10/XX/2006

Subject: Generator Penalty Exemption for Scheduled Steady-State Testing

Generators that schedule applicable test periods with the NYISO in accordance with the terms of this Bulletin, may thereby be exempt from performance penalties and be paid LBMP for all energy produced during the test.

Details:

Generators who have scheduled a test period with the ISO *and* who have Accepted Real-Time bids in the Self-Committed Fixed mode that identify the expected output levels of the unit during the test, and that notify the NYISO operations at the start and end of the test will be relieved from under-generation financial penalties during the subject test periods and will receive Real-Time LBMP for all energy produced that was not sold in the DAM and balance out of any unmet DAM position at real-time prices during the subject test periods. This rule change is in recognition of the potential for operating unpredictability during these test periods.

Eligible Units

This capability is extended to all units that may be conducting those ISO required operational tests or other necessary tests that require operation while synchronized to the NYISO managed power grid that are listed in this Bulletin. No pre-registration to qualify units is required to use this feature, however, units are required to following the bidding, scheduling and test notification procedures defined in this technical bulletin in order to qualify for the settlement treatment defined in this technical bulletin. Units will be subject to audit and the ISO may revoke its approval for any particular generator's testing to be covered under the special settlement provisions outlined in this Bulletin upon cause.

New units undergoing startup tests will be considered eligible for the subject penalty relief as long as the tests are included among those listed in this Bulletin and conform to the rules outlined in this Bulletin. New units are directed to TB 116 (http://www.nyiso.com/public/webdocs/documents/tech_bulletins/tb_116.pdf) for additional information on requirements and procedures to be followed for new unit startup testing.

Applicable Tests

Basic rules

Tests that are not listed in this Bulletin do not qualify for this treatment. Tests otherwise eligible but for which the unit operator has failed to follow the prescribed procedures are not eligible for this exemption.

Specific applicable tests

Set forth below are the test types currently qualified. They reflect input from Generators with respect to the types of tests they are obliged to perform that may require out-of-merit (OOM) operation. The following four tests are excluded from the treatment available under this Bulletin because they cannot be scheduled in advance or have undefined test processes. The four tests are:

- Water outfall tests
- Gas system interruption
- Compliance assurance monitoring
- Turbine overspeed tests

Procedures and rules governing exempted tests

For Generator Test hours to be designated as such under this program the following rules must be followed. Any failure by the Market Participant to meet the rules governing a specific test or to provide complete and timely information during the execution of a test may result in the disqualification of the request for the penalty exemption.

A.) General Rules

1.) Test Notification

To schedule a test period the requestor must contact the NYISO Scheduling Department and provide the following test information:

Test Notification Contact: NYISO scheduling at 518-356-6050 or genplan@nyiso.com

Generator Name:
Test Name:
Start and End Date/Time Period for the test:

- For Generators 25 MW and greater; the Generator notifies the NYISO Scheduling Department (see immediately above) and the Transmission Owner (TO) at least Three (3) business days in advance of the proposed test date that the Generator is requesting a test.
- Generators less than 25 MW testing separately are not required to make this advanced test period notification.

- The NYISO will notify the Generator through the TO if, and only if, the request is denied.

2.) Day-Ahead Bidding

- Generators 100 MW and greater must bid into the Day-Ahead energy market such that the Generator is scheduled appropriately[1] for the hours requested for the test. If the Generator is not scheduled, the test is cancelled and notification must be made to NYISO Scheduling (at the number/email address above in red) and the TO by hour 1400 of the business day prior to when the test had been scheduled.

- For Generators 25 to 99 MW, a Day-Ahead bid is not required. Generators in this size range that choose to offer into the Day-Ahead energy market should refer to footnote 1 below for guidance. In the event of a test cancellation the Generator must notify NYISO

[1] Units scheduling day-ahead must be scheduled in the DAM such that they can be scheduled at appropriate fixed levels in real-time. As fixed units engaged in testing they will be unable to supply reserve energy on demand in real time. It is therefore necessary for units desiring to make use of this exemption and that offer into the day-ahead market, to offer into the DAM in either the ISO committed fixed or self scheduled fixed mode in such a manner as to reflect their expected operating levels during the test.

