

NYISO Consumer Interest Liaison Weekly Summary

April 24 – April 28, 2017

Notices:

- Due to the FERC technical conference scheduled on May 1 and May 2, the following NYISO meetings in May have been revised.
 - May 2 MIWG ---> Rescheduled to May 5
 - o May 5 ESPWG ---> Cancelled
 - o May 9 CDAS ---> Rescheduled to May 10
 - o May 9 SOAS 10:00 a.m. Start Time ---> Start Time moved to 9:00 a.m.
- We are pleased to announce that NYISO's Training Team will be offering the in-class, MT-101 <u>Market Overview Course</u> on Wednesday, May 24, 2017. The MT-101 Market Overview is a one day course which will provide attendees with an introduction to the NYISO markets and their functions.
- The 2017 Load & Capacity Data Report (also known as the "Gold Book") is now available and has been posted to the NYISO website. The list of 2017 generators is available at 2017 NYCA Existing Generating Facilities. The protected version of the Gold Book which includes Table VI-1, Existing Transmission Facilities, is available to individuals with a MyNYISO account. To request a myNYISO account, please visit: How to Register for a MyNYISO Account

Meeting Summaries:

Monday, April 24, 2017

Market Issues Working Group

Market Impact Assessment: Preliminary DAM Results Overview

Dr. Nicole Bouchez of the NYISO presented an overview of the Integrating Public Policy project (Study) for background prior to providing results of the Day-Ahead simulations. Dr. Bouchez led a review of the goals for the Study and the methodology and assumptions used to generate the results. It was noted that this effort is not a planning study and the question of underlying transmission upgrades

to support the Clean Energy Standard (CES) is important but is not part of the scope of this work. Dr. Bouchez explained, as a key caveat, that the Study focuses on what happens on the "highways" between the load zones. The load weighted distribution of the new renewable resources (in front of and behind the meter) avoids issues that will be addressed in the interconnection process but it also means that the appearance or disappearance of intra-zonal congestion is an artifact of the modeling method. Michael Swider of the NYISO presented the modeled renewables in comparison to the renewables in service today. The distribution of the additional renewable capacity was presented in a chart for a better visual representation of information provided during an earlier presentation in a table. Mr. Swider provided the results of the simulations run for the four Study days:

- January 19, 2016
- March 22, 2016
- July 25, 2016
- November 10, 2016

The results were intuitive with prices generally being lower in the simulations than in actual production. Graphs depicting the values were provided and split into two areas; Zones A-E (West and North) and Zones F-K (East and South). LBMP prices in the East and South Zone decline less dramatically and are close to production values during the morning and evening load pick-up hours (prior to sunrise and after sunset). Peak days (winter and summer) are impacted differently by the additional renewables than shoulder days (spring and fall). The Study indicated that the Central East interface binds for more hours than in production, with higher shadow prices. The UPNY/SENY interfaces also indicated more congestion on the peak summer day. Additional results indicate that:

- Existing generation is backed down and flexible generation is moving more
- In most hours existing conventional (non-nuclear /non-renewable) generators in both upstate and downstate produce less MW-hours and are committed for fewer hours.
- Existing renewable generation in upstate (West of Central-east) is partially displaced by new renewable generation.
- Flexible units are observed moving up and down more to balance load and generation, with the largest changes on shoulder days

It was suggested by a stakeholder that the NYISO consider including information in a future presentation on the generation type that becomes the predominantly marginal unit for the simulation results. Mr. Swider noted that the results are preliminary and likely to change as assumptions are refined. An appendix with detailed assumption information was included with the presentation. A special mailbox is set up for stakeholder feedback at IPP_feedback@nyiso.com. To see the complete NYISO presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2017-04-24/MIWG%20Public%20Policy%20Update%2020170424.pdf

