
Subject: DSASP Resource Audit Procedures and Requirements

Statement: Demand Side Ancillary Service Program (DSASP) Providers are Market Participants that enroll DSASP Resource(s) to participate in the NYISO's Ancillary Service market. This Technical Bulletin addresses the general requirements for auditing DSASP Resources.

Details:**Introduction**

This Technical Bulletin describes the methods used by the New York Independent System Operator (NYISO) to implement the NYISO's Operating Reserves audit procedures as they apply to DSASP Resources. An audit is a special test of a DSASP Resource's capabilities to meet performance standards (for example, emergency response rate, 10-Minute Reserve requirement, and 30-Minute Reserve requirement). Actual performance measured during reserve pickups is also used to verify a DSASP Resource's capabilities. This Technical Bulletin covers the following audits a DSASP Resource may be subject to:

- Audit to ascertain its emergency response rate as a test of its ability to provide Operating Reserves.
- An order for a reserve pickup to ascertain the DSASP Resource's ability to provide Operating Reserves.
- Audit to ascertain its ability to reach and operate at its Normal Upper Operating Limit (UOL_N) via 10- or 30-minute reserve audit.
- Regulation Performance Audit, if applicable.

The NYISO may, at any time and without prior notification, request a DSASP Resource to demonstrate its ability to achieve and sustain its emergency response rate and/or its ability to reach and operate at its Normal Upper Operating Limit (UOL_N) by performing an audit. Audits of 10-Minute Reserve, 30-Minute Reserve and UOL_N may be conducted at least once per Capability Period, or more frequently to make sure that DSASP Resources can perform as offered. Actual performance measured during reserve pickups, or outside of a reserve pickup as if an actual emergency exists, may also be used to verify a DSASP Resource's capabilities.

If a DSASP Resource cannot comply with the NYISO audit request, the DSASP Provider or the Transmission Owner must notify the NYISO at which time the audit will be terminated. The NYISO will classify the DSASP

Resource as failing the audit and will derate the Resource to zero. If the DSASP Resource fails to meet its auditing requirements, the NYISO will derate the resource to the capability levels demonstrated during the audit. DSASP Providers or the Transmission Owner can request a retest of the DSASP Resource at any time after an audit failure.

Test of UOL_N or Emergency Response Rate

To initiate the audit, the NYISO will notify the DSASP Provider or Transmission Owner of the type of test to be conducted. The NYISO will also verify that instructions and parameters being tested are understood by the DSASP Provider or Transmission Owner, specifically:

- The change in output (MW) that will be required of the DSASP Resource;
- The NYISO will increase the DSASP Resource's basepoint to test its ability to provide 10- or 30-Minute Reserve. The expected response rate of the DSASP Resource will be at the emergency response rate.
- The current output of the DSASP Resource, and
- The operating limits of the DSASP Resource and that the audit will not cause the DSASP Resource to exceed those limits.

The start of the audit will be the NYISO clock time identified by NYISO Operations and communicated to the DSASP Provider or Transmission Owner. The DSASP Resource is expected to start responding at the identified time. In the event the Resource is notified by basepoints or verbally through its DSASP Provider or Transmission Owner more than 1 minute after the start time recorded by the NYISO, the additional notification time greater than 1 minute will be added onto the required demonstration period for each test being conducted to evaluate the DSASP Resource's performance. The test will end when one of the following occurs:

- The DSASP Resource output reaches its offered UOL_N or the reserve response has been demonstrated, depending on the type of test being conducted.
- The appropriate time period for the test, including tolerance, is exceeded
- The DSASP Provider or Transmission Owner informs the NYISO Operator that the DSASP Resource is unable to demonstrate the claimed response or capability.

Reserve Pick-Up in Lieu of Test

The NYISO measures and reviews the actual response of each DSASP Resource that is requested to respond to a reserve pick up. The review period starts when the DSASP Resource's new basepoints are made

available to the DSASP Provider. The DSASP Resource's successful response to a reserve pick-up is equivalent to an acceptable test of 10-Minute Reserve.

The unsuccessful response of a DSASP Resource to a request for a reserve pick up is equivalent to failing a test of 10-Minute Reserve. Section V below outlines the action that must be taken following an unsuccessful test.

Acceptance Criteria

The UOL_N and response at the emergency response rate for 10 or 30 minutes must be attained or exceeded during the test. The UOL_N will be taken from the DSASP Resource's UOL_N real-time offer.

- **10 Minute, UOL_N Reserve**

For a DSASP Resource demonstration of 10 Minute Reserve, a variation of 2% of required pick-up may be used (example: A 15 MW pickup is required in 10 minutes (plus 1 minute tolerance). Minimum acceptable performance would be 14.7 MW).

- **30 Minute, UOL_N Reserve**

For a DSASP Resource demonstration of 30 Minute Reserve capability, a variation of 2% of required may be used (example: A 30 MW pickup is required in 30 minutes (plus 3 minute tolerance). Minimum acceptable performance would be 29.4 MW).

Actions in the Event of Unsuccessful Performance

In the event of unsuccessful performance, the NYISO will notify the DSASP Provider of the failure. Within two business days, NYISO Market Mitigation and Analysis (MMA) will provide the DSASP Provider's primary contact a copy of the audit report, which details the tested parameter they failed.

DSASP Provider's Explanation of the Failure

Upon failure of a test of 10-Minute Reserve or 30-Minute Reserve, the DSASP Provider must submit a letter of explanation to the NYISO stating why the Resource failed the test, how the problem will be corrected, and the time required to make the correction. The letter must be submitted, within 5 business days after receipt of a copy of the audit report, to the MMA department at the NYISO with a copy to the NYISO's Stakeholder Services Representative.

