Standard Development Roadmap

This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

Development Steps Completed:

1. SAC authorized posting TTC/ATC/AFC SAR development June 20, 2005.

2. SAC authorized the SAR to be development as a standard on February 14, 2006.

3. SC appointed a standard drafting team on March 17, 2006.

Description of Current Draft:

This is the first draft of the proposed standard posted for stakeholder comments. This draft includes the modifications identified in the SAR with consideration of applicable FERC directives from FERC Order 693 and Order 890.

Future Development Plan:

Anticipated Actions	Anticipated Date
1. Respond to comments.	TBD
2. Post revised standard for stakeholder comment.	TBD
3. Respond to comments.	TBD
4. Post for 30-day pre-ballot review.	TBD
5. First ballot of standard.	TBD
6. Respond to comments.	TBD
7. Recirculation ballot.	TBD
8. 30-day posting before board adoption.	TBD
9. Board adoption.	TBD

Definitions of Terms Used in Standard

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

None.

A. Introduction

1. **Title:** **Flowgate Network Response Available Transfer Capability**

2. **Number:** MOD-030-1

3. **Purpose:** To promote the consistent and uniform application and documentation of Available Transfer Capability (ATC) calculations performed using the Flowgate Network Response method for reliable system operations.

4. **Applicability:**

   4.1. Each Planning Coordinator that uses the Flowgate Network Response method to calculate Available Transfer Capabilities for paths identified in an Available Transfer Capability Implementation Document.

   4.2. Each Reliability Coordinator that uses the Flowgate Network Response method to calculate Available Transfer Capabilities for paths identified in an Available Transfer Capability Implementation Document.

   4.3. Each Transmission Service Provider that uses the Flowgate Network Response method to calculate Available Transfer Capabilities for paths identified in an Available Transfer Capability Implementation Document.

5. **Proposed Effective Date:** To be determined.

B. Requirements

R1. Each Planning Coordinator and Reliability Coordinator shall include, in its "Available Transfer Capability Implementation Document" for a specific Transmission Service Provider, the criteria used to identify sets of transmission Facilities as Flowgates that are to be considered by the Transmission Service Provider when analyzing requests for service. At a minimum, the criteria shall specify:

   R1.1. How the methodology meets the planning criteria in TPL-001 and TPL-002, for the Contingencies in Table 1, Category B or the successor criteria.

   R1.2. How the methodology identifies transmission Facilities that are expected by the AFC calculator to cause congestion on the transmission system.

   R1.3. The treatment of transmission Facilities that have historically been constrained.

R2. Each Planning Coordinator and Reliability Coordinator associated with a Transmission Service Provider shall, at a minimum, create, modify, or delete Flowgates as necessary at the beginning of every calendar quarter, based on the criteria specified in R1.

R3. The Transmission Service Provider shall ensure the definitions of all Flowgates specified by the Planning Coordinator and Reliability Coordinator are made publicly available, including the type of Flowgate (thermal, voltage, or stability).

R4. Each Transmission Owner and Transmission Planner shall provide its Transmission Service Provider with the current thermal limits for thermally limited Flowgates.

R5. The Transmission Service Provider shall use the current thermal limits provided by the Transmission Planner and Transmission Operator as the Total Flowgate Capability (TFC).

R6. Each Planning Coordinator and Reliability Coordinator shall provide its Transmission Service Provider with the current voltage and stability limits for voltage or stability limited Flowgates, respectively.

R7. The Transmission Service Provider shall use the voltage and stability limits provided by its Planning Coordinator and Reliability Coordinator as the TFC.

R8. Each Planning Coordinator and Reliability Coordinator associated with a Transmission Service Provider shall ensure that TFC for each of the specified Flowgates for that Transmission Service Provider is equal to the lesser of:

- The Thermal Rating of the Flowgate, or

- The voltage limit of power transferred across the Flowgate, if applicable, or

- The Stability Limit of power transferred across the Flowgate, if applicable.

R9. Each Planning Coordinator and Reliability Coordinator associated with a Transmission Service Provider shall ensure that TFC for all the specified Flowgates for that Transmission Service Provider are calculated for use within the Transfer Capability time horizons specified in MOD-001.

R10. Each Planning Coordinator and Reliability Coordinator shall make available to its Transmission Service Provider the results of the calculations of TFC for all the specified Flowgates of that Transmission Service Provider upon completion of the calculation.

R11. The Transmission Service Provider shall make publicly available the results of the calculations of TFC provided by the Planning Coordinator and Reliability Coordinator upon their being made available to the Transmission Service Provider.

R12. The Transmission Service Provider shall calculate Available Flowgate Capability (AFC) for the time horizons specified in MOD-001 R2 according to the ATC schedule specified in MOD-001 R5.

R13. The Transmission Service Provider shall calculate Firm AFC by reducing the TFC by the sum of the firm Existing Transmission Commitments (ETCs), the Capacity Benefit Margin (CBM), and the Transmission Reliability Margin (TRM) allocated to the Flowgate.

R14. The Transmission Service Provider shall determine the impact of firm ETCs based on the following inputs:

- The transmission capability utilized in serving Native Load commitments, to include Native Load growth, Load forecast error and losses not otherwise included in TRM or CBM.

- The impact of Firm Network Integration Transmission Service serving Load, to include Load forecast error and losses not otherwise included in TRM or CBM.

- The impact of grandfathered firm Transmission Service Agreements and bundled contracts for energy and transmission, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or Safe Harbor Tariff accepted by FERC.

- The impact of Firm Point to Point Transmission Service,

- The impact of maintaining roll-over rights for Firm Transmission Service contracts, five years or longer in duration, granting Transmission Customers the right of first refusal to take or continue to take Transmission Service from a Transmission Owner when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

- The impact of any Ancillary Services not otherwise included in CBM or TRM.

- Post-backs of redirected or released Firm services.

- The impact of counter-flows not otherwise accounted for in the AFC calculation.

- The impact of any other services, contracts, or agreements not specified above using transmission that serves Native Load or Firm Network Integration Transmission Service

- The impact of any relevant third-party Firm Transmission Service that has not already been accounted for.

R15. The Transmission Service Provider shall limit the total impact of all Transmission Service from a specific source to not exceed sum of the nameplate ratings of all generators at that source.

R16. The Transmission Service Provider shall incorporate the following into relevant third-party Transmission Service:

- The transmission capability associated with serving the third-party's Native Load that impacts the Transmission Service Providers system by more than 3%.

- The impact of confirmed Network Integrated Transmission Service utilized on the third-party's system that impacts the Transmission Service Provider's system by more than 3%.

- The impact of confirmed Point to Point Transmission Service utilized on the third-party's system, based on expected source and sink, which does not source or sink within the Transmission Service Provider's own system and impacts the Transmission Service Provider's system by more than 3%.

- The impact of any roll-over rights on the third-party's system that impact the Transmission Service Provider's system by more than 3%.

- The impact of grandfathered Agreements on the third-party's system that impact the Transmission Service Provider's system by more than 3%.

- The impact of any required Ancillary Services not included in CBM or TRM on the third-party's system that impact the Transmission Service Provider's system by more than 3%.

R17. The Transmission Service Provider shall calculate non-firm AFC by reducing the TFC by the sum of the firm ETCs, the non-firm ETCs, and the TRM that the Transmission Service Provider has not elected to release allocated to the path.

R18. The Transmission Service Provider shall determine the impact of non-firm ETCs based on the following inputs:

- The impact of Non-Firm Network Integration Transmission Service serving Load, to include Load forecast error and losses not otherwise included in TRM or CBM.

- The impact of grandfathered non-firm Transmission Service Agreements and bundled contracts for energy and transmission, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or Safe Harbor Tariff accepted by FERC.

- The impact of Non-firm Point to Point Transmission Service.

- The impact of counter flows not otherwise accounted for in the ATC calculation.

- Capacity utilized for TRM that the Transmission Service Provider has elected to be released for as non-firm ATC.

- Postbacks due to the reinstating of Firm from a "Firm-to-Non-Firm" redirect

- The impact of any relevant third-party Non-Firm Transmission Service that has not already been accounted for.

R19. For Point-to-Point Transmission Service where the source has not been specified, the Transmission Service Provider shall assume the source to be the adjacent Balancing Authority most electrically equivalent to the Point-of-Receipt.

R20. For Point-to-Point Transmission Service where the sink has not been specified, the Transmission Service Provider shall assume the sink to be the adjacent Balancing Authority most electrically equivalent to the Point-of-Delivery.

R21. The Transmission Service Provider shall make publicly available the results of the calculations of AFC upon calculation.

R22. The Transmission Service Provider shall covert Flowgate AFCs to path ATCs based on the following process:

Flowgate(1), … , Flowgate(n) = all Flowgates managed by a Transmission Service Provider

AFC of a Flowgate(n) impacted by a path, divided by the Distribution Factor for the path on the Flowgate(n) = "Partial ATC(n)"

ATC for a path = the lowest of all Partial ATC(1), … , Partial ATC(n)

- For each Flowgate honored by the Transmission Service Provider, the Transmission Service Provider shall calculate the partial AFC of that Flowgate by dividing the current AFC of that Flowgate by the path's power transfer distribution factor for that Flowgate.

- The Transmission Service Provider shall set the ATC for the path equal to the lowest of the partial AFCs of those Flowgates.

R23. The Transmission Service Provider shall increase non-firm ATC by the amount of capacity associated with unscheduled Transmission Service accounted for within firm and non-firm ETC, to the extent allowable by the agreement associated with the service, in accordance with established business practices.

R24. The Transmission Service Provider shall make publicly available the ATC for each path.

C. Compliance

To be added with next posting.

D. Measures

To be added with next posting.

E. Regional Differences

None.

F. Associated Documents

Version History

Version	Date	Action	Change Tracking