

REPLACEMENT SERVICE AGREEMENT
for
NETWORK INTEGRATION
TRANSMISSION SERVICE
executed by the
UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
acting by and through the
BONNEVILLE POWER ADMINISTRATION
and
FULL NAME OF CUSTOMER

1. This Replacement Service Agreement (Agreement), dated as of _____, is entered into, by and between the Bonneville Power Administration Transmission Business Line (Transmission Provider) and [Customer Name] (Transmission Customer).
2. The Transmission Customer has been determined by the Transmission Provider to have ~~a Completed Application for an existing~~ Network Integration Transmission Service Agreement under the Transmission Provider's Open Access Transmission Tariff (Tariff) (Prior Agreement). This Agreement shall supersede the Prior Agreement identified in Section 9(a) of Exhibit A, Table 1.
3. Service under this agreement shall commence on _____ ~~the later of (1) the requested Service Commencement Date, or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed.~~ Service under this aAgreement shall terminate on such date as mutually agreed upon by the parties.
4. The Transmission Provider agrees to provide and the Transmission Customer agrees to pay for Network Integration Transmission Service in accordance with the provisions of Part III of the Tariff and this ~~Service~~ Agreement.
5. Notwithstanding changes to the Tariff that may be ordered by the Federal Energy Regulatory Commission (Commission), the Transmission Provider shall, for the term of this Agreement, offer Network Integration Transmission Service that has the following fundamental characteristics:

- a. The Transmission Provider shall plan, construct, operate and maintain its Transmission System to provide Network Integration Transmission Service to meet Network Loads.
 - b. The Transmission Provider shall provide Network Integration Transmission Service for delivery of capacity and energy from designated Network Resources to serve Network Loads, subject to redispatch rights.
 - c. The Transmission Provider shall provide Secondary Service from non-Network Resources on an as available basis at no additional charge and at a higher priority than service to non-firm Point-to-Point Transmission Customers.
 - d. Transmission Customers may terminate and designate new Network Resources.
 - e. Transmission Customers may add new Points of Delivery and interconnection points.
 - f. Curtailments will be made on a non-discriminatory basis.
6. The Transmission Provider may, at any time, propose to amend the fundamental Network Integration Transmission Service characteristics described in Section 5 of this Agreement. Such proposed amendment shall be offered to all Transmission Customers with Replacement Service Agreements for Network Integration Transmission Service.
- a. If less than two thirds of such customers concur with the proposed amendment, the Transmission Provider may elect to execute the amendment with only those customers that concur.
 - b. If two thirds or more of such customers concur with the proposed amendment, the proposed amendment shall apply to all Transmission Customers with Network Integration Replacement Service Agreements.
7. For the term of this Agreement, and for serving existing obligations as defined in this Agreement, the Transmission Provider shall:
- a. spread redispatch costs pursuant to the Tariff over all Network Integration Transmission Customers; and
 - b. spread congestion costs, that are not redispatch costs, over all Transmission Customer contracts not converted to RTOW.
 - c. limit the congestion rate treatment described in this Section 7 to the Transmission Customer's monthly Network Load on the hour of the Monthly Transmission Peak Load, selected from the period FY 1998 - FY 2002, and as specified in Section 9(b) of Exhibit A, Table 1.
 - d. Rate Mitigation Measures [Place Holder]

8. Disputes concerning this Agreement shall be resolved as provided for in the Tariff.

9. This Agreement shall govern regarding differences between the Tariff and this Agreement.

10. Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated in Exhibit B.

~~11.6.~~—The Tariff, Exhibit A (Specifications for Network Integration Transmission Service), Exhibit B (Notices), and Exhibit C (Network Operating Agreement) are incorporated herein and made a part hereof. Capitalized terms not defined in this agreement are defined in the Tariff.

~~12.7.~~—This Service Agreement shall be interpreted, construed, and enforced in accordance with Federal law.

~~13.8.~~—This Service Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors.

