

**Tampa Electric Company
Available Transfer Capability
Implementation Document (ATCID)
Effective Date March 11, 2013**

Tampa Electric Company's (TEC) ATCID is created in response to NERC reliability standard MOD-001-1 and MOD-028-1. The standards' requirements are noted herein for reference.

MOD-001-1

R3. Each Transmission Service Provider shall prepare and keep current an Available Transfer Capability Implementation Document (ATCID) that includes, at a minimum, the following information: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

R3.1. Information describing how the selected methodology (or methodologies) has been implemented, in such detail that, given the same information used by the Transmission Service Provider, the results of the ATC or AFC calculations can be validated.

TEC uses the Area Interchange Methodology, in accordance with standard MOD-028. This methodology is described in Attachment C to the Company's Open Access Transmission Tariff ("OATT") and is posted on TEC's OASIS. The methodology is implemented by the Florida Transmission Capability Determination Group ("FTCDG"), of which TEC is a member, using Open Access Technology, Inc.'s ("OATI") webTrans ATC Module, the "Engine". The FTTCS TTC/ATC Calculation Reference Document ("Reference Document"), fully describes the implementation of the methodology. Relevant parts of this document are attached. The algorithms used for the Engine's ATC calculation are included in Mathematical Algorithm Used To Calculate Firm and Non-Firm ATC posted on TEC's OASIS.

R3.2. A description of the manner in which the Transmission Service Provider will account for counterflows including:

3.2.1. How confirmed Transmission reservations, expected Interchange and internal counterflow are addressed in firm and non-firm ATC or AFC calculations.

3.2.2. A rationale for that accounting specified in R3.2.

Confirmed, long-term, firm transmission reservations, as well as firm contracted interchange transactions and internal Balancing Area flows resulting from expected load and generation dispatch levels, are included in the base models used to calculate ATC. Therefore, all flows and counterflows resulting from these items are reflected in the ATC calculations. Counterflows made available from short-term and non-firm transmission reservations are not reflected in posted ATC, due to the level of uncertainty associated with the scheduling of such reservations. However, any ATC made available from unscheduled reservations is released as non-firm ATC (posted back) in the Scheduling Horizon.

R3.3. The identity of the Transmission Operators and Transmission Service Providers from which the Transmission Service Provider receives data for use in calculating ATC or AFC.

Modeling data is provided by all registered Transmission Operators through the FRCC Planning Process. Outage data is received from all Transmission Service Providers through the Florida Transaction Management System (FTMS). These are shown in the NERC compliance registry, found on the NERC website.

R3.4. The identity of the Transmission Service Providers and Transmission Operators to which it provides data for use in calculating transfer or Flowgate capability.

TEC provides data to all of the entities listed in the response to R3.3.

R3.5. A description of the allocation processes listed below that are applicable to the Transmission Service Provider:

- Processes used to allocate transfer or Flowgate capability among multiple lines or sub-paths within a larger ATC Path or Flowgate.

TEC does not allocate ATC within a larger path.

- Processes used to allocate transfer or Flowgate capabilities among multiple owners or users of an ATC Path or Flowgate.

When a path has multiple owners, ATC is allocated in accordance with the ownership percentage.

- Processes used to allocate transfer or Flowgate capabilities between Transmission Service Providers to address issues such as forward looking congestion management and seams coordination.

TEC has no instances where ATC is allocated among multiple TSPs except when there are multiple owners as discussed in the previous bullet.

R3.6. A description of how generation and transmission outages are considered in transfer or Flowgate capability calculations, including:

3.6.1. The criteria used to determine when an outage that is in effect part of a day impacts a daily calculation.

For the scheduling horizon, daily ATC is the minimum of all hours so a partial day outage will affect daily ATC for that day. In the planning horizon, only outages that impact the peak hour impact the daily ATC calculation.

3.6.2. The criteria used to determine when an outage that is in effect part of a month impacts a monthly calculation.

Monthly ATC is determined by the lowest day ATC. Thus, an outage that causes a single day to have a low ATC value will cause the monthly ATC to similarly have that value.

