NYISO Consumer Interest Liaison Weekly Summary

April 29 – May 3, 2019

Notices:

- *When the **redesigned NYISO public website launched in December 2018**, links within technical resources including manuals, user guides, and technical bulletins became invalid. The NYISO is now in the process of reviewing and updating these resources to include functional links.*

- *The New York Independent System Operator (NYISO) has released* **Power Trends 2019**. *Each year, this report provides information and analysis on how technology, economic forces and public policy are shaping a more dynamic power grid, and the implications for the state's wholesale electricity markets.* ***See it here***

- *The NYISO will host its **annual Joint Board of Directors & Management Committee Meeting** on June 3 to 4 at the Sagamore Resort in Bolton Landing, New York. The event is a key component of the NYISO's Strategic Planning process and provides Stakeholders an opportunity to interact with NYISO Board members on emerging industry topics. Register here for the upcoming Joint Board of Directors & Management Committee Meeting.*

Meeting Summaries:

Tuesday, April 30, 2019

Joint Market Issues/Installed Capacity/Price Responsive Load Working Group

Update on Order 841 Compliance

Michael DeSocio of the NYISO presented an update on the FERC Order No. 841 compliance filing. Mr. DeSocio noted that there is one particular item the NYISO will be unable to resolve for this filing. The NYISO had expected to modify the current Energy Limited Resource (ELR) model, originally developed for the Gilboa power station, to effectively incorporate additional storage technologies. However, the modifications to the ELR model will require a much larger effort than anticipated. The NYISO plans to submit the ELR participation model to the project prioritization process as a 2020 project candidate for complete development. Limited energy resources will have the option of using the existing Limited Energy Storage Resource (LESR) model to provide Regulation Service.

The NYISO will include an explanation of the situation in its May 1, 2019 filing to FERC in Docket No. ER19-467.

More Granular Operating Reserves

Ashley Ferrer of the NYISO presented the on-going effort to provide more granular operating reserves. The first step of this project was to establish a reserve region in Zone J (NYC). This effort was completed earlier this year on an accelerated schedule. The remaining elements of this project will be:

- Evaluating load pocket reserves in NYC
- Reviewing performance of resources scheduled to provide reserves
- Evaluating the NYCA 30-minute reserve demand curve structure that applies during certain activations of Special Case Resources (SCRs) and Emergency Demand Response Program (EDRP) resources
- Reviewing the Zone J reserve demand curve pricing and applicable reserve requirements during Thunderstorm Alerts (TSA).

In its 2017 State of the Market (SOM) report,[1] the Market Monitoring Unit (MMU) recommended that the NYISO consider implementing local reserve requirements (LRRs) in the New York City load pockets. There are a variety of reliability rules set by NYSRC for load pockets in NYC that correspond to certain operating conditions. These reliability rules may be fulfilled using out-of-market actions that result in uplift costs. As part of this project, the NYISO is exploring the possibility of incorporating local reliability requirements within the market software by establishing load pocket reserve requirements. By modeling these LRRs within the market solution, the commitments would be satisfied through market-based mechanisms. The NYISO will determine the load pockets to target for potential reserve regions within NYC and the appropriate quantity of reserves to be procured in each identified load pocket.

Ms. Ferrer also introduced the effort to review reserve supplier performance. This was a Market Monitor (MMU) SOM Recommendation for 2017. The NYISO currently performs audits on reserve providers on a regular, random basis with no advance notice to the supplier. If a provider fails an audit, the NYISO places a derate on the supplier's ability to provide reserves until a demonstration of stated ability is provided in a retest.

A review of the NYISO audit results shows very high reserves performance in comparison to the MMU analysis. The difference in the analyses is based on the type of response analyzed. The MMU based its analysis on economic real-time commitments whereas the NYISO values are the result of a provider's response to a reserve pickup signal, providing a view of supplier performance following a reserve activation.

The NYISO will continue to review performance audit results on an ongoing basis.

