

Comment Form for 1st Draft of MOD-001-1

Please use this form to submit comments on the first draft of the ATC/AFC Methodology Documentation Standard (MOD-001-1 ATC and AFC Calculation Methodologies). Comments must be submitted by **March 16, 2007**. You must submit the completed form by email to sarcomm@nerc.com with the words "ATC/AFC Methodology" in the subject line. If you have questions please contact Bill Lohrman at wvlohman@praguepower.com or 908-630-0289.

Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Ron Falsetti	
Organization:	IESO	
Telephone:	905-855-6187	
E-mail:	ron.falsetti@ieso.ca	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input checked="" type="checkbox"/>	2 — RTOs, and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input checked="" type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 – Regional Reliability Organizations, and Regional Entities

Background Information

The proposed standard labeled [MOD-001-1](#) outlines requirements for the calculation of ATC and AFC, but does not provide requirements for the calculation of TFC or TTC. The proposed standard may (in the future) reference NERC Standard(s) FAC-012 and/or FAC-013 as the source for the requirements for calculation of TTC and/or TFC. Currently [FAC-012](#) identifies requirements for the calculation of inter-regional and intra-regional Transfer Capabilities (TC). The term TTC is not mentioned in [FAC-012](#), as described in the FERC NOPR¹.

A distinct definition for the TC and TTC terms appears in the NERC *Glossary of Terms Used in Reliability Standards*². The members of the drafting team are proposing that they are basically the same quantity and should be covered in a single standard in [FAC-012](#). Consequently, the draft version of MOD-001-1 does not contain calculation requirements for TTC. The drafting team is seeking input from the industry on this question (see Comment Form questions 13 and 14). The comment form includes a question asking whether the values for TC and TTC should be considered the same value.

If the calculation of AFC and ATC are ultimately dependent upon values derived in the FAC-012 and/or the FAC-013 standard(s), the drafting team will revise FAC-012 and/or FAC-013 as necessary prior to balloting MOD-001-1 so that the industry will know how these precursor values will be developed. A partial list of these precursor values could include:

- Semi-annual summer and winter TTC values
- Assumptions used for modeling generation dispatch
- Transmission and generation outage schedules
- Power flow models
- Load forecasts
- Path definitions and facility ratings
- Algorithms

Clarification of Capacity Benefit Margin and Transmission Reserve Margin will be subsequently addressed by the drafting team in proposed revisions to the respective standards dealing with those values.

The Standard Drafting Team would like to receive industry comment on the proposed requirements. Once there is consensus on the requirements, the drafting team will add measures and compliance elements.

¹ <http://www.ferc.gov/whats-new/comm-meet/051806/E-1.pdf>

² ftp://www.nerc.com/pub/sys/all_updl/standards/rs/Glossary_02May06.pdf

You do not have to answer all questions.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. This is the proposed definition for 'Existing Transmission Commitments (ETCs)' — Any combination of Native Load uses, Contingency Reserves not included in Transmission Reliability Margin or Capacity Benefit Margin, existing commitments for purchases, exchanges, deliveries, or sales, existing commitments for transmission service, and other pending potential uses of Transfer Capability.

Is this definition sufficient to calculate the ETC in a consistent and reliable manner? If not, please explain.

Yes

No

Comments: We agree with most of the components except "...other pending potential uses of Transfer Capability". This component is subject to interpretation and it is difficult to demonstrate a quantifiable need for the inclusion of this component. Also, we question the need to specify "exchanges" and "deliveries" given that "purchases" and "sales" are already included in the definition.

2. This is the proposed definition for 'Transmission Service Request' — A service requested by the Transmission Customer to the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.

Should this definition be expanded or changed?

Yes

No

Comments:

3. This is the proposed definition for 'Flowgate' — A single transmission element, group of transmission elements and any associated contingency (ies) intended to model MW flow impact relating to transmission limitations and transmission service usage. Transfer Distribution Factors are used to approximate MW flow impact on the flowgate caused by power transfers.