~~14.9.~~—The Transmission Customer and the Transmission Provider agree that provisions of Section 3201(i) of Public Law 104-134 (Bonneville Power Administration Refinancing Act) are incorporated in their entirety and hereby made a part of this Service Agreement.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

CUSTOMER NAME

UNITED STATES OF AMERICA
Department of Energy
Bonneville Power Administration

By: _____

By: _____

Name: _____
(Print/Type)

Name: _____
(Print/Type)

Title: _____

Title: Transmission Account Executive

Date: _____

Date: _____

(W:\TMC\CT\Customer\Contract [DRAFT or FINAL]\#####.doc) 00/00/01

**EXHIBIT A
SPECIFICATIONS FOR
NETWORK INTEGRATION TRANSMISSION SERVICE**

**TABLE 1
REQUEST FOR TRANSMISSION SERVICES**

The OASIS Assignment Reference Number (ARef) is: _____¹

1. TERM OF TRANSACTION

Service Commencement Date: at 0000 hours on X.
Termination Date: at 0000 hours on X.

(Roll-over Rights definition place holder)

~~As of the execution date of this Agreement, the Transmission Provider does not have sufficient transmission capacity to accommodate Point to Point Transmission Service to the Transmission Customer beyond the Termination Date. The Transmission Customer shall not have the right to continue to take Point to Point Transmission Service from the Transmission Provider after the Termination Date pursuant to section 2.2 of the Tariff, or its successor, unless, before [insert date 60 days before termination of contract; ex. August 2, 2003], (a) transmission capacity sufficient to accommodate Point to Point Transmission Service to the Transmission Customer for such period becomes available; and (b) the Transmission Customer requests the Transmission Provider to continue service. In such case the Transmission Customer's exercise of its right of first refusal pursuant to section 2.2 or its successor shall be subject to the terms and conditions of such section.~~

2. NETWORK RESOURCES

(a) Generation Owned by the Transmission Customer

Resource	Capacity (MW)	Capacity Designated as Network Resource	Control Area
N/A[*]			

[*Use "N/A" if there is no resource.]

(b) Power Purchased by the Transmission Customer

Source (Contract No.)	Capacity (MW)	Control Area (Delivered From)

¹ To be assigned

(c) **Total Network Resources equals 2(a) + 2(b)**

3. POINT(S) OF RECEIPT

(a) **Non-Federal Resource Point of Receipt**

Name of Substation

Location: the points in the Transmission Provider's [Insert name of Substation & etc.];

Voltage: kV;

Metering: scheduled quantity;

Delivering Party: X;

Control Area: X.

~~(b) (b)~~ **Federal Generation Point(s) of Receipt**

Federal Generation Points of Receipt, and operation of federal Network Resources shall be as documented in Memorandum of Agreement No. 02TX-10925 between the Transmission Provider and the Bonneville Power Administration Power Business Line, as may be amended or replaced.

~~**Location:** FCRTS;~~

~~**Voltage:** varies by facility;~~

~~**Metering:** scheduled quantity;~~

~~**Transmission Demand:** net requirements;~~

~~**Delivering Party:** X;~~

~~**Control Area:** X;~~

~~**Exceptions:** none.~~

4. POINT(S) OF DELIVERY

(a) **Description of Network Points of Delivery** [Option 1 of 2]
Not applicable. See section 4(b) of this Table 1.

(a) **Description of Network Points of Delivery** [Option 2 of 2]

(1) **Name of Point of Delivery**

Voltage: kV;

Metering: X;

Metering Loss Adjustment: [Use only if adjustment applies.]the Transmission Provider will adjust for losses between the Transmission Customer's Point of Delivery and point of metering. Such adjustments shall be specified in written correspondence between the Transmission Provider and the Transmission Customer;

Dynamic Schedule: [Use only if it applies.]the load at this POD shall be served via a [one-way dynamic schedule/two-way-dynamic schedule. (Choose one.)];

Exceptions: X. [List any exceptions that apply, if none - delete.]

(b) **Description of Transfer Points of Delivery** [Option 1 of 2]
Not applicable. See section 4(a) of this Table 1.

