NYISO Consumer Interest Liaison Weekly Summary

May 27 – May 31, 2019

Notices:

- *The **final** version of NYISO Economic Planning Process Manual (M-35), has been posted to the **Manuals, Technical Bulletins & Guides webpage** under Manuals, Planning. All proposed changes were presented at the BIC on May 13, 2019.*

- *The **new Corona – Rainey 36187 138 kV line and PARS** were placed in service on Tuesday, May 28, 2019. The Corona – Rainey 138 kV PAR controlled line is expected to remain in service as the normal Con Edison grid configuration.*

- *In response to stakeholder requests at the May 16 Operating Committee Meeting, **supplemental information regarding the projected Locational Capacity Requirements ("LCRs") for Class Year 2017-2** has been posted on the NYISO's website. This posting is purely for informational purposes and no changes have been made to the BSM analyses. The document can be found on the **Market Monitoring page** of the NYISO's public website under Market Monitoring > ICAP Market Mitigation > Buyer Side Mitigation > Class Year 2017 in the file browser.*

- *The NYISO has received and posted on its website a **"Notice of Retirement of Hudson Avenue GT#4; PTID # 23540"**, which was submitted to the New York State Public Service Commission by Consolidated Edison Company of New York, Inc. regarding its Hudson Avenue Gas Turbine #4 electric generation facility located in Brooklyn, New York. The Notice can be found on the NYISO's Planning webpage at: **NOTICE***

Meeting Summaries:

Wednesday, May 29, 2019
Budget and Priorities Working Group
Rate Schedule 1 – Allocation of NYISO Budget

Christopher Russell of the NYISO asked stakeholders, as required by tariff, to determine whether a new Cost of Service Study should be conducted to evaluate the Rate Schedule 1 (RS1) allocation between withdrawals and injections. The current allocation was determined in 2012, when the Management Committee voted to allocate RS1 72% to withdrawals, 28% to injections and a portion to non-physical transactions to be redistributed as a rebate (virtual and TCC).[1] The tariff requires a vote on whether a new study should be conducted. If the MC votes to decline conducting a new allocation study, a vote is required in Q3 of each year until a new RS1 allocation study is conducted. In 2017 and 2018, the Management Committee voted to not conduct a Cost of Service Study for the determination of RS1 allocation.

NYISO staff recommends that a new Cost of Service Study be conducted in 2019/2020 in order to consider the RS1 impact of the most significant market design changes to be implemented since 2005:

- Integration of Renewable Resources
- Distributed Energy Resource Roadmap
- Energy Storage Integration and Optimization

Some stakeholders suggested that although the market changes may require a change to the RS1 allocation structure, it is too early at this time to comprehend precisely how these changes will impact the market. These stakeholders opined that there should be a time period allotted to gain insight into the impact on the markets for the changes. The NYISO responded that it would be beneficial to have the new resources enter the market with a rule established, which can later be changed to reflect conditions.

There will be a vote on July 31, 2019 at the Management Committee meeting to determine whether a Cost of Service Study will be conducted in 2019/2020 to evaluate the RS1 allocation.

To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6753250/02%20RS1%20Study%20Vote.pdf/ab6b514f-a5df-14d3-5f06-de6943700729

2020 Market Project Updates, Costs, and Stakeholder Survey

Robb Pike of the NYISO presented an update on the 2020 Project Prioritization as the process moved into the prioritization phase. Mr. Pike led a review of the project candidates and noted that estimated project costs had been provide for approximately 65% of the project candidates. Mr. Pike also noted recent additions to the project candidate:

- *Capacity Zone Elimination (Stakeholder Initiated Proposal)*
- *Class Year Redesign*
- *Competitive Entry Exemption Non-Qualifying Contract Rule Review*
- *Communication of Voltage Schedule to Generators (Stakeholder Initiated Proposal)*
- *Reserving Capacity for TCC Balance-of-Period (BOP) Auctions (Stakeholder Initiated Proposal)*

Mr. Pike noted that due to the constraints placed upon NYISO Capacity market resources, the NYISO would not be in a position to address *Capacity Zone Elimination* in 2020. Some stakeholders acknowledged the NYISO resource constraint and requested that the project remain a 2020 project candidate as it is a priority for their clients. All estimated project costs and 2020 deliverables will be available for the June 12, 2019 BPWG meeting, at which time the project scoring surveys will be distributed. Stakeholders were advised to review the Management Committee contact data to confirm the survey would reach the correct contacts. Mr. Pike noted that the surveys could be distributed to

