

NYISO Consumer Interest Liaison Weekly Summary

October 22 – October 26, 2018

Notices:

- The <u>final</u> version of the NYISO TB-245, "Monthly Net Benefit Offer Floor Calculation Methodology", has been posted to the NYISO Technical Bulletins webpage under the Technical Bulletins folder. This Technical Bulletin presents the methodology submitted to the Federal Energy Regulatory Commission on August 19, 2011 pursuant to Order No. 745 for calculating the Monthly Net Benefit Offer Floor applicable to Bids for Demand Side Resources participating in the NYISO's Day-Ahead Demand Response Program and Demand Side Ancillary Service Program. The NYISO has clarified the methodology in certain respects to reflect Commission directives and align with current market rules.
- The NYISO will be modifying the Ramp Capacity Limit applied at its NPX-AC Interface in the Real-Time Market. The Ramp Capacity Limit will be increased from 200 MW to 300 MW, and will apply to each quarter hour interval (xx:00, xx:15, xx:30, and xx:45). This change does not affect the Day-Ahead Market. This increased Ramp Capacity Limit is anticipated to take effect between 11AM-1PM on Tuesday, October 30th 2018. Please see the <u>"External Interface Interchange Ramp Capacity Limits Included in SCUC and RTC"</u> posting describing all Ramp Capacity Limits at our External Interfaces.

Meeting Summaries:

Monday, October 22 2018

Integrating Public Policy Task Force

Wholesale Suppliers Subject to the Carbon Charge and Applicable Carbon Emissions

Dr. Nathaniel Gilbraith of the NYISO presented an outline of the wholesale suppliers that would be subject to the carbon charge. All NYCA wholesale suppliers would be subject to the carbon charge on applicable emissions. The carbon charge will be applied to all aspects of providing wholesale energy;

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energy and ancillary services, start-up, no-load levels, etc. The CO₂ amount covered will be calculated at the "burner tip" and will not include upstream or fugitive emissions.

Suppliers that will not be subject to the carbon charge include eligible Clean Energy Standard designated wholesale suppliers and emissions associated with participation in the Demand Response (SCR, EDRP, DADRP, and DSASP) programs. Stakeholders suggested that the NYISO should give more consideration to including Demand Response resources that are enabled by backup fossil fuel generation for carbon charges as they may constitute emissions leakage. The NYISO responded that although leakage from Demand Response resources is minimal, the suggestion will be considered. Cogeneration suppliers will be subject to the carbon charge for the portion of their emissions produced specifically for injections into the wholesale market. The portion of the emissions produced in the primary function of the facility (heat, steam, etc.) is not in the scope of a wholesale electric sector carbon charge. Dr. Gilbraith noted that the NYISO will develop a methodology to determine the emissions rate for cogeneration assets based on the portion of wholesale electricity generation on a case-by-case basis. Stakeholders requested examples of how this proration may be determined. These resources will be required to work with the NYISO to establish a reference emissions allocation method.

Behind-the-Meter Net Generation Resources (BTM:NG) and Distributed Energy Resource Aggregators (DCEA) will be assessed a carbon charge based on the provision of wholesale energy and ancillary services and will also be required to work with the NYISO to establish a reference emissions allocation method.

The NYISO will develop internal processes to verify that supplier emission submissions are reasonable and accurate, with sanction capabilities for inaccurate, insufficient or untimely data submissions. The NYISO will coordinate the time periods for data submission with the settlement cycle for

consistency with the final bill closeout timeline.

