

**Collection of Transmission Provider  
OATT “Attachment C” Filings:  
Methodology to Assess Available Transmission Capability**

1. Arizona Public Service Company
2. Avista Corporation
3. Bonneville Power Administration
4. Idaho Power Company
5. Northwestern Energy
6. PacifiCorp
7. Portland General Electric Company
8. Sierra Pacific Resources Operating Companies
9. Western Area Power Administration
10. Excel Energy Operating Companies

## **ATTACHMENT C**

### **Methodology To Assess Available Transmission Capability**

In assessing the Available Transmission Capability (“ATC”) of its transmission system capacity to fulfill new requests for transmission service, the Transmission Provider shall use a 10 year planning horizon and may exclude transmission capacity needed to meet the forecasted loads of its Native Load customers, contractual obligations of any existing or new firm transmission service agreements, contractual obligations of current or new agreements for firm sales to third parties, and pending applications for firm Point-to-Point and Network Integration Transmission Services.

#### **1. Determination of ATC**

The process for determining ATC should be reasonable, auditable and supportable. It consists of three steps: (1) the determination of Total Transfer Capability (TTC), (2) the allocation of TTC between Rights Holders, and (3) the determination of each transmission Rights Holder’s Committed Uses. ATC is then determined by subtracting Committed Uses from allocated TTC.

$$\text{ATC} = \text{TTC (allocated)} - \text{Committed Uses}$$

Using NERC ATC terminology,

$$\text{Committed Uses} = \text{TRM} + \text{Existing Transmission Commitments (including CBM)}$$

$$\begin{aligned} \text{where TRM} &= \text{Transmission Reliability Margin} \\ \text{CBM} &= \text{Capacity Benefit Margin} \end{aligned}$$

“Committed Uses” is described in Section 6.3 in terms of the six RTG categories of Committed Uses, NERC TRM, Existing Transmission Commitments and CBM.

For information on the determination of ATC and the related operating and planning relationships, refer to the NERC document, “Available Transfer Capability\_Definitions and Determination” specifically the Sections entitled Determination of Available\_Transfer Capability, page 15, Commercial Components of Available Transfer Capability, pages 15 to 18, and Recallable and Non-recallable Relationships and Priorities, pages 18 to 21.

### **1.1 Determination of Total Transfer Capability (TTC)**

TTC represents the reliability limit of a transmission path at any specified point in time. It is a variable quantity, dependent upon operating conditions in the near term and forecasted conditions in the long term. TTC cannot exceed the path rating. Within the Western Interconnection, a wide area approach is used to determine Total Transfer Capability (TTC) on a path basis using the Rated System Path method discussed in WSCC's "Procedures for Regional Planning Project Review and Rating Transmission Facilities" and NERC's "Report on Available Transfer Capability Definitions and Determination". The determination of TTC is required to conform with WSCC's "Procedures for Regional Planning Project Review and Rating Transmission Facilities" and WSCC's "Minimum Operating Reliability Criteria". If a Rights Holder (Transmission Provider) chooses not to obtain a WSCC Accepted Rating, it still must conform to the rating methods defined in these documents. Specific system operating conditions (system topology, load/generation patterns, simultaneous path loadings, and facility outages) may require that TTC or TRM be adjusted to maintain system reliability.

TTC may sometimes be better defined by a nomogram or set of nomograms than by a single number, particularly when determining TTC values for two or more parallel paths. Where the simultaneous transfer capabilities of paths are limited by the interactions of flows on paths, the Rights Holder (Transmission Provider) should make this known on the OASIS. This may be done by posting non-simultaneous TTC and subtracting TRM, where TRM includes the difference between non-simultaneous and simultaneous limits. As an alternative to computing TRM, the Rights Holder may post non-simultaneous TTC and describe on the OASIS the nomogram and associated curtailment conditions. In either case, Non-recallable ATC should be based on the best estimate of the simultaneous capability of the path during the period posted.

### **1.2 Allocation of TTC**

When multiple ownership of transmission rights exists on a path or parallel paths, it is necessary to reach agreement on the allocation of transmission rights in order to determine and report ATC.<sup>1</sup> A single TTC number, appropriate for the actual or projected condition of the transmission system, will be agreed upon for the path and this TTC will then be allocated between the Rights Holders, to yield each Rights Holder's share of the path's TTC for the ATC posting period.

If the multiple Rights Holders can't come to an agreement amongst themselves, the WSCC and the RTGs in the Western Interconnection provide several dispute resolution forums through which path rating and allocation issues may be addressed.

---

<sup>1</sup> The allocation rules may address allocations for both normal conditions and system outage conditions.

