

### 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:** **Transmission Reliability Margin Calculation Methodology**
2. **Number:** MOD-008-1
3. **Purpose:** To promote consistent and transparent calculation of the maximum Transmission Reliability Margin (TRM) and supporting methodologies among Transmission Service Providers, Transmission Planners, and Transmission Operators to help ensure more accurate calculation of transfer capabilities.
4. **Applicability:**
  - 4.1. Transmission Planner.
  - 4.2. Transmission Operator.
  - 4.3. Transmission Service Provider.
  - 4.4. Reliability Coordinator.
  - 4.5. Planning Coordinator.
  - 4.6. Load-Serving Entity.
5. **Proposed Effective Date:** To be determined.

## B. Requirements

- R1. The Transmission Planner, and Transmission Operator shall each document its TRM calculation methodology, and shall include all of the following in that methodology:
  - R1.1. Identification any of the following uncertainties used to calculate its TRM:
    - Aggregate Load forecast error (not included in determining generation reliability requirements).
    - Load distribution error.
    - Forecast uncertainty in transmission system topology.
    - Allowances for parallel path (loop flow) impacts.
    - Allowances for simultaneous path interactions.
    - Variations in generation dispatch.
    - Short-term System Operator response (Operating Reserve actions not exceeding a 59-minute window).
    - Reserve sharing requirements.
    - Inertial response.
  - R1.2. A statement to confirm that it shall use the same assumptions in calculating TRM as those that are used in the transmission planning process for the appropriate time periods.
  - R1.3. The description of the method of allocation across paths.
  - R1.4. The identification of that TRM calculation used for the following time periods:

- R1.4.1.** Same day and real-time.
  - R1.4.2.** Day-ahead and pre-schedule.
  - R1.4.3.** Beyond the day-ahead and pre-schedule.
- R1.5.** If a Transmission Planner or Transmission Operator reserves zero (0) TRM in any time horizon, that Transmission Planner or Transmission Operator shall document in its TRM methodology the reason(s) why it did not reserve any TRM.
- R2.** Each Transmission Planner and Transmission Operator that reserves TRM shall document in its TRM Calculation Methodology (on each of its respective posted Contract Paths or Flowgates) each of the following components of uncertainty if used in calculating TRM and shall describe how that component is used to calculate a TRM value:
  - Aggregate Load forecast error (not included in determining generation reliability requirements).
  - Load distribution error.
  - Forecast uncertainty in transmission system topology.
  - Allowances for parallel path (loop flow) impacts.
  - Allowances for simultaneous path interactions.
  - Variations in generation dispatch.
  - Short-term System Operator response (Operating Reserve actions not exceeding a 59-minute window).
  - Reserve sharing requirements.
  - Inertial response.
- R3.** The Transmission Planner and Transmission Operator shall only use the components of uncertainty from R1.1 to calculate TRM.
- R4.** The Load-Serving Entity shall not use the components of uncertainty from R1.1 to determine its CBM megawatt import requirement.
- R5.** At least once each year, the Transmission Operator shall calculate (in accordance with its TRM methodology) a TRM value for the following time periods (on each path or Flowgate) and provide these TRM values to its Transmission Service Provider(s):
  - R5.1.** Same day and real-time.
  - R5.2.** Day-ahead and pre-schedule.
- R6.** At least once each year, the Transmission Planner shall calculate (in accordance with its TRM methodology) a TRM value for the time period beyond the day-ahead and pre-schedule (on each path or Flowgate) and provide these TRM values to its Transmission Service Provider(s).

- R7.** Each Transmission Service Provider shall make its TRM calculation methodology publicly available.
- R8.** Each Transmission Service Provider shall make available (within seven calendar days) any underlying documentation, work papers and load flow base cases used to determine TRM for the Facilities within its service territory to adjacent requesting Transmission Service Providers and to any requesting transmission customer or Load-Serving Entity within its service area unless providing the information violates an applicable rule, regulation or confidentiality agreement prohibiting such disclosure or where release of the requested data would pose a security risk to the grid.
- R9.** Each Transmission Planner, Transmission Operator, and Transmission Service Provider shall provide its TRM calculation methodology and supporting documentation to the Reliability Coordinator and Planning Coordinator responsible for oversight of the Facilities for which the Transmission Service Provider offers service.
- R10.** Each Transmission Service Provider shall make publicly available (for each posted path or Flowgate) the TRM value for each of the following time periods:
  - R10.1.** Same day and real-time.
  - R10.2.** Day-ahead and pre-schedule.
  - R10.3.** Beyond the day-ahead.
- R11.** If a Transmission Planner or Transmission Operator reserves capacity on its transmission system for use as TRM, then the associated Transmission Service Provider shall use TRM in its calculation of Available Transfer Capabilities (ATCs) or Available Flowgate Capabilities (AFCs).

**C. Compliance**

To be added with next posting.

**D. Measures**

To be added with next posting.

**E. Regional Differences**

None identified.

**F. Associated Documents**

**Version History**

<b>Version</b>	<b>Date</b>	<b>Action</b>	<b>Change Tracking</b>