hereunder to such Company at that time, for 20 years under terms which are not less favorable to each Company than those which Bonneville is then offering for comparable services, provided that such Company, if it was participating in a capacity exchange as described in section 6(b) at the time of such offer, also offers to make available to the Government for the period of such extended term the same amount of capacity as before the contract extension, such capacity to be made available under terms which are not less favorable to the Government than those which such Company is then offering for comparable services. Bonneville's offer may be accepted by each

Company individually, and shall not require acceptance by the other Companies to be effective.

- 3. <u>Exhibits</u>. Exhibits A through G are incorporated herein as part of this agreement. All references to "the Administrator" are changed to "Bonneville" in such exhibits. In the event of conflict between any provision in Exhibit C and the provisions of this contract, the provisions of this contract shall prevail.
  - 4. <u>Construction, Operation and Maintenance of Facilities.</u>
  - (a) Bonneville shall construct, operate and maintain:
    - (1) a 500 kV substation at Garrison; and
  - (2) two 500 kV a-c circuits from Garrison to Townsend, two 500 kV terminal positions in Garrison Substation for such Garrison-Townsend lines and necessary series and shunt compensation facilities at Garrison, part of such compensation facilities being required for transmission facilities constructed by the Companies between Townsend and Broadview.
  - (b) The Companies shall construct, operate, and maintain:
    - (1) two 500 a-c circuits from Townsend to Broadview, two 500 kV terminal positions and shunt compensation facilities at Broadview for a portion of such Townsend-Broadview lines; and
    - (2) such other facilities as the Companies determine to be necessary to transmit Project power to Broadview.
- (c) Such construction by Bonneville and the Companies shall be completed no later than October 31, 1983. This completion date shall be extended for a time equivalent to delays, if any, as are caused by events which the constructing party could not reasonably be expected to avoid by the exercise of reasonable diligence and foresight. Each party shall provide adequate protective equipment within its terminal facilities to provide normal and efficient operation of the interconnected systems.
- (d) Bonneville shall operate and maintain the series and shunt compensation facilities located at Garrison and other facilities described in (a)(2) above which are

required for transmission facilities constructed by the Companies between Townsend and Broadview. Such operation and maintenance shall be in the same manner as Bonneville operates and maintains similar facilities of the Government in accordance with the provisions of Exhibit G.

- (e) On or before July 1 of each year after August 9, 1994, Bonneville and Montana shall each furnish to the other a written description of the construction and operation activities which it has planned for the Montana Intertie over the next 5 years. Each party shall furnish such additional data, information, and documents that are available to such party and that are requested by any other party regarding the necessity and adequacy of such construction and operation activities. This notification requirement shall not apply to emergency replacement of equipment
  - 5. <u>Transmission of Electric Power and Energy.</u>
- (a) This subsection describes firm transmission services over the Montana Intertie to be provided by Bonneville for each Company from Townsend to Garrison. During each hour of the term hereof, each Company shall make available or arrange to have made available to Bonneville at the Garrison Substation 500 kV bus, using the Montana Intertie, its Project Scheduled Power and Bonneville for each such hour shall transmit such power as provided in such Company's Colstrip Transmission Agreement. Such hourly amounts shall not exceed the east to west Transmission Demands specified for such Company in Exhibit D. Garrison shall not be a point of delivery for any Company hereunder except as provided in the Colstrip Transmission Agreements or another agreement.
- (b) This subsection describes firm transmission service over the Montana Intertie to be provided by each Company for Bonneville from Broadview to Townsend. During each hour of the term hereof commencing on the date when a 500 kV transmission line, connecting Garrison to the 500 kV portion of the Federal Transmission System, first becomes available for scheduling power, Bonneville shall make available or arrange to have made available to the Companies at Broadview Substation 500 kV bus the amounts

of electric power that Bonneville determines are available for transmission from Broadview to Garrison hereunder for such hour. Such amounts of power, less losses to Garrison Substation 500 kV bus calculated pursuant to Exhibit F, shall not exceed Bonneville's Transmission Demand for the east to west direction specified in Exhibit D, and the amount made available to each Company shall be in proportion to such Company's pro rata share of the capacity exchanged with Bonneville as specified in Exhibit D. Each such Company for each such hour shall make available such amounts of electric power, less losses between Broadview and Garrison Substation 500 kV bus scheduled for such hour pursuant to section 7, to Bonneville at Garrison Substation 500 kV bus using the Montana Intertie.

- (c) This subsection describes firm transmission service over the Montana Intertie to be provided by Bonneville for each Company from Garrison to Townsend. During each hour of the term hereof, each Company having a Transmission Demand in Exhibit D for the west to east direction shall make available or arrange to have made available to Bonneville at the Garrison Substation 500 kV bus the amounts of electric power such Company determines are available for transmission from Garrison to Townsend hereunder for such hour and Bonneville for each such hour shall schedule on behalf of such Company such electric power over the Montana Intertie to Broadview. Such hourly amounts made available at Garrison Substation 500 kV bus shall not exceed the west to east Transmission Demand specified for such Company in Exhibit D.
- (d) This subsection describes firm transmission service over the Montana Intertie to be provided by each Company for Bonneville from Townsend to Broadview. During each hour of the term hereof commencing on the date when a 500 kV transmission line, connecting Garrison to the 500 kV portion of the Federal Transmission System, first becomes available for scheduling power, Bonneville shall make available or arrange to have made available to the Companies at Garrison Substation 500 kV bus the amounts of electric power that Bonneville determines are available for such hour for transmission from Townsend to Broadview hereunder using the Montana Intertie. Such hourly

amounts of electric power shall not exceed Bonneville's west to east Transmission Demand specified in Exhibit D, and the amount made available to each Company shall be in proportion to such Company's pro rata share of the capacity exchanged with Bonneville as specified in Exhibit D. Each such Company for each such hour shall make available such amounts of electric power, less losses between Garrison Substation 500 kV bus and Broadview scheduled for such hour pursuant to section 7, to Bonneville at Broadview Substation 500 kV bus.

- (e) This subsection describes nonfirm transmission service to be provided over the Montana Intertie. During each hour of the term hereof, a party hereto having energy available for transmission on the Montana Intertie which is not covered by a firm transmission agreement may make available or arrange to have made available to the Companies at Broadview for east to west transmission or to Bonneville at Garrison for west to east transmission, the amounts of electric energy such party desires to be made available at the opposite end of the Montana Intertie for such hour plus losses calculated pursuant to Exhibit F. Such hourly amounts requested shall not exceed the line capacity which Bonneville and the Companies have determined is available for transmission of such energy hereunder. Any Company or Bonneville, as appropriate, to whom electric energy is made available pursuant to this subsection, on each such hour shall make available equal amounts of energy, less losses assessed on the Montana Intertie pursuant to Exhibit F, to the transferee on the opposite end of the Montana Intertie.
- (f) Arrangements for transmission rights on the Townsend-Broadview line section and on connecting lines east of Broadview must be made with individual owners of transmission capacity. Arrangements for transmission rights on the Townsend-Garrison line section and other segments of the Government's System including the Garrison 500/230-kV transformer must be made with Bonneville.
- (g) All parties hereto having power or energy to be transmitted over the Montana Intertie shall submit schedules of such power or energy (1) to Bonneville for coordination with Montana if the direction of the schedule is west to east, or (2) to Montana for

coordination with Bonneville if the schedule is east to west. The amounts scheduled hereunder shall be the amounts deemed to be delivered hereunder.

- 6. Payment for Use of Montana Intertie.
- (a) As compensation for the transmission services provided pursuant to sections 5(a) and 5(c) above, each Company shall pay Bonneville each month during the term hereof commencing at 2400 hours on the date when the Montana Intertie first becomes available for scheduling power, in accordance with the provisions of Exhibits B, D and E, such Company's Intertie Charge. The Intertie Charge for Companies providing Bonneville with transmission services east of Townsend includes a credit described in subsection (b) below during the period specified in such description.
- (b) As compensation for the transmission services provided to Bonneville by any of the Companies hereunder, Bonneville shall provide each such Company, commencing on the date when a 500 kV transmission line, connecting Garrison to the 500 kV portion of the Federal Transmission System, first becomes available for scheduling power, a credit (Exchange Credit) in the calculation of such Company's Intertie Charge. The calculation of the Exchange Credit is contained in Exhibit D.
- (c) As compensation for the transmission services provided over the Garrison-Townsend line pursuant to section 5(e) above, each Company receiving such services shall pay Bonneville each month during the term hereof an amount equal to the product obtained by multiplying the kilowatthours of electric energy scheduled by such Company under section 5(e) for such month by the associated transmission charge specified in Exhibit A. For the purpose of subsection (d) below, Bonneville shall calculate each month during the term hereof a credit equal to the product obtained by multiplying the kilowatthours of electric energy that the Government scheduled under section 5(e) over the Townsend-Garrison line segment for such month, by the associated transmission charge specified in Exhibit A. Bonneville shall file Exhibit A with the Federal Energy Regulatory Commission prior to the date that the Montana Intertie first becomes available for scheduling power.

- (d) Revenues from services provided to the Companies pursuant to section 5(e) above and the credit calculated in subsection (c) above for the Government's comparable use of the Townsend-Garrison line segment will reduce Bonneville's revenue requirement from firm transmission agreements for use of the Townsend-Garrison line. Calculation of each Company's monthly bill will include a pro rata share of (1) such credit, and (2) a credit for the revenues from such service pursuant to section 5(e) for such month. Monthly bills shall be based on the most complete data available at the time of billing. However, adjustments shall be made to future bills as necessary to compensate for transaction data that were not available at the time of billing.
- (e) As compensation for purchasing, constructing, operating and maintaining series and shunt compensation facilities pursuant to section 4(d) above, Montana, on behalf of the Companies pursuant to the Colstrip Project Transmission Agreement, shall pay Bonneville each month during the term hereof commencing on the date when the Montana Intertie first becomes available for scheduling power the charge (Line Compensation Charge) contained in Exhibit G.
- 7. <u>Losses</u>. Losses on the Montana Intertie shall be determined by Montana pursuant to Exhibit F. Losses on all Government schedules for transmission of power hereunder, except such schedules pursuant to section 5(e), shall be scheduled 168 hours later or at another hour mutually agreed upon between Bonneville and Montana.
- 8. <u>Metering</u>. Electric energy, Integrated Demands therefor, and varhours flowing to and from the Government's facilities at Garrison Substation shall be measured by meters furnished and installed by Bonneville at Garrison Substation.
  - 9. Revision of Exhibits.
- (a) If any party determines that the charges specified in Exhibit D or any subsequent transmission of charges specified in this agreement must be changed pursuant to section 19 of Exhibit C, such party shall give notice to the other parties of the need for such changes and if no party objects within 90 days, Bonneville shall prepare a new Exhibit D incorporating such changes, and such new Exhibit D shall become effective as

of the date specified therein. The parties hereto shall: (1) use every effort in good faith to agree on the facts upon which such changes are based, and (2) subject to provisions of this subsection, proceed under section 20 of Exhibit C if such effort does not result in agreement. The construction, addition, or replacement of facilities for the purpose of increasing the transmission capability of the facilities upon which the Intertie Charge is based shall be subject to mutual agreement of the parties hereto if the costs of such capacity are to be included in the Intertie Charge. Construction and replacement of facilities required to maintain the transmission capability of the Government's portion of the Montana Intertie and the changes to Exhibits D and G that may result therefrom, whether the costs are capitalized or expensed as operation and maintenance casts, shall neither be subject to mutual agreement nor to arbitration.

- (b) Subject to subsection (e) below, Bonneville reserves the right to change its rates and charges provided herein pursuant to sections 19 and 37 of Exhibit C.
- (c) If the final rate schedules and associated general transmission rate schedule provisions which are confirmed and approved by a governmental agency having jurisdiction over such rate schedules and provisions differ from any rate schedule or provisions placed into effect on an interim basis by a jurisdictional agency and incorporated into this agreement, such amended or modified rate schedules and provisions shall be made a part of this agreement and shall replace the said interim rate schedules or provisions effective as of the date specified in the agency's final approval.
- (d) Upon any change in rates or charges pursuant to this section which affect the transmission charges specified in Exhibit D or any subsequent charges specified in this agreement, such charges shall be recalculated accordingly and Exhibit D shall be revised incorporating the new charges. Such revised Exhibit D shall be substituted for the Exhibit D then in effect and shall become effective as of the effective date of such new rates or charges.
- (e) If any rates or charges of Bonneville under this agreement are collected subject to refund in accordance with the requirements or orders of a governmental agency

with jurisdiction over such rates or charges, any refund required or ordered by such agency shall be made as soon as reasonably practicable, with interest, in accordance with the requirements or orders of such agency, and such refunds shall either be sent to the Company or if agreed by the parties shall be made by adjustment of the Company's monthly bill.