- 3.6.3.** How outages from other Transmission Service Providers that cannot be mapped to the Transmission model used to calculate transfer or Flowgate capability are addressed.

The transmission model includes all of Florida and the SERC region. All relevant outages are mapped to the transmission model.

MOD-028-1

- R1.** Each Transmission Service Provider shall include in its Available Transfer Capability Implementation Document (ATCID), at a minimum, the following information relative to its methodology for determining Total Transfer Capability (TTC): [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

- R1.1.** Information describing how the selected methodology has been implemented, in such detail that, given the same information used by the Transmission Operator, the results of the TTC calculations can be validated.

See MOD-001-1 R3.1 (above)

- R1.2.** A description of the manner in which the Transmission Operator will account for Interchange Schedules in the calculation of TTC.

Long-term firm interchange is included in the TTC calculation and input to the process through “TSR List for Interchange” as described in the Reference Document.

- R1.3.** Any contractual obligations for allocation of TTC.

TEC’s only contractual obligation regarding allocation of TTC involves jointly owned facilities, as described in MOD-001-1 R3.5 (above).

- R1.4.** A description of the manner in which Contingencies are identified for use in the TTC process.

The contingency list used in the TTC process uses the same criteria as that used for FRCC Operations Planning studies. TEC’s entries are essentially all transmission facilities 100kV and above, and critical 69kV facilities as identified by FRCC as having an impact on the Bulk Electric System. Note that there are no 69kV facilities identified at this time.

- R1.5.** The following information on how source and sink for transmission service is accounted for in ATC calculations including:

See Reference Document, Service Point Definition, section 2.1.

- 1.5.1.** Define if the source used for Available Transfer Capability (ATC) calculations is obtained from the source field or the Point of Receipt (POR) field of the transmission reservation

ATC is calculated using the Point of Receipt as shown in the Reference Document.

1.5.2. Define if the sink used for ATC calculations is obtained from the sink field or the Point of Delivery (POD) field of the transmission reservation

ATC is calculated using the Point of Delivery as shown in the Reference Document.

1.5.3. The source/sink or POR/POD identification and mapping to the model.

List of identified POR/POD's for which ATC is calculated. This is the same list as is in the model.

| | | | |
|---------|----------|----------|---------|
| PKU-FPC | POU-TEC | | TEC-FPL |
| PLK-FPC | FPC-PKU | SSO-PKU | TEC-FPC |
| POU-FPC | FPC-PLK | SSO-PLK | |
| PKU-FPL | FPC-POU | SSO-POU | |
| PLK-FPL | FPC-FPL | SSO-FPC | |
| POU-FPL | FPC-TEC | SSO-FPL | |
| PKU-SSO | FPL-PKU | SSO-TEC | |
| PLK-SSO | FPL-PLK | RECK-PKU | |
| POU-SSO | FPL-POU | RECK-PLK | |
| PKU-SSO | FPL-FPC | RECK-POU | |
| PLK-SSO | FPL-TEC | RECK-SSO | |
| POU-SSO | RECK-TEC | TEC-PKU | |
| PKU-TEC | RECK-FPC | TEC-PLK | |
| PLK-TEC | RECK-FPL | TEC-POU | |

1.5.4. If the Transmission Service Provider's ATC calculation process involves a grouping of generation, the ATCID must identify how these generators participate in the group.

TEC uses models compiled by the FRCC for the ATC calculation process. Each generator is modeled individually and listed in the Generator Block and Priority spreadsheet, which is an input to the Engine and is discussed in the Reference Document. To the extent that multiple generators within an area are assigned the same block and priority, these generators could be considered grouped. They would participate in the group proportionally to their maximum output.

Change/Reason Log

| Date | Summary of Change | Reason for Change | Changed By |
|----------|-----------------------|--|----------------|
| 4/1/2011 | Original Document | Original Document | Art Nordlinger |
| 3/5/13 | Updated list of paths | Certain paths are no longer calculated | Art Nordlinger |

Excerpts from
FTTCS TTC/ATC Calculation Reference Document