[1] With Non-physical transactions and rebates included, the approximate allocation is 68% Withdrawals/26% Injections/6% Non-Physical

several organizational contacts but each registered entity would be limited to one scoring survey response. The completed scoring surveys will be due back to the NYISO by June 25, 2019, allowing stakeholders two weeks for internal review and discussion prior to submission.
To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6753250/03%20Market%20Project%20Updates%20Cost%20Survey.pdf/e209e255-58b0-d2ed-081e-4b7fb83d6ffd

2020 Enterprise Project Costs and Deliverables

Robb Pike of the NYISO presented the project costs and 2020 deliverables for the 2020 Enterprise Project Prioritization process. The enterprise projects are presented for informational purposes to stakeholders with no associated scoring survey. Mr. Pike led a review of the enterprise projects and provided responses to clarifying questions.
In response to a stakeholder question, Mr. Pike explained that there is cross-over in resources from market and enterprise projects and the NYISO would highlight resource constraints that limit a projects selection later in the process.
To see the complete presentation on enterprise projects, please go to:
https://www.nyiso.com/documents/20142/6753250/04%202020%20Enterprise%20Project%20Candidates.pdf/f5b001d7-d380-a45d-0fa9-f310e90304a9

2019 Project Milestone Update

Robb Pike of the NYISO presented the status update for the 2019 project schedule milestones. Throughout the year, the NYISO presents project status updates to stakeholders. Mr. Pike led a review of the 2019 projects and highlighted status changes by product category. Projects with status changes include:

- *Enterprise Information Management – Data Integration Phase IV* — *At Risk/Delayed*
- *S&P Credit Ratings Platform Change* — *Complete*
- *Position Control Position* — *On Schedule*
- *Enhancing Fuel and Energy Security* — *At Risk/Delayed*
- *External Capacity Performance and Obligations* — *At Risk/Delayed*
- *DER Participation Model* — *Complete*
- *Ancillary Services Shortage Pricing* — *On Schedule*
- *Enhanced Fast Start Pricing* — *On Schedule*
- *Deliverability and Interconnection Process Redesign* — On Schedule

While reviewing the projects with stakeholders, Mr. Pike took the opportunity to make stakeholders aware that the following projects would be discussed in upcoming working group meetings:

- *Enhancing Fuel and Energy Security*
- *Competitive Entry Exemption for Increased CRIS*
- *BSM Repowering*
- *Tailored Availability Metric*
- *Demand Curve Reset*
- *External Capacity Performance & Obligations*
- *DER Participation Model*
- *Enabling Technologies for DER*
- *NYISO Pilot Framework*
- *Carbon Pricing*
- *More Granular Operating Reserves (SOM)*

- *Ancillary Services Shortage Pricing (SOM)*
- *Enhanced Fast Start Pricing*
- *Reserve for Resource Flexibility*
- *Comprehensive System Planning Process Review*
- *Climate Change Impact and Resilience Study*

To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6753250/05%202019%20Project%20Schedule%20Milestone%20update.pdf/dc4519c3-80eb-7a45-fffe-5cccf8a38284

2020 Project Candidate: Relocating the IESO Proxy Bus

Tolu Dina of the NYISO presented the proposal to relocate the Bruce Station proxy bus as the primary representation of energy delivered from Ontario's Independent Electric System Operator (IESO). Analysis of the actual delivered energy from transactions between IESO and NYISO indicate a potential improvement that can be made with the power flow results from the NYISO's market software. Historically, approximately 85%-95% of the scheduled energy between IESO and NYISO is realized over the six direct tie-lines between IESO and NYISO, as compared to the roughly 70%-85% that is expected by the market software when it is making scheduling decisions. The operation of the Ontario-Michigan Phase Angle Regulators (PARs) to better conform with actual power flows to scheduled power flows at the Ontario-Michigan interface has resulted in more IESO-NY interchange being delivered directly to New York, rather than looping around Lake Erie. A more optimal proxy bus for IESO scheduling will better align the power flow results with real-time operations.