### **1.3 Determination of Committed Uses**

This section describes the principles, practices and methodology for the determination of Committed Uses in terms of the NERC components of TRM, Existing Transmission Commitments and CBM. The relationship is shown between these components and the five components of Committed Uses (CU1 - CU5) which are delineated in the western RTG Governing Agreements. The five categories of RTG Committed Uses are:

1. Native Load Uses (CU1)
2. Prudent Reserves (CU2)
3. Existing Commitments for purchases/exchanges/deliveries/sales (CU3)
4. Existing Commitments for transmission service (CU4)
5. Other Pending Potential Uses of transfer capability (CU5)

#### **1.3.1 Principles for Determination of Committed Uses**

This document adopts a non-prescriptive approach for addressing the determination of Committed Uses. A prescriptive approach based on uniform rules, planning criteria, and assumptions was felt unworkable in the near-term and unnecessary in the long-term. For the same reasons, it was also decided not to develop a list of “safe harbor” assumptions or specific criteria for reasonable assumptions.

The key to the successful implementation of the non-prescriptive approach is development of specific principles, guidelines and reasonableness tests that will be used by transmission Rights Holders in making their assumptions and determinations of Committed Uses and will provide guidance for dispute resolution proceedings.

Under this non-prescriptive approach, Rights Holders will be expected to:

- Use reasonable, “good-faith” assumptions, consistent with general principles outlined in this document
- Make those assumptions and the underlying justifications for those assumptions available, in accordance with NERC and WSCC standards, the RTA Governing Agreements, FERC Order 888 and FERC Order 889.
- Justify such assumptions and results, if called upon to do so, in applicable dispute resolution forums, (i.e. FERC 888 tariff process and RTG, WSCC or other dispute resolution processes).

- Adopt assumptions which are consistent with documented and consistently applied reliability requirements, including WSCC Minimum Operating Reliability Criteria, WSCC Power Supply Design Criteria, WSCC Reliability Criteria for System Planning , and the transmission provider's documented and consistently applied internal reliability criteria.
- Apply all assumptions comparably, non-discriminatorily and reasonably. A Rights Holder's assumptions and methodologies, taken as a whole, must be consistently applied and treat all transmission users (including the Rights Holder) in a comparable and non-discriminatory manner.
- Use assumptions and methodologies that reasonably maximize the availability of transfer capability for market participants, provided that the outcome meets transmission system reliability requirements and does not impose uncompensated costs on the Rights Holder.
- A Rights Holder's assumptions and methodologies for determining ATC must be consistent with the assumptions used by the Rights Holder in other aspects of its business (for example, system planning).

### **1.3.2 Determination of NERC Transmission Reliability Margin (TRM)**

#### **NERC TRM is a part of RTG Prudent Reserves - (CU 2)**

In the Western Interconnection methodology, TTC (or non-recallable ATC) reductions associated with TRM may include allowances for unscheduled flow, simultaneous limitations associated with operation under a nomogram, uncertainty in load forecast <sup>1</sup> and unplanned transmission outages (for paths in which contingencies have not already been considered in establishing the path rating). TRM does not include allowances for planned outages and other known transmission conditions which should be included in the calculation of TTC. The Rights Holder has the option of including the above described components of TRM in either the determination of TRM or TTC, but not in both. The Rights Holder should make its methodology and assumptions for determination of TRM available upon request.

Allowances for transmission contingencies should not be included in TRM for paths which have had an Accepted Rating established, since contingencies are already

---

<sup>1</sup> Rights Holders (Transmission Providers) allowances for load forecasts uncertainty may be part of TRM provided that: (1) the allowance is available on a comparable and recallable basis to all Rights Holders, (2) the allowance reduces the exposure to curtailments to all Rights Holders on a prorata basis for unanticipated load, and (3) the allowance does not duplicate consideration of uncertainty within the load forecast itself.

included in the determination of the Accepted Rating. A Rights Holder which desires to reduce its risk of pro-rata curtailment must explicitly request a reservation of additional rights. Such rights cannot be reserved under the auspices of Prudent Reserve or TRM. Where such reserved rights are not scheduled for use, the Rights Holder is required to make such rights available to other transmission service requesters in accordance with FERC Order 888 rules.

