

NYISO Consumer Interest Liaison Weekly Summary

May 28 – June 1, 2018

Notices:

- A memo from Kevin Lang, representing NYC, to BPWG members re: climate change background materials has been posted on the <u>NYISO website</u> with the May 30, 2018 BPWG meeting materials.
- Stakeholder comments on the NYISO Master Plan have been posted at the link below.
 Comments
- On May 30, 2018, the New York Independent System Operator (NYISO) reported that electricity supplies in New York State are expected to be adequate this summer, with a total of 42,169 megawatts (MW) of power resources available to meet forecasted peak demand conditions.
- On June 1, 2018, NYISO filed its **Semi-Annual Reports on New Generation Projects and Demand Response Programs in the New York Control Area**. A copy of the filing is attached (here) for your use and will soon be available in FERC's eLibrary and on the NYISO website.

Meeting Summaries:

Wednesday, May 30, 2018 Management Committee

Motion 1:

The Management Committee (MC) approves the February 28 and March 28, 2018 meeting minutes.

The motion passed unanimously by show of hands

Wednesday, May 30, 2018

Budget and Priority Working Group

2018 Project Schedule Milestone Update

Robb Pike of the NYISO presented updates to the 2018 Project Schedule. Mr. Pike led a review of the 2018 project schedule by product area, highlighting projects with a change in status. To aid stakeholders in preparing for meetings, the NYISO also highlights projects in a blue font to show they

Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYSIO or the discussions that take place at the meetings.

will be presented for discussion in upcoming meetings. Mr. Pike identified the following projects and status changes:

•	RMR Cost Recovery Phase I	At Risk/Delayed
•	Competitive Entry Exemption for Increased CRIS	On Schedule
•	BSM Repowering	On Schedule
•	Telephony System Upgrade	At Risk/Delayed
•	Enterprise Info Management – Data Integration Phase II	At Risk/Delayed
•	Laptop Refresh and Upgrade	At Risk/Delayed
•	Corporate Workstation Replacement	At Risk/Delayed
•	FERC Form 1 Redesign	Critical/Overdue
•	Electric Quarterly Report (EQR) DSS Report Update	Complete
•	TOA Platform Upgrade Phase II	Critical/Overdue
•	Gurobi Hardware Refresh	On Schedule
•	Gurobi Software Refresh	On Schedule
•	EPG PMU Enhancements	At Risk/Delayed
•	Model on Demand Upgrade and Build-Out	On Schedule

To see the complete list of projects and statuses, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2_018-05-30/02%202018%20Project%20Schedule%20Milestone%20Update.pdf

Rate Schedule 1 – Allocation of NYISO Budget

Chris Russell of the NYISO reminded the BPWG of the requirement for the Management Committee to determine whether a new Cost of Service Study should be conducted to evaluate the Rate Schedule 1 (RS1) allocation between withdrawals and injections in Q3 2018. Mr. Russell led a review of the historical RS1 allocation changes beginning with a rate based on 100% to Withdrawals in 1999 and ending with the current 72% Withdrawals and 28% Injections with rebates based on Non-physical transactions contributing 6%. The tariff states that a vote of the Management Committee will be taken annually in the third calendar quarter, on whether a new study to evaluate RS1 allocation should be conducted in the following calendar year. The vote was taken at the July 26, 2017 Management Committee meeting, where the motion to not conduct a study in 2017-2018 was unanimously approved by a show of hands. There will be a vote on whether to conduct a study at the July 25, 2018 MC meeting. To see Mr. Russell's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2_018-05-30/03%20RS1%20Study_Allocation%20of%20budget.pdf

<u>Identification and Integration of Future Climate System Impacts and Resilience Attributes Into the NYISO's System Planning and Markets</u>

Kevin Lang, representing New York City, presented a proposal for the NYISO to undertake a three-phased project to examine issues associated with resilience and reliability and to develop potential market solutions. The three phases include:

- 1. Identify and examine impacts to the bulk power system under different extreme weather and climate scenarios
- 2. Identify the attributes and actions necessary to mitigate the reliability and resilience risks identified in Phase 1
- 3. Develop market design concepts targeted to provide adequate compensation for the above attributes with stakeholders