To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg_ipptf/meeting_mate rials/2018-10-22/applicable%20carbon%20emissions_for%20discussion.pdf

Tuesday, October 23, 2018

Joint Installed Capacity/Market Issue Load Working Group/Transmission Planning Advisory Subcommittee

DERs: Interconnection and CRIS Requirements

Thinh Nguyen of the NYISO presented the proposal for changes to the interconnection requirements for wholesale energy and capacity market participation by individual resources 1 MW or less. Mr. Nguyen led a brief review of the three interconnection procedures that all Distributed Energy Resources (DER) will be subject to, depending on the point of interconnection and their intent to make wholesale sales:

- 1. NYISO interconnection procedures
- 2. NY Standardized Interconnection Requirements (SIR)
- 3. Utility Interconnection procedures

To facilitate the interconnection of DER, the NYISO is making several revisions to the Small Generator Interconnection Procedures (SGIP). The concept of "Facility" will be expanded to include all assets behind a single facility meter, and will be updated to allow multiple assets and different technologies in the same Interconnection Request. Mr. Nguyen explained the differences between material modifications and permissible modifications.

Capacity Resource Interconnection Service (CRIS) will be awarded at the Facility level, not to the individual assets within a facility. Mr. Nguyen explained the process required for DER facilities to

request CRIS and the methodology for determining the maximum amount of the permissible CRIS request. The Deliverability Study will use the derated generator capacity incorporating availability or the UCAP Deration Factor (UCDF). A Deliverability methodology was also described for multi-technology DER CRIS determination.

Mr. Nguyen led a brief review of the concepts for the proposed tariff revisions that will be required for OATT Attachments S, X and Z.

Comments are encouraged and can be sent to <u>tnguyen@nyiso.com</u>. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/ 2018-10-23/102318%20MIWG%20DER%20CRIS%20and%20Interconnection%20Draft_Final.pdf

Conceptual Details of Meter Service Entities (MSEs) Participation in NYISO Markets

Michael Ferrari of the NYISO presented the detailed proposal for the development of a Meter Service Entity (MSE) construct that will authorize qualified entities to provide meter services to DER Aggregations. An MSE is a third-party entity that is approved by NYISO to provide metering and data services, including the provision of real-time telemetry data and revenue metering data, for an Aggregation for participation in the NYISO markets.

Mr. Ferrari detailed the requirements that a prospective MSE must meet to participate in the program. The responsibilities of an MSE will include providing a plan to the NYISO of the physical meter data and for the proper handling, verification, retention and security of data.

Several responsibilities for MSE Operations were explained, ranging from conducting yearly audits of Metering Facilities to supporting the NYISO settlements and dispute resolution procedures.

MSEs will also be responsible for maintaining timely compliance with the MSE rules and eligibility requirements in response to changes in the tariff, NYISO procedures or other changes affecting MSE eligibility and responsibilities as may be developed by the NYISO.

Mr. Ferrari outlined the responsibilities of the NYISO in the review and authorization of MSEs, audit performance, settlements and dispute resolution. Potential sanctions for non-compliance of MSE conditions of eligibility and performance standards were presented with examples of potential responses to non-compliance.

The NYISO is seeking stakeholder input and will return to future MIWG meetings with proposed tariff and manual/user guide updates. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/ 2018-10-23/DER%20Market%20Design%20-

%20Conceptual%20details%20of%20MSE%20Participation%20in%20NYISO.pdf

Wednesday, October 24, 2018

Joint Electric System Planning Working Group/Transmission Planning Advisory Subcommittee Status of the B-3402 & C-3403 Feeders

Martin Paszec of Consolidated Edison (ConEd) provided an update on the status of the B3402 and B3403 Feeder lines. The 345kV lines are currently out of service and should be considered out of service for all studies going forward. The NYISO has been notified of this status.

Thursday, October 25, 2018

Fall Economic Conference

Adam Kamins of Moody's Analytics presented the economic forecast for 2019. Mr. Kamins provided data on economic indicators used to determine the forecast for the U.S. as a whole prior to presenting a

forecast specifically for New York State. Several stakeholders attended in person and remotely through a Webex presentation.

Friday, October 26, 2018

Joint Installed Capacity/Market Issue/Price Responsive Load Working Group ESR Participation Model: Prototyping Update

Pradip Ganesan of the NYISO presented an update to the prototyping effort by the NYISO and ABB to build an Energy Storage Resource (ESR) model that respects the parameters discussed with stakeholders as part of the ESR market design. Mr. Ganesan's presentation provided links to 15 previous ESR presentations for reference. The market design includes 20 parameters specifically developed to enable ESR participation¹. Mr. Ganesan explained the application of the parameters and how ESRs would be committed and dispatched by the optimization engine in the Day-Ahead Market. The NYISO was able to test the ESR prototype using the new Network Manager

(NM) platform that is still in the process of being validated for the EMS/BMS system.