The additional portions of the More Granular Operating Reserves project will be presented in future MIWG meetings as they are developed. To see the complete presentation, please go to: https://www.nyiso.com/documents/20142/6279405/More%20Granular%20Operating%20Reserves.pdf/5f824a9d-6876-2e8f-4044-d287a56cfd45

Carbon Pricing: Calculating the $LBMP_C$

Ethan Avallone of the NYISO presented additional information on the calculation of a carbon component for LBMP. The Carbon Pricing Proposal envisions including carbon pricing within the wholesale energy market using the existing offer structure where Market Participants can include carbon emission costs in their economic offers. The NYISO will use an ex post calculation to estimate the LBMP carbon impact (LBMPc).

The NYISO proposed that an estimated marginal fuel cost be used to determine the LBMPc for a given Load Zone or Proxy Generator Bus. The NYISO will determine which fuel pricing point or blend of fuel pricing points is appropriate. The NYISO proposed to use the RT LBMP divided by an estimated marginal fuel cost, then multiplied by a fuel conversion factor, to provide an implied heat rate. The implied heat rate produced by the calculation will be limited by a minimum and maximum value to maintain an appropriate LBMPc, based on the approximate minimum and maximum of the NYCA fleet. The calculated implied heat rate will be multiplied by the tons of carbon per mmBTU to determine the tons of carbon per MWh for the applicable marginal fuel.
For transparency, the NYISO will post several inputs that will be used in the LBMPc calculation:

- Fuel indices
- Fuel factor(s)
- Minimum implied heat rate
- Maximum implied heat rate
- Assumed tons of carbon per mmBTU
- RGGI price source
- Social Cost of Carbon

In response to requests received at prior $LBMP_C$ presentations, examples of the calculation were provided and discussed in detail with stakeholders. Stakeholders requested that additional examples be provided at future MIWG meetings that incorporate the effects of seasonal changes.
The timeline for additional carbon pricing MIWG presentations was provided. To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6279405/4.30.2019_MIWG_Carbon_Pricing_LBMPc.pdf/8fd068cc-984d-a916-132d-15a507775756

Friday, May 3, 2019

Joint Transmission Planning Advisory Subcommittee/Electric System Planning Working Group/Installed Capacity Working Group/Interconnection Projects Facilities Study Working Group

Key Study Assumptions for Lyonsdale Biomass

Keith Burrell of the NYISO presented the key study assumptions to be used in the deactivation study for the retirement of the Lyonsdale Biomass generating station (Lyonsdale). Lyonsdale is a 21.1 MW generator (nameplate) in Zone E. Lyonsdale sent notice of intent to retire to the New York State Public Service Commission (PSC) on March 28, 2019 following an April 1, 2018 designation of ICAP Ineligible Force Outage (IIFO) status. The IIFO Generator Deactivation Assessment for Lyonsdale was completed on June 6, 2018 concluding that a Generator Deactivation Reliability Need was not identified for the Study Period (April 1, 2019 – April 1, 2024).
The most recent base case from the reliability planning process was used for the 2019-2028 Comprehensive Reliability Plan (CRP) with Gilboa 1 assumed out of service. The NYISO is performing the assessment of the BPTF (Bulk Power Transmission Facilities). The assessment of the non-BPTF will be performed by National Grid. The Generator Deactivation Assessment will be completed by July 17, 2019.
To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6384420/03_Lyonsdale_StudyAssumptions.pdf/7afab5d4-ea3b-85f6-8677-b3963bf1b0f9 (A MyNYISO account is required to access this material)

Study Scopes under Consideration for Recommendation for OC Approval

Queue #709

Alder Creek Solar SRIS Scope
Solar Generator
205 MW W/S
Oneida County, NY
Recommended to the OC for Approval with an abstention

Queue #710
Horseshoe Solar SRIS Scope
Solar Generator
180 MW W/S
Livingstone/Monroe Counties, NY
Recommended to the OC for Approval with an abstention

Study Reports under Consideration for Recommendation for OC Approval
Queue #686
Bull Run Solar SRIS Report
Solar Generator
170 MW W/S
Clinton County, NY
Recommended to the OC for Approval with an abstention