(b) **Description of Transfer Points of Delivery** [Option 2 of 2]
For purposes of this section the following definitions shall apply:

“Named Transfer Point of Delivery” means the point where the Transmission Provider delivers power to the Intervening System.

“Point of Receipt from Intervening System” means the point where the Transmission Provider or a Third Party receives power from the Intervening System prior to delivery of power to the Point of Delivery.

(1) **Transfer Point of Delivery Name**

Location of Named Transfer Point of Delivery: X;

Location: X;

Voltage: kV;

Metering: X;

The Transmission Provider's Point of Receipt from Intervening System: X; [Include only if applicable.]

Location: X;

Voltage: kV;

Metering: X;

Transmission Customer Point of Delivery: X; [List the name of the point of delivery where the Transmission Customer takes final delivery of power.]

Location: X;

Voltage: kV;

Metering: X;

Metering Loss Adjustment: X; [Use only if adjustment applies, if none – delete.]

Exceptions: X. [List any exceptions that apply, if none – delete.]

5. NETWORK LOAD

The Application provides the Transmission Customer’s initial annual load and resource information. Annual load and resource information updates shall be submitted to the Transmission Provider at the address specified in Exhibit B, by September 30 of each year, unless otherwise agreed to by the Transmission Provider and the Transmission Customer.

6. DESIGNATION OF PARTY(IES) SUBJECT TO RECIPROCAL SERVICE OBLIGATION

[Insert name of Transmission Customer.]

7. NAMES OF ANY INTERVENING SYSTEMS PROVIDING TRANSMISSION SERVICE

None. [If applicable insert full names of utility(ies).]

8. DECLARED CUSTOMER-SERVED LOAD [Indicate if “Not applicable” and delete sections 8(a) through 8(c)(1)(D).]

(a) Declared Customer-Served Load (CSL) is the monthly amount in megawatts of the Transmission Customer’s Network Load that the Transmission Customer elects not to serve under this Service Agreement.

(b) Where a Transmission Customer’s Network Load is served pursuant to a transmission agreement between the Transmission Provider and a third party, in order for such load to qualify as a declared CSL, such transmission agreement must be for Firm Transmission Service of at least one month to the Transmission Customer’s system, and must include a point of delivery at the Transmission Customer’s system. The

amount of such load which will be treated as a declared CSL is limited to the demand amounts at the point of delivery set forth in such transmission agreement.

- (c) Identify for all CSL:
 - (1) **Name of Resource #1**

- (A) **Monthly Amounts (kW)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2001-2002												
2002-2007												

- (B) **Supplied by(If BPAT): Transmission Provider Contract No. 02TX-XXXXX)**

- (C) **Control Area Delivered From:**

- (D) **Primary Point of Delivery on Transmission Customer System:**

9. OTHER PROVISIONS SPECIFIC TO THIS SERVICE AGREEMENT

a. Prior Agreement superseded by this Agreement: (list).

b. Transmission Customer’s monthly Network Load for determining congestion cost treatment as described in Section 7 of this Agreement.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

10. SERVICE AGREEMENT CHARGES

Service under this Agreement will be subject to some combination of the charges detailed in Tables 1 and 2 of this exhibit. (The appropriate charges for transactions will be determined in accordance with the terms and conditions of the Tariff.)

- (a) **Transmission Charge**
NT-02 Rate Schedule and UFT-02 Rate Schedule or successor rate schedules.

- (b) **System Impact and/or Facilities Study Charge(s)**
System Impact and/or Facilities Study Charges are not required at this time for service under this Service Agreement. [Delete this statement if there are charges. If applicable, reference the reimbursable agreement.]

11. DIRECT ASSIGNMENT AND USE-OF-FACILITIES CHARGES [Option 1 of 2]
 Facilities Charges are not required at this time for the service under this Service Agreement.

11. DIRECT ASSIGNMENT AND USE-OF-FACILITIES CHARGES [Option 2 of 2]

(a) **Direct Assignment Facilities Charges**
 [To be completed.]

(b) **Use-of-Facilities Charges**
 [To be completed.]