DER Aggregations Concept Proposal

James Pigeon of the NYISO presented the concept proposal for the Distributed Energy Resource (DER) aggregations. Determining aggregation requirements is the first step in developing the concepts for the DER Roadmap process. Mr. Pigeon led a review of DER aggregations including size and registration concepts, which are detailed in prior presentations. The concept of the "super aggregation" was discussed with stakeholders in relation to size and eligibility to provide ancillary services. In response to a stakeholder request, Mr. Pigeon noted that the NYISO is investigating the limitations in the commitment software to help evaluate whether or not lowering the DER minimum size can be considered. Mr. Pigeon detailed the registration requirements and responsibilities for the DER Coordination Entity (DCE). It was noted that the DCE will be responsible for notifying the NYISO of

all DCE Aggregation (DCEA) changes in status and reflecting any changes of this status in their bids. In terms of resource commitment, similar to Behind-the-Meter Net Generation Resources, the NYISO has considered DER to be dispatch-only because they are generally expected to be serving a load. Throughout this process, the NYISO and the utilities will continue to discuss coordination and operational procedures for aggregation mapping to the transmission network. The NYISO will soon begin the next step of reviewing the Measurement and Verification concepts. A special mailbox is set up for stakeholder feedback at DER feedback@nyiso.com. All comments received will be posted on the NYISO Demand Response programs webpage. To see Mr. Pigeon's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2017-04-24/Distributed%20Energy%20Resource%20Aggregations%20MIWG%20042417.pdf

Con Ed/PSEG Wheel Replacement Protocol –Update

David Edelson of the NYISO presented an update on the FERC Filing and Market-to-Market (M2M) changes for the ConEd/PSEG Wheel Replacement Protocol. NYISO and PJM jointly filed Joint Operating Agreement (JOA) revisions on January 31, 2017 and FERC staff issued an order accepting the proposal as filed, effective May 1, 2017, subject to refund and further commission order. NYISO and PJM plan to implement the new protocols, as filed, on May 1, 2017. Mr. Edelson detailed how the Interchange and Operational Base Flow (OBF) are now modeled in the system. Congestion from the existing PAR-qualified flowgates will be reflected to each of the NY-NJ PARs as part of M2M PAR Coordination. The flowgate qualification process is currently being worked out for additions to the M2M program. The NYISO will come back to MPs after agreement with PJM has been reached on new PAR flowgates. To see Mr. Edelson's complete presentation, please go to: http://www.nyiso.com/public/webdocs/markets operations/committees/bic miwg/meeting materials/2

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2017-04-24/agenda%204%20Wheel%20Replacement%20Protocol%20Update%20-%20MIWG%20-%20April%2024%202017_FINAL.pdf

Rate Schedule 1 – MISO PAR Cleanup

Chris Russell of the NYISO presented an update on the process to refund transmission customers for the charges that NYISO assessed for the Bunce Creek phase angle regulators (PARs) and paid to MISO. In August 2016, FERC directed MISO to refund NYISO the funds that were paid to MISO. The refund totaled \$16.3M, plus \$1.27M in interest. The last refund payments to transmission customers will be included on the May 5th Invoice. NYISO proposes to remove the language in OATT Section 6.1.6 related to the MISO PAR cost recovery and refund process. The NYISO anticipates May/June 2017 governance action for this issue. To see Mr. Russell's complete presentation please go to: http://www.nyiso.com/public/committees/documents.jsp?com=bic_miwg&directory=2017-04-24

FERC Order 831 Compliance

Ethan Avallone of the NYISO presented an update on compliance with FERC Order 831, Offer Caps. Mr. Avallone noted that in November 2016 FERC issued an order under which resources would be allowed to submit bids above the existing \$1,000 bid cap, subject to cost verification. The NYISO will file tariff revisions with FERC in its compliance filing for Order 831. The NYISO filing will incorporate a \$1,000/MWh soft cap and a \$2,000/MWh hard cap. The NYISO will verify that offers greater than \$1,000/MWh and less than or equal to \$2,000/MWh accurately reflect a resource's cost before such offers are included in the market software. Supplier offers greater than \$2,000/MWh will be capped at \$2,000, and will not be eligible to set price. Mr. Avallone led a review of specific tariff language with stakeholders. Stakeholders requested that the NYISO clarify some of the revised tariff

language prior to the compliance filing with FERC on May 8, 2017. To see the complete presentation please go to:

http://www.nyiso.com/public/committees/documents.jsp?com=bic_miwg&directory=2017-04-24

New Business

Greg Campbell of the NYISO provided an update to stakeholders on the total Behind-the-Meter Net Generation (BTM:NG) Resource CRIS allocated MWs. At this time, no CRIS MWs have been allocated to BTM:NG Resources. There are currently requests for approximately 95 CRIS MWs in the registration queue for BTM:NG Resources. The NYISO will advise the ICAPWG of any changes going forward.

Wednesday, April 19, 2017

Management Committee

Motion #1:

The Management Committee (MC) approves the March 29, 2017 meeting minutes.