This is the definition of Flowgate in the NERC *Glossary of Terms Used in Reliability Standards*: A designated point on the transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions.

Which definition do you prefer?

Proposed definition

Already approved definition

Comments:

4. The drafting team believes that formal definitions are needed for the various time frames used in the standard. As a straw man, the drafting team would like to have industry comment on the proposed definitions below:

Operating Horizon — Time frames encompassing same-day and real-time periods.

Scheduling Horizon — Time frames encompassing the day-ahead period.

Operations Planning Horizon — Time frames beyond the Scheduling Horizon up to 13 months

Long-term Planning Horizon — Time frames beyond the Operations Planning Horizon

Do you think that the above terms need to be defined for use in this standard — and if you do, then do you agree with the proposed definitions?

N/A — these terms do not need to be defined for use in this standard

The terms do need to be defined and I do agree with the proposed definitions

The terms do need to be defined but I don't agree with the proposed definitions

Comments:

5. Do you agree with the remaining definition of terms used in the proposed standard? If not, please explain which terms need refinement and how.

Agree

Disagree

Comments:

6. The proposed standard assigns all requirements for developing ATC and AFC methodologies and values to the Transmission Service Provider. Do you agree with this? If not, please explain why.

Yes

No

Comments:

7. In Requirements 1 and 4, the standard drafting team has identified three methodologies in which the ATC and AFC are calculated (Rated System Path — ATC, Network Response — ATC and Network Response — AFC, methodologies). Should the drafting team consider other methodologies? (Note that the difference between the Rated System Path methodology for calculating ATC and the Network Response methodology for calculating ATC use identical equations, but there are distinct differences between these methodologies that will become more clear when the drafting team issues its proposed changes to the standards that address Total Transfer Capability or Transfer Capability.) Please explain.

Yes

No

Comments: We are not suggesting that the SDT consider other methodologies. However, we do not understand why AFC calculation must be tied with the Network Response methodology only. Use of Flowgate, and determining TFC and calculating AFC on the identified Flowgates can be applied to the Rated System Path methodology as well. In this case, the Flowgates themselves could become the Rated Paths.

Hence, we question the need for the qualifying statement – “using a Network Response Methodology” in parentheses, after “calculates AFC” in each of the requirements R4, R5 and R6.

8. In Requirement 2, the Transmission Service Provider that calculates ATC is required to recalculate ATC when there is a change to one of the values used to calculate ATC-TTC, TRM, CBM or ETC. When TTC, TRM, CBM or ETC changes, how much time should the Transmission Service Provider have to perform its recalculation of ATC?

Comments: No more than 1 hour.

9. Do you agree (?) with the frequency of exchanging data as specified Requirement 6?

Yes

No

Comments: We agree with the frequency of exchanging data as specified in Requirement 6. However, we do not agree with the sub-requirement 6.5.

Not all TSPs perform load forecasting. They should not be required to provide this information. Besides, load forecast information is already included in the base model a TSP uses in calculating AFCs. This is met by virtue of meeting R6.4.

10. Requirement 9 indicates that the Transmission Service Provider shall have and consistently use only one methodology for the Transmission Service Provider's entire system in which the ATC or AFC are calculated (Rated System Path — ATC, Network Response — ATC and Network Response — AFC, methodologies). If choosing just one of these methods is not sufficient for your system, please explain why.

Yes

No

Comments: See comments under Q7 on Rated Path Methodology – AFC (not included in the 3 methods).

11. Do you think that Requirement 13 in this proposed standard necessary?

Yes

No

Comments: Requirement 13 is not required. Approving a service request at a value less than the ATC or AFC is a commercial issue, which does not affect reliability. This issue can be addressed in the Business Practice.

12. Do you agree with the other proposed requirements included in the proposed standard?
If not please explain with which requirements you do not agree and why.

Yes

No

Comments: We do not agree with the following:

- (i) The text box next to R5 says: [Please note that it may appear that the AFC methodology contains more requirements than that ATC methodology. Due to the characteristics of the ATC methodology, the corresponding level of detail will be contained in the standard that determines TTC (e.g. FAC 12 or FAC 13) when it is revised.]