Scheduling (at the number/email address above in red) and the TO by hour 1400 of the business day prior to when the test was scheduled.

2.) Test Day Procedures

- On the day of the scheduled test, at least three (3) hours prior to the scheduled test, the Generator, through the Transmission Owner, must request permission from the NYISO to perform the test. Also, the Generator, regardless of size, (i.e., with or without a DAM schedule), must ensure that in the Real-Time Market the unit is scheduled for the hours requested for the test, including ramping up to and down from the test level. Test schedules must be accomplishable within the unit's normal ramp rates. The NYISO will approve or deny the request at least two (2) hours prior to the scheduled test, notifying the Generator through the Transmission Owner, allowing time for Real-Time Market bid adjustments.

- If conditions occur that could result in a test cancellation, a delay beyond the scheduled start time, an extension beyond the scheduled end time or if the generator is projecting that it cannot meet its day ahead schedule, units are to notify the Transmission Owner who will notify the NYISO operators. Generators should communicate their expected operating characteristics during these events and make appropriate changes in the unit's real-time bid profile, when possible. If bid profiles cannot be modified NYISO Operators will make appropriate changes to the unit limits per NYISO Operating procedures. Notwithstanding schedule changes that may be approved, special settlement rules are duration limited pursuant to the durations included in this Bulletin for all allowable tests; see Section B. below.

At least 3 hours before the test, the Generator is required to have bid (in Self-Committed Fixed Mode) with the NYISO in the NYISO RT market, a good-faith estimate of its energy production in quarter-hour increments for any hours when the Generator Test is expected to be conducted. These bid-in estimates will be used for all NYISO real-time schedule forecasts. NOTE: while operating in fixed mode units are not eligible to supply reserves and units that have DAM reserve schedules will be buying out of those schedules.

- The Generator must notify the NYISO through the Transmission Owner that the test has started.

- The NYISO will log that the Generator is performing a test and that the Generator is dispatched out-of-merit.

- The Generator must notify the NYISO through the Transmission Owner that the test is complete. The NYISO will log the completion time and the Generator will resume following normal base points.

B.) Test Specific Criteria

The ISO will apply special settlement rules for specific tests pursuant to the following test criteria: That is,

- The duration of any test period exemption will be limited to the "Qualifying Test Duration" listed for each test regardless of the length of an actual test.
- In addition the ISO will refer to Periodicity as the expected frequency of a test for any given unit. Periodicity is a guideline for the ISO to use in assessing the impact of this exemption process and with which the ISO will monitor the program for possible abuse.

1.) DMNC Test (See TB 029 for specific DMNC testing and reporting requirements http://www.nyiso.com/public/webdocs/documents/tech_bulletins/tb_091.pdf)

Steam Unit DMNC Test
DAM scheduling criteria – Must be scheduled to 90% of Operating Capability
Test Periodicity – 2/year, Bi-Annually (Winter/Summer);
Qualifying test duration – 6 hours

GT DMNC (With/Without Power Recovery) Test
DAM scheduling criteria - Must be scheduled to 90% of Operating Capability
Test Periodicity – 1/year
Qualifying test duration – 4 hours

2.) **VAr Tests (**See TB 091 for specific VAr testing and reporting requirements, http://www.nyiso.com/public/webdocs/documents/tech_bulletins/tb_091.pdf)

Steam Unit VAR (Lead/Lag) Test
DAM scheduling criteria – As per Technical Bulletin 091
Test Periodicity – 1/year
Qualifying test duration – 3 hours

3.) RATA Testing

DAM scheduling criteria – as accurate as can be done, NYISO expectation is that unit will be scheduled to at least minimum Generation
Test Periodicity – 1/year
Qualifying test duration – full day

4.) Mill fineness checks & turbine testing -

DAM scheduling criteria - ????? what levels are appropriate
Test Periodicity – 1/year
Qualifying test duration – 2 hours

