## A. Introduction

- 1. Title: Methodologies for Determining Electrical Facility Ratings
- **2. Number:** FAC-004-0
- **3. Purpose:** To ensure that electrical facilities used in the transmission and storage of electricity are rated in compliance with applicable Regional Reliability Organization requirements.

#### 4. Applicability:

- **4.1.** Transmission Owner
- **4.2.** Generator Owner
- 5. Effective Date: April 1, 2005

#### **B.** Requirements

- **R1.** The Transmission Owner and Generator Owner shall each document the methodology(ies) used to determine its electrical equipment and Facility Ratings. Further, the methodology(ies) shall comply with applicable Regional Reliability Organization requirements. The documentation shall address and include
  - **R1.1.** The methodology(ies) used to determine equipment and Facility Rating of the items listed for both normal and emergency conditions:
    - R1.1.1. Transmission circuits.
    - **R1.1.2.** Transformers.
    - **R1.1.3.** Series and shunt reactive elements.
    - R1.1.4. Terminal equipment (e.g., switches, breakers, current transformers, etc).
    - **R1.1.5.** VAR compensators.
    - **R1.1.6.** High voltage direct current converters.
    - **R1.1.7.** Any other device listed as a Limiting Element.
  - **R1.2.** The Rating of a facility shall not exceed the Rating(s) of the most Limiting Element(s) in the circuit, including terminal connections and associated equipment.
  - **R1.3.** In cases where protection systems and control settings constitute a loading limit on a facility, this limit shall become the Rating for that facility.
  - **R1.4.** Ratings of jointly-owned and jointly-operated facilities shall be coordinated among the joint owners and joint operators resulting in a single set of Ratings.
  - **R1.5.** The documentation shall identify the assumptions used to determine each of the equipment and Facility Ratings, including references to industry Rating practices and standards (e.g., ANSI, IEEE, etc.). Seasonal Ratings and variations in assumptions shall be included.
- **R2.** The Transmission Owner and Generator Owner shall provide documentation of the methodology(ies) used to determine its transmission equipment and Facility Ratings to the Regional Reliability Organization(s) and NERC on request (30 calendar days).

## C. Measures

M1. The Transmission Owner or Generator Owner shall provide documentation that the methodology(ies) used for determining equipment and Facility Ratings meets the requirements of Standard FAC-004-0\_R1 as specified in Standard FAC-004-0\_R1.

# D. Compliance

1. Compliance Monitoring Process

#### 1.1. Compliance Monitoring Responsibility

Compliance Monitor: Regional Reliability Organization.

## 1.2. Compliance Monitoring Period and Reset Timeframe

On request (30 calendar days.)

#### 1.3. Data Retention

None specified.

## **1.4.** Additional Compliance Information

None.

## 2. Levels of Non-Compliance

- **2.1.** Level 1: Equipment and Facility Ratings methodology(ies) do not address one of the five elements listed in Reliability Standard FAC-004-0\_R1.
- **2.2. Level 2:** N/A.
- **2.3.** Level 3: Equipment and Facility Ratings methodology(ies) do not address two of the five elements listed in Reliability Standard FAC-004-0\_R1.
- **2.4.** Level 4: Equipment and Facility Ratings methodology(ies) do not address three or more of the five elements listed in Reliability Standard FAC-004-0\_R1, or no equipment and Facility Rating methodology was provided.

## E. Regional Differences

**1.** None identified.

#### **Version History**

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New
0	September 26, 2005	Fixed reference in M1 from FAC-004-0_R2 to FAC-004-0_R1	Errata