Calculation of Charges Pursuant to the UFT-02 Rate Schedule

<u>Facility</u>	<u>Investmen</u> <u>t</u>	<u>I&A</u> <u>Annual</u> <u>Cost Ratio</u>	<u>I&A</u> <u>Annual</u> <u>Cost</u>	<u>O&M</u> <u>Annual</u> <u>Cost</u>	<u>Sum of Non-</u> <u>Coincidental</u> <u>Demands</u>	<u>\$/kW/</u> <u>yr</u>
Substation	\$	%	\$	\$	kW	\$
X	X	X	X	X	X	X

Total UFT Charge¹ = \$#.##/kW/mo

¹ This charge may be revised annually to reflect changes in:
 (1) the yearly noncoincidental demands on the facility under this Service Agreement and other agreements;
 (2) I&A annual cost ratios;
 (3) O&M annual costs; and
 (4) investments in facilities.

**TABLE 2
ANCILLARY SERVICE CHARGES**

This Table 2 is subject to the ACS-02 Rate Schedule or successor rate schedules.

[If a particular service is not applicable, ex. customer not in our control area, insert "Not applicable" under Provider and footnote the reason why.]

	Provided By	Contract No.
1. SCHEDULING, SYSTEM CONTROL AND DISPATCH (Customer required to purchase from Transmission Provider)	Transmission Provider	
2. REACTIVE SUPPLY AND VOLTAGE CONTROL (Customer required to purchase from Transmission Provider)	Transmission Provider	
3. REGULATION & FREQUENCY RESPONSE (Only for customers serving load in Transmission Provider's Control Area)	Transmission Provider	
4. ENERGY IMBALANCE SERVICE (Only for customers serving load in Transmission Provider's Control Area who do not receive requirements power service from BPA)	Transmission Provider ¹	
5. OPERATING RESERVE - SPINNING RESERVE	Transmission Provider	
6. OPERATING RESERVE - SUPPLEMENTAL RESERVE	Transmission Provider	

(W:\TMC\CT\Customer\Contract [DRAFT or FINAL]\#####.doc)

¹ *[If the provider is BPA PBL, add footnote to define.]* Bonneville Power Administration (BPA) Power Business Line (PBL); Energy Imbalance service is not applicable to BPA requirements customers; or not applicable because Transmission Customer serves no load in the Transmission Provider's Control Area.

**EXHIBIT B
NOTICES**

1. NOTICES RELATING TO PROVISIONS OF THE SERVICE AGREEMENT

Any notice or other communication related to this Service Agreement, other than notices of an operating nature (section 2 below), shall be in writing and shall be deemed to have been received if delivered in person, First Class mail, by telefax or sent by acknowledged delivery.

If to the Transmission Customer: If to the Transmission Provider:

Customer Name	Bonneville Power Administration
Address	P.O. Box 491
City State	Vancouver, WA 98666-0491
Attention: [Name of Customer Contact]	Attention: Transmission Account Executive for [Customer Name] – TM/Ditt2
Title:	
Phone: () ___-___	Phone: (360) 418-___
Fax: () ___-___	Fax: (360) 418-___

2. NOTICES OF AN OPERATING NATURE

Any notice, request, or demand of an operating nature by the Transmission Provider or the Transmission Customer shall be made either orally or in writing by telefax or sent by First Class mail or acknowledged delivery.

If to the Transmission Customer: If to the Transmission Provider:

Customer Name	Bonneville Power Administration
Address	Address
City State	City State
Attention: [Name of Customer Contact]	Attention: Name of Contact
Title:	Title:
Phone: () ___-___	Phone: () ___-___
Fax: () ___-___	Fax: () ___-___

3. SCHEDULING AGENT [“Not applicable” if the customer performs its own scheduling; or if customer is a PBL full requirements customer.]

