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:** **Rated System Path Available Transfer Capability**

2. **Number:** MOD-029-1

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

4. **Applicability:**

4.1. Each Planning Coordinator that uses the Rated System Path method to calculate Transfer Capabilities for paths identified in an Available Transfer Capability Implementation Document.

4.2. Each Reliability Coordinator that uses the Rated System Path method to calculate Transfer Capabilities for paths identified in an Available Transfer Capability Implementation Document.

4.3. Each Transmission Service Provider that uses the Rated System Path method to calculate Transfer Capabilities for paths identified in an Available Transfer Capability Implementation Document.

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

B. Requirements

R1. The Planning Coordinator shall provide to its Transmission Service Provider (in the report drafted for a TTC study) a description of the Contingencies and assumptions considered in the study.

R2. The Transmission Service Provider shall make publicly available the reports drafted for TTC studies supplied by its Planning Coordinator(s).

R3. The Planning Coordinator shall use a model to conduct its TTC studies that includes at least the entire Planning Coordinator Area, as well as critical modeling details from other Planning Coordinator Areas that would impact the Facility or Facilities under study.

R4. Each Planning Coordinator shall update the following components of the base case power flow model it uses to determine a TTC for the time horizon being studied:

R4.1. Anticipated transmission system configuration

R4.2. Facility Ratings

R4.3. Load forecast

R4.4. Transmission system Elements scheduled to be taken out of or returned to service

R4.5. Generation resources scheduled to be in service, to be taken out of service or to be returned to service

R4.6. Special Protection System models

R5. The Planning Coordinator shall use assumptions in its TTC calculation that are consistent with those it uses in its expansion planning analyses.

R6. For each path upon which Transmission Service has been requested, each Planning Coordinator shall:

R6.1. Determine the reliability limited TTC for a path by adjusting generation schedules and Load levels to extreme values (without introducing fictitious facilities into the model) to determine the maximum flow that can be simulated on the path while at the same time satisfying the planning criteria in TPL-001 and TPL-002 for the Contingencies in Table 1, Category B or the successor criteria.

- If it is not possible to simulate a flow sufficiently large to reach a reliability-limited TTC, the TTC of the path is equal to the maximum flow simulated and the path is said to be flow limited.

- If the TTC determined for a path in one direction is reliability limited and the TTC determined for the same path in the other direction is flow limited, the reliability limited TTC may be used for both directions.

R6.2. Determine if the TTC for a new or revised path adversely impacts the path ratings or TTC values of existing paths by modeling the flow on the new or revised path at its proposed new TTC level simultaneous with the flow on the existing path at its TTC level, and if there is an adverse impact:

- Limit the TTC for the new or revised path to eliminate the adverse impacts, or

- Follow a local or regional procedure for resolving the impact with the affected parties.

R6.3. Ensure that for jointly owned paths, the sum of all owners' allocations is equal to the TTC of the path

R6.4. Draft a report to document the steps performed in determining the TTC for the path including the resulting TTC and the Contingencies and assumptions used to determine the resulting TTC.

R7. Each Planning Coordinator associated with a Transmission Service Provider shall ensure that TTC for all posted paths for that Transmission Service Provider are calculated and up to date for use within the transfer capability time horizons specified in MOD-001.

R8. Each Planning Coordinator associated with a Transmission Service Provider shall make available to the Transmission Service Provider the most current value for TTC for all the posted paths of that Transmission Service Provider and the reports on the TTC studies performed for each path.

R9. The Transmission Service Provider shall make publicly available the results, and associated study reports, of the calculations of TTC provided by the Planning Coordinator(s) upon their being made available to the Transmission Service Provider.

R10. The Transmission Service Provider shall calculate ATC for the time horizons specified in MOD-001 R2 according to the ATC calculation schedule specified in MOD-001 R5.

R11. The Transmission Service Provider shall calculate firm ATC by reducing the TTC by the sum of the impact of firm Existing Transmission Commitments (ETCs), the Capacity Benefit Margin (CBM), and the Transmission Reliability Margin (TRM) allocated to the path.

R12. The Transmission Service Provider shall determine the impact of firm ETCs based on the following inputs:

R12.1. 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.

R12.2. The impact of Firm Network Integration Transmission Service serving Load, to include Load forecast error and losses not otherwise included in TRM or CBM.

R12.3. 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.

R12.4. The impact of Firm Point to Point Transmission Service.

R12.5. 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.

R12.6. The impact of any Ancillary Services not otherwise included in CBM or TRM,

R12.7. Post-backs of redirected or released Firm services.

R12.8. The impact of counter-flows not otherwise accounted for in the ATC calculation.

> Re: R12.7 — Being discussed at NAESB - may need to be included. Maybe for temporary "undesignation" of a DNR

R12.9. The impact of any other services, contracts, or agreements not specified above using transmission that serves Native Load or Firm Network Integration Transmission Service

R12.10. The Transmission Service Provider shall calculate non-firm ATC by reducing the TTC by the sum of the firm ETCs, the non-firm ETCs, and the TRM allocated to the path.

R13. The Transmission Service Provider shall determine the impact of non-firm ETCs based on the following inputs:

R14. 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.

  R14.1. 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.

  R14.2. The impact of Non-firm Point to Point Transmission Service.

  R14.3. The impact of counter-flows not otherwise accounted for in the ATC calculation.

  R14.4. Capacity utilized for TRM that the Transmission Service Provider has elected to be released for as non-firm ATC.

  R14.5. Post-backs due to the reinstating of Firm from a "Firm-to-Non-Firm" redirect.

R15. 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.

R16. 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