

Note: an Interpretation cannot be used to change a standard.

Request for an Interpretation of a Reliability Standard

Date submitted: February 17, 2009

Contact information for person requesting the interpretation:

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Identify the standard that needs clarification:

Standard Number and Title:

MOD-001-01 – Available Transmission System Capability

MOD-029-01 - Rated System Path Methodology

Identify specifically what needs clarification:

Requirement Number and Text of Requirement:

MOD-001-01 Requirement R2:

- **R2.** Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):
 - **R2.1.** Hourly values for at least the next 48 hours.
 - **R2.2.** Daily values for at least the next 31 calendar days.
 - **R2.3.** Monthly values for at least the next 12 months (months 2-13).

MOD-001-01 Requirement R8:

- **R8.** Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:
 - **R8.1.** Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.
 - R8.2. Daily values, once per day.



R8.3. Monthly values, once per week.

Clarification Needed:

Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Background Information: Available Transfer Capability (ATC) is defined as a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. It is defined as Total Transfer Capability less existing transmission commitments (including retail customer service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus counterflows.

A customer's ability to schedule transactions in the NYISO system is, with the exception of certain external interfaces, not limited by a pre-defined amount of ATC. Therefore, for NYISO, ATC is **not** "a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses" in New York. Instead, as FERC has recognized, ATC postings in New York are "advisory" projections that are, with the exception of certain postings for external interfaces, calculated after the NYISO markets close, and transactions are scheduled, based on calculations performed by the NYISO's day-ahead and real-time market software. The fact that a posted ATC is zero does not mean that further commercial activity is precluded because the NYISO may redispatch its system to support additional transactions. A posted ATC value of zero simply indicates that there is congestion at a particular NYISO interface. FERC has granted the NYISO a number of waivers from its OASIS posting regulations that reflect these differences.

R2 and R8 under MOD-001 seem to presume that all Transmission Service Providers calculate ATC values for various time intervals further in the future than one-day ahead. This presumption is generally not applicable to NYISO because its FERC-approved market design does not allow customers to schedule transactions, or reserve transmission service, more than one-day ahead (except for certain external interfaces where "pre-scheduling" is allowed.) The NYISO therefore does not calculate ATC for periods further than one day ahead, except to the extent necessary to support "pre-scheduling." In its June 18, 2008 "Consideration of Comments," the ATC SDT noted that the "advisory" form of ATC posted by the NYISO might not actually be "ATC" and that the NYISO may therefore not have any "ATC Paths" for purposes of the ATC MOD standards. The SDT recognized that advance transmission reservations were generally not supported under the NYISO market design and suggested that the NYISO could comply with R2 and R8 by describing its "process, and which components of the ATC equation are zero" in its ATCID.

Requirement Number and Text of Requirement:

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

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



Where:

 NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

NITS_F is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

 GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

 PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

 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.

 OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC $_{NF}$) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

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

Where:

 ${\sf NITS_{NF}}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

 GF_NF is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

 $\mathsf{PTP}_{\mathsf{NF}}$ is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

 OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Clarification Needed:

Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?



Transmission Flow Utilization represents the security constrained network powerflow solutions of the NYISO's Security Constrained Unit Commitment software, with respect to the NYISO Day-Ahead Market, or its Real-Time Commitment and Real-Time Dispatch software with respect to the NYISO's Real-Time Market. The NYISO's existing FERC-approved ATC equation, which reflects the nature of the "financial reservation" based form of open access transmission service that it provides, calculates firm and non-firm ATC as follows (the NYISO does not utilize CBM.).

ATC (Firm) = TTC — Transmission Flow Utilization (Firm) — TRM

ATC (Non-Firm) = ATC (Firm) — Transmission Flow Utilization (Non-Firm)

The ATC SDT has indicated that it believes that the OS definitions are broad enough to encompass the NYISO's Transmission Flow Utilization information.

Identify the material impact associated with this interpretation:

The material impact to the NYISO is the risk that an auditor might conclude that its current approach to calculating ATC/TTC was not consistent with NERC's requirements. If an auditor were to reach such a conclusion, the NYISO could be exposed to serious consequences, including sanctions or a requirement to modify its market design and transmission model in ways that would not be desired by its stakeholders, required by FERC, or necessary for any reliability-related purpose.

Project 2009-15: Response to Request for an Interpretation of MOD-001-1 Requirements R2 & R8 and MOD-029-1 Requirements R5 & R6 for New York Independent System Operator

The following interpretation of MOD-001-1 Requirements R2 & R8 and MOD-029-1 Requirements R5 & R6 was developed by the ATC/TTC/CBM/TRM Standards Drafting Team.

Requirement Number and Text of Requirement

MOD-001-01 Requirement R2:

R2. Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):

- R2.1. Hourly values for at least the next 48 hours.
- **R2.2.** Daily values for at least the next 31 calendar days.
- R2.3. Monthly values for at least the next 12 months (months 2-13).

MOD-001-01 Requirement R8:

R8. Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:



R8.1. Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.

R8.2. Daily values, once per day.

R8.3. Monthly values, once per week.

Question #1

Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Response to Question #1

Requirements R2 and R8 of MOD-001-1 are both related to Requirement R1, which defines that ATC methodologies are to be applied to specific "ATC Paths." The NERC definition of ATC Path is "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated; and any Posted Path." Based on a review of the language included in this request, the NYISO Open Access Transmission Tariff, and other information posted on the NYISO Web site, it appears that the NYISO does indeed have multiple ATC Paths, which are subject to the calculation and recalculation requirements in Requirements R2 and R8. It appears from reviewing this information that ATC is defined in the NYISO tariff in the same manner in which NERC defines it, making it difficult to conclude that NYISO's "advisory ATC" is not the same as ATC. In addition, it appears that pre-scheduling is permitted on certain external paths, making the calculation of ATC prior to day ahead necessary on those paths.

The second part of NYISO's question is only applicable if the first part was answered in the negative and therefore will not be addressed.

Requirement Number and Text of Requirement

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC $_F$) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

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

Where:

 NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

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Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

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R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC $_{NF}$) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

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

Where:

 ${\rm NITS_{NF}}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

 $\mathsf{GF}_{\mathsf{NF}}$ is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

 $\mathsf{PTP}_{\mathsf{NF}}$ is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

 OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Question #2

Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

Response to Question #2

This request for interpretation and the NYISO Open Access Transmission Tariff describe the NYISO's concept of "Transmission Flow Utilization;" however, it is unclear whether or not Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6 are incorporated into "Transmission Flow Utilization." Provided that "Transmission Flow Utilization" does not include Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6, it is appropriate to be included within the "Other Services" term. However, if "Transmission Flow Utilization" does incorporate those components, then simply including "Transmission Flow Utilization" in "Other Service" would be inappropriate.