
ATTACHMENT C

Methodology To Assess Available Transmission Capability

GTC shall be responsible for calculating Available Transfer Capability (AATC@) and related terms on GTC=s Transmission System based on current industry practices, standards and criteria, and shall make available the ATC information to all transmission users at the same time on GTC=s Open Access Same-Time Information System (AOASIS@). As recommended by NERC=s Transmission Transfer Capability Task Force, GTC will determine ATC values that are consistent with the principles in the NERC Available Transfer Capability Definitions and Determination document.

A. Near-Term ATC (Less than one year into the future)

GTC will perform seasonal assessments with VACAR-AEP-SOUTHERN-TVA (AVAST@) Study Group within the Southeastern Electric Reliability Council (ASERC@) Region to determine transfer capabilities to satisfy the OASIS twelve (12) months ATC posting requirements.

For the constrained transmission paths, GTC will coordinate with the appropriate transmission operating agent(s) and make available the ATCs for the firm (non-recallable) and non-firm (recallable) transmission service for the next 168 hours and, thereafter, to the end of a thirty (30) day period.

B. Long Term ATC (Greater than one year into the future)

GTC will perform future planning assessments with VACAR-SOUTHERN-TVA (AVST@) Study Group within the SERC Region to determine transfer capabilities to satisfy the OASIS future (greater than one (1) year and less than ten (10) years) ATC posting requirements.

C. Transfer Capability Allocations

GTC will utilize the jointly developed Power Transfer Distribution Factor (APTDF@) interface allocation methodology and principle for allocating transfer capabilities within the Southern subregion or associated transactions to support the posting and reservation of ATC values, taking into account the regional or wide-area approach to the determination or coordination of such ATC values.

D. Definitions of Available Transfer Capability and Related Terms

Available Transfer Capability (AATC@) is defined as the Total Transfer Capability (ATTC@) less the Transmission Reliability Margin (ATRM@), less the sum of existing transmission commitments (which includes retail customer load service) and the Capacity Benefit Margin (ACBM@).

Transmission Reliability Margin (ATRM@) is defined as 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.

Capacity Benefit Margin (ACBM@) is defined as that amount of transmission interconnection capability reserved by load serving entities to ensure access to generation from interconnected systems to meet generation reliability requirements.

Recallability is defined as the right of a transmission provider to interrupt all or part of a transmission service for any reason, including economic, that is not unduly discriminatory, and that is consistent with applicable Governmental Authority policy and the transmission provider's transmission service tariffs or contract provisions.

Non-recallable ATC (ANATC@) is defined as TTC less TRM, less non-recallable reserved transmission service (including CBM).

Recallable ATC (ARATC@) is defined as TTC less TRM, less recallable reserved transmission service, less non-recallable reserved transmission service (including CBM). Portions of the TRM may be made available by the transmission provider for recallable use, depending on the time frame under consideration for granting additional transmission service. RATC must be considered differently in the planning and operating horizons. In the planning horizon, the only data available are recallable and non-recallable transmission service reservations, whereas in the operating horizon transmission schedules are known.

E. Determination of Available Transfer Capability

The steps in the determination of Available (Transmission) Transfer Capability (AATC@) can be summarized as follows:

1. Determine appropriate commitments for base case assumptions for the following types of transmission service:

- X Non-recallable reserved (NRes - planning horizon)
- X Non-recallable scheduled (NSch - operating horizon).
- X Recallable reserved (RRes - planning horizon)

X Recallable scheduled (RSch - operating horizon).

2. Calculate Thermal, Voltage, and Stability Limits for path(s) or interface(s) of interest using appropriate Regional models, loads, criteria, and contingency conditions.

3. Calculate Total Transfer Capability (TTC)

TTC = Minimum of [Thermal Limit, Voltage Limit, Stability Limit]

4. Determine appropriate Transmission Reliability Margin (TRM) and Capacity Benefit Margin (CBM)

5. Calculate Non-recallable Available Transfer Capability (NATC)

NATC = TTC - TRM - NRes (including CBM)
(applicable to both Operating and Planning Horizons)

6. Calculate Recallable Available Transfer Capability (RATC)

RATC = TTC - a * TRM - RRes - NRes (including CBM)
(applicable to the Planning Horizon)

RATC = TTC - b * TRM - RSch - NSch (including CBM)
(applicable to the Operating Horizon)

where $0 \leq a$, $b \leq 1$, values that are determined by individual transmission providers based on reliability concerns.