Need to discuss with IPPNY to better understand the test

Mill fineness testing - should be done a few times per year contract - should be done a few times per year for component testing - pump, fan, mill - should be tested routinely to determine performance heat rate - testing should be done after major outage.
Under NYPP this was a requirement (MP3 testing)

5.) Modified Turbine Test (a.k.a. Turbine Enthalpy Drop Test)

DAM scheduling criteria – scheduled to 90% of full load
Test Periodicity – 2/year
Qualifying test duration – 4 hours

6.) N2 Leakage Test

DAM scheduling criteria – as accurate as can be done, minimum schedule 50% of full load
Test Periodicity – 1/year
Qualifying test duration – 8 hours

7.) **Boiler Efficiency Test**

DAM scheduling criteria – 90% of full load
Test Periodicity – 2/year
Qualifying test duration – 4 hours

8.) Feedwater Heater Performance Test

DAM scheduling criteria – as accurate as can be done, minimum schedule 50% of full load
Test Periodicity – ask IPPNY; they have as needed
Qualifying test duration – 3 hours

9.) **Pump Performance Test**

DAM scheduling criteria – as accurate as can be done , minimum schedule 75% of full load
Test Periodicity – ask IPPNY: they have as needed
Qualifying test duration – 3 hours

10.) GT Monthly Operational Test

DAM scheduling criteria – 100% of opcap
Test Periodicity – 1/month
Qualifying test duration – 2 hours

11.) Infra-red Scan Test

DAM scheduling criteria -
Test Periodicity – 1/year
Qualifying test duration – 3 hours

These tests can be prescheduled for any weekday, last approximately two hours, and are done approximately once per year. **(Are these tests that need to be scheduled with the ISO? Do they affect the unit's ability to follow basepoints? ASK IPPNY)**

12.) Particulate Testing

DAM scheduling criteria - ????? Need to ask IPPNY what are the scheduling and operating levels

Test Periodicity – 1/5 year
Qualifying test duration – 1 day

Particulate testing must be conducted on every emission unit firing liquid or solid fuel at least once every five year. The DEC has expressed willingness to consider representative testing but that provision in not codified in the regulations. (Generally 12-16 hours per unit)

Residual oil fired units will be required to conduct particulate testing annually for nickel under the EPA's proposed Hazardous Air Pollutant (HAP) Maximum Achievable Control Technology (MACT) requirements. Coal may have similar requirements under the HAP MACT mercury requirements. (Generally 12-16 hours per unit)

13.) NOx Testing

DAM scheduling criteria - ???? Need to ask IPPNY what are the scheduling and operating levels

Real Time scheduling criteria –
Test Periodicity – 1/5year
Qualifying test duration – ??? 6 hours or is it 12 for dual fuel

Every combustion turbine and diesel generator that is grid connected is subject to NOx testing once every five years. If the unit is capable of operating on multiple fuels testing must be conducted on each fuel. There are provisions that allow testing of representative units (basically one in three) so practically speaking not every unit will actually be tested. (Generally 4-6 hours per unit per fuel)

14.) Boiler & Turbine Performance

DAM scheduling criteria – 90% of the expected load ranges hourly
Test Periodicity – 1/year
Qualifying test duration – 8 hours

15.) Full Load Fuel Oil Test

DAM scheduling criteria – Must be scheduled to 90% of Operating Capacity
Test Periodicity – 1/month/Combustion Turbine
Qualifying test duration – 3 hours

Settlement

The Generator Test designation will be applied to the whole hour for any hour in which the test is actually in progress up to the limit of the Qualifying Test Duration.

Performance penalties will not be levied during a designated test period and the Real-Time LBMP is paid for all energy produced during the designated test period. Unmet DAM energy positions will be cleared at Real-time market prices.

The generator is not eligible for either Real-Time BPCG or DAMAP supplemental payments during any full hour in which the test is conducted.

Designated Generator Test periods will be denoted (and will be DSS accessible), in the billing system by Out-of-Merit (OOM) Code 25 – the associated log or description field will specify Generator Testing when that is the reason for putting the unit OOM. This OOM code is currently shared by the SU/SD exemption and Generator DMNC testing.