## Part 500 Facilities



Section 505.3 Coordinating Synchronization, Commissioning, WECC Testing and Ancillary

Services Testing

#### **Applicability**

- 1 Section 505.3 applies to:
  - (a) the **legal owner** of a **generating unit** with a rating of five (5) MW or greater that is connected or to be connected to **transmission facilities** or an **electric distribution system** in the **balancing authority area** of the **ISO** and which such **generating unit**:
    - (i) is a new generating unit;
    - (ii) has been the subject of a modification affecting its net-to-grid operating capabilities;
    - (iii) requires baseline and model validation testing, being WECC testing; or
    - (iv) requires testing in accordance with any **ancillary services** technical requirements;
  - (b) the **legal owner** of an **aggregated generating facility** with a rating of five (5) MW or greater that is connected or to be connected to **transmission facilities** or to an **electric distribution system** in the **balancing authority area** of the **ISO** and which such **aggregated generating facility**:
    - (i) is a new aggregated generating facility;
    - (ii) has been the subject of a modification affecting its net-to-grid operating capabilities;
    - (iii) requires baseline and model validation testing, being **WECC** testing; or
    - (iv) requires testing in accordance with any ancillary services technical requirements; and
  - (c) the ISO.

#### Requirements

#### **Connecting New Facilities**

- **2(1)** Each of the **legal owner** of a **generating unit** and the **legal owner** of an **aggregated generating facility** must not synchronize its generating facility until obtaining written confirmation from the **ISO** that:
  - (a) the legal owner has met the energization requirements; and
  - (b) the **legal owner**'s final **commissioning** plan, required under subsection 3, is approved.
- (2) Each of the legal owner of a generating unit and the legal owner of an aggregated generating facility must, on the day of and not less than one (1) hour prior to synchronizing any generating facilities, phone the ISO and obtain verbal authorization from the ISO to synchronize the generating facility.

ISO Rules Effective: 2012-12-31

# Part 500 Facilities



# Section 505.3 Coordinating Energization, Commissioning and WECC Testing Activities

(3) After receiving authorization to synchronize its generating facilities, the **legal owner** of a **generating unit** and the **legal owner** of an **aggregated generating facility** may synchronize them to the **transmission system**.

#### Plans for Commissioning, WECC Testing or Ancillary Services Testing Activities

- 3 Each of the **legal owner** of a **generating unit** and the **legal owner** of an **aggregated generating facility** must provide a final, written **commissioning** or testing plan to the **ISO**:
  - (a) which the ISO approves as being able to be implemented without impacting the reliable operation of the interconnected electric system;
  - (b) detailing the types of tests the legal owner proposes to conduct, including WECC tests; and
  - (c) a minimum of thirty (30) days prior to commissioning or testing.

#### **Commissioning or Testing Major Facilities Plan Details**

- 4 Any of the following:
  - (a) the **legal owner** of a **generating unit** equal to or greater than five (5) MW;
  - (b) the legal owner of an aggregated generating facility equal to or greater than five (5) MW; or
  - (c) the **legal owner** of a **generating unit** or the **legal owner** of an **aggregated generating facility** which owns any of the following major transmission or load facilities:
    - (i) motors of a rating sufficient to cause operational concerns, as identified during the connection project process;
    - (ii) static VAr compensators;
    - (iii) high voltage direct current facilities;
    - (iv) flexible alternating current transmission system devices;
    - (v) phase shifting transformers;
    - (vi) alternating current transmission line series compensation; and
    - (vii) synchronous condensers

intending to perform **commissioning**, **WECC** testing or **ancillary services** testing activities on such facilities, must include in its **commissioning** or testing plan the details of the proposed testing activities, including the expected output of **real power** and **reactive power** from the facility to the **interconnected electric system** and over what periods of time.

ISO Rules

Effective: 2012-12-31

## Part 500 Facilities





#### **Commissioning Minor Facilities Plan Details**

- 5 Each of the **legal owner** of a **generating unit** and the **legal owner** of an **aggregated generating facility** that owns any of the following:
  - (a) circuit breakers;
  - (b) transformers and voltage regulators;
  - (c) capacitor banks;
  - (d) reactors; and
  - (e) alternating current transmission lines,

intending to conduct **commissioning** on such facilities must include in its **commissioning** plan the proposed date and time of energization.

#### Conducting Commissioning, WECC Testing or Ancillary Services Testing Activities

- **6(1)** Each of the **legal owner** of a **generating unit** and the **legal owner** of an **aggregated generating facility** must not begin its **commissioning** or testing activities until obtaining written confirmation from the **ISO** that the **legal owner**'s final **commissioning** or testing plan, required under subsection 3, is approved.
- (2) Each of the legal owner of a generating unit and the legal owner of an aggregated generating facility must, on the day of and not less than one (1) hour prior to the scheduled time of commissioning or testing, phone the ISO and obtain verbal authorization from the ISO to proceed.
- (3) After receiving authorization to proceed with its **commissioning** or testing activities, the **legal owner** of a **generating unit** and the **legal owner** of an **aggregated generating facility** may commence the **commissioning** or testing activities.

#### **Changes to Approved Commissioning or Testing Activities**

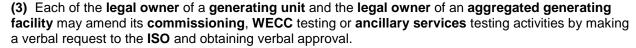
- **7(1)** The **ISO** may amend or suspend any **commissioning**, **WECC** testing or **ancillary services** testing activities it has already approved under subsection 3, based on real time **reliability** requirements of the **interconnected electric system** and necessary **ISO** operational flexibility, and it may do so by providing written or verbal notice to the **legal owner** of the facility.
- (2) Each of the legal owner of a generating unit and the legal owner of an aggregated generating facility may suspend its commissioning, WECC testing or ancillary services testing activities by giving verbal notice to the ISO.

ISO Rules Effective: 2012-12-31

# Part 500 Facilities



Section 505.3 Coordinating Energization, Commissioning and WECC Testing Activities



(4) A legal owner of a generating unit and the legal owner of an aggregated generating facility that has amended or suspended any previously approved commissioning. WECC testing or ancillary services testing activities must, if the ISO requests, submit a revised written commissioning or testing plan and must do so within the timeframe the **ISO** specifies in order to proceed with **commissioning**, WECC testing or ancillary services testing activities.

#### **Revision History**

Description Effective 2012-12-31 Initial Release

ISO Rules Effective: 2012-12-31

Page 4 of 4