The Transmission Customer has designated the following scheduling agent:

Scheduling Agent Name
Address
City State
Attention: [Name of Contact]
Title:
Phone: () ___-___
Fax: () ___-___
Function(s):

(W:\TMC\CT\Customer\Contract [DRAFT or FINAL]\#####.doc)

**EXHIBIT C
NETWORK OPERATING AGREEMENT**

1. PURPOSE OF NETWORK OPERATING AGREEMENT

The purpose of this Agreement is to identify contractual requirements related to Network Integration Transmission Service over the Transmission Provider's Transmission System. The parties to this agreement (Parties) agree to adhere to Good Utility Practice, including all applicable reliability criteria as observed in the region.

(a) This Agreement requires the Parties to recognize that:

- (1) the Transmission Provider's Transmission System is directly or indirectly interconnected with transmission systems owned or operated by others;
- (2) the flow of power and energy between such systems shall be controlled by the physical and electrical characteristics of the facilities involved and the manner in which they are operated; and
- (3) part of the power and energy being delivered under these Provisions may flow through such other systems rather than through the Transmission Provider facilities. The Parties shall determine methods and take appropriate actions to assure capability for delivery of power and energy at the points of receipt and delivery, and at additional or alternate points of receipt and delivery as established by the Parties.

(b) The Parties shall:

- (1) operate and maintain equipment¹ necessary for interconnecting the Transmission Customer with the Transmission Provider's transmission System;
- (2) transfer data² between their respective control centers as required to maintain reliability of the Transmission System;
- (3) use software programs required for data links and constraint dispatching;

¹ Necessary equipment includes, but is not limited to, remote terminal units, metering, communications, telemetering, and relaying equipment.

² Data may include, but is not limited to, data pertaining to instantaneous Spinning and Non-Spinning Operating Reserves, heat rates, fuel costs, and operational characteristics of Network Resources, generation schedules for Network Resources, interchange schedules, unit outputs for redispatch, voltage schedules, flows of real and reactive power, loss factors, switch status, breaker status, megawatt (MW)/megaVAr flow on lines, bus voltages, transformer taps and other Supervisory Control and Data Acquisition System (SCADA) and real-time data.

- (4) exchange data on forecasted loads and resources necessary for planning and operation; and
- (5) address other technical and operational considerations required for Tariff implementation, including scheduling protocols.

2. TERM

This Agreement shall remain effective through the term of the Service Agreement.

3. ADMINISTRATION OF THE PROVISIONS

In the event of any irreconcilable differences between the Tariff and this Agreement, the language of the Tariff shall govern.

4. NOTICE

Notices or requests made by either Party regarding these provisions shall be made to the representative of the other Party as indicated in the Service Agreement.

5. DEFINITIONS

Unless otherwise defined herein, capitalized terms refer to terms defined in the Tariff or in the Rate Schedules.

- (a) Automatic Generation Control (AGC)
The real-time control scheme used by all Control Areas to meet the NERC requirement that Control Areas continually adjust generation, as necessary and within predetermined limits, to meet Control Area load requirements and scheduled interchange commitments and its obligation to support interconnected frequency.
- (b) Effective Control Action (ECA)
An action which results in a specific mitigating response at a location(s) in the power system related to the disturbances of concern, thereby providing acceptable power system performance.
- (c) Hourly Data Reported Hourly (HDRH)
Hourly kilowatthour (kWh) and kilovarhour (kVARh) data provided to the Transmission Provider at the end of each hour. HDRH is taken from sources such as the interchange kWh system.
- (d) Hourly Data Reported Monthly (HDRM)
Hourly kWh and kVARh data provided at least monthly to the Transmission Provider. HDRM is taken from sources such as the Revenue Metering System.
- (e) Operating Reserves
The sum of Contingency Reserves and Regulating Reserves plus any on-demand obligations plus any reserves required for interruptible imports.