The NYISO acknowledged that although there will be several benefits to this modeling change, there are issues to consider in the development of the project. One concern is the timing of the modeling change in relation to the Transmission Congestion Contract (TCC) market auctions. There are TCC products that have been sold through the TCC auction and would produce a new value with this modeling update.

The project will be available for stakeholder scoring with the 2020 Project Prioritization Process. To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6753250/06%20IESO%20Proxy%20Bus.pdf/f1bb4566-585b-9945-7daa-8251d5d3a969

2020 Buyer-side Mitigation Projects

Christina Duong of the NYISO provided clarification to several proposed projects related to mitigation. At the request of stakeholders at a previous BPWG meeting, the NYISO was asked to develop a presentation to provide insight into the Capacity Market Mitigation projects that are candidates for 2020 Project Prioritization. Ms. Duong led a discussion on the circumstances that gave rise to the need for each project and the proposed milestones:

- Competitive Entry Exemption Non-Qualifying Contract Rule Review
  - *2019 Q3 Market Design Concept Complete*
- BSM Evaluation for Small Resources Outside of the Class Year
  - *NYISO's project goal for 2020 would be Market Design Concept Proposed*
- Enhanced BSM Forecast Assumptions
  - *NYISO's project goal for 2020 would be Market Design Concept Proposed*
- Enhanced BSM Mitigation Study Period
  - *NYISO's project goal for 2020 would be Market Design Concept Proposed*
- NYC Part A Test Exemption
  - *NYISO's project goal for 2020 would be Market Design Concept Proposed*

- BSM Renewables Exemption Study
    - *NYISO's project goal for 2020 would be Study Complete*

To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6753250/07%202020%20BSM%20Projects.pdf/d1e8ae7f-4fe6-985c-70c9-a724af27b1dc

Thursday, May 30, 2019

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

Grid in Transition Draft Report Discussion

Michael DeSocio of the NYISO led a discussion with stakeholders on the draft Grid in Transition white paper. The objective of the discussion was to establish a common starting point in evaluating changes coming to the grid for stakeholders and initiate thought for feedback. Mr. DeSocio noted that this discussion is just the start of an anticipated lengthy process to determine potential market, product, operational and planning changes for the future grid.

Mr. DeSocio began with a review of the findings and conclusions of the report, pointing out the anticipated generation mix to reflect the New York State public policy goals. A question was posed to stakeholders for discussion:

> *"How can the wholesale energy market in New York continue to provide pricing and investment signals necessary to reflect system needs and to attract and retain enough controllable and flexible resources to balance the electric system and provide grid services necessary for reliability?"*

Mr. DeSocio noted that the guiding principles in response to the question are that; all aspects of grid reliability must be maintained and competitive markets should continue to maximize economic efficiency and minimize the cost of maintaining reliability. It was also noted that the requirements for controllable and flexible resources is a need for grid reliability, and in no way indicated a preference for supplier technologies.

The topic of revenue sufficiency was raised for discussion, following the principle that in a future without market design enhancements, the wholesale market revenues will not support the investment of new flexible generation needed to maintain grid reliability.

Mr. DeSocio highlighted potential enhancements for the energy, ancillary service and capacity markets. The potential enhancements were categorized as either ongoing efforts, under NYISO consideration or under investigation as a future market concept.

Stakeholders will have the opportunity to provide comments through June 24, 2019. Comments received after that date will be reviewed on a best effort basis. An updated report will be available in late summer 2019. The report will be used to help inform the NYISO's September Board strategic planning session.

To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6785167/20190522%20NYISO%20-%20Grid%20in%20Transition%20MIWG%20Presentation%20053019.pdf/4a8a3bc1-4fda-2997-98ee-88e7e60b319e

Carbon Pricing: Calculating the LBMPc

Ethan Avallone of the NYISO presented additional details on the $LBMP_C$ calculation, originally provided at the April 30, 2019 MIWG/ICAPWG meeting. It was noted that the April 30, 2019 LBMPc presentation was reposted to reflect the NYISO's proposal to set the implied heat rate to zero when the calculated implied heat rate is below the minimum implied heat rate, as further outlined in today's presentation.