Unscheduled flow may be handled in either of two ways, either of which is acceptable, provided that the methodology is applied consistently and non-discriminatorily:

- The path can be reserved up to its TTC, without factoring in any estimates of unscheduled flows. In such a case, when unscheduled flows materialize, accommodations and curtailments will be made consistent with the WSCC Unscheduled Flow Mitigation Plan.
- The path operator, using reasonable, auditable, supportable projections, may subtract sufficient transfer capability from TTC, as a component of TRM, to reduce the need to make curtailments associated with projected unscheduled flows.<sup>1</sup> This should be made available as recallable transfer capability in case unscheduled flow is less than anticipated.

### **1.3.3 Determination of NERC “Existing Transmission Commitments”**

This section identifies those items to be included in the determination of “Existing Transmission Commitments”.

NERC “Existing Transmission Commitments” are included in the following four RTG Committed Use categories:

- (1) Native Load Uses (CU 1)
- (2) Existing Commitments for Purchases/Exchanges/Sales (CU 3)
- (3) Existing Commitments for Transmission Service (CU4)
- (4) Other Pending Potential Uses (CU5).

**The following address Native Load Uses - (CU1):**

---

<sup>1</sup> Note: the SWRTA Bylaws specifically permit the exclusion of transmission capacity needed to accommodate unscheduled flows, at levels consistent with the WSCC Unscheduled Flow Mitigation Plan. Making allowances for projected unscheduled flows based on assumptions that are appropriate for the time horizon of the ATC estimate would be consistent with making the best technical estimate of ATC, and would therefore be consistent with the NERC ATC report.

- Reservations for Native Load Growth: Rights Holders may reserve existing transfer capability needed for reasonably forecasted Native Load growth and transmission customer Native Load growth<sup>1</sup>. Transfer Capability reserved for a Rights Holder's load growth must be made available for use by others until the time that it is actually needed by the Rights Holder.
- Loss of Native Load: If a customer constituting a portion of a Rights Holder's Native Load is served by another entity for a given period of time and releases the Rights Holder from any obligation to serve for a given period, the Rights Holder shall adjust its native load forecast and any associated transmission reservation accordingly. The Rights Holder shall have a reasonable amount of time to adjust the native load forecast and any associated transmission reservation after receiving notice from the other entity.
- Native Load Forecasts: ATC determination does not presume the existence of sanctioned forecasts by regulatory agencies, although a Rights Holder may use such a sanction in arguing the reasonableness of its determination of Committed Uses. In making reservations for Native Load, Rights Holders must use reasonable assumptions, make available those assumptions and the resulting conclusions, and be able to justify the reasonableness of those assumptions and the resulting conclusions, as well as their consistency with then-current FERC policies, in applicable dispute resolution proceedings.
- Ancillary Services (required as a part of Native Load service): Transfer capability should be reserved under Native Load for those ancillary services required to serve Native Load.<sup>2</sup> These include transfer capability required to supply load regulation and frequency response services, reactive supply and voltage control services, and energy imbalance services. Ancillary services for Operating Reserves are covered under Section 6.3.4.
- Reservations Beyond Reliability-Based Needs: A Rights Holder may reserve ATC for the import of power which is beyond the amount reserved for reliability needs of their Native Load customers, only to the extent permitted under the FERC's Order 888, or the Right Holder's own open access tariff and is otherwise consistent with the Federal Power Act and the FERC's applicable standards and policies then in effect. See Appendix II for further discussion of the provisions of the pro forma tariff applicable to the service of Native Load.

---

<sup>1</sup> See footnote 2.

<sup>2</sup> Reservations must be explicitly forecasted and determined as part of Committed Uses, as either network Non-Recallable service or point-to-point Non-recallable service (depending on whether the user of the service is the load entity or the generation entity, and depending on whether the user of the service is a network customer of a point-to-point customer). Charges for transmission reserved should be consistent with the appropriate tariff.

**The following are “Existing Commitments” Uses (CU3 and CU4):**

- Existing Commitments: Committed Uses associated with existing commitments at the time of the ATC determination are permissible. Determinations for these types of Committed Uses must be made available and are subject to evaluation upon request and in applicable dispute resolution forums.
- Non-Recallable Transmission Reservations for Energy Transactions: Transfer capability for energy transactions that can reasonably be expected to be consummated, such as expected hydro conditions, can be a Committed Use for the Rights Holder (including an affiliated merchant business) to the extent consistent with the reservation provisions of the approved tariff by purchasing non-recallable point-to-point transmission service from available transfer capability. Such transfer capability can be reserved for expected energy transactions, but must be released for recallable uses on a scheduling basis in real-time if unused or as otherwise required in accordance with the reservation priorities provided in the Rights Holder’s tariff.