- (f) Operational Constraints
Limitations on the ability of the Transmission System to operate due to any system emergency, loading condition, or maintenance outage on the Transmission Provider facilities, or on facilities of an interconnected utility, that make it prudent to reduce Transmission System loadings, whether or not all facilities are in service.
- (g) Remedial Action Schemes (RAS)
Sets of fast automatic control actions employed to ensure acceptable power system performance following electrical disturbances as determined by the Transmission Provider power flows and/or stability studies. These may include generator dropping and load tripping.
- (h) Revenue Metering System (RMS)
A data collection system that electronically measures hourly demand and energy quantities for both kilowatt (kW) and kiloVARS. The Transmission Provider uses this data on a HDRM basis.
- (i) Single Contingency
The loss of a single generator, transmission line, transformer, bus section or DC monopole under any operating condition or anticipated mode of operation.
- (j) Technical Requirements for the Connection of Transmission Lines and Loads
The detailed technical requirements generally applied to all new or modified line or load connections regardless of type or size, are posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm,
and may be modified from time to time.
- (k) Technical Requirements for the Interconnection of Generation Resources
The detailed technical requirements generally applied to all new or expanded generating resources, regardless of type or size, are posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm,
and may be modified from time to time.
- (l) Telemetry
A data collection system that provides the Transmission Provider with kilowatt information on load, generation, and powerflow, on a continuous, instantaneous basis.
- (m) Transmission Customer Resource

Any Transmission Customer-owned resource, regardless of resource location, and any Third Party (consumer or independent power producer) resource directly connected to the Transmission Customer's transmission or distribution system.

6. INTERCONNECTED FACILITY REQUIREMENTS

(a) Ownership

- (1) Equipment or salvageable facilities owned by one Party and installed on the property of the other Party shall remain the property of the owner, except as noted in this Agreement.
- (2) A Party must identify its facilities installed on the other Party's property. Facilities include all movable equipment and other salvageable facilities which said Party installed on the other Party's property. Ownership of facilities must be made by affixing permanent suitable markers with the owner's name. The Parties shall jointly prepare an itemized list of the aforementioned equipment.
- (3) Each Party agrees to be responsible for the cost of complying with all applicable Federal, State, and local environmental laws for its own facilities, regardless of where the facilities are located.

(b) Safety Design

The Transmission Provider requires clearance of equipment during maintenance, modification, and testing. Facility interconnections between the Transmission Provider and the Transmission Customer are to be designed and constructed to allow clearance of equipment using isolation devices. Isolation devices must produce a visible air gap between the energized facilities and the equipment to be worked on. Operating procedures associated with this interconnection must comply with the Transmission Provider's Accident Prevention Manual and also with the Transmission Customer's safety manual as specified in writing by the Transmission Customer.

(c) Access to Interconnected Facilities

- (1) Each Party agrees to grant permission to the other to enter its property to perform operations and maintenance, meter reading, inspection or removal of the other's equipment and facilities installed on the first Party's property.
- (2) In providing the above permission, the first Party waives no rights or remedies with respect to any injury, loss, or damage resulting from the other's activities on the first Party's property.

7. RESOURCE AND INTERCONNECTION PRINCIPLES AND REQUIREMENTS

(a) Remedial Action Schemes

- (1) The Transmission Customer may be required (at its cost), to provide or assure the provision of its pro rata share of RAS required to support the transmission capability of the transmission paths the Transmission Customer uses.
- (2) If the Transmission Customer is required to provide RAS, then the Transmission Provider and the Transmission Customer shall jointly plan and coordinate the implementation of the RAS. No Party shall unduly withhold consent regarding the implementation of the RAS. The Transmission Customer may implement the required RAS where it chooses on its system, as long as the required level of ECA is obtained. The level of reliability of the RAS design on the Transmission Customer's system shall be at least equal to the level of reliability employed in the design of the overall RAS required to support the transmission capability of the transmission path the Transmission Customer uses.
 - (A) The Transmission Customer's contribution to the total operational responsibility for the RAS shall be the ratio of the Transmission Customer's usage of the Transmission Provider's share of the transmission path, to the total rating of the Transmission Provider's share of the transmission path.
 - (B) The Transmission Provider shall provide the appropriate control signals to the Transmission Customer.
 - (C) The Transmission Customer shall provide the necessary equipment to receive and transmit control signals to and from its transmission, generation, and control center facilities to arm and initiate the appropriate ECA or actions determined by the Transmission Provider.
- (3) Additional information regarding RAS can be found in The Technical Requirements for the Connection of Transmission Lines and Loads and the Technical Requirements for the Interconnection of Generation Resources posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm, and may be modified from time to time.