- (f) Exhibit F may be revised from time to time by Montana, upon consultation and review with the other parties, to incorporate values which represent then current Montana Intertie operating conditions, revised transmission demands, electrical parameters of the facilities, or any value used in such exhibit to calculate the hourly losses. A review of such factors and terms shall also be initiated if requested by any other party. The parties hereto shall: (1) use every effort in good faith to agree on the significance of changed conditions, and (2) proceed under section 20 of Exhibit C if such effort does not result in a mutually agreeable arrangement. Bonneville shall prepare a new Exhibit F incorporating such revisions upon receipt of the necessary information from the Companies and such revised exhibit shall become effective as of the date specified therein.
- (g) Exhibit G may be revised from time to time in accordance with the provisions thereof.
- (h) Exhibit D shall be revised as necessary to reflect all agreements which provide for the firm transmission of electric power and energy over transmission facilities of the Government's section of the Montana Intertie.
- (i) Except as provided in subsection 17(f), the numbers shown as Bonneville's investment in Revision A to Exhibit D and Exhibit G are Bonneville's original costs of the Eastern Intertie Facilities as of October 1, 1994, as agreed upon by the parties. Except as provided in subsection 9(j) and 17(f) or agreed upon in writing by the parties after August 9, 1994, these numbers shall not be subject to audit, revision, or other change.
  - (i) Bonneville's investment in the Eastern Intertie Facilities as shown in Exhibit

D shall be:

- (i) increased by the original cost of any capital additions to or replacements of the Eastern Intertie Facilities that are required to maintain the transmission capability of the Montana Intertie, excluding the costs of any additions or replacements that are made to increase the transmission capability of the Montana Intertie or to connect the Montana Intertie with any other transmission system; and
- (ii) increased as provided for in subsection (m)(iv) below.

  Bonneville's investment shall be subject to additional adjustment only as may be agreed upon by the parties (i.e. to reflect the Companies' participation in any additions or replacements that are made to increase the transmission capacity of the Eastern Intertie Facilities or to connect with another system).
- (k) The interest rate used in the determination of the Annual Cost Ratios (ACRs) used in the calculation of the Intertie Charge for each Fiscal Year commencing after September 30, 1994, shall be eight percent (8.00%) per annum, except as otherwise specifically provided for in subsections 9(l), 9(m) and 9(o) below.
- (1) If the aggregate increase in Bonneville's investment pursuant to subsection 9(j)(i) for any capital additions or replacements made during any Fiscal Year exceeds \$2,000,000 (as the same may be adjusted as provided below), then the interest rate used in the determination of the ACR applicable to such increase shall be equal to the average monthly constant maturities index for 30-year instruments published by the Federal Reserve Bank for the months included in the Fiscal Year during which the applicable capital additions and replacements are made plus one percent (1%). The \$2,000,000 amount specified above in this subsection shall be increased to \$3,000,000 at 2400 hours on September 30, 2004 and \$4,000,000 on September 30, 2014. Any ACR determined under this paragraph shall be adjusted under subsection 9(m) if the option described therein is exercised after the Fiscal Year in which the applicable capital additions or replacements are made.

- (m) The Companies may, at their option at any time and from time to time during the term of this Agreement after September 30, 2000, change the interest rate to be used in the determination of the ACRs (other than the ACRs described in Subsection 9(o) and 9(p)) used in the calculation of the Intertie Charge as follows:
  - (i) the Companies shall give Bonneville written non-binding notice forty (40) days in advance of their intent to exercise the option, which notice must specify the last business day of a month, and the Companies must choose to exercise or not on that day;
  - (ii) the interest rate shall be changed to equal the then current Treasury bond rate available to Bonneville for the term closest to, but not shorter than, the remaining term of this Agreement plus one-quarter of one percent (0.25%);
  - (iii) the change in interest rate shall be effective as of the first day of the month following the month in which the Companies give Bonneville written notice exercising the option;
  - (iv) Bonneville's then-current investment in the Eastern Intertie
    Facilities as shown in Exhibit D shall be increased by the following percentage
    (as the same may be adjusted pursuant to (vi) below) based upon the Fiscal Year
    in which the option is exercised:

FY Ending Sept. 30	Percentage
2001	6.83
2002	6.63
2003	6.44
2004	6.24
2005	6.05
2006	5.85
2007	5.66
2008	5.46
2009	5.27
2010	5.07
2011	4.88
2012	4.68

2013	4.4	.9
2014	4.2	9
2015	4.1	0
2016	3.9	0
2017	3.7	1
2018	3.5	1
2019	3.3	2
2020	3.1	2
2021	2.9	13
2022	2.7	'3
2023	2.5	4
2024	2.3	4
2025	2.1	5
2026	1.9	15
2027	1.7	6

- (v) the amount of any increase in Bonneville's investment pursuant to (iv) above shall be effective as of the effective date of the change in interest rate and amortized over the remaining term of this Agreement;
- (vi) upon any exercise of the option, the percentages set forth in (iv) above shall be adjusted to equal the call premium on Treasury bonds then available to Bonneville for the term closest to, but not shorter than, the remaining term of this Agreement;
- (vii) if Treasury bonds are not available to Bonneville at the pertinent times mentioned in paragraphs (ii) and (vi) above, then the market interest rates and call premiums then available to Bonneville shall be substituted for the Treasury bonds referenced in those paragraphs;
- (viii) if the parties are unable to agree upon the interest rate described in (ii) above or the adjustment described in (vi) or (vii) above, then any party may submit the same for determination by arbitration under section 20 of Exhibit C; and
- (ix) The Companies shall not exercise the option more than once in any period of sixty (60) consecutive calendar months.

- (n) The service life to be used in the calculation of the ACRs effective with Revision A to Exhibit D shall be determined as follows:
  - (i) the service life for the Eastern Intertie Facilities and the Rock Creek Environmental Settlement shall be 44 years; and
  - (ii) the service life of any capital addition or replacement to Eastern Intertie Facilities shall be 44 years.
- (o) The ACR for Bonneville's general plant interest and amortization (I&A) used in the calculation of the Intertie Charge for Fiscal Years commencing after September 30, 1994 shall be 0.01300; provided, however, that, upon request of any party after September 30, 2004, the parties shall review such ACR and Bonneville's actual General Plant interest and amortization which is properly allocable to the Eastern Intertie Facilities; provided that this shall not require Bonneville to keep any records that it does not otherwise keep. After any such review, any party may request a renegotiation of such ACR. In such event, the parties shall use their best efforts to agree upon such ACR to be used in the calculation of the Intertie Charge for Fiscal Years commencing after the request for renegotiation. If the parties do not agree upon such ACR within sixty (60) days after the request for renegotiation, then such ACR shall be determined by arbitration pursuant to section 20 of Exhibit C.
- (p) The charge for Bonneville's operation and maintenance (O&M) costs allocable to the Eastern Intertie Facilities used in the calculation of the Intertie Charge for Fiscal Years commencing after September 30, 1994 shall be equal to one and three-tenths percent (1.3%) of Bonneville's investment in the Eastern Intertie Facilities for such Fiscal Year; provided, however, that, upon request of any party after September 30, 2004, the parties shall review such methodology and Bonneville's actual operation and maintenance costs which are properly allocable to the Eastern Intertie Facilities; provided that this shall not require Bonneville to keep any records that it does not otherwise keep. After any such review, any party may request a renegotiation of the methodology for determining the charge for such operation and maintenance costs. In such event, the

parties shall use their best efforts to agree upon the methodology to be used in the determination of such charge for Fiscal Years commencing after the request for renegotiation. If the parties do not agree upon such methodology within sixty (60) days after the request for renegotiation, then such methodology shall be determined by arbitration pursuant to section 20 of Exhibit C.

- (q) On or before each August 1 after September 30, 1994, Bonneville shall prepare and submit to each of the Companies a proposed revision of Exhibits D and G reflecting any changes to be made pursuant to subsection 9(j), 9(l), 9(m), 9(o) or 9(p) above or to update Bonneville's operation and maintenance costs of the Exhibit G facilities in accordance with the methodology set forth therein. Any revisions to Exhibits D and G that are limited to the foregoing subsections shall not require signatures of the parties. Upon request Bonneville shall promptly provide a written explanation of the changes and the reason for the changes. If Bonneville does not receive any proposed changes from the Companies within sixty (60) days after the Companies' receipt of the proposed exhibit revision, Bonneville shall commence billing under the proposed exhibit revision charges upon the effective date of the exhibit revision. If the Companies submit changes to the proposed exhibit revision within the period specified herein, the parties shall attempt to resolve the disputed questions of fact through good-faith negotiations. If negotiations fail, then the parties shall arbitrate any disputed questions of fact in accordance with procedures established in section 20 of Exhibit C of the Agreement. Pending resolution of negotiations or arbitration, Bonneville may commence billing under the proposed exhibit revision charges upon the effective date of the proposed exhibit revision. Any exhibit revisions under this paragraph shall be subject to audit under section 17.
- 10. <u>Reactive Power</u>. It is the intent of the parties hereto that the voltage level at the Garrison Substation be controlled in accordance with prudent utility operating practice. The parties hereto shall jointly plan and operate their systems so that the flow of reactive power accompanying or resulting from deliveries of electric power and energy

hereunder will not adversely affect the system of either party.

- 11. <u>Changes in the Transmission Demand or Termination of Agreement.</u>
- (a) Transmission Demands, in whole or in part, may not be pooled. The Transmission Demand of any of the Companies shall be increased or reduced, upon 3 months prior written notice by such Company to Bonneville, but not more frequently than once every 12 months, upon the following terms and conditions:
  - (1) The Transmission Demand, at the Company's request, may be increased, subject to transmission capacity availability as determined by Bonneville and the Companies, to the extent that such Company increases its share of the Project Output, or to the extent that other Companies decrease their Transmission Demands pursuant to (2) below.
  - (2) The Transmission Demand, at a Company's request and subject to (d) below, shall be reduced (A) to the extent that such Company assigns all or a portion of its share of the Project Output for a period of at least one year; such reduction of such Company's Transmission Demand for the Project will be subject to the execution of a transmission agreement between Bonneville and the assignee for transmission of the amount so reduced over the Government's portion of the Montana Intertie; (B) if there is a partial reduction in Project generating capability, to the extent of such Company's pro rata share of such reduction, subject to subsection (b) below; or (C) to the extent that other Companies increase their Transmission Demands such that the total of all Transmission Demands is not decreased thereby.
- (b) At each Company's option the agreement may be terminated as to such Company upon destruction or abandonment of the Project or upon discontinuation of Project Output required by a final order of a public official having authority to issue such order. This Agreement may not be terminated by reason of a partial reduction in Project generating capability. If there is a partial reduction in Project generating capability, and if a Company requests a reduction in Transmission Demand with no compensating

increase in Transmission Demand by another Company, then, at Bonneville's option, the Companies so requesting a reduction in Transmission Demand shall pay Bonneville (A) for that part of the Unamortized Investment in any non-salvageable facilities Bonneville has constructed at Government expense for the purpose of providing transmission service for the Project hereunder and which have become unused and are likely to remain unused, in Bonneville's opinion, due to such reduction in Project generating capability, or (B) monthly at a rate that will compensate Bonneville for the annual cost of the facilities so constructed, to the extent and for so long as, during the term of this Agreement, such facilities become and remain unused, in whole or in part as the result of such partial reduction. If the Agreement is terminated under this subsection 11(b), then each Company so terminating shall pay Bonneville its Share of the Unamortized Investment plus the estimated Decommissioning Costs, less the estimated Salvage Value of any facilities Bonneville has constructed at Government expense for the purpose of providing transmission service for the Project hereunder, to the extent that such facilities are unusable, in Bonneville's opinion, in whole or in part as the result of such destruction or abandonment of the Project or upon such discontinuation of Project Output. The parties hereto: (1) shall use every effort in good faith to agree on the facts upon which the determination of an unused, likely to remain unused, or unusable condition is based pursuant to this subsection, and (2) shall proceed under section 20 of Exhibit C if such effort does not result in agreement.