**The following are Other Pending Uses (CU5):**

- Good Faith Requests: Reservations for “Pending Uses” applies to “good faith requests” for transmission service received by a Rights Holder in accordance with applicable FERC or RTG request for service policy.<sup>1</sup>

**1.3.4 Determination of NERC Capacity Benefit Margin (CBM)**

Reservations required to maintain reliability of service (ancillary services, operating reserves, etc.) in accordance with a tariff’s terms and conditions, must be considered Committed Uses. In accordance with the terms and conditions of the Right Holder’s tariff, these reservations may be sold on a recallable basis.

**The following are Native Load Uses (CU1)**

- Ancillary Services (Operating Reserves): Transmission reserved by the control area operator to accommodate operating reserves (spinning and supplemental) can be reserved under CBM for the Rights Holder’s ability to transmit the reserves for its own potential resource contingencies or when operating reserves are pooled for the purpose of meeting reliability requirements. In order for these reservations to

---

<sup>1</sup> The methodology used to determine Pending Uses Reservations must be consistent with prudent utility practice, must be clearly documented and consistently followed, must be applied in a non-discriminatory manner, and must be auditable.

be deemed reasonable, such operating reserves may not exceed NERC, WSCC, applicable pool requirements or individual members' reliability requirements. The associated transmission should be explicitly included in the determination of CBM.

- Reservations of Transmission for Purposes Other than Energy Delivery: In certain cases, a Rights Holder may desire to reserve transmission for purposes other than energy delivery - for example, to provide a path for the import of ancillary services (such as spinning reserves) from another control area; or to allow imports on a different path (in a case where a control area requires a certain amount of unscheduled transfer capability for stability reasons). Similar to reserve sharing arrangements, such reservations are legitimate Committed Uses by a transmission Rights Holder, and may be included under CU1, to the extent that they are associated with meeting native load reliability requirements (rather than being economics-driven).

**The following are Prudent Reserves Uses (CU2)**

Reservations of additional transfer capability for resource contingencies must be based upon reasonable, publicly available assumptions subject to evaluation in applicable dispute resolution proceedings. The methodology for determining the amount of Prudent Reserve must be consistent with prudent utility practice, must be clearly documented and consistently followed, must be applied in a non-discriminatory manner, and must be auditable.

- Generation Patterns and Generation Outages: Many generation patterns and forced generation outages occur in the power system. These may be considered when determining Committed Uses, to the extent that deductions from ATC associated with these uncertainties use assumptions that are consistent with the planning and service reliability criteria which the Rights Holder uses in serving its customers.<sup>1</sup>

---

<sup>1</sup> As uncertainty in forecasts diminishes, a Rights Holder must release transmission capacity in a manner that is consistent with prudent utility practice, clearly documented, and consistently followed, applied in a non-discriminatory manner, and auditable.

## GLOSSARY

**Accepted Rating:** a path rating obtained through the WSCC three-phase rating process that is the recognized and protected maximum capability of the path.

**Available Transfer Capability (ATC):** a measure of the transfer capability remaining in the physical transmission network for further commercial activity, over and above already-committed uses.

**Capacity Benefit Margin (CBM):** that amount of transmission transfer capability reserved by load-serving entities to ensure access to generation from interconnected systems to meet generation reliability requirements.

**Committed Uses:** Five committed uses described in the RTG Governing Agreements as described in this document.

**Native Load:** existing and reasonably-forecasted customer load for which the Rights Holder - by statute, franchise, contract or regulatory policy - has the obligation to plan, construct or operate its system to provide reliable service.

**Prudent Reserve:** the amount of transfer capability set aside for a Rights Holder's reasonable reliability requirements.

**Rights Holder:** an entity holding transfer capability rights through ownership, contractual agreement, or other transmission service arrangement. As used in this document, a Rights Holder may be either the Transmission Provider or a Transmission Customer as those terms are used in the FERC's pro-forma tariff. Some references to Rights Holder may apply only to the Transmission Provider in the context of the provisions of the pro-forma tariff.

**RTG Governing Agreements:** Northwest Regional Transmission Association Governing Agreement, Southwest Regional Transmission Association Bylaws, and the Western Regional Transmission Association Governing Agreement.

**Total Transfer Capability (TTC):** the amount of electric power that can be transferred over the interconnected transmission network in a reliable manner while meeting all of a specific set of defined pre- and post- contingency system conditions.

**Transmission Reliability Margin (TRM):** that amount of transmission transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.

