## **A. Introduction**

- 1. Title: Establish and Communicate System Operating Limits
- **2. Number:** FAC-014-3
- **3. Purpose:** To ensure that System Operating Limits (SOLs) used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.
- 4. Applicability:
  - 4.1. Functional Entities:
    - **4.1.1.** Reliability Coordinator
    - 4.1.2. Transmission Operator
    - 4.1.3. Planning Coordinator
    - 4.1.4. Transmission Planner
- 5. Effective Date: TBD

## **B. Requirements and Measures**

- **R1.** Each Reliability Coordinator shall establish Interconnection Reliability Operating Limits (IROLs) for its Reliability Coordinator Area that are consistent with its System Operating Limit Methodology ("SOL Methodology") as established in FAC-011-4.
- **R2.** Each Transmission Operator shall establish SOLs for its portion of the Reliability Coordinator Area consistent with its Reliability Coordinator's SOL Methodology.
- **R3.** Each Reliability Coordinator shall determine stability limitations to be used in operations when the limitation impacts more than one Transmission Operator in its Reliability Coordinator Area consistent with its SOL Methodology.
- **R4.** Each Reliability Coordinator shall provide the SOLs for its RC Area to adjacent Reliability Coordinators within an Interconnection and Reliability Coordinators who request and indicate a reliability-related need for those limits, and to the Transmission Operators, Transmission Planners, and Planning Coordinators within its Reliability Coordinator Area.
  - **4.1.** The Reliability Coordinators shall provide any updates to the SOL values established as part of Requirement R1 or Requirement R3 to impacted TOPs in its Reliability Coordinators Area in a mutually agreeable periodicity and format.
- **R5.** Each Reliability Coordinator with an established IROL shall provide the following IROL information to adjacent Reliability Coordinators within an Interconnection, to other Reliability Coordinators that indicate a reliability-related need for the information, and to the Transmission Operators, Transmission Planners, and Planning Coordinators within its Reliability Coordinator Area:

- **5.1.** Identification of the Facilities that are critical to the derivation of the IROL;
- **5.2.** The value of the IROL and its associated IROL  $T_v$ ;
- 5.3. The associated Contingency(ies); and,
- 5.4. The type of limitation represented by the IROL (*e.g.*, voltage collapse, angular stability).
- **R6.** Each Reliability Coordinator with an established IROL shall provide the following IROL information to Transmission Owners and Generation Owners within its RC Area:
  - **6.1.** Identification of the Facilities that are owned by that entity, which are critical to the derivation of the IROL.
- **R7.** The Transmission Operator shall provide any SOLs and updates to those limits to its Reliability Coordinator and to the Transmission Service Providers that share its portion of the Reliability Coordinator Area.
- **R8.** Each Planning Coordinator and Transmission Planner shall communicate the results of the stability analysis identified in its Planning Assessment and Transfer Capability assessment to each affected Reliability Coordinator and Transmission Operator. This shall include:
  - **8.1.** The type of the instability (*e.g.*, voltage collapse, angular instability, transient voltage dip criteria violation);
  - 8.2. The Contingencies which result in the instability;
  - 8.3. Any Remedial Action Scheme action, under voltage load shedding (UVLS) action, under frequency load shedding (UFLS) action, interruption of Firm Transmission Service, or Non-Consequential Load Loss that was employed (or invoked) to address the instability; and,
  - 8.4. Any Corrective Action Plan associated with the instability.