(c) Either Montana or Basin Electric may reduce its Transmission Demand if it builds a transmission line tap on the Montana Intertie between Townsend and Broadview, provided that Montana or Basin Electric, as applicable, shall pay Bonneville monthly at a rate that will compensate Bonneville for the annual cost of the facilities Bonneville has constructed at Government expense (A) for the purpose of providing transmission service for the Project hereunder, and (B) at Garrison, including the 500/230 kV transformer, which are unused due to such reduction in Transmission Demand.

- (d) Any reduction in any Company's Transmission Demand shall be subject to the condition that there be no reduction in Bonneville's transmission rights in the Townsend-Broadview Line. If, after a reduction in a Company's Transmission Demand, such Company has insufficient Transmission Demand to equal its applicable Exchange Credit, such Company and Bonneville shall execute an alternative arrangement for payment of the Exchange Credit by Bonneville at a cost no greater than before the reduction.
- (e) The Companies, except for Basin Electric, shall assume pro rata Basin Electric's Transmission Demands contained in Exhibit D and all of Basin Electric's obligations hereunder if the Rural Electrification Administration does not approve Basin Electric's participation in any agreement, including this agreement, among the Companies which is a condition to Basin Electric's acquisition of a share of Project Output. The reference to "the parties" in section 36 of Exhibit C means "Basin Electric."
- (f) When Transmission Demands are changed pursuant to this section or section 12, the parties shall incorporate such revisions in a new Exhibit D as soon as reasonably practicable.
- 12. <u>Capacity Exchange Contingent upon Transmission Agreement between</u>
  Montana and Western.

In the event that Montana and Western do not reach agreement on transmission services to be provided to Western for transmission of electric power and energy between Western's system and Broadview, or if such agreement terminates before the term hereof, all provisions herein for a capacity exchange on the Montana Intertie and for firm services to be provided to Bonneville hereunder shall terminate and all payment provisions herein and the calculations in all exhibits hereto shall be revised by Bonneville to reflect that:

- (a) Bonneville's Transmission Demand goes to zero;
- (b) The Companies Intertie Charge will be calculated without an Exchange Credit.

## 13. Provisions in Lieu of Federal Stipulation.

- (a) The value of the rights-of-way granted by the Government to the Companies for the construction of the transmission lines from the Project to Townsend designated as the 500-kV Colstrip-Broadview "B" transmission line and the 500-kV Broadview-Townsend "A" and "B" transmission lines ("Colstrip Transmission Facilities") shall not be included in the price to be paid by the Government in the event it acquires any or all of the facilities constructed on or across such rights-of-way.
- (b) The Government shall be allowed at its expense to increase the capacity of the Colstrip Transmission Facilities by making additions or modifications to such facilities and to utilize such increased capacity on an exclusive basis. The Government shall give the Companies not less than 1 year's notice of its intent to so increase the capacity of the Colstrip Transmission Facilities. The Companies may, within 1 year after receipt of such notice, notify the Government of the Companies' intention to make such increase in capacity, in which case the Government's right to make such increase shall be preempted, provided that the Companies plan such increase at approximately the same time planned by the Government. If the Government so increases such capacity, the Government and the Companies shall enter into an agreement providing, among other things, for the determination of the amount of such increase in capacity, and for the allocation to the Government of all incremental or decremental losses and an appropriate share of operation maintenance, and other costs allocable to such increase in capacity. In order to fully utilize the increased capacity, the Government shall be allowed to interconnect, at its expense, its transmission facilities with the Colstrip Transmission Facilities in a manner conforming to approved standards of practice. In the event of any such increase in capacity or interconnection, the Government shall ensure that the existing operating condition of the Project, the Companies' portion of the Colstrip Transmission Facilities, and interconnected systems shall not be adversely affected by such increase in capacity or interconnection. After any such interconnection is completed, the Companies shall operate and maintain the Colstrip Transmission Facilities in good condition, and except

in emergencies, shall maintain in a closed position all connections under the Companies' control necessary for the transmission of the Government's power and energy over the Colstrip Transmission Facilities using such increased capacity. The parties may, by mutual consent, open any such connection for maintenance, repair, or construction; provided, however, no party shall unreasonably withhold or delay its consent.

- (c) During each hour of the term hereof if the Government has energy available for transmission on the Colstrip Transmission Facilities between Colstrip and Broadview the Government may make available or arrange to have made available to the Companies at Broadview for west to east transmission or at Colstrip for each to west transmission, the amounts of electric energy the Government desires to be made available at the opposite end of the Colstrip Transmission Facilities between Colstrip and Broadview for such hour plus losses assessed pursuant to Exhibit F. Each Company shall transmit a pro rata share of the hourly amounts requested, but not to exceed the line capacity which each such Company has determined is available in excess of such Company's requirements or obligations for transmission of energy in such hour. The Government shall pay each Company for such transmission at a rate base on an amount in dollars representing the same portion of the total monthly costs of such part of the transmission facilities used as the maximum amount in kilowatts of the power transmitted hereunder in such month bears to the total capacity in kilowatts of that portion of the transmission facilities.
- (d) The Companies shall not be obligated to allow the transmission of electric power and energy by the Government over the surplus capacity described in subsection (c) above to any person receiving service from any of the Companies on the date of the filing of the first application for rights-of-way across Government lands for the Colstrip Transmission Facilities, other than to statutory preference customers including agencies of the Government and other Pacific Northwest customers of Bonneville.
- (e) The provisions of this section are intended to replace the stipulations required of the Companies by the Government, under 43 CFR 2805.1(c) and 36 CFR 251.56(f)(3)

as conditions for the grant of rights-of-way across Government lands for construction of the Colstrip Transmission Facilities.

- 14. Execution by Counterpart. This agreement may be executed in a number of counterparts and shall be deemed to constitute a single document with the same force and effect as if all the parties hereto having signed a counterpart had signed all other counterparts. Each party shall deliver a signed counterpart to Bonneville, who will prepare\a composite conformed copy and deliver the same to each party. The agreement shall become effective when counterparts have been signed by all parties.
- 15. <u>Decommissioning Eastern Intertie Facilities</u>. If the Companies do not enter into an agreement for Bonneville to provide transmission service over the Eastern Intertie Facilities after September 30, 2027 and Bonneville removes the Eastern Intertie Facilities or any portion thereof by September 30, 2034, then:
- (a) each Company shall pay Bonneville such Company's Share of the amount (if any) by which the sum of the Unamortized Investment and the Decommissioning Costs exceeds the Salvage Value of the Eastern Intertie Facilities or portion thereof so removed; and
- (b) Bonneville shall pay or credit to each Company such Company's Share of the amount (if any) by which the Salvage Value exceeds the sum of the Unamortized Investment and the Decommissioning Costs of the Eastern Intertie Facilities or portion thereof so removed.
  - 16. Decommissioning of the Townsend-Broadview Facilities.

If Bonneville does not enter into an agreement for the Companies to provide transmission service over the Townsend-Broadview Facilities after September 30, 2027 and the Companies remove the Townsend-Broadview Facilities or any portion thereof by September 30, 2034, then:

(a) Bonneville shall pay the Companies Bonneville's Share of the amount (if any) by which the sum of the Unamortized Investment and the Decommissioning Costs

exceeds the Salvage Value of the Townsend-Broadview Facilities or portion thereof so removed; and

(b) the Companies shall pay or credit to Bonneville Bonneville's Share of the amount (if any) by which the Salvage Value exceeds the sum of the Unamortized Investment and the Decommissioning Costs of the Townsend-Broadview Facilities or portion thereof so removed.

## 17. <u>Audit Rights</u>

- (a) The Companies shall have the right to review and audit, at their own expense, Bonneville's books, records, and documents that directly pertain to the determination of or billings for the charges or other amounts payable by the Companies under the Agreement; provided that, except as provided in subsection 17(f) below, the first audit hereunder shall not be conducted prior to October 1, 1996. Any factor that is fixed and not subject to revision or adjustment shall not be subject to audit. Bonneville shall have the right to review and audit, at Bonneville's expense, the Companies' books, records, and documents that directly pertain to the determination of the amounts payable by Bonneville associated with the decommissioning pursuant to section 16. The foregoing shall not be construed to permit the parties to conduct a general audit of Bonneville's or the Companies' books, records, and documents beyond those needed to perform an audit under the Agreement.
- (b) Audits shall be conducted by the Companies not more frequently than once in any period of twenty-four (24) consecutive calendar months, upon reasonable advance notice to Bonneville, at reasonable times and in conformance with generally accepted auditing standards. Bonneville shall perform such audit of the Companies only in the event the Townsend-Broadview Facilities are decommissioned pursuant to section 16.
- (c) Books, records, and documents pertaining to any cost or revenue subject to audit hereunder shall be retained for up to 3 years following the first billing for such cost. Bonneville shall retain all records and documents prepared in the normal course of

business for the entire length of the audit period. In the event the Companies' facilities are decommissioned, the Companies shall retain books, records, and documents of the costs associated with the decommissioning.

- (d) The Companies' audit team shall consist of representatives from all of the Companies. If any Company chooses not to participate in any such audit, then such Company shall notify Bonneville in writing prior to the conduct of the audit that it will accept the audit findings of the Companies that do participate and their resolution of any disputed audit findings with Bonneville.
- (e) After completion of any audit under this section 17, the Companies shall promptly notify Bonneville in writing of any exception taken as a result of the audit. Bonneville shall review and respond in writing to any such exception within 30 days after receipt of such notice from the Companies. If Bonneville agrees with any exception, Bonneville shall promptly correct its billings, correct applicable revisions to Exhibits D and G as appropriate, and refund, credit or bill without interest any such amount to the Companies. Likewise if decommissioning occurs pursuant to section 16 and Bonneville performs an audit of the decommissioning costs, then Bonneville shall promptly notify the Companies in writing of any exception taken as a result of the audit. The Companies shall review and respond in writing to any such exception within 30 days after receipt of such notice from Bonneville. If the Companies agree with any exception, the Companies shall refund, credit or bill without interest any such amount to Bonneville.
- (f) The 1994 increase in Bonneville's Investment from \$114,316,395 to \$115,608,381 shall be subject to audit, verification and correction to reflect Bonneville's actual costs of the capital additions and replacements representing such increase.

IN WITNESS WHEREOF, the parties hereto have executed this agreement in several counterparts.

UNITED STATES OF AMERICA
Department of Energy

By <u>/S/ Earl Gjelde</u> Acting Bonneville Power Administrator

# AGREEMENT SIGNATURES

	PORTLAND GENERAL ELECTRIC COMPANY
	By /S/ Glen E. Bredemier
	Title Vice President
ATTEST	
By /S/ Dallas A. Marckx	
Title Asst. Secretary	
	THE MONTANA POWER COMPANY
	By <u>/S/ Melvyn M. Ryan 4/14/81</u>
	Title Executive Vice President for Administration
ATTEST:	
By /S/ Bernice H. Wilson	
Title Asst. Secretary	
	PACIFIC POWER & LIGHT COMPANY
	By <u>/S/ R.B. Lisbakken</u>
	Title Vice President
ATTEST:	
By <u>/S/ Sally A. Nofziger</u>	
Title Assistant Secretary	
	PUGET SOUND POWER & LIGHT COMPANY
	By <u>/S/_R.G. Bailey</u>
	Title Vice President
ATTEST:	
By/S/ W.E. Watson	
Title Secretary	

	THE WASHINGTON WATER POWER COMPANY
	By /S/ E.W. Harding
	Title Vice President
ATTEST:	<del></del>
By	
Title	
	DAGNARY FOR FORMAL POWER GOODER ATTIVE
	BASIN ELECTRIC POWER COOPERATIVE
	By/S/_James L. Grahl
	Title General Manager
ATTEST:	
By/S/ Deborah Fohr	
Title Staff Counsel	

### **CERTIFICATE**

I, Wayne R. Lee, Acting Chief, Brand of Contract Management, Division of Customer Service, Bonneville Power Administration, do hereby certify that the agreement to which this certificate is attached is a true, complete and conformed composite copy of the Transmission Agreement, Contract No. DE-MS79-81BP90210, and that signed counterpart originals are on file with the Bonneville Power Administration, each signed by the parties thereto.

