

NYISO Consumer Interest Liaison Weekly Summary

September 23 – September 27, 2019

Notices:

- *At the September 5, 2019 TPAS/ICAPWG meeting, the NYISO requested **written feedback from stakeholders regarding potential tariff revisions related to the ICAP Demand Curve reset process (DCR) and/or annual update process for further review and consideration.** The NYISO has posted the written feedback received to the NYISO's website on the Installed Capacity Market (ICAP) page (www.nyiso.com/installed-capacity-market) at the following location: Installed Capacity Data -> Reference Documents -> 2021-2025 Demand Curve Reset -> Stakeholder Comments – Potential Tariff Changes.*
- *The **final** version of the **NYISO Demand Response Information System User's Guide (UG-11)** has been posted to the [NYISO Manuals, Guides, and Technical Bulletins webpage](#) under User Guides*
- *The **Board Selection Subcommittee** has selected the firm of **Heidrick & Struggles** to provide candidates to fill the upcoming Board vacancy. Market Participants who would like to submit candidates should send them to their specific Board Selection Subcommittee (BSSC) Sector representatives.*

End Use Sector – Sector Representatives

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Meeting Summaries:

Monday, September 23, 2019

Joint Electric System Planning Working Group/Transmission Planning Advisory Subcommittee Proposed Tariff Language for Cost Containment

Carl Patka of the NYISO led a review of incremental tariff changes for cost containment in the Public Policy Transmission Planning Process (PPTPP). The NYISO received several stakeholder comments

from the previous discussion on tariff language. Many of the updates discussed at the September 23, 2019 ESPWG/TPAS are a result of stakeholder input.

Mr. Patka noted that the NYISO is currently refining the language in Section 15.3 of the Development Agreement contained in Section 31.7 of the OATT, and will circulate the incremental changes to stakeholders for review and feedback prior to an October OC vote.

To see the proposed tariff revisions, please go to: <https://www.nyiso.com/espwg?meetingDate=2019-09-23>

Generator Deactivation Process: Financial Information Requirements

Jonathan Newton of the NYISO presented the information requirements needed to determine that a Generator Deactivation Notice is “complete”. The NYISO is seeking stakeholder feedback on how it can more clearly identify this information.

Market parties intending to retire or mothball a generator must submit financial information in accordance with OATT Attachment FF Section 38.25. The 365 day notice period will only begin to run once the NYISO determines the submission is sufficiently complete. The NYISO instructs market parties to submit required revenue and cost information via input template spreadsheet.

- *Required financial information includes:*
- *Capital expenses*
- *Fixed operating and maintenance costs*
- *Variable operating costs*
- *Financial parameters, including but not limited to cost of debt, cost of equity, and (WAAC)*
- *Opportunity costs*
- *All sources of revenues*

For each item listed in the spreadsheet, the percentage of costs/revenues avoidable if the Generator ceased to operate must be provided. This information must be provided for each of the five years prior to the year of retirement and for each of the six years after the year of plant retirement. The NYISO welcomes input from stakeholders, particularly if they consider the information requirement unnecessarily burdensome. To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8360597/03%20Generation%20Deactivation%20Information%20Requirements.pdf/f5fb33a3-417c-8999-0719-7f89fd61a673>

Short Term Reliability Process

Keith Burrell of the NYISO started his presentation by providing additional details on the concept of the Short-Term Reliability Process (STRP).

Mr. Burrell explained that the NYISO will use its judgement to perform a reliability assessment for an ICAP Ineligible Forced Outage generator in either; a current, ongoing Short-Term Assessment of Reliability (STAR), the next STAR, or an ad-hoc resource-specific basis. The NYISO may elect to address a Generator Deactivation Reliability Need identified in an ad-hoc study immediately, in the next STRP or in the Reliability Planning Process (RPP), depending on the nature and timing of the identified need.

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The NYISO also clarified that the Interim Service Provider (“ISP”) rate paid to deactivating Generators will be triggered from the later of:

- *180 days after the Generator Deactivation Notice is complete;*
- *10 days after the completion of the STAR; or*
- *The Deactivation Date noted in the Generator Deactivation Notice*

In discussing the STRP solution solicitation, Mr. Burrell explained the circumstances which would lead the NYISO to withdraw an original solicitation and issue a solicitation to address an updated Short-Term Reliability Need, or issue a second solicitation for solutions to the unaddressed additional, incremental need.

Mr. Burrell noted proposed changes to Attachment FF of the OATT. The NYISO will propose rules that will preclude it from entering into an RMR Agreement if the only need identified can be addressed by retaining appurtenant facilities, such as the step-up transformer, and does not require the Generator’s operation. The NYISO will also propose changes to post a public notice when it receives a Generator Deactivation Notice, before the notice is complete. The NYISO will consider stakeholder feedback for other clarifications and improvements as the drafting of tariff language progresses.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8360597/04%20ShortTermReliabilityPlanningProcess.pdf/9b15ee0c-c622-f571-c6c0-c54e91666ff0>

Tuesday, September 24, 2019

Joint Installed Capacity/Market Issues/Electric System Planning/Price Responsive Load Working Groups

More Granular Operating Reserves

Ashley Ferrer of the NYISO presented the project to develop more granular operating reserves. Ms. Ferrer differentiated the current NYISO efforts concerning reserves and explained how the following projects will complement each-other:

- Reserves for Resource Flexibility (2020 milestone: Deploy)
 - Increase reserve requirements to account for uncertainty on the transmission system
- More Granular Operating Reserve (Not Prioritized for 2020)
 - Establish reserve requirements for certain load pockets in NYC
- Ancillary Services Shortage Pricing (2020 milestone: Market Design Complete)
 - Re-evaluate the demand curve prices used for ancillary services

The (LRR) evaluation can result in committing resources that may not be economic, hence resulting in uplift.