We interpret this text box applies to both R5 and R6.

We agree that the two methods are different and therefore may need different detailed requirements in certain aspects. However, many of the sub-requirements in R5 and R6 appear to be applicable to the ATC calculation methodology as well hence the detailed requirements can also be addressed in this standard. Moreover, addressing detailed ATC calculation requirements in FAC-012 or –013 appears to be a misfit since the latter standards deal with Transfer Capabilities (and to be revised to deal with Total Transfer Capabilities as suggested in Q14, below), which are solely reliability parameters. Moreover, having the detailed ATC calculation requirements placed in a separate standard would leave room for confusion to the standard users.

- (ii) R6.5. Please see comments under Q9.
- (iii) R11.4 The contingencies considered and applied in determining the ATC or AFC would be the same sets used for operating studies and planning studies which could include all possible Category B and Category C contingencies on the TSP's system. It would be near impossible to identify them all. This requirement is implied by R11.2, and where necessary, R11.2 can be expanded to ensure that the ATC and AFC shall be determined with the same set of contingency criteria applicable to the reliability assessment of the like time frame.
- (iv) R11.5 We do not understand this requirement. Does it mean that for ATC and AFC calculation, the model and assumptions must be the same as those used for expansion planning? Note that calculations of ATC and AFC need to consider planned outages to BES facilities, whereas expansion planning may not. Also, if this is the requirement, what are the parallel requirements for ATC and AFC calculation in time frames less than 13 months?

13. Should the proposed standard include further standardization for the components of the calculation of ATC or AFC (i.e., should the proposed standard be more prescriptive regarding the consistency and standardization of determining TTC, TFC, ETC, TRM, and CBM)? If so, please explain.

Yes

No

Comments: Some general criteria (the basis) for determining CBM and TRM should be developed so that a consistent approach is used by all TSPs.

14. Do you agree that Total Transfer Capability (TTC) referenced in the MOD standards and Transfer Capability (TC) references in the FAC-012-1 and/or FAC-013-1 standards are the same and should be treated as such in developing this standard? If you don't believe these are the same, please explain what you feel are the differences between TC and TTC.

Yes — TTC and TC are the same

No — TTC and TC are not the same

Comments:

15. As mentioned in the introduction, the drafting team has deferred development of requirements for the calculation of Total Flowgate Capability (TFC) pending industry comments. The drafting team would like to know whether the industry believes that MOD-001-1 needs to address TFC methodology and documentation as opposed to having the TFC methodology addressed by revising the existing Facility Rating FAC-012-1 and/or FAC-013-1 standards. Please explain your answer.

Yes

No

Comments: TTC and TFC are reliability parameters that are determined by the facility rating methodologies stipulated in FAC-012 and FAC-013, and these values are not determined by the TSP. In ATC and AFC calculations, these values serve as the upper bound for assessing and managing available transmission services only.

16. When calculating ATC and monthly, daily, weekly, and hourly AFC values, what time horizon(s) for CBM should be used and which reliability function(s) should make the CBM calculations? Please explain.

Comments: All time horizons should be used in accordance with the corresponding ATC calculation time frame. The value of CBM should be determined by the TSP based on the need demonstrated by the LSE.

17. When calculating ATC and monthly, daily, and hourly AFC values, what time horizon(s) for TRM should be used, and which reliability function(s) should make the TRM calculations? Please explain.

Comments: All time horizons should be used in accordance with the corresponding ATC calculation time frame. The value of TRM should be determined by the TOP and

RC depending on the reason for the need of interconnection assistance to cover uncertainties that could affect transmission reliability.

18. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement?

Comments: No conflicts. But there are markets that do not provide physical transmission services which require the calculation and posting of ATCs and AFCs. In addition, there are entities that are not under FERC's jurisdiction and hence may not provide any transmission services.

19. Do you have other comments that you haven't already provided above on the proposed standard?

Comments: Requirement 12 should be R11.6