

DMNC Validation Process Enhancements

Kristen Chambers

MMA-Reference Level Analyst

Business Issues Committee

May 15, 2024

Agenda

- **Background**
- **Proposed revisions to ICAP Manual**
- **Appendix**
 - Required questions
 - Optional questions
- **Next Steps**
- **Q&A**

DMNC Validation Process Background

Background

- **In order to establish a Generator’s DMNC (or, for a Behind-the-Meter Net Generation Resource, DMGC), Installed Capacity Suppliers must submit results from a DMNC/DMGC test or data from actual operation from within the DMNC Test Periods**
 - Market Participants have historically had the option to submit a completed DMNC Test Supplemental Information Form (“Attachment D”) as backup data accompanying a DMNC Test entry.
- **Once DMNC data is submitted for a Generator the NYISO will validate the data and confirm the DMNC/DMGC value**
 - Validation typically occurs within 30 days of test submission or within the NYISO’s best efforts.
- **The NYISO is proposing to require submission of Attachment D, which has been renamed the “DMNC Test Supplemental Information Form”**
 - This is in addition to existing entry of DMNC information into the ICAP AMS
 - Revised form includes mandatory and optional questions pertaining to a Generator’s DMNC rating.
 - Submission of the form will streamline NYISO’s review and validation process
 - Optional questions will help the NYISO track additional data which may be used for future enhancements.

ICAP Manual Attachment D

- Also referred to as “Dependable Maximum Net Capability Test Supplemental Information Form ”
- Historically, ICAP Suppliers have had the option to submit the DMNC Test Supplemental Information Form along with DMNC test data.
 - Often, the NYISO has asked Market Participants for additional information on an informal basis.
- NYISO is changing the name to the DMNC Test Supplemental Information Form
- Requiring simultaneous submission of DMNC test data and the DMNC Test Supplemental Information Form will streamline the NYISO’s review and validation process.
- Standardized form consisting of, but not limited to, questions regarding:
 - Station configuration
 - Equipment specifications
 - Ambient conditions
 - Environmental permit limitations
 - Host load/steam obligations
 - Firm gas contracts

Proposed ICAP Manual Revisions

Proposed Manual Revision:

- **ICAP Manual section 4.2 requires Resources to submit DMNC Test results or data from actual operation within the DMNC Test Periods, by the date identified in the ICAP Event Calendar.**
- **The NYISO proposes to add the following sentences to Section 4.2:**
 - “Beginning with the DMNC Test Period that opens June 1, 2024, Installed Capacity Suppliers must also submit a completed Dependable Maximum Net Capability Test Supplemental Information Form (see ICAP Manual Attachment D). Submit completed Forms to dmncattachments@nyiso.com. Failure to submit (i) DMNC or DMGC test data or data from actual operation, and or (ii) a completed Dependable Maximum Net Capability Test Supplemental Information Form, or (iii) both, may result in financial sanctions pursuant section 5.12.12 of the NYISO Services Tariff”
- **The NYISO also proposed to clarify Section 4.2.4, Required DMNC Generating Capability Test Data:**
 - “An entity that wants to establish a DMNC rating for its Resources must, for each Resource, (i) report the DMNC test data to the NYISO using the ICAP Market System, and (ii) submit a completed DMNC Test Supplemental Information Form (see ICAP Manual Attachment D).”
- **NYISO’s proposal would become effective beginning June 1, 2024, for DMNC tests applicable to the Summer 2025 DMNC Capability Season.**

Next Steps

- Final Posting Date May 31, 2024, pending BIC approval

Questions?

Appendix

Required Questions:

Required Questions:

- 1. Was there a net change +/- 1% of the previous capability season approved test?**
- 2. Were there any equipment updates or malfunctions in the past year that impacted DMNC test outcomes?**
 - Purpose: to analyze overall performance of PTID during DMNC test, define reasons for increase/decrease in capacity offer, and streamline NYISO's validation review.**

Required Questions

3. Please provide ambient temperature, relative humidity, wet bulb/dry bulb readings, and inlet temperature collected at station.

3a. Describe any other non-typical ambient conditions that could be impactful to the DMNC test.

- Purpose: Distinguish differing ambient and weather conditions during test. Not limited to ambient corrected units

4. Were any actions taken that differ from the normal day-to-day operation of the unit in preparation for and/or during DMNC test hour(s)?

- Purpose: NYISO seeks to understand dependable versus demonstrated.

Required Questions

5. Is this a multi-unit station?

5a. Were all units tested simultaneously? If not, how are the individual units adjusted for station-level limitations?

5b. Do separate PTIDs share equipment (such as Once Through Cooling System, Gas Compressors, ACC, other) that impacts the station-level DMNC results?

- Purpose: NYISO seeks to understand station setup and validate appropriately in accordance with ICAP Manual Section 4.2.2 Resource Specific Test Conditions.

Required Questions

6. Does this unit offer Emergency MW capability?

6a. Does this unit's configuration during DMNC testing require greater than 5 minutes to access capacity in real-time? Procedural or configurational? Please explain:

- Purpose: NYISO seeks to understand and validate appropriately in accordance with ICAP Manual Section 4.2 DMNC and DMGC Procedures that all generating Resources test using customary industry practices expected to be used during season peak load conditions as applicable.

Required Questions

7. Does the unit provide host steam?

7a. What is the Nameplate rating of all Steam Turbines at the station?

7b. Is this steam load curtailable?

7c. Is this unit linked to an active host steam supply agreement(s)?

7d. What were the readings for export steam to host facility during DMNC test?

- **Purpose: NYISO seeks to understand station set up with host load/contractual steam obligations with PTIDs linked with steam turbines.**

Required Questions

8. Is this a BTM:NG Resource?

8a. Describe station load and MW requirements:

8b. Does this unit participate in the Station Power Program?

- Purpose: NYISO seeks to confirm that appropriate metering and tags are in place for DMNC/DMGC test validation, as well as Station Power Program MWs are separately metered.

Optional Questions:

Optional Questions

1. Does this station have water temperature restrictions?

1a. What were the inlet water temperature and discharge temperatures measured during the test?

1b. Does this unit have environmental permits pertaining to water temperature (discharge water temperature limitations and inlet-to-discharge temperature spread)?

1c. Please explain any environmental permit limitations that could limit generator capability, include permitted limitations.

- **Purpose:** NYISO seeks to understand inlet and discharge water temperatures, environmental permits, and whether water temperatures and/or permits impact the availability and/or output of the unit.

Optional Questions

2. Is this a Once-Through-Cooled unit located on the Hudson River or Atlantic Coast?

2a. What were the tidal readings on the day of DMNC test? Please provide 24 hours of readings:

- Purpose: NYISO seeks to understand whether tidal conditions impact availability and/or output of the unit.

Optional Questions

3. Does this unit have applicable Firm Gas Contracts?

3a. Please explain firm fuel supplier arrangements:

3b. Is this a multi-fueled unit? Please explain alternate fuel supplier arrangements:

- Purpose: NYISO seeks to coordinate with Capacity Accreditation in validating submitted Firm Fuel elections.

Optional Questions

4. Does the unit use either evaporative coolers or inlet fogging equipment?

4a. Is the efficiency of the evaporative cooler known? Describe assumptions:

- Purpose: Distinguish differing ambient and relative humidity conditions during test.

Our Mission & Vision



Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation