DESERET POWER
ELECTRIC COOPERATIVE

Transmission Services

Available Transfer Capability Implementation Document

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1. Purpose

The Available Transfer Capability Implementation Document (ATCID) provides for the documentation of required information as specified in the NERC Standard MOD Standards and the NAESB OASIS Standards regarding the calculation methodology and information sharing of Available Transfer Capability specific to this Transmission Provider

2. Definitions

2.1. Terms used in this document align with the definitions identified in the NERC Glossary of Terms and the NERC MOD Standards.

2.2. Specific terms to Deseret Power are as listed:

2.2.1. **Firm Loss Return Capacity (LR_F)** - The firm capacity reserved for the delivery of loss returns to the Deseret Power system from all transmission customers needing such capacity

2.2.2. **Counterflows** – The scheduled energy values of transactions utilizing a Firm Transmission Service on the path in the opposite direction for which an ATC is being calculated, i.e., for the purposes of ATC calculations, Cournterflows are firm, tagged counter-schedules.

3. Requirements

3.1. The Requirement R3 of NERC Standard MOD-001, Available Transmission System Capability are applicable to this document.

4. Implementation

4.1. <u>Methodology</u>

4.1.1. Deseret Power has selected the MOD-029 Rated System Path Methodology for determining Total Transfer Capability and Available Transfer Capability for all Posted Paths and in all ATC time horizons.

4.1.2. Terms and the ATC calculations used in this implementation are consistent with the ATC and ETC equations expressed in NERC Standard MOD-029, Rated System Path Methodology and with Deseret Power's OATT Attachment C, which provide the following general equations:

4.1.2.1. $ATC_F = TTC – ETC_F – CBM - TRM + Postbacks_F + Counterflows_F$

4.1.2.2. $ATC_{NF} = TTC - ETC_F - ETC_{NF} - CBM - TRM + Postbacks_{NF} + Counterflows_{NF}$

4.1.3. The ATC values are calculated at a minimum for the following time periods:

4.1.3.1. Hourly values for the next 48 hours.

4.1.3.2. Daily values for at least the next 31 calendar days.

4.1.3.3. Monthly values for at least the next 12 months (months 2-13).

4.2. ATC Calculations

4.2.1. The TTC values are as established in the MOD-029 Operational Study Report. This Study Report maybe updated from time to time as system conditions in Deseret Power's judgment may require. This study used the methodology requirements of MOD-029.

4.2.2. The ETC values are used as documented in Deseret Power OATT Attachment C.

4.2.2.1. $ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$

However, for Deseret Power's system, NL, NITS, and GF are set to zero (0) because all of Deseret's transmission reservations are for Point to Point (PTP) Transmission Service and grandfathered transmission contracts have been converted to Point to Point obligations.

4.2.2.2. The rollover right (ROR_F) is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

4.2.2.3. Firm Loss Return Capacity $\mathbf{LR_F}$ is considered as an "other service" ($\mathbf{OS_F}$) component of $\mathbf{ETC_F}$ as allowed under MOD-029, Rated System Path Methodology.

4.2.2.4. Therefore the ETC_F for Deseret Power is the sum of $PTP_F + ROR_F + OS_F$

4.2.2.5. $ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$

For Deseret Power's system the $NITS_{NF}$ and GF_{NF} are zero (0).

4.2.3. Deseret power does not use TRM or CBM in its ATC calculation; therefore, these values at set to zero (0).

4.2.4. Postbacks are added back to the ATC calculation in accordance with Deseret Power's Business Practice, which may be changed from time to time.

4.2.4.1. $Postbacks_F$ are set to zero for the firm ATC calculation, but are used in the non-firm ATC calculation. They include any portion of a confirmed firm transmission service that has been redirected to another path.

4.2.5. $Postbacks_{NF}$ are included as an addition to the non-firm ATC calculation and include any non scheduled confirmed transmission service reservation on the associated path plus any $Postback_F$ for the associated path.

4.2.6. Counterflows

4.2.6.1. ATC_{NF} in the Scheduling Horizon will be increased for those paths that have tagged firm counter schedules. Only tagged firm counter schedules will be used to increase non-firm ATC on the associated path.

4.2.6.2. ATC_F is not affected by Counterflows because Counterflows are set to zero (0) for the ATC_F Calculation.

4.2.6.3. The rationale for this Counterflow implementation is that Counterflows are not known until they are tagged. Counterflows are too uncertain to use them to create additional firm ATC. Non-firm Counterflows are too uncertain to be used to increase ACT.

4.2.7. Other Services

4.2.7.1. Firm Loss Return Capacity $\mathbf{LR_F}$ is considered as an "other service" ($\mathbf{OS_F}$) component of $\mathbf{ETC_F}$ as allowed under MOD-029, Rated System Path Methodology.

4.3. ATC Data Received from Others

4.3.1. Deseret Power receives data from the following Transmission Operators for use in the calculation of ATC:

- PacifiCorp (PACE)

4.3.2. Deseret Power does not receive data from any Transmission Provider for use in the calculation of ATC.

4.4. TTC Data Delivered to Others

4.4.1. Deseret Power does not provide any data to any other Transmission Operator or Transmission Provider for use in calculating transfer or Flowgate capability. This is interpreted as having to do with Total Transfer Capability or Total Flowgate Capability.

4.5. Allocation of TTC and ATC

4.5.1. The Bonanza West path rating is a WECC rated path with a path rating of 785 MW. The Bonanza West path is composed of two lines: the Upalco-Carbon 138 kV line owned by PacifiCorp and the Bonanza-Mona 345 kV line owned by Deseret Power. The allocation of the TTC is 140 MW to the Upalco-Carbon line and 645 MW to the Bonanza-Mona line. This allocation is based on the 1990 capacity study.

4.5.2. UMPA is a minority owner (6.25% by contract) in the Deseret Power transmission system. Its allocation is based on the percentage ownership of each line. Its ownership is handled as a confirmed long- term, firm transmission reservation on the Deseret Power OASIS.

4.5.3. Deseret does not have any seams issues or issues with forward looking congestion that cannot be handled in the normal routine.

4.6. Generation or Transmission Outages

4.6.1. Deseret Power's TTC values are not adjusted for generator outages.

4.6.2. Deseret Power's Transmission system is based on a rated path methodology. When there is a planned or forced outage the TTC is reset to zero for that path for the duration of the outage. The outage would affect that portion of a day or month.

4.6.3. Deseret Power's Transmission system TTC values are generally independent of other transmission paths. Historically, other transmission outages have not been a problem on the TTC of the Deseret Power system. Other outages either don't impact the Deseret system or they may limit the ability to schedule into the Deseret system thereby limiting the demand for transmission on the Deseret system.

5. Revision History

Revision	Date	Change Summary

0	April 1, 2011	Initial version
1.0	April 21, 2011	Added Counterflows to firm equation