



## **Public Service Company of Colorado Balancing Authority and Transmission Provider**

### **GENERAL BUSINESS PRACTICES Effective October 15, 2016**

#### **General Information**

These OASIS Business Practices are for the Public Service Company of Colorado (PSCo) Balancing Authority and Transmission Provider in the WECC. Questions concerning these Business Practices will only be addressed through questions submitted via the “Transmission Customer Questions and Answers” process documented in the Transmission Customer Q&A link. The link can be found here ([http://www.rmao.com/xfpp/psc\\_qa.html](http://www.rmao.com/xfpp/psc_qa.html)). All questions and responses will be made public. Transmission service over the PSCo transmission system is available under the rates and terms of the Xcel Energy Operating Companies Joint Open Access Transmission Tariff (Xcel Energy OATT) applicable to the PSCo system. In addition to these PSCo OASIS Business Practices, customers must comply with all applicable provisions of the Xcel Energy OATT. The Xcel Energy OATT, Business Practices relating to the Xcel Energy OATT, as well as contracts for service can be found on PSCo’s OASIS home page at <http://www.oatioasis.com/psco/index.html>.

#### **Scheduling and Tagging**

1. NERC Reliability Standards for the Western Interconnection are the default rules for scheduling and tagging unless stated in these business rules.
2. Pre-Schedule - Normal business hours for prescheduled tags are Monday through Friday 0800 to 1500 hours (Mountain Prevailing Time - MPT). Pre-scheduled tags (Firm and Non-Firm) are considered late if submitted after 1500 MPT, and will be accommodated if practicable. Pre-Schedule days are based on the WECC Pre-Schedule calendar.
3. Release of Unscheduled Firm Capacity - Unscheduled Firm capacity and Transmission Reliability Margin (TRM) will be released and made available on OASIS as Non-Firm at 1000 MPT hours each pre-scheduling day in accordance with the WECC Pre-Schedule calendar.
  - a. In order to accommodate pre-schedules in the Pacific Prevailing Time zone (PPT), PSCo Transmission Operations will release capacity into the first hour of the day following the Pre-Scheduling window (in accordance with the WECC Pre-Schedule calendar).
  - b. To ensure competing Transmission Service Requests (TSR) for a constrained resource are granted according to the NASEB Service Request Tier queue priority designation (see NASEB WEQ Standards – Version 002-1 Table 4-3), TSRs submitted between 1000 to 1005 MPT will be considered as competing for a constrained resource (the released Non-Firm capacity made available at 1000 MPT), and will be assessed collectively and granted capacity based on the Service Request Tier



## Public Service Company of Colorado Balancing Authority and Transmission Provider

designation and request attributes as identified in the NASEB WEQ Standards.

4. Real Time tags:
  - a. Real Time Tags New and Adjustments - New Real-time hourly or Intra-hour tags are due 20 minutes prior to the start of the Scheduling Interval of implementation. Tags received less than 20 minutes prior to the start of the Scheduling Interval of implementation will be accommodated, if practicable.
5. Interchange tags using PSCo transmission as a path must have a valid OASIS number or a valid transmission contract identifier.
6. PSCo only offers the following Transmission Services:
  - a. Next-Hour Market Service – non-firm Available Transmission Capacity for the purposes under the Joint Dispatch Agreement.
  - b. Fixed Hourly - starts at the beginning of a clock hour and stops at the end of a clock hour.
  - c. Fixed Daily - starts at 00:00 MPT and stops at 00:00 MPT on the following day.
  - d. Sliding Daily - starts at the beginning of any hour or the day and stops exactly 24 hours later at the same period on the next day.
  - e. Fixed Weekly - starts on Monday at 00:00 MPT and ending on the following Monday at 00:00 MPT.
  - f. Fixed Monthly - starts on the first day of the month at 00:00 MPT and stops on the first day of the following month at 00:00 MPT.
  - g. Fixed Yearly - starts at 00:00 on the first date of a calendar year and stops at 00:00 on the first date of the next consecutive year.
  - h. Sliding Yearly - starts at 00:00 on any date and stops at 00:00 on the same date of the flowing year.
  - i. Extended Yearly - starts at 00:00 of any date and stopping at 00:00 more than one year later.
7. PSCo accepts requests for additional types of transmission service. Submit such requests by email to: [PSCoTariff@xcelenergy.com](mailto:PSCoTariff@xcelenergy.com)
8. PSCo will validate and match NERC priority codes between tags and TSRs. If the NERC priority code on the tag and TSR do not match, the Tag will be denied.
9. Firm and Non-firm tag curtailment methodology is pro-rata

**ATC Formula** - the following documents are posted on PSCo's OASIS home page under the ATC Information folder. <http://www.oatioasis.com/psco/index.html>



## **Public Service Company of Colorado Balancing Authority and Transmission Provider**

1. The Available Transmission Capacity (ATC) calculation methodology is outlined in the ATCID document.
2. Capacity Benefit Margin (CBM) is not currently utilized and the value is always zero. The process by which CBM can be established is outlined in the CBMID document.
3. Transmission Reserve Margin (TRM) is released as non-firm capacity at the same time that the unscheduled firm is released as non-firm; further details are outlined in the TRMID document.
4. The Postback Methodology that PSCo uses is located in the Current Postback Methodology document.

### **Lamar DC Tie OASIS Reservations and Scheduling**

1. Administration - PSCo administers transmission service across the Lamar DC HVDC Tie (DC Tie), which interconnects the PSCo transmission system to the transmission system of Southwestern Public Service Company (SPS), another Xcel Energy Operating Company.
  - a. Attachment C of the Xcel Energy OATT describes the methodology to calculate ATC on the PSCo system. However, Attachment C does not detail the process by which variability in the output of variable energy resources (VERs) (including wind generators) located near the Lamar DC Tie are taken into account in the calculation of non-firm ATC from east to west across the Lamar DC Tie. Details for this calculation are stated in the Lamar to Boone Available Transfer Capability Business Practice.
2. Availability of Non-firm ATC – Non-firm ATC data for scheduling across the Lamar DC tie will be made available in accordance with the WECC Pre-Schedule calendar.
3. Firm ATC - Requests by an existing SPS Network Customer under the Xcel Energy OATT or by a Southwest Power Pool (SPP) Network Customer to designate Firm Network Resources on the PSCo side of the DC Tie for delivery across the DC Tie to a Network Load on the SPS transmission system shall be made on the PSCo OASIS page. SPS or SPP Network Integrated Transmission Service (NITS) customers requesting delivery of Network Resources across the Lamar HVDC Tie from the PSCo transmission system to the SPS transmission system shall execute a separate NITS agreement with PSCo. The PSCo NITS customer shall designate the Network Load for such requests at the Lamar Tie and submit requests on OASIS showing LAMR345 as the POD.
4. ATC - TTC and ATC for the Lamar DC tie are posted on OASIS. Bi-directional ATC will be posted up to the continuous operating capability of the tie. TSRs will be processed pursuant to the Xcel Energy OATT, NERC Reliability Standards, WECC Business Practices and PSCo Business Practices.



## **Public Service Company of Colorado Balancing Authority and Transmission Provider**

5. Ramp Rate - The DC tie conforms to the WECC ramp rates as identified in the NERC standards. As such the tie has the physical capability to ramp from -210 MW to +210 MW in the allotted 20-minute ramp duration.

### **Coordination of the Xcel Energy OATT with the WestConnect Tariff**

1. PSCo and its utility operating company affiliate SPS are subject to the Xcel Energy OATT. PSCo and SPS have one point of interconnection (LAMR345). The Xcel Energy OATT includes a provision (Schedules 7 & 8 "Service by Multiple Operating Companies") that provides that a Point-to-Point (PTP) transmission customer may use more than one Xcel Energy operating company system under "higher of" pricing rather than pay pancaked PTP transmission service rates.
2. PSCo has filed a separate WestConnect Tariff providing for non-firm PTP transmission service under the WestConnect pricing principles. The PSCo WestConnect tariff link is on PSCo's OASIS home page at <http://www.oatioasis.com/psco/index.html>.
3. To be eligible for non-pancaked PTP transmission service rates, identical PTP service requests (those with the same product type, duration, and quantity) must be secured over both the PSCo and SPS systems under the Xcel Energy OATT, connecting at LAMR345. Transactions using the PSCo West Connect tariff with a POD of LAMR345 may use (a) NITS under either the Xcel Energy OATT or the Southwest Power Pool (SPP) OATT, or (b) PTP service under the SPP OATT, for deliveries on the SPS side of LAMR345. The transmission services on the SPS system must meet the eligibility requirements under the applicable OATT. Neither PTP transmission service using the PSCo WestConnect tariff nor PTP transmission service using the SPP OATT are eligible for "higher of" pricing.'