/S/ Wayne R. Lee

Date May 5, 1981

Wayne R. Lee, Acting Chief Contract Management Branch Division of Customer Service

# AMENDMENT NO. 1 SIGNATURES

UNITED STATS OF AMERICA	PUGET SOUND POWER & LIGHT
Department of Energy	COMPANY
Bonneville Power Administration	
	By /S/ Robert V. Myers
By /S/ Allen L. Burns	Name Robert V. Myers
Name Allen L. Burns	Title Senior Vice President
Title Manager, IOU Segment	Date <u>August 10, 1994</u>
Date <u>August 10, 1994</u>	
PACIFICORP	THE MONTANA POWER COMPANY
By /S/ Dennis P. Steinberg Name Dennis P. Steinberg Title Senior Vice President Date August 10, 1994	By /S/ Robert L. Miller Name Robert L. Miller Title Executive Assistant – Transmission & Power Management Date August 10, 1994
PORTLAND GENERAL ELECTRIC	THE WASHINGTON WATER POWER
COMPANY	COMPANY
By /S/ Marlene Huntsinger	By /S/ Stephen V. Fisher
Name <u>Marlene Huntsinger</u>	Name Stephen V. Fisher
Title Manager, Power Controls	Title Senior Power Resource Engineer
Date <u>August 10, 1994</u>	Date <u>August 10, 1994</u>

# <u>EXHIBIT A</u> Montana Intertie Nonfirm Energy Transmission Rate Schedule

Exhibit A will be attached when it has been filed with the Federal Energy Regulatory Commission (FERC).

## EXHIBIT B

## GENERAL TRANSMISSION RATE SCHEDULE PROVISIONS

- 1. <u>DEFINITIONS</u>: Capitalized terms that are used in the Transmission Rate Schedules shall be as defined below, or, if not so defined, as defined in the Agreement.
- (a) <u>Agreement</u> means the transmission agreement to which this exhibit is attached.
- (b) <u>Annual Cost</u> means the cost to the Government for the operation, maintenance and amortization of the Federal Transmission System facilities, or any applicable portion thereof, with interest, including an appropriate share of the general plant and administrative and general costs.
- (c) <u>Annual Cost Ratio</u> means the annual cost of the Federal Transmission System, or any applicable portion thereof, divided by the investment in such system or portion thereof.
- (d) <u>Capacity</u> means the load carrying capability of a transmission facility determined by use of general utility standards adopted by the Administrator for the purpose of calculating a use-of-facilities charge.
- (e) <u>Capacity Factor</u> means the decimal fraction determined by dividing the average peak load carried by all comparable segments of the Federal Transmission System during the most recent heavy load periods, by the sum of their related Capacities.
- (f) <u>Federal Transmission System.</u> The words Federal Transmission System or Federal Transmission System facilities mean the transmission facilities of the Federal Columbia River Power System, which for the purpose of these rate schedules are deemed to include the transmission facilities owned by the Government and operated by the Administrator, and other facilities which the Administrator uses under lease, easement, license, or exclusive use-of-facilities charge.
- (g) <u>Industrial Customer</u> means a manufacturing firm which is being supplied electric power and energy under a power sales contract with the Administrator.
- (h) <u>Industrial Delivery</u> means the transformation and Terminal Facilities located at a Point of Delivery to an Industrial Customer.
- (i) <u>Intertie</u> means the Government's share of the 500 kV a-c and 800 kV d-c Pacific Northwest-Pacific Southwest transmission facilities extending from the vicinity of the Government's John Day and The Dalles substations to the Oregon-California and Oregon-Nevada borders, respectively.

- (j) <u>Main Grid</u> means that portion of the Federal Transmission System rated 230 kV and higher, exclusive of the Intertie.
- (k) <u>Main Grid Delivery Terminal</u> means 230 kV Terminal Facilities associated with a Point of Delivery.
- (l) <u>Main Grid Distance</u> means the distance in airline miles on the Main Grid between the Point of Interconnection and the Point of Delivery, multiplied by 1.15.
- (m) <u>Main Grid Interconnection Terminal</u> means the Main Grid Terminal Facilities located at the Point of Interconnection.
- (n) <u>Main Grid Miscellaneous Facilities</u> means switching, transformation and other backup facilities of the Main Grid required to integrate the Main Grid.
- (o) <u>Main Grid Terminal</u> means Terminal Facilities on the Main Grid adjacent to the Secondary System.
- (p) <u>Point of Delivery and Point of Interconnection</u> mean such point or points as are specified in the Agreement.
- (q) <u>Replacement Energy</u> means non-Federal energy acquired for another entity by the Administrator for delivery in lieu of Federal non-firm energy which has been restricted.
- (r) <u>Secondary System</u> means that portion of the Federal Transmission System facilities exclusive of Main Grid facilities, Intertie facilities, and lower voltage Federal Transmission System facilities which may be used on a use-of-facility basis.
- (s) <u>Secondary System Delivery Terminal</u> means a Point of Delivery from a Main Grid substation at 115 kV, or a terminal located at a Point of Delivery from the Secondary System.
- (t) <u>Secondary System Distance</u> means the number of circuit miles of Secondary System transmission line between the Main Grid and the Point of Delivery or the lower voltage Federal Transmission System facilities which may be used on a use-of-facility basis, as specified in the Agreement.
- (u) <u>Secondary System Interconnection Terminal</u> means the first Terminal Facility in the Secondary System.
- (v) <u>Secondary System Intermediate Terminal</u> means the final Terminal Facilities in the Secondary System.
- (w) <u>Secondary Transformation</u> means transformation from Main Grid to Secondary System facilities.

- (x) <u>Terminal Facilities</u> means Federal Transmission System facilities interconnecting a transmission line with a switching station or a substation, or such Federal facilities interconnecting with another entity's facilities at a Point of Delivery or a Point of Interconnection. Terminal Facilities normally consist of a power circuit breaker, associated protective equipment, and appurtenant structures.
- 2. <u>TRANSMISSION CONTRACT DEMAND</u>: The Transmission Contract Demand shall be the number of kilowatts specified in the Agreement for transmission over the Federal Transmission System facilities.
- 3. <u>MEASURED DEMAND</u>: The Measured Demand is the maximum Integrated Demand for a billing month determined from measurements made as specified in the Agreement or as determined in section 7 hereof when metering or other data are not available for such purpose. The Administrator, in determining the Measured Demand, will exclude any abnormal Integrated Demands due to, or resulting from (a) emergencies or breakdowns on, or maintenance of, the Federal Transmission System facilities, and (b) emergencies on facilities of the Transferee provided that such facilities have been adequately maintained and prudently operated as determined by the Administrator.

If the Agreement provides for delivery of more than one class of power to the Transferee at any Point of Delivery, the portion of each Integrated Demand assigned to any class of power shall be determined as specified in the Agreement. The portion of the Integrated Demand so assigned shall constitute the Measured Demand for such class of power.

- 4. <u>SCHEDULED DEMAND</u>: The Scheduled Demand is the maximum hourly demand, in kilowatts, at which electric power and energy is scheduled by the Transferee to the Administrator for transmission under the terms of the Agreement.
- 5. <u>AVERAGE POWER FACTOR</u>: The formula for determining Average Power Factor (Power Factor) is as follows:

Power Factor =  $(Kilowatthours)/\sqrt{[(kilowatthours)^2 + (Reactive kilovoltamperehours)^2]}$ 

In applying the above formula, the meter for measurement of reactive kilovoltamperehours will be ratcheted to prevent reverse registration.

When a class of electric power and energy delivered by the Administrator at any point is commingled with any other class or classes of power and it is impracticable to meter separately [continued on next page]

the kilowatthours and reactive kilovoltamperehours for each class, the Power Factor of the total delivery of such electric power and energy for the month will be used, where applicable, as the Power Factor for each of the separate classes.

Except as it is otherwise specifically provided in the Agreement no adjustment will be made for Power Factor at any point of delivery described in the Agreement when the varhours delivered at such point are not measured.

- 6. <u>BILLING MONTH</u>: Bills for transmission service are normally computed at intervals of approximately 30 days, not always on a calendar month basis.
- 7. <u>DETERMINATION OF ESTIMTED BILLING DATA</u>: If the Integrated Demands for electric energy must be estimated from data other than metered or scheduled quantities, the Administrator and the Transferee will agree on billing data to be used in preparing the bill. If the parties cannot agree on the estimated billing quantities, a determination binding on both parties shall be made in accordance with the arbitration provisions of the Agreement.
- 8. <u>PAYMENT OF BILLS</u>: Bills for transmission service are rendered monthly and are payable at the Office of the Administrator. Failure to receive a bill does not release the Transferee from liability for payment. Billings under each rate schedule application are rounded to whole dollar amounts, by elimination of any amount of less than 50 cents and increasing any amount from 50 cents through 99 cents to the next higher dollar.

If the Administrator is unable to render the Transferee a timely monthly bill which includes a full disclosure of all billing factors, he may elect to render an estimated bill for that month to be followed at a subsequent billing date by a final bill. Such estimated bill, if so issued, has the validity of, and is subject to, the same payment provisions as a final bill.

Bills not paid in full on or before the close of business of the twentieth day after the date of the bill bear an additional charge which is the greater of one-fourth percent of the amount unpaid or \$50. Thereafter, a charge of one-twentieth percent of the sum of the initial amount remaining unpaid and the additional charge herein described is added on each succeeding day until the amount due is paid in full. The provisions of this paragraph do not apply to bills rendered under contracts with other agencies of the United States.

Remittances received by mail will be accepted without assessment of the charges referred to in the preceding paragraph provided the postmark indicates the payment was mailed on or before the twentieth day after the date of the bill. If the twentieth day after the date of the bill is a Sunday or other nonbusiness day of the Transferee, the next following day is the last day on which payment may be made to avoid such further

charges. Payment made by metered mail and received subsequent to the twentieth day must bear a postal department cancellation in order to avoid assessment of such further charges.

The Administrator may, whenever a transmission bill or a portion thereof remains unpaid subsequent to the twentieth day after the date of the bill, and after giving 30 days' advance notice in writing, cancel the Agreement, but such cancellation does not affect the Transferee's liability for any charges accrued prior thereto.

9. <u>APPROVAL OF RATES</u>: Schedules of rates and charges, or modifications thereof, for transmission of electric power and energy by the Administrator shall become effective only after confirmation and approval by the Federal Power Commission.

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#### GENERAL APPLICATION

- 1. Interpretation.
- (a) The provisions in the agreement to which these General Wheeling Provisions are an exhibit shall be deemed to be a part hereof for the purpose of determining the meaning of any provision contained herein. If a provision in such agreement is in conflict with a provision contained herein, the former shall prevail.
- (b) Nothing contained in this agreement shall, in any manner, be construed to abridge, limit, or deprive any party thereto of any means of enforcing any remedy, either at law or in equity, for the breach of any of the provisions thereof which it would otherwise have.
  - 2. Definitions. As used in this agreement:
  - (a) the words "Contractor", "Utility" or "Borrower" as used herein shall mean the party to this agreement other than the Administrator;
  - (b) the word "month" shall mean the period commencing at the time when the meters mentioned in this agreement are read by the Administrator and ending approximately 30 days thereafter when a subsequent reading of such meters is made by the Administrator;
  - (c) the words "Integrated Demand" shall mean the number of kilowatts which is equal to the number of kilowatt-hours delivered at any point during a clock hour;
  - (d) the words "System" or "Facilities" shall mean the transmission facilities: (1) which are owned or controlled by either party, or (2) which either party may use under lease, easement, or license.
- 3. <u>Prior Demands</u>. In determining any credit demand mentioned in, or money compensation to be paid under this agreement for any month, Integrated Demands at which electric energy was delivered by the Transferor at points of delivery mentioned herein for the account of the other party to this agreement prior to the date upon which the agreement takes effect shall be considered in the same manner as if this agreement had been in effect.
- 4. <u>Measurements</u>. Except as it is otherwise provided in section 7 hereof, each measurement of each meter mentioned in this agreement shall be the measurement automatically recorded by such meter, but if not so recorded, shall be the measurement as determined by the parties hereto.

If it is provided in this agreement that measurements made by any of the meters specified therein are to be adjusted for losses, such adjustments shall be made by using factors, or by compensating the meters, as agreed upon by representatives designated by the parties to such agreement. If changes in conditions occur which substantially affect any such loss factor or compensation, it will be changed in a manner which will conform to such changes in conditions.

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- 5. <u>Measurements and Installation of Meters</u>. The Administrator may at any time install a meter or metering equipment of the Government to make the measurements required for any computation or determination mentioned in this agreement, and if so installed such measurements shall be used thereafter in such computation or determination.
- 6. <u>Tests of Meters</u>. Each party to this agreement will, at its expense, test its meters mentioned in this agreement at least once every two years, and, if requested to do so by the other party, will make additional tests or inspections of such meters, the expense of which will be paid by such other party unless such additional tests or inspections show such meters to be inaccurate as specified in section 7 hereof. Each party will give reasonable notice of the time when any such test or inspection is to be made to the other party, who may have representatives present at such test or inspection. Meters found to be defective or inaccurate shall be adjusted, repaired or replaced to provide accurate metering.