Mr. Avallone highlighted the inputs to the LBMPc calculation and noted that stakeholders will be kept informed as the values are updated.
In response to stakeholder feedback, the NYISO will determine relevant transmission constraints that will be mapped to groups of Load Zones and fuel indices that are consistent with the NYISO's current reserve regions. The mapping to each Load Zone and fuel index were provided in the presentation. Mr. Avallone provided examples of pricing priorities in the event of various binding constraints.
A variable operations and maintenance (VOM) cost will be subtracted from the LBMP, which will then be divided by the estimated marginal fuel cost ($/mmBTU), plus the cost of emissions ($/mmBTU).
Mr. Avallone explained the methodology for determining the implied heat rate and the minimum and maximum heat rate range that would be used upon implementation. The implied heat rate was applied to the carbon emissions and social cost of carbon to calculate the LBMPc in $/MWh.
There will be additional opportunities for stakeholder discussion as additional tariff language is developed.
To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6785167/5.30.2019_MIWG_Carbon_Pricing_LBMPc_FINAL.pdf/e1ce07eb-84b3-5c31-1026-17a513cba2fe

Enhanced Fast-Start Pricing
Whitney Lesnicki of the NYISO led a review of the existing fast-start pricing logic with stakeholders and the compliance obligations required as a result of the FERC Order on fast-start pricing in the NYISO's markets, issued on April 18, 2019.
Ms. Lesnicki described the existing fast-start pricing employed by the NYISO today. Fast-start pricing logic treats eligible Fixed Block Units as flexible in both the DAM and RTM, enabling them to set price. Examples of the pricing protocol were provided for illustration. In order to be eligible for fast-start pricing today, a resource must:

- *be a Fixed Block Unit,*
- *be able to start and synchronize to the grid in 30 minutes or less,*
- *have a minimum run time of one hour or less, and*
- *submit economic energy offers into the market for evaluation.*

Ms. Lesnicki explained that certain units and/or conditions would make units ineligible to set prices. Revised fast-start pricing will extend the existing logic to dispatchable units. Once implemented, fast-start pricing will apply to; all resources that can start up and synchronize to the grid in 30 minutes or less, that have a minimum run time of one hour or less, and that submit economic offers for evaluation. Revised fast-start pricing logic will include the start-up and minimum generation costs of all fast-start resources in the LBMP calculation and will also apply in the withdrawal state, for fast-start resources that are eligible to withdraw energy.
The NYISO is considering how to allocate start-up costs across the minimum generation period of fast-start resources. The NYISO will analyze historical data, review the practices of other ISO/RTO's, and consider additional feedback from stakeholders.
To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6785167/053019%20MIWG%20-%20Enhanced%20Fast%20Start%20Pricing.pdf/dab2227c-e7ef-f7bf-194c-fdc8180809cd

Friday, May 31, 2019
Joint Installed Capacity/Market Issues/Price Responsive Load Working Groups
Cost Containment Metric for Transmission Project Evaluation in Public Policy Process

Yachi Lin of the NYISO presented the proposal to amend the Public Policy Transmission Planning Process in the OATT to establish the treatment of cost containment in the project proposal, evaluation and selection, and Development Agreement processes.
The NYISO position continues to be:

- *Cost containment considered in Public Policy Process will be limited to capital costs only*
- *Evaluation methodology must be feasible for NYISO implementation*
- *Consistency across projects must be maintained*
- *Consideration of cost containment must not add to evaluation time and lengthen Public Policy Process that stakeholders have agreed already takes too long to complete*

Ms. Lin led discussion on the qualitative and quantitative factors with stakeholders and noted feedback. A new, separate metric for considering cost containment proposals on a qualitative basis was introduced and discussed with stakeholders.
The NYISO plans on returning to the ESPWG/TPAS in June for further discussion. Comments are encouraged and can be sent to PublicPolicyPlanningMailBox@nyiso.com. To see the complete presentation, please go to:
https://www.nyiso.com/documents/20142/6786453/Cost_Containment_Eval%20Proposal%2020190522.pdf/fb0a93ad-a590-151a-c7eb-57601159ac87

FERC Filings

May 31, 2019
Compliance amendments to address issues regarding the ability of electric storage facilities to participate in the NYISO markets as Generators that are Energy Limited Resources.

May 31, 2019
NYISO filing of motion for leave to answer and answer in response to NRG Curtailment Solutions, Inc.'s answer to motion to hold proceeding in abeyance re: NYISO's metering services proposal.

May 30, 2019
NYISO compliance filing of 2019 Semi-Annual Reports on New Generation Projects and Demand Response Programs

FERC Orders

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

Filings and Orders:

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