(b) Operation of Resources

- (1) The Transmission Customer shall operate its generation resources that interconnect with the Transmission Provider's Transmission System or which are located in the Transmission Provider's Control Area in a manner consistent with Good Utility Practice, and the standards, criteria, and requirements of NERC, WSCC, NWPP, the Transmission Provider, and any applicable RTA.
- (2) The Transmission Customer shall pay the cost of necessary communications installations, and modification of the Transmission Provider's computer hardware and software, including accommodating the Transmission Customer's decisions to change Control Areas.
- (3) Any resources used by the Transmission Customer to meet its Operating Reserve obligations to the Transmission Provider's Control Area shall meet the same NERC, WSCC, NWPP, and other applicable requirements, practices, and procedures as the Transmission Provider's generating resources providing these same services including, AGC capability, reserve availability, ramp rate, governor response, random testing, and a monthly startup test.

(c) Interconnection with Third Parties

- (1) Each Party shall cooperate with other interconnected systems in establishing arrangements or mitigation measures to minimize operational impacts on the other Party's system.
- (2) Each Party recognizes that a Party's proposed new interconnection or modification of an existing interconnection between its system and the system of a Third Party, may cause adverse effects on the system of the other Party. The Party making such interconnection or modification shall minimize, or otherwise compensate for adverse operational impacts to the other Party's system.

(d) Interconnection with the Transmission Provider

- (1) The Transmission Customer shall plan, construct, operate, and maintain its facilities and system that interconnect with the Transmission Provider's Transmission System in accordance with Good Utility Practice, including, but not limited to, all applicable guidelines of NERC, WSCC, and NWPP, the Transmission Provider and any applicable RTA, and generally accepted regional practices.
- (2) Additional information regarding Interconnection Requirements can be found in The Technical Requirements for the Connection of Transmission Lines and Loads and the Technical Requirements for

the Interconnection of Generation Resources posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm, and may be modified from time to time.

(e) **Generation Integration**

- (1) Resources connected directly to the Transmission Provider's Transmission System or which are in the Transmission Provider's Control Area are subject to compliance with the Transmission Provider's generation integration requirements, Good Utility Practice, and all applicable standards of NERC, WSCC, NWPP, the Transmission Provider and any applicable RTA, and any generally accepted regional practices that are adopted by the Transmission Provider.

All resources integrated into a Transmission Customer's system which, by virtue of their point of interconnection, are capable of energizing the Transmission Provider's facilities, must comply with safety requirements of the above standards, including those for relay protection, insulation coordination, switchgear and safety. This requirement typically applies to generators that are integrated into a system that is connected radially from a tapped Transmission Provider transmission line or Transmission Provider substation. With respect to other resources integrated into a Transmission Customer's network, all points of interconnection between the Transmission Provider and the Transmission Customer must be operated and maintained in a manner consistent with Good Utility Practice.

- (2) The Transmission Customer agrees to notify the Transmission Provider a minimum of eighteen (18) months prior to energization of a resource if such resource is expected to impact the Transmission Provider's Transmission System.

8. CUSTOMER INFORMATION REQUIREMENT

The Transmission Customer shall provide to the Transmission Provider load forecasts, generation forecasts, schedules, and any other information necessary to implement Curtailment, Load Shedding, and congestion management procedures, and for ATC computations when requested by the Transmission Provider.

9. POWER QUALITY

Requirements and information regarding Power Quality can be found in The Technical Requirements for the Connection of Transmission Lines and Loads and the Technical Requirements for the Interconnection of Generation Resources posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm, and may be modified from time to time.