The NYISO will work with NYC to review the proposal and produce a scope and estimated cost of the project and submit the proposal to the stakeholder project prioritization process survey. To see the presentation and associated background material, please go to:

http://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=mc_b pwg

Fuel Assurance: Resiliency Risk Study Proposal

Rick Gonzales of the NYISO presented a proposal to retain an external consultant to perform a study to examine fuel and energy security for the bulk power system over a ten year horizon. Mr. Gonzales explained that future changes to New York's fuel supply mix as well as the expected increased demands for natural gas may challenge the ISO's ability to meet electric system demands under certain stressed system conditions, such as a prolonged cold weather event and/or natural gas transportation disruptions. The report will facilitate the subsequent development of recommendations for potential operational and/or capacity and energy market mechanisms necessary to achieve desired improvements in grid resilience as related to fuel and energy security. The project candidate will be included in the project prioritization process survey for stakeholder voting. To see Mr. Gonzales' presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2018-05-30/06%20Joint%20NYC-CECONY%202019%20NYISO%20Project%20Proposal.pdf

Enterprise Information Management: Data Integration

Ryan Smith of the NYISO presented the proposal to update the Decision Support System (DSS). The Decision Support System has been in operation since 2003 with substantially the same architecture and technology. The current technology for the DSS is outdated and will reach the end of its support life in December 2020. While planning a multi-year process to update the DSS, it became apparent that the level of effort and related technology limitations were more significant than originally anticipated. The NYISO conducted a Request for Proposal (RFP) process and selected a vendor to develop an updated, flexible system to replace the current technology. A timeline with an estimated cost was provided with the system completion date of late Q2 2020. The proposal will be evaluated as part of the 2019 project prioritization and budgeting process. To see the complete presentation, please go to: http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2018-05-30/04%20EIM-Data%20Integration.pdf

Energy Management System Project Update

Kevin Pytel of the NYISO provided an update on the Energy Management System/Business Management System (EMS/BMS) project. Stakeholders had requested an update on the status of this multi-year project at a prior BPWG meeting. Mr. Pytel briefly reviewed the steps completed in the project and detailed the steps remaining to complete the project. The project is currently tracking behind schedule, but steps have been taken to stay on schedule for an April 2019 "Go-Live" date. NYISO Operations has requested that implementation of this project should not take place during the summer peak period, which effectively implies that any delay beyond May 1, 2019 would see implementation of this project in October 2019 at the earliest. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2_018-05-30/05%20EMS_BMS.pdf

Project prioritization

Robb Pike of the NYISO provided an update on the 2019 Project Prioritization and Budgeting Process. Mr. Pike presented an updated timeline reflecting the transition of the process from the identification phase to the prioritization phase. The next step in the process is to have NYISO provide cost and benefit estimates available for all project candidates for stakeholder evaluation at the June 15, 2018 BPWG meeting. The deadline for stakeholder completion of the scoring survey is set for June 26, 2018. Mr. Pike led a review of the project candidates and provided preliminary cost and benefit information where available. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2018-05-30/08%202019%20Project%20Prioritization%20Process.pdf

Thursday, May 31, 2018

Joint Market Issues/Installed Capacity Working Group

<u>Market Design Concepts to Prepare for Significant Renewable Generation: Ancillary Services</u> Shortage Pricing

Ethan Avallone of the NYISO presented a proposal to re-evaluate Ancillary Services Shortage Pricing to incent market participants to offer more flexibility and responsiveness in the Real-Time Market. Ancillary services shortage pricing is expected to become more important with the increases in weather dependent generation.

The NYISO recommends that stakeholders evaluate the benefits of increasing ancillary services shortage pricing values after 2019. The NYISO believes that work on this effort would be more effective once the market designs for the Reserve Procurement for Resilience project and the More Granular Operating Reserves project are complete.

Some stakeholders noted that the NYISO should give this issue a higher priority because ISONE and PJM capacity market performance programs are coming on line in the near future.

This proposal is a part of the Master Plan. To see the 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/2 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/2 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/2 http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_miwg/meet

External Resource Performance & Eligibility: SRE Process Improvements for External Capacity Resources

Ethan Avallone of the NYISO presented the proposal to revise rules for external capacity resources to make them more comparable to the rules for internal capacity suppliers. Mr. Avallone explained that external capacity suppliers are currently able to receive capacity payments and avoid providing energy, even when called upon by NYISO Operations during critical system conditions. The current Supplemental Resource Evaluation (SRE) process was reviewed and discussed with stakeholders to identify the inconsistencies between the internal and external requirements.