#### 7. Adjustment for Inaccurate Metering.

- (a) If any meter mentioned in this agreement fails to register, or if the measurement made by such meter during a test made as provided in section 6 hereof varies by more than one percent from the measurement made by the standard meter used in such test, adjustment shall be made correcting all measurements made by such inaccurate meter during the period hereinafter stated. Such corrected measurements shall be used to recompute the amounts of any electric power and energy to be made available, of any credits to be made in any exchange energy account, and of any money compensation to be paid to the Transferor as provided in this agreement for (1) the actual period during which such inaccurate measurements were made if such period can be determined, or (2) if not, the period immediately preceding a test of such inaccurate meter which is equal to one-half the time from the date of the last preceding test of such meter; provided, however, that the period for which such recomputations are to be made shall not exceed six months.
- (b) If the credit theretofore made to the Transferor in the exchange energy account varies from the credit to be made as recomputed, the amount of the variance will be credited in such exchange energy account to the party entitled thereto.
- (c) If the money compensation theretofore paid to the Transferor varies from the money compensation to be paid as recomputed, the amount of the variance will be paid to the party entitled thereto within 30 days after the recomputation is made; <u>provided</u>, <u>however</u>, that the other party may deduct such amount due it from any money compensation which thereafter becomes due the Transferor under this agreement.
- 8. <u>Character of Service</u>. Unless otherwise specifically provided for in the agreement, electric power and energy made available pursuant to this agreement shall be in the form of three-phase current, alternating at a frequency of approximately 60 hertz.
- 9. <u>Point of Delivery and Delivery Voltage</u>. Electric power and energy shall be delivered to each Transferee at such point or points and at such voltage or voltages as are agreed upon by the parties hereto.
- 10. <u>Combining Deliveries Coincidentally</u>. If it is provided in this agreement that the amounts of electric energy and varhours, delivered at any point of delivery, and of the Integrated Demands for such electric energy, for any period, *[continued on next page]*

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shall be the amounts thereof determined by combining deliveries at two or more metering points coincidentally:

- (a) the amounts of electric energy and varhours so delivered at such point of delivery during such period shall be the sums computed by adding together the amounts of electric energy and varhours, respectively, which flow during such period at such metering points, determined as provided in this agreement; and
- (b) the amount of each Integrated Demand for such electric energy at such point of delivery shall be the sum computed by adding together the Integrated Demands for such hour at such metering points, determined as provided in this agreement.
- 11. <u>Suspension of Deliveries</u>. The other party to this agreement may at any time notify the Transferor in writing to suspend the deliveries of electric power and energy provided for in this agreement. Upon receipt of any such notice, the Transferor will forthwith discontinue, and will not resume, such deliveries until notified to do so by the other party, and upon receipt of such notice from the other party to do so, will forthwith resume such deliveries.
- 12. <u>Continuity of Service</u>. The Transferor may temporarily interrupt or reduce deliveries of electric power and energy to the Transferee if he determines that such interruption or reduction is necessary or desirable in case of system emergencies, Uncontrollable Forces, or in order to install equipment in, make repairs, replacements, investigations, and inspections of, or perform other maintenance work on, the Transferor's System. Except in case of emergency and in order that the Transferee's operations will not be unreasonably interfered with, the Transferor will give the Transferee advance notice of any such interruption or reduction, the reason therefor, and the probable duration thereof.
  - 13. Uncontrollable Forces.
- (a) Each party shall notify the other as soon as possible of any Uncontrollable Forces which may in any way affect the delivery of power hereunder. In the event the operations of either party are interrupted or curtailed due to such Uncontrollable Forces, such party shall exercise due diligence to reinstate such operations with reasonable dispatch.
  - (b) The term "Uncontrollable Forces" means:
    - (1) Strikes affecting the operation of either party's System or other Facilities upon which such operation is completely dependent; or
    - (2) Such of the following events as either party, by exercise of reasonable diligence and foresight, could not reasonably have been expected to avoid:
      - (i) Events, reasonably beyond the control of the party having jurisdiction thereof, causing failure, damage, or destruction of any such system or facilities. The word "failure" shall be deemed to include interruption of, or interference with, the actual operation of such System or Facilities; or

- (ii) Floods which limit or prevent the operation of, or which constitute an imminent threat of damage to, any such system or facilities.
- 14. Reducing Charges for Interruptions. If deliveries of electric power and energy to the Transferee are suspended, interrupted, interfered with or curtailed due to Uncontrollable Forces, as defined in section 13 hereof, on either the Transferee's System or Transferor's System, or if the Transferor interrupts or reduces deliveries to the Transferee for any of the reasons stated in section 12 hereof, the credit in the exchange energy account which would otherwise be made, or the money compensation which would otherwise be paid, to the Transferor shall be appropriately reduced. No interruption, or equivalent interruption, of less than 30 minutes duration will be considered for computation of such reduction in charges.
- 15. Net Billing. Payments due one party may be offset against payments due the other party under all contracts between the parties hereto for the sale and exchange of electric power and energy, use of transmission facilities, operation and maintenance of electric facilities, lease of electric facilities, mutual supply of emergency and standby electric power and energy, and under such other contracts between such parties as the parties may agree. Under contracts included in this procedure all payments due one party in any month shall be offset against payments due the other party in such month, and the resulting net balance shall be paid to the party in whose favor such balance exists unless the latter elects to have such balance carried forward to be added to the payments due it in a succeeding month.
  - 16. Power Factor.
  - (a) The formula for determining average power factor is as follows:

Average Power Factor =  $(Kilowatthours)/\sqrt{(Kilowatthours)^2 + (Reactive Kilovolt-ampere-hours)^2)}$ 

In applying the above formula, the meter for measurement of reactive kilovolt-amperehours will be ratcheted to prevent reverse registration.

- (b) When delivery of electric power and energy by the Transferor at any point is commingled with any other class or classes of power and it is impracticable to separately meter the kilowatthours and reactive kilovolt-ampere-hours for each class, the average power factor of the total delivery of such electric power and energy for the month will be used, where applicable, as the power factor for each of the separate classes.
- (c) Except as it is otherwise specifically provided in this agreement, no adjustment will be made for power factor at any point of delivery described in this agreement while the varhours delivered at such point are not measured.
- (d) The Transferror may, but shall not be obligated to, deliver electric energy hereunder at a power factor of less than 0.85 lagging.

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#### 17. Permits.

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- (a) If by the terms of any contract between the parties any equipment or facilities of a party to this agreement are, or are to be, located on the property of the other at any point of delivery provided in this agreement, a permit to install, test, maintain, inspect, replace, repair, and operate during the term of this agreement and to remove such equipment and facilities at the expiration of said term, together with the right of ingress to and egress from the location thereof at all reasonable times in such term is hereby granted by the other party.
- (b) Each party shall have the right to read, at all reasonable times, any and all meters mentioned in this agreement which are installed on the property of the other.
- (c) If by the terms of any contract between the parties either party is required or permitted to install, test, maintain, inspect, replace, repair, remove, or operate equipment on the property of the other, the owner of such property shall furnish the other party accurate drawings and wiring diagrams of associated equipment and facilities, or, if such drawings or diagrams are not available, shall furnish accurate information regarding such equipment or facilities. The owner of such property shall notify the other party of any subsequent modifications which may affect the duties of the other party in regard to such equipment, and furnish the other party accurate revised drawings, if possible.

#### 18. Ownership of Facilities.

- (a) Except as otherwise expressly provided, ownership of any and all equipment, and of all salvable facilities installed by a party to this agreement on the property of the other party shall be and remain in the installing party.
- (b) Each party shall identify all movable equipment and, to the extent agreed upon by the parties, all other salvable facilities which are installed by such party on the property of the other. Within a reasonable time subsequent to initial installation, and subsequent to any modification of such installation, representatives of the parties shall jointly prepare an itemized list of said movable equipment and facilities.
- 19. Adjustment for Change of Conditions. If changes in conditions hereafter occur which substantially affect any factor required by this agreement to be used in determining (a) any credit in any exchange energy account to be made, money compensation to be paid, or amount of electric power and energy to be made available to one party by the other party, or (b) any maximum replacement demand, or average power factor mentioned in this agreement, such factor will be changed in a manner which will conform to such changes of conditions. If an increase in the capacity of the facilities being used by the Transferor in making deliveries hereunder is required at any time after execution of this agreement to enable the Transferor to make the deliveries herein required together with those required for its own operations, the construction or installation of additional or other equipment or facilities for that purpose shall be deemed to be a change of conditions within the meaning of the preceding sentence.

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If, pursuant to the terms of the agreement establishing such exchange energy account, another rate is substituted for the rate to be used in settling the balance in such account, the number of kilowatthours to be credited to the Transferor in such account for each month as provided in this agreement, shall be changed for each month thereafter to the amount computed by multiplying such number of kilowatthours by 2.5 mills and dividing the resulting product by the currently effective substituted rate in mills per kilowatthour.

20. <u>Arbitration</u>. If the parties do not agree on the determination of any question of fact hereinafter stated, such determination will be made by arbitration. The party calling for arbitration shall serve notice in writing on the other party, setting forth in detail the question or questions to be arbitrated and the arbitrator appointed by such party. The other party shall, within ten days after the receipt of such notice, appoint a second arbitrator, and the two so appointed shall choose and appoint a third. In case such other party fails to appoint an arbitrator within said ten days, or in case the two so appointed fail for ten days to agree upon and appoint a third, the party calling for the arbitration, upon five days' written notice delivered to the other party, shall apply to the person who at the time shall be the presiding judge of the United States Court of Appeals for the Ninth Circuit for appointment of the second or third arbitrator, as the case may be.

The determination of the question or questions submitted for arbitration shall be made by a majority of the arbitrators, and shall by binding on the parties. Each party shall pay for the services and expenses of the arbitrator appointed by or for it, and all other costs incurred in connection with the arbitration shall be paid equally by the parties thereto.

The questions of fact to be determined as provided in this section shall be: (a) the determination of the measurements to be made by the parties hereto pursuant to section 4 hereof; (b) the correction of the measurements to be made as provided in section 7 hereof; (c) the amount of reduction in charges mentioned in section 14 hereof; (d) the duration of the interruption or equivalent interruption mentioned in section 14 hereof; (e) whether changes in conditions mentioned in section 19 hereof have occurred, and if so, the change to be made in the factor mentioned; (f) whether an increase or decrease in load or change in load factor mentioned in section 31 hereof is unusual; (g) any fact mentioned in sections 29 and 33 hereof; (h) whether an abnormal nonrecurring demand occurred and the amount and time thereof; (i) and the acceptable level of harmonics mentioned in section 34 hereof.

- 21. <u>Contract Work Hours and Safety Standards</u>. This agreement, to the extent that it is of a character specified in the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.
- (a) Overtime requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, apprentices, trainees, watchmen, and guards shall require or permit any laborer, mechanic, apprentice, trainee, watchman or guard in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of 40 hours in such workweek on work subject to the *[continued on next page]*

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provisions of the Contract Work Hours and Safety Standards Act unless such laborer, mechanic, apprentice, trainee, watchman, or guard receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight hours in any calendar day or in excess of 40 hours in such workweek, whichever is the greater number of overtime hours.

- (b) <u>Violation</u>: <u>liability for unpaid wages</u>; <u>liquidation of damages</u>. In the event of any violation of the provisions of subsection (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, apprentice, trainee, watchman, or guard employed in violation of the provisions of subsection (a) in the sum of \$10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of his standard workweek of 40 years without payment of the overtime wages required by subsection (a).
- (c) Withholding for unpaid wages and liquidated damages. The Administrator may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of subsection (b) above.
- (e) <u>Subcontracts.</u> The Contractor shall insert subsections (a) through (d) of this section in all subcontracts, and shall require their inclusion in all subcontracts of any tier.
- (f) <u>Records.</u> The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records shall be preserved for three years from the completion of the contract.
- 22. <u>Convict Labor.</u> In connection with the performance of work under this contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1965 (18 U.S.C. 4082(c) (2)) and Executive Order 11755, December 29, 1973.
- 23. <u>Equal Employment Opportunity.</u> (The following clause is applicable unless this agreement is exempt under the rules, regulations and relevant orders of the Secretary of Labor [41 CFR, ch. 60].)