**WSCC:** Western Systems Coordinating Council



## **ATTACHMENT C**

### **Methodology To Assess Available Transmission Capability**

Avista Corp. will assess the capability of Avista Corp.'s Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Sections 4 and 5 of Avista Corp.'s annual FERC Form 715 submittal. In determining the level of capacity available for new requests for Point-To-Point Transmission Service Avista Corp. may exclude, from capacity to be made available for new requests for Point-To-Point Transmission Service, that capacity needed to meet current and reasonably forecasted loads of Native Load Customers and Network Customers, and to meet contractual obligations existing prior to May 1, 1996.

## **ATTACHMENT C**

### Methodology to Assess Available Transmission Capability

#### **Available Transfer Capability (ATC) Management**

The Transmission Provider will compute ATC consistent with applicable Commission, NERC, and WSCC criteria, including the WSCC document “Determination of Available Transfer Capability within the Western Interconnection” or its successor. The Transmission Provider may require the Transmission Customer to submit forecasts of loads and/or generation receiving transmission service under this Tariff and/or schedules receiving transmission service under this Tariff, which are reasonably necessary to enable the Transmission Provider to compute ATC. The Transmission Provider’s specific ATC methodology will be posted on its OASIS and may be modified from time to time.

Constraints on paths internal to the Transmission System may require the Transmission Provider to post and manage ATC over those paths. This may require the Transmission Provider to use a zonal approach in the implementation of this Tariff, including, but not necessarily limited to, ATC calculations, reservations, scheduling, Curtailments, and redispatch.

Unused (i.e., “unscheduled”) Reserved Capacity may be sold only as non-firm transmission.

**ATTACHMENT C**

**Methodology To Assess Available Transmission Capability**

The Transmission Provider will assess the capability of the Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Section 4 and 5 of the Transmission Provider's annual FERC Form 715 submittal. In determining the level of capacity available for new Transmission Service requests, the Transmission Provider may exclude, from capacity to be made available for new Transmission Service requests, that capacity needed to meet; current and reasonably forecast load of Native Load Customers and Network Customers, existing firm Point-to-Point Transmission Service customers, previously received pending Applications for firm Point-to-Point Transmission Service, and other firm contractual obligations.

**ATTACHMENT C**

**Methodology To Assess Available Transmission Capability**

The Transmission Provider will assess the capability of the Transmission Provider's Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Section 4 and 5 of the Transmission Provider's annual FERC Form 715 submittal. In determining the level of capacity available for new Transmission Service requests, the Transmission Provider may exclude, from capacity to be made available for new Transmission Service requests, that capacity needed to meet current and reasonably forecasted load of Native Load Customers and Network Customers, existing Firm Point-To-Point Transmission Service customers, previously received pending Applications for Firm Point-To-Point Transmission Service, reasonable reliability requirements consistent with NERC and WECC guidelines and Good Utility Practice, and to meet existing contractual obligations under other tariffs and rate schedules.

**ATTACHMENT D**

**Methodology To Assess Available Transmission Capability**

**Definitions:**

- 1) Available Transmission Capability ("ATC") - The measure of the transmission capability remaining in the physical transmission network for further commercial activity, over and above already committed uses.
- 2) Capacity Benefit Margin ("CBM") - The amount of transmission capability reserved by load-serving entities within the Transmission Provider's Control Area to ensure access to backup generation from interconnected systems to meet generation reliability requirements commencing at the end of any hour that a loss of generation occurs in. CBM Transmission shall only be an import quantity and shall be available following a generator contingency for the time period commencing at the end of the hour a generator contingency occurred in.
- 3) Reserve Sharing Obligations ("RSO") - The amount of transmission capability reserved by a Transmission Customer as either (1) import transmission capacity necessary to receive amounts of agreed to reserve sharing from other Control Areas or (2) export transmission capacity necessary to deliver amounts of agreed to reserve sharing to other Control Areas. RSO Transmission shall be available for the period immediately following a generator contingency until the end of the hour

such generator contingency occurred in (up to a maximum of 59 minutes).

- 3) Total Transmission Capability ("TTC") - The amount of electric power that can be transmitted over the interconnected transmission network in a reliable manner while meeting all of a specific set of defined pre- and post- contingency system conditions.
- 4) Transmission Reliability Margin ("TRM") - The amount of transmission capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainty in system conditions. For the purposes of this Attachment D to the Tariff, TRM may include but shall not be limited to the following:
  - a) Transmission capacity necessary to reliability facilitate anticipated levels of unscheduled flow within the Transmission Provider's Control Area and between the Transmission Provider's Control Area and other Control Areas; and
  - b) Differences between non-simultaneous and simultaneous ratings on a transmission facility, facilities, or paths.