The NYISO proposes that after receiving an SRE notice, an external capacity resource will have successfully responded to the NYISO's SRE if the resource:

- 1. is online.
- 2. is available for the amount of capacity sold, and
- 3. flows a capacity backed transaction from its control area to the NYCA border

If an external capacity resource is unable to demonstrate its successful response to an SRE request, then the resource will be assessed a penalty. The penalty structure was outlined in an attached appendix.

In response to a stakeholder questioning the "make-whole" policy for external transactions, Mr. Avallone explained that there is a process for external capacity resources to recover their costs as long as a supplier can demonstrate that its costs were not recovered during the response to an SRE. Some stakeholders requested more details and examples on the timeline of an SRE for external suppliers. The NYISO will provide this information in an upcoming MIWG/ICAP meeting. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2 018-05-

31/External%20Resource%20Performance%20Eligibility%20May%202018%20ICAPWG%20FINAL.pdf

Dispatchable Solar Market Design Concept Proposal

David Edelson of the NYISO presented the proposal to include solar resources in the real-time economic dispatch. Mr. Edelson provided background on the expansion of market rules associated with in-front-of-the-meter (FTM) Solar resources, including solar forecasting and meteorological data requirements. The new proposal will provide a Market Design Concept to treat FTM Solar resources as dispatchable (down only) resources in the Real-Time Market. Mr. Edelson explained that this proposal follows the concept currently in place for wind resources.

The timeline for this proposal, included in the Master Plan, would move it to the Market Design Complete phase in 2020 with an implementation date of 2022.

To see Mr. Edelson's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2018-05-31/FTM%20Solar%20Integration%20-

%20Solar%20on%20Dispatch%20MIWG%205_31_2018_vFINAL.pdf

HFPTCC Extensions

Greg Williams of the NYISO provided an update on the proposal for the Historic Fixed Price TCC (HFPTCC) Extension Product, originally presented at the May 9, 2019 joint ICAP/MIWG meeting. Mr. Williams explained that the revision relates to the provision that the HFPTCC Extension product will be available to LSEs that converted expired/terminated Existing Transmission Agreements (ETAs) to HFPTCCs and continued to purchase HFPTCCs throughout the entire full term for which the LSE initially had the right to purchase and renew HFPTCCs (10 or 12 years). The update is that the NYISO is proposing a limited exception to this general rule for LSEs that purchased HFPTCCs but previously elected to terminate their HFPTCCs early.

Tariff language for the revisions was provided for stakeholder perusal and comment. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2018-05-31/Historic%20Fixed%20Price%20TCC%20Extensions_MIWG_2018-05-31_FINAL-Approved-Updated_05-29-2018%20(00000002).pdf

Highlights of the 2017 State of the Market Report NYISO Markets

Pallas LeeVanSchaick of Potomac Economics (MMU) presented the highlights from the 2017 State of the Market report. Mr. LeeVanSchaick focused on the energy and ancillary services market results, having previously presented the capacity results to the ICAPWG. Analysis of the market results was explained for several areas such as:

- Energy prices
- Operator actions to manage constraints

- Day-ahead and real-time reserves
- Supplemental resource commitment
- PAR operation
- CTS results

Mr. LeeVanSchaick led a review of the MMU recommendations and where possible, related the recommendations to NYISO proposed or scheduled projects. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2018-05-31/2017%20NYISO%20SOM%20Report%20Presentation_for%20MIWG_5-25-2018.pdf

Friday, June 1, 2018

Joint Electric System Planning Group/Transmission Planning Advisory Subcommittee Reliability Planning Process (RPP) Manual #26 Updates

Kevin DePugh of the NYISO provided proposed updates to the RPP Manual. Mr. DePugh outlined the updates to the manual and noted several ministerial changes. Redline and clean versions of the manual revisions were provided for stakeholder review. Comments can be sent to kdixon@nyiso.com. To see the complete set of revisions to the manual, please go to:

http://www.nyiso.com/public/committees/documents.jsp?com=bic_espwg

2018 MARS Model Updates

Ken Layman of the NYISO provided updates to the MARS model that will be used for the 2018 Reliability Needs Assessment (RNA). An initial set of MARS model updates were presented at the March 13, 2018 ESPWG/TPAS meeting. Mr. Layman presented changes to the Western New York interface limits to accommodate the inclusion of the NY public policy project starting in summer 2022. A second update by Mr. Layman compared the pre-Cricket Valley formulaic model to the new dynamic limit table (DLT) model.