Failure of 10-Minute Reserve Test or Failure of 30-Minute Reserve Test

Upon failure of a reserve test, the parameter that failed to reflect the DSASP Resource's true capabilities should be reduced to the level the DSASP Resource achieved. Physical parameters that may require modification are:

- The DSASP Resource's emergency response rate may need to be reset to no higher than the response rate achieved during the test.
- The DSASP Resource's normal response rate may be needed to be reset to no higher than the response rate achieved during the test.

The NYISO may derate the DSASP Resource's response rates and/or UOL_N in MIS, if necessary, to preserve reliability.

Request to Retest

Once a DSASP Resource is capable of performing at its previously stated response rates or UOL_N , following a reduction in such rate or UOL_N as a result of a performance audit or otherwise, the DSASP Provider may request a re-test. The request to re-test shall be made to the NYISO's System Operator's Generation Desk, and the NYISO Generation Operator will attempt to schedule the test within 48 hours of the request. Upon successful completion of the test, the NYISO's Generation Operator will restore the DSASP Resource's UOL_N capability in MIS to the value achieved in the re-test.

Following a successful response rate re-test, the NYISO's Generation Operator will provide the information to MMA and NYISO Stakeholder Services to have the response rates updated to the value achieved in the re-test. MMA and NYISO Stakeholder Services, within two business days, will confirm the DSASP Resource's re-tested performance and update the response rates to the appropriate values.

Payments and Penalties

DSASP Resources are not paid for energy produced during a test. Bid Production Cost Guarantee (BPCG) and Day-Ahead Margin Assurance Payments (DAMAP) will be paid pursuant to the provisions of the Market Administration and Control Area Services Tariff. Under-generation penalty assessment during a test will be pursuant to the provisions of the Market Administration and Control Area Services Tariff.

Documentation

The NYISO records the parameters and results of each test using one of the forms appended to this Technical Bulletin. In order that the DSASP Provider or DSASP Resource may have a copy of the test documentation, the DSASP Provider or Resource is encouraged to record the parameters and results of a test using the same form.

This Technical Bulletin is not currently expected to be incorporated into a NYISO Manual/User Guide.

10 Minute Sync RESERVE RESPONSE TEST

Type of test: 10 Minute response Pass _____ Fail _____

This is a NYISO DSASP Resource audit of _____ 10 minute reserve.

The DSASP Resource has an Emergency Response Rate of ____ MWs per minute.

NYISO shows the DSASP Resource loaded at _____ MWs and it has to increase loading to _____ MWs to pass the 10 minute reserve audit.

The audit start time is (DSASP Provider notified): _____.

Actual output at 10 minutes: _____ 11 minutes _____

Expected output in 10 minutes: _____ Tolerance: _____

Within tolerance: Yes _____ No _____

Test terminated at: _____ DSASP Provider notified: _____

Date: _____

Comments and or actions taken _____

NYISO Shift Supervisor _____

NYISO Generation Operator _____

DSASP Provider Primary Operations Contact _____

10 and 30 MINUTE Sync

RESERVE RESPONSE TEST

Type of test: 10 and 30 Minute response Pass _____ Fail _____

This is a NYISO DSASP Resource audit of _____ 10 and 30 minute reserve.

The DSASP Resource has an Emergency Response Rate of _____ MWs per minute.

NYISO shows the DSASP Resource loaded at _____ MWs and it has to increase loading to _____ MWs to pass the 10 minute reserve audit and to _____ MWs to pass the 30 minute reserve audit.

The audit start time is (time DSASP Provider notified) _____.

Actual output at 10 minutes _____ 11 minutes _____

Expected output in 10 minutes _____ Tolerance _____
Within tolerance: Yes _____ No _____

Actual output in 30 minutes _____ 33 minutes _____

Expected output at 30 minutes _____ Tolerance _____
Within tolerance: Yes _____ No _____

Test terminated at: _____ DSASP Provider notified: _____

Date: _____

Comments and or actions taken _____

NYISO Shift Supervisor _____

NYISO Generation Operator _____

Provider Primary Operations Contact _____

10 – 30 MINUTE Sync and UOL_N

RESERVE RESPONSE, UOL_N TEST

Type of test: 10, 30 minute response and claimed UOL_N. Pass _____ Fail _____

This is a NYISO DSASP Resource audit of _____ 10 and 30 minute reserve.
 This is also an audit of the DSASP Resource's claimed Upper Operating Limit Normal.
 The DSASP Resource has an Emergency Response Rate of _____ MWs per minute.

NYISO shows the DSASP Resource loaded at _____ MWs and it has to increase loading to _____ MWs to pass the 10 minute reserve audit, _____ MWs to pass the 30 minute reserve audit and to _____ MWs to pass the Upper Operating Limit Normal audit.

The audit start time is (time DSASP Provider notified): _____

Actual output at 10 minutes: _____ 11 minutes _____

Expected output in 10 minutes: _____ Tolerance _____
 Within tolerance: Yes _____ No _____

Actual output in 30 minutes _____ 33 minutes _____

Expected output at 30 minutes _____ Tolerance _____
 Within tolerance: Yes _____ No _____

Maximum generation reached _____ Tolerance: _____
 Expected generation _____ (UOL_N)
 Within tolerance: Yes _____ No _____

Test terminated at: _____ DSASP Provider notified: _____

Date: _____

Comments and or actions taken _____

NYISO Shift Supervisor _____

NYISO Generation Operator _____

Provider Primary Operations Contact _____