**Criteria:**

The Transmission Provider will assess the capability of the Transmission System to provide the service requested using the criteria and process for this assessment as detailed in the Transmission Provider's annual FERC Form 715 submittal. In addition, in performing such evaluations, the Transmission Provider

will also adhere to the applicable criteria of the WSCC's *Reliability Criteria*, December 2000, Part I - Reliability Criteria for Transmission System Planning.

**Determination of Firm ATC.**

In determining the level of long-term firm or short-term firm ATC available for new Transmission Service requests or for posting on its OASIS, the Transmission Provider shall exclude, from the TTC of a transmission facility, facilities or paths that capacity needed to:

- 1) Meet current and reasonably forecasted load of Native Load Customers and Network Customers;
- 2) Fulfill transmission reservation obligations to existing firm Point-to-Point Transmission Service customers;
- 3) Fulfill transmission reservation obligations associated with transmission committed to CBM Requirements (CBM reservations on transmission paths with both CBM and RSO reservations shall be consolidated with RSO reservations so as to avoid any duplication of reservation amounts);
- 4) Fulfill transmission reservation obligations associated with transmission committed to RSO Requirements (RSO reservations on transmission paths with both CBM and RSO reservations shall be consolidated with CBM reservations so as to avoid any duplication of reservation amounts);
- 5) Allow a Transmission Customer to schedule applicable Real Power Losses to the Transmission Provider;
- 6) Meet the Transmission Provider's obligations associated with

TRM;

- 7) Preserve requested reservation amounts in accordance with previously received pending Applications for firm Point-to-Point Transmission Service; and
- 8) To meet existing contractual obligations under other tariffs and rate schedules.

**Determination of Non-Firm ATC.**

In determining the level of non-firm ATC available for posting on its OASIS, the Transmission Provider shall exclude, from the TTC of a transmission facility, facilities or path:

- 1) Pre-schedules or real time schedule amounts associated with Native Load Customers and Network Customers;
- 2) Pre-schedules or real time schedule amounts associated with existing firm Point-to-Point Transmission Service customers;
- 3) Pre-schedules or real time schedule amounts associated with return of applicable Real Power Losses to the Transmission Provider; and
- 4) Pre-schedules or real time schedule amounts associated with existing contractual obligations under other tariffs and rate schedules.

**Determination of TTC.**

The TTC will be determined using the load flow case filed with the WSCC's latest FERC 715 filing. Load levels in this case will be modified to represent forecasted load projections for the study period. All facilities will be modeled in their normal

configuration. Each WSCC control area will be economically dispatched to meet its load, loss and interchange commitments. The Transmission Provider's interface TTC values will be determined on a non-simultaneous basis, with sink/source pairs determined by generation economics and availability.

**Determination of TRM:**

The TRM value used represents the Transmission Provider's transmission reserves it is required to carry to meet its reliability obligations within the WSCC. Such reservations for unscheduled flow and simultaneous path limitations shall be determined by the Transmission Provider using reasonable, auditable, and supportable projections. Such amounts are to be determined by the Transmission Provider and any reductions to the ATC resulting from TRM shall be for the benefit of the Transmission Provider in meeting its TRM obligations as described above.

**Determination of CBM:**

The CBM value shall be based upon contractually agreed to amounts of transmission reserved by load serving entities within the Transmission Provider's Control Area. CBM shall be reserved in a manner identical to Point-to-Point Transmission Service.

**Determination of RSO:**

The RSO value shall be based upon contractually agreed to amounts of transmission reserved by Transmission Customers. RSO shall be reserved in a manner identical to Point-to-Point Transmission

PacifiCorp  
FERC Electric Tariff,  
5<sup>th</sup> Rev Volume No. 11

Substitute Original Sheet No. 280

Service.

Issued by: Jack E. Stamper, Regulatory Manager

Issued on: July 23, 2004

Effective on: April 26, 2004

---

## **ATTACHMENT C**

### **Methodology to Assess Available Transmission Capability**

Portland General Electric Company (PGE) will assess the capability of its Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Section 4 and 5 of PGE's annual FERC Form 715 submittal. In determining the level of capacity available for new Transmission Service requests, PGE may exclude, from capacity to be made available for new Transmission Service requests, that capacity needed to meet current and reasonably forecasted load of Native Load customers and Network customers, existing Firm Point-to-Point Transmission Service customers, previously received pending Applications for Firm Point-to-Point Transmission Service and to meet existing contractual obligations under other tariffs and rate schedules.