10. SERVICE INTERRUPTIONS

(a) Temporary Load Shifts and Maintenance Notification

- (1) The Parties may temporarily curtail, reduce, or shift deliveries of electric power if any such Party determines that such Curtailment, reduction, or load shift is necessary or desirable in case of system emergencies or operational constraints on the system of either Party, or to install equipment in, make repairs to, make replacement within, conduct investigations and inspections of, or perform other maintenance work on the Parties' facilities. To the extent reasonable or appropriate, the Parties shall use temporary facilities or equipment to minimize the effect of any such interruption, reduction, or load shift.
- (2) The Transmission Customer must submit a report concerning any such curtailment, reduction, or load shift on its transmission system to the Transmission Provider within four (4) days of such curtailment, reduction, or load shift. Reports may be made by telephone, mail, or other electronic processes. The point of contact for each Party shall be designated pursuant to the Service Agreement. On receipt of the Transmission Customer's report, the Transmission Provider shall adjust the Transmission Customer's billing determinants pursuant to the Transmission Provider's billing procedures. If the Transmission Customer does not submit the report within four (4) days of the curtailment, reduction, or load shift, the Transmission Provider shall assess charges based on available data.

- (b) Additional information regarding Service Interruptions can be found in The Technical Requirements for the Connection of Transmission Lines and Loads and the Technical Requirements for the Interconnection of Generation Resources posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm, and may be modified from time to time.

11. EMERGENCY PLANNING AND OPERATION

- (a) The Transmission Provider shall be responsible for planning, coordinating, and implementing emergency operation schemes. Examples of such schemes include the NWPP underfrequency Load Shedding program, the undervoltage Load Shedding program, and the system restoration plan. There may be additional schemes that meet the NWPP, WSCC, and RTA reliability planning objectives. If the Transmission Provider identifies reliability objectives beyond the NWPP,

WSCC, and RTA objectives, they shall be communicated to the Transmission Customer(s). The need to identify additional objectives may involve anticipated reduction in system restoration time following blackout or brownout emergencies.

- (b) The Transmission Customer shall:
- (1) participate in the development and implementation of Load Shedding programs for system security;
 - (2) install and maintain the required Load Shedding relays, including underfrequency and undervoltage relays; and
 - (3) participate in system restoration planning. Disputes with any of the requirements specified by the Transmission Provider shall be resolved through the dispute resolution process described in the Tariff.
- (c) Additional information regarding Emergency Planning and Operation can be found in The Technical Requirements for the Connection of Transmission Lines and Loads and the Technical Requirements for the Interconnection of Generation Resources posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm, and may be modified from time to time.

12. INFORMATION AND METERING REQUIREMENTS

Requirements and information regarding Information and Metering Requirements can be found in The Technical Requirements for the Connection of Transmission Lines and Loads and the Technical Requirements for the Interconnection of Generation Resources posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm, and may be modified from time to time.

13. METERING COSTS

- (a) **Metering of Existing Facilities**
The Transmission Provider shall be responsible for costs of all Transmission Provider-required new meter installation or meter replacements at a Transmission Customer facility existing on the Effective Date of this Service Agreement.

The Transmission Customer shall be responsible for the costs of:

- (1) Any meter replacement or new installation at points of delivery which are not required to achieve the best overall plan of service (convenience points of delivery); and
- (2) Any meters needed because the Transmission Customer changes Control Areas or is displacing transmission from the Transmission Provider; and/or meters requested by the Transmission Customers.

(b) **Metering of New Transmission Customer Facilities**

The Transmission Provider shall be responsible for costs associated with installation of the Transmission Provider-approved metering at new facilities established after the Effective Date of this Service Agreement that are connected to the Transmission Provider's Transmission System.

The Transmission Customer shall be responsible for the costs of the Transmission Provider approved metering for:

- (1) all points of generation (resource) integration;
- (2) all AGC interchange points; and
- (3) all other points of electrical interconnection, including convenience points of delivery.

14. COMMUNICATIONS

Requirements and information regarding Communications can be found in The Technical Requirements for the Connection of Transmission Lines and Loads and the Technical Requirements for the Interconnection of Generation Resources posted by the Transmission Provider at:

http://www.transmission.bpa.gov/orgs/opi/system_news/index.shtm, and may be modified from time to time.

(W:\TMC\CT\Customer\Contract [DRAFT or FINAL]\#####.doc)