### **Oasis Transmission Reservations**

1. The practice of submitting numerous duplicate requests to OASIS to secure a single reservation seriously degrades the performance of the OASIS system and negatively affects all transmission customers. PSCo deems more than six (6) identical requests submitted by the same company/entity within any two consecutive clock hours to be an abuse of the system and all requests submitted by that company/entity within that specified duration will be REFUSED.
2. Before a conditional reservation deadline, an Eligible Customer with a reservation for shorter term service has the right of first refusal to match any longer term request before losing its reservation priority. Reservation is defined as a confirmed request, whereas request is a queued request that has not been confirmed.
3. PSCo accepts REDIRECT requests of FIRM Original PTP reservations on a FIRM basis for periods of less than or equal to the duration of the Original

## **Public Service Company of Colorado Balancing Authority and Transmission Provider**

reservation. The requirements for redirecting FIRM PTP transmission service are summarized below.

- a. All requests to redirect a FIRM reservation will be treated as new requests and should be submitted on OASIS with a Request Type of "REDIRECT".
  - b. A REDIRECT request will be accepted if there is sufficient ATC available to satisfy the request. Each Firm REDIRECT retains the reservation priority of the ORIGINAL request.
  - c. Any REDIRECT request must indicate the AREF of the ORIGINAL reservation in the RELATED\_REF field and must be PRECONFIRMED.
  - d. A request to REDIRECT can be for all or part of the capacity of the ORIGINAL reservation. A request to REDIRECT must be for the same amount for the entire redirected period. No variable schedule or use of profile edit to segment reservation into smaller intervals with gaps is allowed. Furthermore, no profile segment may request a capacity value of zero (0).
  - e. With respect to ORIGINAL reservations, a firm REDIRECT request must match an existing type of PTP service with a similar or shorter duration service increment than the ORIGINAL request (excluding hourly). The Start and Stop times must fall within the boundaries of the ORIGINAL reservation. For example, a Monthly Firm PTP reservation may be redirected with a Weekly Firm or Daily Firm PTP reservation of type "REDIRECT".
  - f. Only ORIGINAL Firm TSRs and redirected Firm TSRs with a CONFIRMED status may be redirected.
  - g. Once a firm REDIRECT request is CONFIRMED, any capacity on the ORIGINAL path freed up during the overlapping period will be available to other customers for the period of that redirect.
  - h. A request for a Firm REDIRECT is subject to all request timing requirements consistent with a reservation for Firm PTP service of similar duration.
  - i. Any applicable rollover rights will remain on the ORIGINAL path of a long-term firm reservation unless otherwise conveyed by the Transmission Customer through meeting all applicable conditions as stipulated in the NASEB Business Practice Standards.
4. Insufficient ATC - if there is insufficient ATC to grant the Transmission Customer's request, PSCo will not offer Partial Service through a Counteroffer of the TSR.
  5. Price bids – PSCo does not offer or accept negotiated transmission service pricing through a Counteroffer of the TSR.
  6. Annulments - PSCo Transmission may annul a CONFIRMED TSR at the request of the customer in the very near term following submittal of the TSR. The service must be annulled in full; requests for partial annulment will NOT be granted.



## **Public Service Company of Colorado Balancing Authority and Transmission Provider**

7. Ancillary Services – PSCO does not post Ancillary Services separate on OASIS. All required Ancillary Services per PSCO's OATT are automatically assigned to the Transmission Customer unless otherwise provided through contractual agreement.