**ATTACHMENT C**

**Methodology To Assess Available Transmission Capability**

**Zone A:**

Sierra Pacific Power Company's transmission system is tightly constrained. With a limited number of interconnections with neighboring utilities, Sierra Pacific has a Control Area Net Import Limit, as well as an Export Limit. The reliable operation of the control area requires all interchange schedules result in actual tieline operation within these limits. As a result, each interconnection can not be viewed independently; transactions on one interconnection many times will affect the ability to accommodate transactions on the other interconnections. This interdependency necessitates a multi-step approval process for transmission reservations. First, each requested transmission path must be checked to ensure there is sufficient Available Transmission Capability (ATC) to accommodate the desired reservation; then, other obligations on all other interconnections must be analyzed in total, to ensure the operational control area limits are not violated.

Sierra Pacific will determine the Available Transmission Capability (ATC) on a transmission path by subtracting the Transmission Obligations already committed to - including the

interdependency of the path with the rest of the system - from the seasonal Operational Transmission Capability(OTC) for each transmission path, in each direction. For normal operation with the full transmission system in-service, the OTC for each path will be the non-simultaneous transfer capability listed in the Western Electricity Coordinating Council (WECC) Path Rating Catalog. During line outages or other unusual conditions, the OTC's will be adjusted accordingly.

**Zone B:**

The Transmission Provider will assess the total transmission capability and the available transmission capability of the Transmission System to provide the service requested as prescribed by Commission regulations and in accordance with the process detailed in Sections 4 and 5 of the Transmission Provider's annual FERC Form 715 submittal. In determining the level of capacity available for new transmission service requests, the Transmission Provider will take into consideration that capacity needed to meet current and reasonably forecasted loads of Native Load Customers, existing Network Customers, existing Firm Point-To-Point Transmission Service Transmission Customers, pending applications for Firm Point-To-Point Transmission Service, and other existing contractual obligations under other tariffs and rate schedules.

For purposes of this Service Agreement, the Transmission Provider's Transmission System consists of the facilities of the (Region) as described in Attachment K.

4.0 The Transmission Customer agrees to supply information the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.

5.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Non-Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff, and this Service Agreement.

6.0 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 below.

Transmission Provider:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Transmission Customer:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

7.0 The Tariff as presently constituted or as it may be revised or superseded is incorporated herein and made a part hereof.

8.0 *Power Factor:* The Transmission Customer will be required to maintain a power factor between \_\_\_-percent lagging and \_\_\_-percent leading for all deliveries of capacity and energy to and from the Transmission Provider's Transmission System.

9.0 *Transmission Losses:*

9.1 *Loss Factors:*

9.1.1 If, based on operating experience and technical studies, the Transmission Provider determines that any of the transmission loss factors on the Transmission Provider's Transmission System differs from the loss factors set forth in this Service Agreement, the Transmission Provider will notify the Transmission Customer of the revised loss factor(s) pursuant to Section 1.0 of this Service Agreement.

9.1.2 *Transmission Provider*

*Transmission Loss Factor:* Transmission Provider transmission losses shall initially be \_\_\_\_\_% and shall be assessed on the power scheduled and transmitted to a point of delivery on the Transmission Provider's Transmission System.

10.0 *Ancillary Services*

10.1 Provided by Transmission Provider

10.1.1 Scheduling, System Control, and Dispatch Service

10.1.2 Reactive Supply and Voltage

Control from Generation Sources Service

10.2 Provided by Transmission Customer

10.2.1 To be filled in if appropriate

10.2.2

10.3 Provided by \_\_\_\_\_

10.3.1 To be filled in if appropriate

10.3.2

11.0 *Net Billing and Bill Crediting*

*Option:* The Parties have agreed to implement [Net Billing, Bill Crediting, or both] as set forth in Attachment J.

12.0 *Charges for Service:* Charges for Non-Firm Point-to-Point Transmission

Service and associated Ancillary Services shall be calculated in accordance with [Rate Schedules] attached hereto and made a part of this Service Agreement. The rates or rate methodology used to calculate the charges for service under that schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies. [This section will be included as appropriate at the Transmission Provider's discretion.]

13.0 *Independent System Operator:* The Parties understand that the Transmission Provider may join an independent system operator under Commission jurisdiction. In the event the Transmission Provider either joins or is required to conform to protocols of the independent system operator, the Parties agree that the Transmission Provider either may (1) may make any changes necessary to conform to the terms and conditions required by Commission approval of the independent system operator, or (2) terminate this Service Agreement by providing a one-year written notice to the Transmission Customer.

*In Witness Whereof,* the Parties have caused this Service Agreement to be executed by their respective authorized officials.

