

Subject: Market Participant Notification of NYISO Network Power System Model Updates

The New York Independent System Operator's (NYISO) Control Center Requirements Manual requires New York Transmission Owners (TOs) to supply the NYISO with updated network modeling data and associated real-time measurement data for its Energy Management System and Business Management System.

In addition, the NYISO's System Analysis Data Manual requires Market Participants that own or operate facilities within or interconnected to the New York Control Area to provide the NYISO with updated network modeling data to maintain a valid system representation for System and Resource Planning processes.

This Technical Bulletin identifies specific time requirements for Generators and other Market Participants to notify the NYISO and the relevant TOs of such power system modeling data and real-time measurement updates.

Details:

Each Market Participant that owns or operates facilities within or interconnected to the New York Control Area, including TOs and Generators, shall inform the NYISO, and interconnecting New York Transmission Owner as necessary, of all planned power system equipment additions or modifications that may affect NYISO power system operational tools or planning models. The NYISO and the interconnecting TO shall be informed by the Market Participant by completing and forwarding to the NYISO and the interconnecting TO the required modeling data as described below at least sixty (60) days ahead of the expected implementation date pursuant to the notification procedures provided in this Technical Bulletin.

1. Updates to Seasonal Ratings of Existing Equipment: At least seven (7) days ahead of the expected implementation date. These updates are limited to seasonal ratings of existing facilities that have already been included in the NYISO model for use in the Day Ahead Market analysis.
2. Updates to Metering Data for Existing Equipment: At least fourteen (14) days ahead of the expected implementation date. These updates are limited to the metering data transfer identifiers (ICCP OIDs) of existing facilities that have already been included in the NYISO model.
3. Other Equipment Additions or Modifications: At least sixty (60) days ahead of the expected implementation date. These additions or modifications comprise all data that is not covered under items 1 and 2.

Additionally, each Market Participant that owns or operates facilities, including each New York Transmission Owner and Generator, shall inform the NYISO and interconnecting New York Transmission Owner of all changes to parameters of existing modeled power system facilities within five business days after identifying the facility parameter change or modeling discrepancy.

The purpose of this "Technical Bulletin" is to facilitate participation in the NYISO by communicating various NYISO concepts, techniques, and processes to Market Participants before they can be formally documented in a NYISO manual. The information contained in this bulletin is subject to change as a result of a revision to the ISO Tariffs or a subsequent filed tariff with the FERC.

I. General Power System Modeling Data Notification Requirements:

1. *Change Description:* A short description of the power system modeling update.
2. *Facility:* The power system facility to be added/modified such as transmission line, transformer, shunt, series reactor, breaker, disconnect and generator, and any associated data identified in the NYISO SAD Manual.
3. *Station One-Line Diagram:* A switching one-line station diagram which indicates the updated facilities before and after the change.
4. *Effective Date:* The expected date of the change. Please note that the request for changes must be provided in writing to the NYISO as soon as possible and no later than sixty (60) days prior to the effective date of the change.
5. *Cut-Over Requirement:* If there is any temporary configuration change required for implementation of the new configuration, the NYISO needs to be informed of such temporary operating configuration changes.

II. New York Transmission Owner Requirements - Data Coordinator Responsibilities:

The NYISO Control Center Requirements Manual establishes the requirements for TO Data Coordinators to provide power system network modeling data and associated real-time measurement data to ensure the proper operation of the NYISO and TO computer control energy management systems. These data requirements and the process for periodic updates are described in Section 3.4 of the Control Center Requirements Manual.

In addition to these periodic reporting requirements, TO Data Coordinators shall inform the NYISO within the timeline specified above when New York TOs power system modeling data require ad-hoc updates.

Notification of changes to network model data should be sent via E-mail to the NYISO Data Coordinator Mailbox: Data_Coordinator@nyiso.com

The following are examples of the power system modeling and measurement data required by TO Data Coordinators:

Transmission Lines: Typical line modeling data (R, X, B).

Transformer: Transformer modeling data (R, X; LTC tap parameters (side, tap range, voltage /tap ratio range)). For high voltage transformers (≥ 230 kV), the explicit kV at each tap position is preferable.

Phase Shifter: The transformer modeling data (R, X, angle range; tap range, neutral kV; impedance as a function of phase with a minimum of 3 points (neutral, min and max tap position)).

Shunt: Nominal kV and MVar rated reactive capacity.

Series Reactor: The series reactor impedance data (R, X).

Circuit Breaker/Switch: The breaker/switch name and associated station one-line diagram.

Real-Time Measurements: All applicable real-time metering for facilities being added or modified must be provided to the NYISO (MW, MVar, Tap position, kV, breaker or switch status points, facility seasonal ratings and dynamic ratings). The exact location of metering should be indicated on the substation one line diagram where the corresponding instrument transformer(s) is located.

Whenever possible, the data exchange Inter-Control Center Communications Protocol (ICCP) should be pre-assigned by the TO Data Coordinator so that the NYISO can implement metering database updates in advance of the actual metering becoming available.

III. NYCA Facility Owner Requirements – Market Participant Responsibilities

The ISO System Analysis Data Manual establishes the requirement for New York Control Area (NYCA) Facility Owners to provide network modeling data to the NYISO to support Resource and System Planning processes.

The data requirements for NYCA Facility Owners are described in Section 3 of the System Analysis Data Manual, and the process for periodic updates is described in Section 1.4 of this Manual.

In addition to these periodic reporting requirements, NYCA Facility Owners shall inform the NYISO and any affected New York TOs within the timeline specified above of any changes to their facilities described in Section 3 of the System Analysis Data Manual that could affect the NYISO's operations of the Bulk Power System or the affected TOs operations of non-Bulk Power System facilities.

Notification of changes to network model data as described in Section 3 of the System Analysis Data Manual should be submitted via e-mail to the NYISO System Analysis Data mailbox: System_Analysis_Data@nyiso.com

<p>The NYISO anticipates that this Technical Bulletin will be incorporated into the System Analysis Data Manual during its next available recertification period.</p>
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