Eight existing units were selected for testing and their parameters changed to mimic ESRs in the prototype. The testing revealed that the prototype takes longer than the currently acceptable timeframe to solve in SCUC, with eight ESR units in the model, when committing the resources based on the new parameters. Mr. Ganesan explained why it takes significantly more time to solve the unit commitment for ESRs than it takes to solve the commitment for other types of units.

The NYISO recommends that a dispatch-only model for ESRs is the best option given the timeline for implementation of FERC Order No. 841 with the belief that additional time and effort is required to understand the performance issues with the ESR commitment model.

The dispatch model for ESRs will include Energy Level Management and round trip efficiency for the ISO-Managed ESR option:

- There will be no infeasible operating region in the ESR dispatch model
 - The NYISO has other existing programs for storage resources that have an infeasible operating region and want to participate in the wholesale markets
- *Min/Max Charge Time and Min/Max Discharge Time parameters are not part of the ESR dispatch model*
- The dispatch model will allow the storage resources to provide spinning reserves, regulation and other ancillary services if the resource qualifies to provide these services

The NYISO plans to file tariff revisions for the ESR dispatch-only model by December 03, 2018 and is planning for a February 2020 deployment to allow storage resources to participate in the NYISO markets. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/ 2018-10-26/ESR%20Prototyping%20Update.pdf

Proposed Tariff Revisions for the ESR Participation Model

Pallavi Jain of the NYISO presented the proposed tariff revisions to accommodate the Energy Storage Resource (ESR) Participation Model. On February 15, 2018, FERC issued Order No. 841, directing "each RTO/ISO to revise its tariff to establish a participation model consisting of market rules that, recognizing the physical and operational characteristics of electric storage resources, facilitates their

¹ Parameters include: Maximum Discharge Limit, Minimum Discharge Limit, Maximum Charge Limit, Minimum Charge Limit, Minimum Discharge Time, Maximum Discharge Time, Minimum Charge Time, Maximum Charge Time, Incremental Bid Curve, Charge Ramp Rate, Discharge Ramp Rate, State of Charge, Maximum State of Charge, Minimum State of Charge, Roundtrip efficiency, Start Up Charge/Discharge Costs and Minimum Charge/Discharge Limit costs, Transition Time

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participation in the RTO/ISO markets.²" The compliance filing deadline for Order No. 841 is December 3, 2018, with an implementation deadline of February, 2020. Ms. Jain provided an overview of the market design for the participation model.

Ms. Jain led a discussion of changes to the Market Services Tariff (MST) including:

- MST 2 Definitions
- MST 3 ISO Procedures
- MST 4 Market Services: Rights and Obligations
- MST 15 ISO Market Administration and Control Area Service Tariff Rate Schedules
- MST 17 LBMP Calculation
- MST 18 BPCG Payments
- MST 23 Energy Storage Mitigation
- MST 25 DAMAP Payments

The NYISO will submit the compliance filing on or before December 3, 2018 with a request for a February 2020 implementation date. To see the complete presentation, please go to: http://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=bic_icapwg#

FERC Filings

October 24, 2018

NYISO and PJM Joint filing of a motion for leave to answer and answer to Panda Power Generation protest

October 22, 2018

NYISO filing of a supplement to its August 13, 2018 answer related to NRG's July 24, 2018 complaint.

FERC Orders

There were no Orders issued to the NYISO by FERC for this week.

Filings and Orders:

http://www.nyiso.com/public/markets_operations/documents/tariffviewer/index.jsp

² Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators, Order No. 841, 162 FERC ¶ 61,127, at P3 (Feb. 15, 2018) ("Order No. 841") as amended by the Feb. 28, 2018 Errata Notice ("Order No. 841 Errata")

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