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Subject: New Generation Units Operating During the Start-Up Testing Phase

To ensure accurate system representation, new generating units operating during their testing phase should provide the NYISO with all necessary metering, control, communication, and protective relay data. Additionally, new units must be registered with the NYISO so they can be properly modeled in the MIS. During testing these Generators must be offered in the real-time market to be scheduled and the NYISO must be notified of any deviations from schedules.

Details:

Background

This Technical Bulletin describes procedures for new generating units to operate in testing mode prior to commercial operation.

Registration/Data Coordination/ Modeling for New Generation Units

Prior to synchronizing to the grid, new generating units must complete the <u>NYISO Registration</u> <u>Packet for NYISO Customers and Guests</u>. New generating units submit data on section D of the NYISO Registration Packet, at least 60 days prior to intended start-up testing, to ensure proper modeling in the MIS and NYISO Operations systems. Data is coordinated and modeled by the NYISO on the basis of the information provided in section D. A completed section D denotes the following information:

- Generator size
- Minimum loading level of the Generator
- Operating restrictions
- VAR Capability of all Generators (both leading and lagging)
- NYS Transmission System delivery point and voltage level
- Whether or not the unit will provide Installed Capacity (ICAP)
- Indication of unit's intention to offer reserves and regulation.

During data coordination the unit indicates its net MW output which will dictate its requirement to support Phase I or II metering. All Units over 500 MW, including grouped units whose aggregated MW value exceeds 500 MW, must have both Phase I (analog) and Phase II (digital) metering points. Units less than 500 MW only need Phase II metering. Suppliers should contact NYISO Customer Relations to coordinate a unit's net MW output. For more information on communication requirements, see section 3.2.5 of the <u>NYISO Control Center Requirements</u> <u>Manual</u>.

<u>Operating, Scheduling, and Bidding New Generation Units During Pre-Commercial Testing</u> Various plant systems are tested prior to the commercial operation of a new generating facility. During these tests, there are occasions when the new Generator is synchronized to the grid and produces electrical energy. Offers submitted by Generators during this testing phase are generally for the Real-Time market. Such Generators are not precluded from participation in the

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.

DAM during testing, but should be aware that the inability to follow a DAM schedule will result in charges or payments for balancing energy.

Initially, new generating units must notify the TO and to NYISO Scheduling at least 30 days prior to initial synchronization. A contact list containing the phone numbers of the generator's operators must be included with the notification.

Then, during each week of pre-commercial operations, the new Generator shall advise the NYISO Operations of the estimated schedule for the following week. This schedule shall include starts/stops, hours to be synchronized, estimated MW outputs, estimated MWs delivered, estimated power factor delivered, testing being performed, and whether any trip testing is planned or any other activities which may effect the system stability. This information shall be updated if it changes.

Prior to synchronizing to the grid, a new generating unit must submit its proposed schedule, via email, to NYISO Scheduling, by 14:00 on the day before the operating day. The NYISO Scheduler will, in turn, forward the schedule to the NYISO Operations' Generation Desk. The final schedule will be mutually acceptable to the NYISO and the new generator. Units may change their real-time offers, to correspond to these agreed upon schedules, up to 75 minutes before the operating hour.

During daily pre-commercial operations, the generating unit must inform NYISO Operations, via the TO, of any anticipated starts, failures to start, trips, substantial change in output, or testing which may impact the system. <u>Technical Bulletin #44</u> outlines the necessary procedures for notifying the NYISO and Transmission Owners of generator outages.

In order to receive payment for such energy, the Generator must have an accepted real-time offer in the NYISO Market Information System ("MIS"). To assure that an offer is accepted, the generator should submit an offer that is representative of their desired schedule. <u>Technical Bulletin #26</u> describes this process. Units that over-generate during pre-commercial testing will be paid according to the procedures described in <u>Technical Bulletin #73</u>.

Units must inform the NYISO, via the TO, if they will deviate ± 50 MWs from their hourly schedule. Off-dispatch units should inform the NYISO so the unit can be derated and properly reflected in the schedule. During all phases of operation, units must respond, as dictated by good utility practice, to directives from the TO or the NYISO.

Scheduling MVars for New Generation Units

Units that are considering selling voltage to the NYISO may wish to conduct MVar testing during the start-up phase. For further information, see <u>Technical Bulletin # 103</u> "Voltage Support Service – Requests for Qualification for Facilities Located within the NYCA."

DMNC Testing

To become eligible to sell capacity in the NY Control Area new units must first perform DMNC testing and provide the NYISO with the necessary test reports or production data. <u>Technical</u> <u>Bulletin #29</u> explains how to Schedule and Report Generator Dependable Maximum Net Generating Capability (DMNC) Tests. The requirements for qualifying and maintaining a unit as an Installed Capacity Supplier are outlined in Section 4.0 of the <u>ICAP Manual</u>.

During all stages of the testing phase, units may contact NYISO Operations 24 hours a day at (518) 356-6028 for operational issues only.