### **Network Integration Transmission (NITS) Customers**

1. Network Customers using Designated Network Resources to serve Network Load will be using Firm NITS. The tag must use the firm transmission service designation of 7-FN in the "Transmission Allocation" section under "Product". PSCO's Tag Validation process will automatically fail any tag using Network Service if the Transmission Allocation Product is not 7-FN. This is to ensure Network Service TSRs are only used for NITS purposes.
2. Network Customers using Non Designated Resources to serve Network Load will be using Secondary Service, the highest priority non-firm PTP transmission service. The E-tag should use the Network non-firm designation of 6-NN for the transmission priority. Secondary Service (6-NN) will be subject to curtailment prior to curtailment of either firm NITS or Firm PTP transmission service.
3. Network Customers may un-designate their network resources for off system, system sales on a temporary basis according to the registered POR for the specific resource.
  - a. For PSCO Network resources serving PSCO Network Load, a Network Resource Grouping POR of PSCOGEN represents those centrally located, unconstrained resources specifically for this purpose. The specific resources identified as PSCOGEN can be found on the Designated Network Resource list that is posted on PSCO's OASIS.
4. NERC Standard EOP-002-3, Requirement 9 of NERC Reliability Standard EOP-002-3 contains the following language:
  - a. When a Transmission Service Provider expects to elevate the transmission service priority of an Interchange Transaction from Priority 6 (Network Integration Transmission Service from Non-designated Resources) to Priority 7 (Network Integration Transmission Service from designated Network Resources) as permitted in its transmission tariff.
  - b. The language of the NERC standard implies that a NITS customer may be allowed to elevate the transmission service priority of a 6-NN interchange transaction to 7-FN during a declared Energy Emergency Alert (EEA1 or EEA2). However, the Xcel Energy OATT contains no provision for elevating transmission service priority from 6-NN to 7-FN as contemplated in EOP-002-3, R9. During a declared EEA1 or EEA2, PSCO will apply this requirement at the direction of the Reliability Coordinator (WECC) and not at the request of a NITS customer.





## Public Service Company of Colorado Balancing Authority and Transmission Provider

- c. NITS customers seeking 7-FN service priority for their interchange tag(s) during a declared emergency condition should thus tag from Designated Network Resources eligible for 7-FN service during such conditions.

### Designated Network Resources

**Network Resource:** A designated Purchase Power Agreement or generating resource owned, purchased or leased by a Network Customer meeting all provisions of PSCo's Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program.

1. **New Network Resources:** A Network Customer can designate a new Network Resource by submitting Network Resources-Initial Designation Form. This document is located on PSCo's OASIS home page, under the FERC 890 Postings folder. <http://www.oatiaoasis.com/psco/index.html>
2. **Changed Network Resources:** If the attributes of a Network Resource change, the Network Customer is required to provide notification of that change by submitting a Network Resource-Change Designation Form. This document is located on the PSCo OASIS home page, under the FERC 890 Postings folder. <http://www.oatiaoasis.com/psco/index.html>
3. **Termination of Network Resources:** The Network Customer may terminate the designation of all or part of a generating resource as a Network Resource by providing notification to the Transmission Provider as soon as reasonably practicable, but no later than the firm scheduling deadline (1000 MPT) for the period of termination. A Network Customer can terminate a Network Resource by submitting the Network Resource – Change Designation Form. This document is located on PSCo's OASIS home page, under the FERC 890 Postings folder. <http://www.oatiaoasis.com/psco/index.html>
  - a. Requests for termination of Network Resource status should indicate whether the request is for permanent or temporary termination. A request for permanent termination of Network Resource status must indicate the date and time that the termination is to be effective, and the identification and capacity of the resource or portions thereof to be permanently terminated.
  - b. As part of a temporary termination, a Network Customer may only re-designate the same resource that was originally designated, or a portion thereof. Requests to re-designate a different resource and/or a resource with increased capacity will be deemed deficient and the PSCo Transmission Operators will deny the request.



## **Public Service Company of Colorado Balancing Authority and Transmission Provider**

### **Transmission Discounting Policy**

PSCo does not currently discount transmission service. If PSCo changes the discounting policy, the new policy will be posted in the OASIS business practices.

### **Yearly Transmission Service and Billing**

As a Transmission Provider, Public Service Company of Colorado (PSCo) had added an option for Yearly long-term point-to-point transmission service as of March 04, 2013. The service can start during any month and day of the year, ending the day before the one-year anniversary date (Yearly Sliding Service). This service will be posted on PSCo's OASIS. Yearly service will be billed on a monthly cycle for the transmission service granted. If the start or stop time of the Yearly transmission service occurs mid-month, the initial and final bills will be pro-rated based on the days of the month covered by the reservation.