Queue #706
High Bridge Wind SRIS Report
Wind Generator
100.8 MW W/S
Chenango County, NY
Recommended to the OC for Approval with an abstention

Queue #758
Sithe Independence Uprate SRIS Report
ERIS Upgrade
+10.9 MW S, +27.1 MW W
Oswego County, NY
Recommended to the OC for Approval with an abstention

Review of Material Modification Determinations and Modifications Requiring a New Interconnection Request/SIS Request
Queue #495
Mohawk Solar
Solar Generator
Recommended to the OC for Approval with an abstention

Orange & Rockland
Line 705 Underground Project
138kV
Burns Substation to Corporate Drive Substation
Does not trigger threshold for SIS

Class Year 2017-2 Report

Thinh Nguyen of the NYISO, along additional NYISO Planning staff, presented the Class Year 2017-2 addendum study reports to TPAS/IPFSWG. Mr. Nguyen led a review of the 27 Class Year 2017 (CY17) participants, noting that 7 of the projects were Capacity Rights Interconnection Service only. A summary of the participant decisions revealed that at the end of CY17-1:

- 15 projects chose to accept the SDU Project Cost Allocation (9 ERIS/CRIS, 6 CRIS only)
- 9 projects chose to proceed to CY17-2 (8 ERIS/CRIS, 1 CRIS only)
- 3 projects chose to reject the SUF and SDU Cost Allocations and withdrew from CY17.

Mr. Nguyen detailed the CY17-2 addendum studies and provided the cost allocations to the applicable projects.

The CY17-2 addendum study reports were recommended by the TPAS/IPFSWG for OC approval and will be presented at the May 16, 2019 OC meeting. To see the complete presentation including the details of next steps after OC approval and the addendum study reports, please go to: https://www.nyiso.com/tpas (A MyNYISO account is required to access this material)

Class Year/Interconnection Queue Redesign

Thinh Nguyen of the NYISO presented feedback on ideas provided by stakeholders at the April 1, 2019 ESPWG/TPAS meeting for process improvements to the Class Year process. The key objectives of the improvements are to:

- *expedite the interconnection study process overall*
- *limit the possibility for unique issues related to a single or few projects to cause delays to the entire class year*
- *clarify interaction among interconnection and Transmission Interconnection Procedures (TIP).*

A second objective of improving the process is to retain aspects of the current process that are important to stakeholders such as:

- *detailed identification of SUFs to reliably interconnect*
- *binding, good faith cost estimates that provide reasonable closure on upgrade costs*
- *equitable allocation of upgrade costs.*

Mr. Nguyen led a review of 16 suggestions received from stakeholders at the April 1, 2019 ESPWG/TPAS meeting and noted whether or not there was stakeholder support for each of the ideas. In consideration of the lessons learned during the class year process and the feedback received from stakeholders, Mr. Nguyen presented several proposals for both a redesign of the Deliverability process and Class Year Study efficiencies.

Deliverability Redesign	**Class Year Study Efficiencies**
Remove additional SDU studies from the CY Study	Frontload Class Year Study work into Part 2 studies
Require Deliverability Evaluation in the SRIS	Eliminate duplication in SRS and Class Year
Mini-Deliverability Study for CRIS-only projects	Require project data earlier in the Class Year process
More stringent CRIS expiration rules	Revise regulatory milestones in relation to NYSERDA contracts and clarify milestones for Offshore Wind

Mr. Nguyen detailed each of the proposals and encouraged stakeholder discussion.

To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6363970/09_Class%20Year%20Redesign%20050319_ICAPWG_TPAS_Final.pdf/304b97a8-9e00-cff9-7a24-3713c386e859 (A MyNYISO account is required to access this material)

FERC Filings

May 1, 2019

NYISO response to FERC's request for additional information to the December 3, 2018 compliance filing on Energy Storage Resources (Order No. 841)

FERC Orders

May 3, 2019

FERC letter order accepted OATT and Services Tariff revisions to clarify a number of Real-Time Market Settlement calculations related to energy injections and energy withdrawals

Filings and Orders:

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