

BTM:NG ICAP Tariff Revisions

James Pigeon

Senior Market Design Specialist, Energy Market Design New York Independent System Operator

Joint Installed Capacity and Market Issues Working Group

November 19, 2015 Krey Corporate Center



Topics

- BTM:NG Initiative Overview and General Concepts
- Benefits of BTM:NG Resources
- Edits to ICAP Tariff Revisions for BTM:NG Resources (first presented Nov. 9)
- Next Steps
- Appendix



General Concepts for BTM:NG Resource Participation in NYISO Markets

Previous presentations regarding the BTM:NG project are available on the NYISO's website



BTM:NG Resources

- A BTM:NG resource is a facility that has onsite generation capability that routinely serves its host Load and has excess generation capability after serving that Host Load
- BTM:NG resources will be allowed to participate in:
 - Energy Market
 - Capacity Market
 - Ancillary Services Market



Benefits of BTM:NG Resources

- Access to this additional supply may:
 - Improve grid reliability and operational flexibility
 - Provide more clarity and certainty for future resource investment within New York State
 - Improve awareness of resources not currently participating in the NYISO wholesale markets



General Eligibility Requirements for BTM:NG Resources

Each BTM:NG Resource must:

- Be designed and operated to facilitate the business function of the on-site load by providing electricity in the regular course of business;
- Meet NYSDEC requirements to operate under nonemergency conditions;
- Have an effective interconnection agreement;
- Meet minimum net generation requirements;
- Have appropriate metering configurations; and
- Be responsive to dispatch instructions for each PTID as a single entity interfacing with the grid



Participation Requirements

- To qualify as a BTM:NG Resource, a minimum of 1 MW of Average Coincident Host Load will be required
 - Host Load includes all electrically connected loads within the defined electrical boundary served by the on-site generation
- The behind-the-meter Generator must have a nameplate rating of greater than 2 MW
- The interconnection must also allow an export (injection to the grid) of at least 1 MW
 - Multiple injection points at lower voltages may be acceptable provided they aggregate to a single injection into the NYS Transmission System
- Each BTM:NG Resource must have a revenue grade TO net meter at each interconnection point from the BTM:NG Resource to the distribution or transmission system
- The BTM:NG Resource must have telemetry and, if bidding flexibly, be able to follow dispatch instructions from NYISO via the connecting TO
 - Direct communication with the NYISO is permitted as a secondary communication path



BTM:NG Resource Facility Configurations

- Participation at a facility will be either:
 - As a single generator serving a host load
 - Required to provide reserves if bidding flexibly
 - Offering regulation service is optional
 - As an aggregated set of generators serving a host load
 - Required to provide 10 min non-spin and 30 minute reserve products if bidding flexibly
- The ISO shall review and approve each facility seeking to participate as a BTM:NG Resource



BTM:NG ICAP Tariff Revisions



Definitions

- Adjusted DMGC Simplified definition with a reference to Sec. 5.12.6.1.1
- Adjusted Host Load Simplified definition with a reference to Sec. 5.12.6.1.2
- DMNC Test Period Clarified definition
- Net Installed Capacity Clarified definition with a reference to Sec. 5.12.6.1



Tariff Revisions

- Section 5.12.1 Installed Capacity Supplier Qualification Requirements
 - Clarified that a Generator that is within a defined electrical boundary, electrically interconnected with, and routinely serving a Host Load at a single PTID will be required to participate as a BTM:NG Resource
 - Section 5.12.1.12 new section stating that a BTM:NG
 Resource may elect not to participate as a BTM:NG
 Resource by written notice to the ISO before August 1. It
 may also re-qualify as a BTM:NG Resource in a
 subsequent Capability Year
 - Additional ministerial changes



Tariff Revisions

- Section 5.12.6.1 ICAP Calculation for Behind-the-Meter Net Generation Resources
 - Clarification of the Net-ICAP Formula
- Section 5.12.6.1.1 Adjusted DMGC
 - Clarification of the Adjusted DMGC Formula
- Section 5.12.6.1.2.1 Average Coincident Host Load
 - Clarified that a resource will have an estimated ACHL if it does not have the appropriate meter data to calculate the ACHL
- Section 5.12.6.2 UCAP Calculations
 - Clarified UCAP calculation for BTM:NG Resources
- Section 5.12.8 Unforced Capacity Sales
 - Ministerial changes



ICAP Tariff Revisions

- Attachment H incremental revisions since those reviewed at the November 9 meeting:
 - Section 23.2 Updates to the Unit Net CONE definition
 - Section 23.4.5.4 Updated to include the details of when Mitigated UCAP that is UCAP of a BTM:NG Resource would not constitute physical withholding if it is not offered into the ICAP Spot Market Auction
 - Various sections to reflect the elimination of "Category III"
 Examined Facilities, including 23.4.5.7.3.5 (no BSM retesting) updated to include effective date of the elimination of Category III (i.e., the effective date of the BTM:NG provisions)
 - Corresponding revisions are made in Attachment O, Section 30.4.6

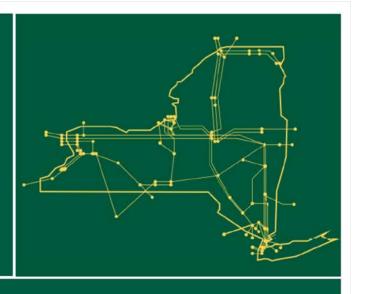


Next Steps

- Tariff Revisions and Review
 - Joint ICAPWG/MIWG (Nov 18th, 2015)
 - Joint ICAPWG/MIWG (Nov 19th, 2015)
 - BIC (December 2015)
 - MC (December 2015)
 - Board Approval (January 2016)
 - Filing (February 2016)
 - Implement (Q4 2016) Contingent upon timely approval from Market Participants, the NYISO Board of Directors and FERC



The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



www.nyiso.com