During the performance of this agreement, the Contractor agrees as follows:

(a) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other [continued on next page]

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forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Administrator setting forth the provisions of this Equal Opportunity clause.

- (b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Administrator, advising the labor union or workers' representative of the Contractor's commitments under this Equal Opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Administrator and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- (f) In the event of the Contractor's noncompliance with the Equal Opportunity clause of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (g) The Contractor will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Administrator may direct as a means of enforcing such provisions, including sanctions for noncompliance; <u>provided</u>, <u>however</u>, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Administrator, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

- 24. <u>Reports.</u> The other party to this agreement will furnish the Administrator such information as is necessary for making any computation required for the purposes of this agreement, and the parties will cooperate in exchanging such additional information as may be reasonably useful for their respective operations.
- 25. <u>Assignment of Agreement.</u> This agreement shall inure to the benefit of, and shall be binding upon the respective successors and assigns of the parties to this agreement; <u>provided</u>, <u>however</u>, that neither such agreement nor any interest therein shall be transferred or assigned by either party to any party other than the United States or an agency thereof without the written consent of the other; <u>provided</u>, <u>further</u>, that the consent of the Administrator is hereby given to any security assignment which may be required under terms of any mortgage, trust, or security agreement made by and between the Utility and any mortgage, trustee, or secured party, as security for bonds or other indebtedness of such Utility, present or future; such mortgagee, trustee, or secured party may realize upon such security in foreclosure or other suitable proceedings, and succeed to all right, title, and interests of such Utility.
- 26. Waiver of Default. Any waiver at any time by any party to this agreement of its rights with respect to any default of any other party thereto, or with respect to any other matter arising in connection with such agreement, shall not be considered a waiver with respect to any subsequent default or matter.
- 27. <u>Notices and Computation of Time</u>. Any notice required by this agreement to be given to any party shall be effective when it is received by such party, and in computing any period of time from such notice, such period shall commence at 2400 hours on the date of receipt of such notice.
- 28. <u>Interest of Member of Congress.</u> No Member of, or Delegate to Congress, or Resident Commissioner shall be admitted to any share or part of this agreement or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

#### APPLICABLE ONLY IF TRANSFEREE IS A PARTY TO THIS AGREEMENT

- 29. <u>Balancing Phase Demands.</u> The Administrator may, at any time during the term of this agreement, require the Transferee to make such changes as are necessary on its system to balance the phase currents at any point of delivery so that the current on any one phase shall not exceed the current on any other phase at such point by more than ten percent.
- 30. Adjustment for Unbalanced Phase Demands. If the Transferee fails to make promptly the changes mentioned in section 29 hereof, the Administrator, at the Transferee's expense, may determine, for each month thereafter until such changes are made, that the registered demand of the Transferee at the point of delivery in question is equal to the product obtained by multiplying by three the largest of the Integrated Demands of the Transferee on any phase at such point during such month. This section shall not apply with respect to any point of delivery where the current required to be supplied at such point is other than three-phase current.

- 31. Changes in Demands or Characteristics. The Transferee will, whenever possible, give reasonable notice to the Administrator of any unusual increase or decrease of its demands for electric power and energy on the Transferor's system, or of any unusual change in the load factor or power factor at which the Transferee will take delivery of electric power and energy under this contract.
- 32. <u>Inspection of Transferee's Facilities.</u> The Administrator may, but shall not be obligated to, inspect the Transferee's electric installation at any time, but such inspection, or failure to inspect, shall not render the Government, its officers, agents, or employees, liable or responsible for any injury, loss, damage, or accident resulting from defects in such electric installation, or for violation of this agreement. The Administrator shall observe written operating instructions posted in facilities and such other necessary instructions or standards for inspection as the parties agree to. Only those electric installations used in complying with the terms of this contract shall be subject to inspection.

#### 33. Electric Disturbances.

- (a) Each party shall design, construct, operate, maintain and use its electric system in conformance with accepted utility practices:
  - (1) to minimize electric disturbances such as, but not limited to, the abnormal flow of power which may damage or interfere with the electric system of the other party or any electric system connected with such other party's electric system; and
  - (2) to minimize the effect on its electric system and on its customers of electric disturbances originating on its own or another electric system.
- (b) If both parties to this agreement are parties to the Agreement Limiting Liability Among Western Interconnected Systems, their relationship with respect to system damages shall be governed by that Agreement.
- (c) During such time as a party to this agreement is not a party to the Agreement Limiting Liability Among Western Interconnected Systems, its relations with the other party with respect to system damages shall be governed by the following sentence, notwithstanding the fact that the other party may be a party to said Agreement Limiting Liability Among Western Interconnected Systems. A party to this agreement shall not be liable to the other party for damage to the other party's system or facilities caused by an electric disturbance on the first party's system, whether or not such electric disturbance is the result of negligence by the first party, if the other party has failed to fulfill its obligations under subsection (a)(2) above.
- (d) If one of the parties to this agreement is not a party to the Agreement Limiting Liability Among Western Interconnected Systems, each party to this agreement shall hold harmless and indemnify the other party, its officers and employees, from any claims for loss, injury, or damage suffered by those to whom [continued on next page]

the first party delivers power not for resale, which loss, injury or damage is caused by an electric disturbance on the other party's system, whether or not such electric disturbance results from the negligence of such other party, if such first party has failed to fulfill its obligations under subsection (a)(2) above, and such failure contributed to the loss, injury or damage.

- (e) Nothing in this section shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a party to this agreement.
- 34. <u>Harmonic Control</u>. Each party shall design, construct, operate, maintain, and use its electric system in accordance with good engineering practices to minimize to acceptable levels the production of harmonic currents and voltages injected or coupled into the other party's facilities.

#### APPLICABLE ONLY IF TRANSFEREE IS NOT A PARTY TO THIS AGREEMENT

35. <u>Protection of the Transferor.</u> Protection is or will be afforded to the Government or its Transferor under such of the following provisions and conditions as are specified in each contract executed or to be executed by the Administrator and each third party Transferee named in this agreement: the power factor clause of the applicable Bonneville Wholesale Rate Schedule and the subject matter set forth in the General Contract Provisions under the following titles, namely:

Adjustment for Unbalanced Phase Demands; Uncontrollable Forces; Continuity of Service; Changes in Demands or Characteristics; Electrical Disturbances; Harmonic Control; Balancing Phase Demands; Permits; Ownership of Facilities; and Inspection of Purchaser's Facilities.

#### RELATING ONLY TO RURAL ELECTRIFICATION ADMINISTRATION BORROWERS

36. <u>Approval of Agreement</u>. This agreement shall not be binding on the parties thereto if it is not hereafter approved the Administrator of the Rural Electrification Administration and any other entity from whom the Borrower borrows under an indenture which requires the lender's approval; <u>provided</u>, <u>however</u>, that the Borrower shall notify the Administrator of any such entity prior to the Administrator's execution of this agreement. If so approved it shall be effective at the time stated in the section of this agreement entitled "Term of Agreement."

#### APPLICABLE ONLY IF THE ADMINISTRATOR IS THE TRANSFEROR

- 37. Equitable Adjustment of Rates.
- (a) As used in this section, the words "Rate Adjustment Date" shall mean any date designated by the Administrator after the date a new rate schedule is available for the class, quality, and type of service covered by this agreement; provided, however, that a Rate Adjustment Date shall not occur more frequently than once in any 12-month period. The Administrator may file with the Federal Power Commission or its successor for approval of a revised or new rate when he determines such revised or new rate is necessary to reflect the cost of the [continued on next page]

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class, quality, and type of service covered by this agreement. The Administrator shall provide the Transferee with his then proposed schedule or schedules, supporting data, and a statement reflecting the effects of the proposed schedule or schedules on the charges specified in this agreement no less than 90 days prior to filing a proposed schedule or schedules with the Federal Power Commission or its successor, unless shorter periods are agreed upon by the parties hereto. The rate schedule in effect under this agreement on the Rate Adjustment Date shall continue in effect until the next Rate Adjustment Date on which revised or new rate schedules shall have been proposed by the Administrator and confirmed and approved by the Federal Power Commission or its successor.

(b) The Transferee shall pay the Administrator for the service made available under this agreement during the period commencing on each Rate Adjustment Date and ending at the beginning of the next Rate Adjustment Date at the rate specified in any rate schedule available at the beginning of such period which would be incorporated in a new agreement for service of the class, quality, and type provided for in this agreement, and in accordance with the terms hereof and of the General Transmission Rate Schedule Provisions incorporated or referred to in such rate schedule. If at the beginning of such period more than one rate is available for the class, quality, and type of service covered by this agreement, the Transferee shall, prior to 30 days after the later of the effective date of such rate or the date of approval of such rate by the Federal Power Commission or its successor, notify the Administrator in writing which of such rates the Transferee elects to have applied under this agreement during such period. If the Transferee fails to make such election, the Administrator shall determine the applicable rate. Such election by the Transferee or determination by the Administrator shall be applied as of the beginning of the first billing month following the effective date of such rate.

Revision F
Exhibit D, Page 1 of 5
Contract No. DE-MS79-81BP90210
Colstrip Project
Effective at 0000 hours on October 1, 2011

This Exhibit D, Revision F, replaces Exhibit D, Revision E, (which was effective at 0000 hours on May 1, 2002, and was the 14<sup>th</sup> Revision to Exhibit D) and updated the Intertie Charge based on revised Transmission Demands and Capacity Requirements resulting from the termination of the Capacity Exchange, which is described in Section 12 and elsewhere in this Agreement.

#### TRANSMISSION DEMANDS AND CALCULATION OF CHARGES

#### TRANSMISSION DEMANDS

**Townsend-Garrison** E to W W to E Broadview-Unit 1 & 2 Unit 3 Unit 4 **Transmission Transmission Townsend** (kW) (**kW**) (**kW**) Demand (kW) Demand (kW) (**kW**) Northwestern 330,000 210,000 210,000 420,000 0 Energy LLC Puget 330,000 175,000 175,000 680,000 0 **PGE** 140,000 140,000 280,000 0 Avista Corp 105,000 105,000 210,000 0 PacifiCorp 70,000 70,000 140,000 0 Subtotal 660,000 700,000 700,000 1,730,000 0 Bonneville 0 16,000 **Total Transmission Demand** 1,746,000

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<sup>&</sup>lt;sup>1</sup> The Companies' rights to transmission in the Broadview-Townsend section are determined pursuant to an agreement among the Companies know as the Colstrip Project Transmission Agreement.

Revision F
Exhibit D, Page 2 of 5
Contract No. DE-MS79-81BP90210
Colstrip Project
Effective at 0000 hours on October 1, 2011

#### CALCULATION OF INTERTIE CHARGE

The Intertie Charge includes interest and amortization, general plant, and operation and maintenance costs.

#### (a) Calculation of Total Annual Cost (TAC)

<u>ITEM</u>	INVESTMENT <sup>2</sup>	ANNUAL COST RATIO <sup>3</sup>	TOTAL ANNUAL COST
Transmission Line	\$102,614,315	$0.101635^4$	\$10,429,206
Terminal Facilities	$18,559,912^5$	$0.101635^4$	1,886,337
Access Road & Bridge	855,989 <sup>5</sup>	$0.101635^4$	86,998
Rock Creek Settlement	1,759,395	$0.075635^6$	133,072
TOTAL	\$123,789,611	TAC =	\$12,535,613

<sup>&</sup>lt;sup>2</sup> Increased by 6.63 percent per the requirements of section 9(m)iv. of the agreement, as amended by Amendatory Agreement No. 1, executed August 10, 1994.

<sup>&</sup>lt;sup>3</sup> Annual Cost Ratios (ACRs) are calculated in accordance with Amendment No. 1.

<sup>&</sup>lt;sup>4</sup> 0.075635 Negotiated ACR for interest (including a 0.25 percent adder for prepayment penalty) and amortization over 44 years as a weighted average service life of all facilities.

<sup>0.01300</sup> ACR for general plant interest and amortization fixed through September 30, 2004, per section 9(o) of the Agreement.

<sup>0.01300</sup> ACR for operations and maintenance fixed through September 30, 2004, per section 9(p) of the Agreement.

<sup>[0.101635</sup> Total of these three ACR components]

<sup>&</sup>lt;sup>5</sup> Terminal facilities include \$3,056,669 for capacitors and \$4,575,891 for reactors at Garrison Substation. See footnote 4 in Exhibit G for an explanation of how the capacitor, reactor, and access road and bridge investments were distributed between Exhibit D and Exhibit G.

<sup>&</sup>lt;sup>6</sup> 0.075635 Recomputed ACR for interest (including a 0.25 percent adder for prepayment penalty) and amortization over 44 years as a weighted average service life of all facilities. Based on Companies exercising their option to change the interest rate per section 9(m) of the Agreement as amended. 0.00000 ACR for general plant not applicable.

<sup>&</sup>lt;u>0.00000</u> ACR for operations and maintenance not applicable.

<sup>0.075635</sup> Total

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#### (b) Calculation of Exchange Ratio (ER) <sup>7</sup>

ER = Broadview-Townsend Investment ÷ Townsend-Garrison Investment

 $ER = $145,270,194 \div $115,069,756^8$ 

ER = 1.262

#### (c) Calculation of Exchange Credit (EC)

 $EC = ER \times Capacity Exchanged with Bonneville$ 

Company	Capacity Exchanged with Bonneville (kW)	Exchanger Credit (EC) (kW)
Northwestern	0	0
Energy LLC		
Puget	0	0
PGE	0	0
Avista Corp.	0	0
PacifiCorp	0	0
Total	0	0

<sup>7</sup> This Exchange Ratio (ER) shall remain fixed for the remainder of the term of the Agreement.

\$113,654,904 Total original investment 1,376,266 Microwave and radio costs 38,586 General plant costs \$115,069,756

<sup>&</sup>lt;sup>8</sup> Microwave and radio, as well as general plant costs, are normally recovered through the ACRs, but since the Companies separately identified them in the Broadview-Townsend investment, they are also treated separately for purposes of calculating the Garrison-Townsend investment.

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#### (d) Calculation of Capacity Requirement (CR) minus Exchange Credit (EC)

	Capacity Requirement		Exchange Credit (EC)	Proration After Exchange
Company	(CR) (kW)	Direction	(kW)	(CR-EC) (kW)
Northwestern	420,000	E to W	0	420,000
Energy LLC	0	W to E	0	0
Puget	680,000	E to W	0	680,000
	0	W to E	0	0
PGE	280,000	E to W	0	280,000
	0	W to E	0	0
Avista Corp.	210,000	E to W	0	210,000
	0	W to E	0	0
PacifiCorp	140,000	E to W	0	140,000
-	<u>0</u>	W to E	<u>0</u>	<u>0</u>
Subtotal	1,730,000		<u>0</u>	<u>1,730,000</u>
Bonneville	16,000	E to W	0	16,000
	0	W to E	0	0
	1,746,000	= Total Capacity	1,746,000	
		Requirement (TCR)		

#### (e) CALCULATION OF INTERTIE CHARGES<sup>9</sup>

Nonfirm Revenue (NFR) is assumed to be zero, but any actual NFR shall be used in the final calculation:

TCR = 1,746,000 kW

<sup>&</sup>lt;sup>9</sup> This Intertie Charge is without any credits either for nonfirm Bonneville use or for Nonfirm Revenues. This Intertie Charge will have such credits applied in the months in which they occur. The symbol NFR represents the total of such credits for such month.

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Therefore, Intertie Charges = 
$$\frac{(TAC + 12) - NFR}{TCR} \times (CR - EC)$$
  
=  $\frac{((12,535,613 \div 12 \text{ mo.})}{1,746,000} - 0) \times (CR-EC)$   
= . 59830 per kW mo. x (CR-EC)

Company	(CR-EC) (kW)	Intertie Charge (\$/mo.)
Northwestern	420,000	\$251,286
Energy LLC		
Puget	680,000	406,844
PGE	280,000	167,524
Avista Corp.	210,000	125,643
PacifiCorp	140,000	83,762
Bonneville	16,000	9,573
Total	1,746,000	\$1,044,632

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#### Schedule TGT –1

#### Townsend-Garrison Transmission

#### Section 1. AVAILABILITY:

This schedule shall apply to all agreements which provide for the firm transmission of electric power and energy over transmission facilities of the Government's section of the Montana Intertie.

#### Section 2. RATE:

The monthly charge shall be one-twelfth of the sum of the annual charges listed below, as applicable and as specified in the agreements for firm transmission. The Townsend-Garrison 500 kV lines and associated terminal, line compensation and communication facilities are a separately identified portion of the Federal Transmission System. Annual revenues plus credit for Government use should equal annual costs of the facilities, but in any given year there may be either a surplus or a deficit. Such surpluses or deficits for any year shall be accounted for in the computation of annual costs for succeeding years. Revenue requirements from firm transmission use will be decreased by any revenues received from non-firm use and credits for all Government use. The general methodology for determining the firm rate is to divide the revenue requirements by the total firm capacity requirements.

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Therefore, the higher the total capacity requirements, the lower will be the unit rate.

If the Government provides firm transmission service in its section of the Montana Intertie in exchange for firm transmission service in a customer's section of the Montana Intertie, the payment by the Government for such transmission services provided by such customer will be made in the form of a credit in the calculation of the Intertie Charge for such customer.

During an estimated one to three-year period following the commercial operation date of the third generating unit at the Colstrip Thermal Generating Plant at Colstrip, Montana, the capability of the Federal Transmission System west of Garrison Substation may be different from the long-term situation. It may not be possible to complete the extension of the 500 kV portion of the Federal Transmission System to Garrison by such commercial operation date. In such event, the 500/230 kV transformer will be an essential extension of the Townsend-Garrison intertie facilities, and the annual costs of such transformer will be included in the calculation of the Intertie Charge. However, starting one month after extension to Garrison of the 500 kV portion of the Federal Transmission System, the annual costs of such transformer will no longer be included in the calculation of the Intertie Charge.

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- a. <u>Non-Firm Transmission Charge</u>. This charge will be filed as a separate Rate Schedule and revenues received thereunder will reduce the amount of revenue to be collected under the Intertie Charge below.
- b. Intertie Charge for Firm Transmission Service.

Intertie Charge = 
$$\left[ \left( \frac{TAC}{12} - NFR \right) x \frac{(CR - EC)}{TCR} \right]$$

#### Section 3. DEFINITIONS:

TAC = Total Annual Costs of facilities associated with the Townsend-Garrison 500 kV transmission line including terminals, and, prior to extension of the 500 kV portion of the Federal Transmission System to Garrison, the 500/230 kV transformer at Garrison. Such annual costs are the total of (1) interest and amortization of associated Federal investment and the appropriate allocation of general plant costs, (2) operation and maintenance costs, (3) an allowance for Bonneville's general administrative costs which are appropriately allocable to such facilities, and (4) payments made pursuant to section 7(m) of Public Law 96-501 with respect to these facilities. Total Annual Costs shall be adjusted to reflect reductions to unpaid total costs as a result of any amounts received, under [continued on next page]

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agreements for firm transmission service over the Montana Intertie, by the Government on account of any reduction in Transmission Demand, termination or partial termination of any such agreement or otherwise to compensate BPA for the unamortized investment, annual cost, removal, salvage, or other cost related to such facilities.

- NFR = Non-Firm Revenues, which are equal to (1) the product of the Non-Firm Transmission Charge described in 2(a) above, and the total non-firm energy transmitted over the Townsend-Garrison line segment under such charge for such month; plus (2) the product of the Non-Firm Transmission Charge and the total non-firm energy transmitted in either direction by the Government over the Townsend-Garrison line segment for such month.
- CR = Capacity Requirement of a customer on the Townsend-Garrison 500 kV transmission facilities as specified in its firm transmission agreement.
- TCR = Total Capacity Requirement on the Townsend-Garrison 500 kV transmission facilities as calculated by adding (1) the sum of all Capacity Requirements (CR) specified in firm [continued on next page]

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transmission agreements described in section 1 and (2) the Government's firm capacity requirement. The Government's firm capacity requirement shall be no less than the total of the amounts, if any, specified in firm transmission agreements for use of the Montana Intertie.

EC = Exchange Credit for each customer which is the product (1) of the ratio of investment in the Townsend-Broadview 500 kV transmission line to the investment in the Townsend-Garrison 500 kV transmission line, and (2) the capacity which the Government obtains in the Townsend-Broadview 500 kV transmission line through exchange with such customer. If no exchange is in effect with a customer, the value of EC for such customer shall be zero.

(WP-PCI-3596A)

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#### LOSS DETERMINATION AND ALLOCATION

#### 1. Methods

Loss determination shall be based on coincidental actual measurements at all points where power can enter or leave the Garrison-Broadview-Colstrip 500 kV system as indicated in the diagram below and the allocation of losses shall be in accordance with the procedures herein. Such determinations and allocation shall be done not less often than once each hour. Mathematical functions will be developed to calculate losses in each segment of the above described system. Such functions used herein shall be checked for accuracy upon the request of any party hereto and corrections for accuracy shall be made as soon as reasonably practicable. The parties shall use every effort in good faith to agree on such functions and proceed under section 20 of Exhibit C if such effort does not result in agreement.

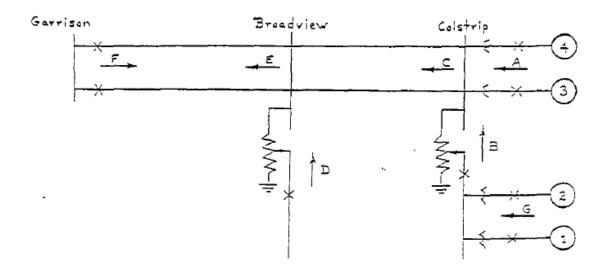


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#### DEFINITIONS AND NOMENCLATURE

- X = Metering points (arrow indicates positive direction of flow)
- A = Metered power flow into Colstrip 3 & 4 step-up transformers
- B = Metered power flow into Colstrip 500/230 kV auto-transformers
- C = Calculated power flow into Colstrip-Broadview 500 kV lines at Colstrip
- D = Metered power flow into Broadview 500/230 kV auto-transformers
- E = Calculated power flow into Broadview-Garrison 500 kV lines at Broadview
- F = Metered power flow into Broadview-Garrison 500 kV lines at Garrison
- G = Metered power flow into Colstrip 1 & 2 step-up transformers
- LT = Total losses to be allocated = A + B + D + F
- LA = Calculated losses in Colstrip 3 & 4 step-up transformers
- LB = Calculated losses in Colstrip 500/230 kV auto transformers
- LC = Calculated losses in Colstrip-Broadview 500 kV lines
- LD = Calculated losses in Broadview 500/230 kV auto-transformers
- LE = Calculated losses in Broadview-Garrison 500 kV lines
- LG = Calculated losses in Colstrip 1 & 2 step-up transformers = f ( )
- LW = Losses assessed on all schedules by the Companies using transmission system surplus capacity as that term is defined in the Colstrip Project Transmission Agreement, on all schedules by Bonneville in excess of its Transmission Demands, and on all schedules where a transmission capacity owner or Bonneville provides transmission service for another person. Such losses shall be assessed at 5 percent of such schedules.

#### INITIAL CALCULATION OF LOSSES (Indicated by subscript I):

 $LA_{I} = f(|A|)$ , where f(|A|) means a function of |A|, and |A| means the absolute value of A  $LB_{I} = f(|B|)$ 

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$$LC_F = f(|C_F|)$$
, where  $|C_F| = |A + B| - |LA_F| - |LB_F|$ 

$$LD_F = f(|D|)$$

$$LF_I = f(FI)$$
, where metered power flow F is used rather than calculated power flow E.

Subject to review by all parties hereto, the line owners shall determine the appropriate functions f([A]),  $f([C_I])$ ,  $f([C_I])$ ,  $f([C_I])$ ,  $f([C_I])$ , and f([G]) to represent losses on those facilities. These functions may include relationships of voltage, current, var flow and other appropriate constants and variables.

$$LT_I = LA_I + LB_I + LC_I + LD_I + LB_I$$

#### ALLOCATION OF CALCULATION AND METERING ERROR AND OF LW

$$LA = LA_{F} \times (LT/LT_{F})(LT-LW)/LT = LA_{F} \times (LT-LW)/LT_{F};$$

where  $(LT-LW)/LT_{I} = Allocation Factor$ 

 $LB = LB_F \times (Allocation Factor)$ 

 $LC = LC_{I} \times (Allocation Factor)$ 

 $LD = LD_F x$  (Allocation Factor)

 $LE = LE_F \times (Allocation Factor)$ 

As a check, the following should balance within 2 kilowatthours

$$LA + LB + LC + LD + LE + LW = A + B + D + F$$

#### ALLOCATION AMONG USERS WHERE SUBSCRIPT (N) REFERS TO:

N = 1 = Montana

2 = Puget

3 = PGE

4 = WWP

5 = Pacific

6 = Basin Electric

7 = Bonneville

All schedules among the parties for replacement or return of losses will be excluded in the following calculation.

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 $A_{N}$  = N's share of power flow at A

 $G_N = N$ 's share of power flow at G

 $BW_N = N$ 's schedules of power flow at B subject to assessment of LW losses

 $SB_N = N$ 's total schedules of power flow at B less  $BW_N$ 

 $DW_{N} = N$ 's schedules of power flow at D subject to assessment of LW losses

 $\mathcal{D}_N = N$ 's total schedules of power flow at D less  $\mathcal{D}_N$ 

$$B_2 = G_2 - LG_2 + SB_2$$
, where  $LG_2 = LG \times G_2/G$ 

$$B_N = SB_N \text{ for } N = 3, 4, 5, 6, 7$$

$$B_1 = B - B_2 - B_3 - B_4 - B_5 - B_6 - B_7 - \sum_{i=1}^{7} BW_N *$$

$$\boldsymbol{\mathit{LB}_1} = \left| \boldsymbol{\mathit{B}_1} \right| \times \left( \operatorname{LB} / \sum_{a}^{a} \left| \boldsymbol{\mathit{B}_N} \right| \right)$$

\* If 
$$B_1 \le 0$$
 and  $|B_1| \le (A_1 - LA_1 - LB_1)$ , then  $C_1 = A_1 + B_1 - LA_1 - LB_1$   
\* If  $B_1 \le 0$  and  $|B_1| > (A_1 - LA_1 - LB_1)$ , then  $C_1 = 0$   
\* If  $B_1 \ge 0$ , then  $C_1 = A_1 + B_1 - LA_1 - LB_1$ 

\* If 
$$B_1 < 0$$
 and  $B_1 > (A_1 - LA_1 - LB_1)$ , then  $C_1 = 0$ 

\* If 
$$B_1 \ge 0$$
, then  $C_1 = A_1 + B_1 - LA_1 - LB_1$ 

$$C_N = A_N + B_N - LA_N - LB_M \text{ for } N = 2, 3, 4, 5, 6, 7$$

$$D_N = SD_N$$
 for  $N = 2, 3, 4, 5, 6, 7$ 

$$D_{1} = D - D_{2} - D_{3} - D_{4} - D_{5} - D_{6} - D_{7} - \sum_{1}^{7} DW_{N} **$$

$$LD_1 = |D_1| \times (LD/\sum_{x}^{T} |D_N|)$$

\*\* If 
$$D_1 < 0$$
 and  $|D_1| \le (C_1 - LC_1 - LD_1)$ , then  $E_1 = C_1 + D_1 - LC_1 - LD_1$  \*\* If  $D_1 < 0$  and  $|D_1| > (C_1 - LC_1 - LD_1)$ , then  $E_1 = 0$  \*\* If  $D_1 \ge 0$ , then  $E_1 = C_1 + D_1 - LC_1 - LD_1$ 

\*\* If 
$$D_1 < 0$$
 and  $D_1 > (C_1 - LC_1 - LD_1)$ , then  $E_1 = 0$ 

\*\* If 
$$\mathbb{D}_1 \ge 0$$
, then  $\mathbb{E}_1 = \mathbb{C}_1 + \mathbb{D}_1 - \mathbb{L}\mathbb{C}_1 - \mathbb{L}\mathbb{D}_1$ 

$$E_N = C_N + D_N - LC_N - LD_N$$
 for  $N = 2, 3, 4, 5, 6, 7$ 

$$LA_{N} = |A_{N}| \times (LA/\sum_{i=1}^{T} |A_{N}|) = LA \times |A_{N}| / \sum_{i=1}^{T} |A_{N}|$$

$$L\mathcal{B}_{N} = |\mathcal{B}_{N}| \times (LB/\sum_{i=1}^{n} |\mathcal{B}_{N}|) = LB \times |\mathcal{B}_{N}|/\sum_{i=1}^{n} |\mathcal{B}_{N}|$$

$$LC_{N} = |C_{N}| \times (LC/\sum_{1}^{7} |C_{N}|) = LC \times |C_{N}|/\sum_{1}^{7} |C_{N}|$$

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$$\begin{split} LD_N &= \|D_N\|_X \left( LD/\frac{1}{1} \|D_N\| \right) = LD_X \|D_N\|/\frac{1}{1} \|D_N\| \\ LB_N &= \|B_N\|_X \left( LE/\frac{1}{1} \|B_N\| \right) = LE_X \|B_N\|/\frac{1}{1} \|D_N\| \\ L_N &= LA_N + LB_N + LC_N + LD_N + LB_N \end{split}$$

As a check, the following should balance within 2 kilowatthours:

$$LW + \sum_{\mathbf{I}} \mathbf{L}_{\mathbf{N}} = A + B + D + F$$

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#### OPERATION AND MAINTENANCE PROVISIONS AND CHARGES

This Exhibit G, Revision H, replaces Exhibit G, Revision G, (which was effective at 0000 hours on October 1, 2008, and was the 17<sup>th</sup> Revision to Exhibit G) and updates the proration (not the total charge itself) of the Monthly Line Compensation charge between the Companies and Bonneville, shown in Section 6 of this Exhibit. This is based on revised Transmission Demands and Capacity Requirements resulting from the termination of the Capacity Exchange described in Section 12 and elsewhere in this Agreement.

#### 1. BONNEVILLE SHALL

- (a) Operate and maintain the series and shunt compensation facilities located at Garrison Substation, part of which are required by transmission facilities constructed by the Companies between Townsend and Broadview, in the same manner in which Bonneville operates and maintains similar facilities of the Government; and
- (b) Operate and maintain all power system control facilities at Garrison, the maintenance for which is not provided for pursuant to another agreement, which are necessary to integrate the Companies' facilities with the Government's control system, and from time to time when Bonneville determines it is necessary, modify or replace the Government power system control facilities.
- 2. For routine replacement of minor components of any of the equipment described in Section I(a) above and any part of Section I(b) above, if any, which belongs to NorthWestern Energy or to the Companies collectively, Bonneville shall provide and install such replacement parts and NorthWestern Energy, on behalf of the Companies pursuant to the Colstrip Project Transmission Agreement, shall compensate Bonneville for the Companies' pro rata share of replacement part costs. By mutual agreement of the parties NorthWestern Energy may provide Bonneville, at the Companies' expense, replacement parts in lieu of such compensation. Such provision of replacement parts by NorthWestern Energy shall be subject to Bonneville's acceptance of such parts as equivalent to those that Bonneville installed or would have installed and shall be further subject to such parts being made available at a time and place acceptable to Bonneville.
- 3. In the event of a major failure of any of the equipment described in Section l(a) above, the parties shall use every reasonable effort in good faith to negotiate and execute a mutually acceptable agreement providing for the replacement or repair of such equipment. The Companies shall pay their pro rata share of the cost of any such replacement or repair.

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- 4. The Companies agree to pay their pro rata share of the cost of modifying or replacing any of the equipment described in Section 1(a) above if and when Bonneville requires such modification or replacement to make the operation of such equipment compatible with the operation of other Government equipment. Bonneville shall provide reasonable advance notice to the Companies consistent with the availability of equipment and budgetary planning that such modification or replacement is required. Any such modification or replacement of equipment will be required only in keeping with prudent utility practice and (a) when Bonneville similarly replaces or modifies similar equipment owned by the Government at the same station; (b) as a part of a programmed project involving a significant portion of Bonneville's system; or (c) by mutual agreement of the parties.
- 5. For performing the duties in Sections l(a) and l(b) above, NorthWestern Energy on behalf of the Companies shall pay Bonneville each month in the term hereof, commencing on the Effective Date, the monthly charge (Monthly Line Compensation Charge) for the Companies determined in accordance with the method illustrated in Section 6 below. The Monthly Line Compensation Charge shall be updated utilizing those annual cost ratios derived from tables used to update O&M charges pursuant to Bonneville's Use-of-Facilities Transmission (UFT) Rate Schedule.

#### 6. CALCULATION OF MONTHLY LINE COMPENSATION CHARGE

Given:

Garrison-Townsend Distance = 91.7 miles Townsend-Broadview Distance = 133.0 miles Total = 224.7 miles

Series capacitors required at Garrison: 2 – 474,000 kVAr units (one for each line)

Shunt reactors required at Garrison: 2-225,000 kVAr units (one for each line)

Since all series capacitors for the Garrison-Broadview line are located at Garrison, the responsibility for the cost of such equipment shall be prorated based on line mileage.

Townsend-Broadview share =  $133.0 \div 224.7 = 59.19\%$ 

The shunt reactors at Garrison are one-half of the total required for the Garrison-Broadview line; the other one-half being located at Broadview. It is deemed that the reactors at Garrison serve one-half of the line ( $224.7 \div 2 = 112.35$  miles) of which 91.7 miles belong to the Government and 20.65 miles belong to the Companies. Prorating based on line mileage, the:

Townsend – Broadview share =  $20.65 \div 112.35 = 18.38\%$ 

Section 6 (continued on next page)

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# CALCULATION OF MONTHLY LINE COMPENSATION CHARGE (continued)

6

		Annual Cost	Annual Cost				
		Ratio with	Ratio without	Annual Cost	Annual Cost		Total Annual
Facilities	Investment	$0 \& M^1$	O&M	with O&M	_	O&M	$Cost^2$
Series Capacitors	\$4,447,525 <sup>3</sup>	12.37%	n/a	\$550,159	n/a	n/a	\$550,159
Shunt Reactors	$\$1,029,545^3$	12.37%	n/a	\$127,355	n/a	n/a	\$127,355
Access Road & Bridge	\$ 179,925	n/a	$0.0780^{4}$	n/a	\$14,034	$$2,339^{5}$	\$16,373
				4677 511	\$14.034	62 230	4603 887

Monthly Line Compensation Charge: \$693,887/year ÷ 12 = \$57,824/month

Proration of Monthly Line compensation Charge between the Companies and Bonneville: See Section d of Revision F to Exhibit D for Calculation of Capacity Requirements (CR):

Proration of Monthly Line Compensation Charge between the Companies and Bonneville:

Monthly Line Compensation Charge	\$57,294	530	\$57,824
CR (kW)	1,730,000	16,000	1,746,000
	Companies	Bonneville	

subtracts column 8 from column 12, which does not capture O&M costs. Yet because there is no separate dollar amounts in the O&M tables, rather than subtracting column 8 (percent of total O&M of annual cost ratio) from column 12 (total including general plant), O&M costs are captured using the total cost (just column 12). Column 12 (which includes O&M) from ACR table dated September 30, 2007, for Garrison Substation (Type H5 substation). The typical Annual cost method

<sup>2</sup> Actual costs of operating and maintaining any facilities described in Section 1(b) above which are not owned by the Government shall be separately identified, added to the Total Annual Cost, and billed to NorthWestern Energy.

n	Total Investment	Townsend-Broadview Shares, Exhibit G	Townsend-Garrison Shares,
			Exhibit D – Term. Fac
East Capacitors	\$7,513,981	\$4,447,525	\$3,066,456
East Reactors	\$5,601,443	\$1,029,545	\$4,571,894
Access Road & Bridges	\$ 979,120	\$ 179,925	\$ 799,195

Series Capacitors Investment x Townsend-Broadview's Shares = \$7,513,981 x 0.5919 = \$4,447,525 (see page 2 of this Section 6: CALCULATION OF MONTHLY LINE COMPENSATION CHARGE – 59.19%.)

Shunt Reactor Investment x Townsend-Broadview's Shares = \$5,601,443 x 0.1838 = \$1,029,545 (see page 2 of this Section 6: CALCULATION OF MONTHLY LINE COMPENSATION CHARGE – 18.38%.)

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## Footnotes (continued)

<sup>4</sup> (a) Annual cost Ratios of 0.0780 is derived from the following table. (See footnote 5, Revision F to Exhibit D as otherwise updated or revised).

0.06500

Total I&A

+  $\underline{0.01300}$  (0.01300 is fixed by the contract, see Amendment No. 1 section 1(o)) 0.07800Plus General Plant

(b) Annual cost Ratios shall be revised annually to reflect actual costs. Such annual revisions shall be made effective as of each October 1 for the Fiscal Year beginning on such October 1. The O&M costs shall be calculated on Bonneville's average system costs, not equipment-specific costs.

 $^{5}$  \$179,925 x 0.01300 = \$2,339

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