WESTERN AREA POWER ADMINISTRATION

By: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

(TRANSMISSION CUSTOMER)

By: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

**Attachment C**

*Methodology To Assess Available Transmission Capability*

The Transmission Provider will compute the transmission transfer capability available on a point-to-point basis from the Delivering Party to the Receiving Party using Good Utility Practice and the engineering and operating principles, standards, guidelines and criteria of the Transmission Provider, the applicable Regional Reliability Council, any entity of which the Transmission Provider is a member and is approved by the Commission to promulgate or apply regional or national reliability planning standards (such as a regional transmission group, RTG), or any similar organization that may exist in the future of which the Transmission Provider is then a member. Principal items used to determine maximum transmission transfer capability available shall include reliability, transmission element loading, system contingency performance, voltage levels, and stability. In determining Available Transmission Capability, the Transmission Provider will reserve sufficient transmission capability to meet its current and forecasted power service obligations, current and forecasted Network Customer loads, and existing transmission service obligations.

**Attachment D**

*Methodology for Completing a System Impact Study*

The Transmission Provider will assess the capability of the Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Sections 4 and 5 of the Transmission Provider's annual FERC Form 715 submittal in those instances where the Transmission Provider is a member of the Western Systems Coordinating Council. (CRSP, DSW, RMR, and SNR) The Transmission Provider will use the Mid-Continent Area Power Pool (MAPP) System Impact Study Methodology when the Transmission Provider is a member of MAPP. (UGPR)

**Attachment E**

*Index of Point-To-Point Transmission Service Customers*

Customer	Date of service agreement

**Attachment F**

*Service Agreement for Network Integration Transmission Service*

1.0 This Service Agreement, dated as of \_\_\_\_\_, is entered into, by and between the (Region) of Western Area Power Administration (Transmission Provider), and \_\_\_\_\_ (Transmission Customer).

2.0 The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Network Integration Transmission Service under the Tariff.

3.0 Service under this Service Agreement shall commence on the later of (1) \_\_\_\_\_, or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as is mutually agreed upon. Service under this Service Agreement shall terminate on \_\_\_\_\_.

4.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Network Integration Transmission Service in accordance with the provisions of Part III of the Tariff, and this Service Agreement.

5.0 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 below.

Transmission Provider:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Transmission Customer:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

6.0 The Tariff and the "Specifications for Network Integration Transmission Service" as presently constituted or as they may be

## **ATTACHMENT C**

### **Methodology To Assess Available Transmission Capability**

#### **Cheyenne Light, Fuel and Power Company & Public Service Company of Colorado**

CLF&P and PSCo utilize the Rocky Mountain Area OASIS ("RMAO") site to post ATC for Point-To-Point service on constrained interfaces and unconstrained interfaces for which CLF&P or PSCo has received transmission service requests within the last 12 months. Individual transmission providers of the RMAO post ATC on the RMAO site. The Transmission Providers are members of the WSCC and currently use Operating Transfer Capability ("OTC") for seasonal operating limits for transmission interfaces which originate from the WSCC OTC policy group. The OTC seasonal limits, the WSCC Path Rating Catalog, and the "Determination of Available Transfer Capability within the Western Interconnection" dated February 18, 1997 are used as guides in determining ATC for posting on the RMAO.

#### **Northern States Power Companies**

NSP has contracted with MAPP to develop the OASIS. Available transmission capability ("ATC") for Point-To-Point service will be posted on constrained interfaces utilizing a flow based methodology. An OASIS calculator will determine the feasibility of each requested service and decrement available capability on all interfaces for each contracted or pending transaction. Dedicated, off-line System Impact Studies will be performed in accordance with the procedures shown in Attachment D if NSP determines one is needed and the Eligible Customer executes a System Impact Study Agreement.

The flow based ATC component for each interface are determined in accordance with the ATC principles published by the North American Electric Reliability Council ("NERC").<sup>1</sup>

#### **Southwestern Public Service Company**

SPS has contracted with SPP to develop the OASIS. ATC for Point-To-Point service is posted on constrained interfaces utilizing a flow based approach. Transfer studies are run to determine the Point-To-Point transfer capabilities on all constrained interfaces in the SPP. SPS verifies the calculation of ATC on constrained interfaces utilizing SPS's Transmission System, and then posts the ATC on OASIS. The ATC components for each interface are determined in accordance with the ATC principles published by the NERC.

Requests for which ATCs are not available (requests for transmission service beyond the ATC calculation) are evaluated by performing a System Impact Study in accordance with the procedures outlined in Attachment D when the Eligible Customer executes a System Impact Study Agreement. The results of these studies are posted on OASIS.

---

<sup>1</sup> Available Transfer Capability Definitions and Determination, NERC, June 1996