Michael Welch of the NYISO continued the presentation with details on other changes to the MARS model, including:

- Landfill Gas Units (LFG) -shapes
- *RECO Load -increased granularity*
- VFT Model
- ISO-NE Model -partial reduction
- NY Capacity Sales Model

Mr. Welch highlighted the remaining timeline for the completion of the 2018 RNA noting an October 2018 presentation to the Board of Directors for approval. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2018-06-01/2018RNA_MARSModelUpdates.pdf

AC Transmission Public Policy Transmission Report

Dawei Fan of the NYISO presented highlights from the AC Transmission Public Policy Transmission Report and the ranking of the evaluated solutions. Mr. Fan led a review of the ranking process and provided tables to illustrate the highlights of the individual solutions for Segments A and B. A summary of the A and B combination evaluation was provided and color coded to visually convey the attributes of the solutions in combination.

Mr. Fan explained that based on consideration of all the evaluation metrics for efficiency or cost effectiveness, together with input from developers, stakeholders, and the Department of Public Service

(DPS), the NYISO staff recommends that the Board of Directors selects NAT/NYPA's T027 Segment A Double-Circuit proposal and NAT/NYPA's T029 Segment B Base proposal as the more efficient or cost-effective transmission solutions to satisfy the AC Transmission Needs.

It was also noted that the combination of T027 and T029 is estimated to cost \$1,080 million, taking into consideration a 30% contingency factor and a 5% discount for cost efficiency synergies of having a single developer for both projects. The projects are estimated to provide combined production cost savings and capacity procurement savings in a range of \$881 million to \$1,979 million depending on future system conditions.

To see the complete report and Mr. Fan's presentation, please go to: http://www.nyiso.com/public/committees/documents.jsp?com=bic_espwg

Friday, June 1, 2018

Joint Market Issues/Installed Capacity Working Group

DER Market Design Updates

Michael Lavillotti of the NYISO presented updates to the Distributed Energy Resource (DER) market design concept proposal. Mr. Lavillotti led a review of the proposed rules for the aggregation of DER in the participation model.

The initial proposal for the DER interconnection process was introduced. Mr. Lavillotti noted that DERs will be evaluated for interconnection service on an individual basis, not in aggregate. Injection resources subject to the NYISO's interconnection procedures will be evaluated for Energy Resource Interconnection Service (ERIS) and, if requested, for Capacity Resource Interconnection Service (CRIS). CRIS obtained through the NYISO's interconnection process will be assigned to the individual resource. It was explained that any resource requesting CRIS will be evaluated under the Buyer Side Mitigation (BSM) Rules. The NYISO is currently evaluating whether the BSM Rule Unit Net CONE test (Part B Test) to determine uneconomic entry should be adjusted for DER injection resources. The NYISO is encouraging stakeholder input on the issue. Another issue for consideration is whether there should be an adjusted timeline for the evaluation of DER injection resources to participate in the capacity market due to the timing and length of the Class Year decisional rounds.

Load reduction-only resources would not require CRIS and would share the same market entry process presently available to Special Case Resources (SCRs). The NYISO encourages comments throughout the development of the DER participation model and anticipates a final set of rules in 2018 for a 2021 implementation. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2_018-06-01/DER%20Market%20Design%20Update%20MIWG%20June%201.pdf

FERC Filings

May 29, 2018

Section 205 filing of Large Generator Interconnection Agreement No. 2407 between Con Edison and Cogen Tech

June 1, 2018

NYISO compliance filing of Semi-Annual Reports on New Generation Projects and Demand Response Programs

FERC Orders

There were no FERC Orders issue to NYISO for this week

lings and Orders: tp://www.nyiso.com/public/markets_	operations/documents/tariffviewer/index.jsp