The motion passed unanimously by show of hands

Motion #2:

The Management Committee (MC) hereby approves the revisions to the NYISO's Market Services Tariff as presented at the MC on April 26, 2017, and recommends that the NYISO Board of Directors authorize NYISO staff to file such revisions under Section 205 of the Federal Power Act.

The motion passed unanimously by show of hands with abstentions

Wednesday, April 19, 2017

Budget and Priorities Working Group

2017 Budget vs. Actual Status

Cheryl Hussey of the NYISO presented the 2017 year-to-date budget vs. actual status. Rate Schedule 1 recoveries are \$0.3M behind budgeted revenues through March. Year-to-date budgeted costs vs. actual costs through March reflect a \$1.5M budget under-run. To see Ms. Hussey's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2017-04-26/MARCH_2017_Budget_vs_Actual%20Results.pdf

2017 Project Schedule Milestone Update

Robert Pike of the NYISO presented the update on the 2017 Project Schedule milestones. Mr. Pike focused on projects with a change in status since the last BPWG presentation. For stakeholder convenience the NYISO has identified projects that will commence stakeholder discussion in the next quarter with a blue font (see meeting materials). Projects with a change in status include:

Treatment of Capacity Exports from Localities
On Ramps and Off Ramps for Zones
Meter Data Policy
Integrating Public Policy
Public Policy Transmission Planning Process Acceleration
TCC Balance-of-Period (TCC AMS, TCC AVS & CMS)
At-Risk/Delayed
On Schedule
On Schedule

Projects that work has commenced on since the last BPWG update include:

- eTariff Webviewer Enhancements
- Granular Pricing & Market Price Delivery

- RTC/RTD Forward Horizon Coordination Improvements
- Model 100+KV Transmission Constraints

Mr. Pike noted that a project titled "CRIS for External-ROS Transmission Investments" has been added to the 2017 Project Schedule as the result of a recent FERC Order and is scheduled for Q4 2017. To see Mr. Pike's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2017-04-26/2017%20Project%20Schedule%20Milestone%20Update.pdf

2018 Project Prioritization and Budgeting Process

Brian Hurysz of the NYISO presented an update to the 2018 Project Prioritization Process in consideration of stakeholder feedback. In order to provide stakeholders an additional opportunity to identify potential projects, Mr. Hurysz offered to accept project suggestions at this meeting. In response to stakeholder requests to have cost/benefit data earlier in the process Mr. Hurysz suggested that the NYISO would provide cost/benefit data at the June 5, 2017 BPWG meeting. The NYISO expects to have cost information completed for approximately 75% of the proposed projects in time for the June 5th BPWG and proposes to share material that is completed in time for the meeting. This would allow for stakeholder advocacy at the June 5 and June 20, 2017 BPWG meetings. The NYISO has also updated the Appeal category to better reflect stakeholder preferences. Mr. Hurysz used the 2018 Proposed Project Prioritization Timeline to show stakeholders where the process currently stands and to illustrate when the additional opportunities to provide input occur.

The 2018 Project Candidates were displayed and described. Several projects were discussed with stakeholders to provide clarity on scope and definition. Stakeholders also offered suggestions for project proposals to be added to the list. Written feedback may be provided up to April 28, 2017 for inclusion in the May 8, 2017 BPWG presentation, and May 10, 2017 for inclusion in the May 22, 2017 BPWG. Comments and requests for assistance in submitting project proposals can be sent to bhurysz@nyiso.com. Mr. Hurysz can also be reached by phone at 518-356-6126. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2017-04-26/2018%20Project%20Prioritization%20Process.pdf

FERC Filings

April 28, 2017

NYISO filing of FERC Reporting Requirement 582: transmission service in interstate commerce provided during calendar year 2016 in MW-hours

April 28, 2017

NYISO section 205 filing to revise Services Tariff provisions concerning Start-Up Bids in the Real-Time Market

NYISO Pre-Technical Conference comments of Bradley C. Jones,

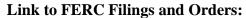
President and CEO, related to the FERC May 1st – May 2nd, 2017 conference addressing State Policies and Wholesale Markets

April 28, 2017

Niagara Mohawk Power Corporation compliance filing to remove section 5.8 from Appendix H of the Appendices to the Large Generator Interconnection Agreement between NMPC and WPS Syracuse Generation, LLC

FERC Orders

There were no FERC Orders to the NYISO for this week



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