NYISO’s proposed market design represents an incremental step in creating a market mechanism for procuring more granular reserve requirements for certain NYC load pockets. The NYISO is proposing to establish three new reserve regions within Zone J and associated 30-minute reserve requirements for the following load pockets:

- **Astoria East/Corona/Jamaica**
- **Astoria West/Queensbridge/Vernon**
- **Greenwood/Staten Island**

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The load pocket reserve requirements are based on the quantity of generation required to return transmission lines in each pocket to applicable limits following an N-1 contingency using one of the other transmission lines into the pocket, consistent with rules for NYCA reliability. The amount of reserves for each load pocket were provided. The NYISO is proposing to establish operating reserve demand curves for each load pocket that assign a \$25/MWh value to the proposed reserve requirements and would be nested within existing, upstream reserve regions.

The expected benefits of this change would provide; more efficient scheduling and procurement of resources, locationally specific market price signals, and incentive for investment in resources to supply the 30-minute reserve products. A consumer impact analysis will be performed on the final market design.

The next step in this process is to review performance of reserves scheduled to provide reserves.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8372822/More%20Granular%20Operating%20Reserves%20-%20MIWG%2009242019.pdf/4f88b294-7a3d-f991-0990-760334435ee4>

Fuel and Energy Security Study Results and Observations

Charles Wu and Paul Hibbard of the Analysis Group (AG) provided an update on the “Fuel and Energy Security Study” results and observations. Mr. Hibbard noted that this presentation would be the last prior to releasing the report.

Mr. Hibbard led a review of the eight scenarios that were studied and the eleven disruptions that were applied to each of those scenarios. The cases (combinations of scenarios and physical disruptions) were analyzed based on the severity of supply deficits and the length of the periods that deficits occurred and/or emergency actions were called for.

Mr. Wu provided the initial assessment to reduce the number of cases to those that may warrant further attention using three steps:

1. Characterize cases by probability of occurrence
 - a. Relative to circumstances and contingency combinations seen in other system operational assessments
2. Characterize cases by severity of potential loss of load
 - a. Relative to potential loss of load events that may be avoided by existing system response options (e.g., voltage reductions)
3. Combine #1 and #2 to reduce to cases for further review that may be characterized as:
 - a. Having a probability similar to conditions that may be evaluated in system operational assessments
 - b. Have potential loss of load outcomes that would be significant enough to warrant consideration of additional mitigating actions (e.g., enhanced procedures or market designs)

Mr. Wu led a review of the observations while noting feedback from stakeholders for consideration in the final report. AG also provided some preliminary options for NYISO’s potential future actions. It was noted that the timetable posted in the presentation would likely be delayed by approximately one week to provide a more complete report. To see the complete presentation, please go to:

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New Capacity Zone (NCZ) Study Inputs and Assumptions

Thinh Nguyen of the NYISO presented the inputs and assumptions that will be used in the upcoming New Capacity Zone (NCZ) study. The NCZ study is conducted in coordination with the Demand Curve Reset (DCR) process, which is on a four year cycle. The NCZ study is a Deliverability study to determine whether there is a need for an additional Capacity Zone.

The 2019–2020 NCZ Study will evaluate deliverability for the Highway interfaces as defined in Attachment S, Section 25.1; *i.e.*, in the Rest of State (Zones A–F) and Lower Hudson Valley (Zones G–I) Capacity Regions. The Highway interfaces to be tested include:

- *Dysinger East*
- *West Central*
- *Volney East*
- *Moses South*
- *Central East/Total East*
- *UPNY-ConEd*

It was noted that all NCZ Study inputs and assumptions are in accordance with Section 5.16.1 of the MST. The NYISO will provide the NCZ Study report to stakeholders before January 15, 2020 per the tariff requirement. To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8372822/2019%20NCZ%20Inputs%20and%20Assumptions_Final2.pdf/500c661b-d621-c70c-2c41-56b31baa029d

CRIS Expiration Rules

Sarah Carkner of the NYISO updated the proposal to revise the Capacity Resource Interconnection Service (CRIS) rules. This proposal has been identified as part of the Class Year Redesign project. Ms. Carkner began with an explanation of when the “3 Year CRIS clock” would begin for facilities. All resources with CRIS will be obligated to inform the NYISO when they begin operation. Once a facility begins operation, if it is CRIS-inactive for 3 years, its CRIS will terminate. For resources not subject to a NYISO interconnection process, their Initial Synchronization date needs to be within four years of obtaining CRIS or their CRIS will terminate. The “3 Year CRIS clock” would then begin from the date of the Initial Synchronization notice to the NYISO.

Load modifiers will be treated as CRIS-inactive for purposes of CRIS expiration. Stakeholder feedback was noted for future consideration.

The proposal will allow a resource to maintain its CRIS even if it exports its capability for 3 years:

- *Exporting capability would not be deemed CRIS-inactive*
- *Prevents the expiration of CRIS for an exporting unit, which then may be unable to participate in our neighbor’s markets*
- *Rule would be effective for resources exporting after the effective date of provision*

Ms. Carkner led a review of proposed tariff changes to OATT Sections 30.14 and 32.5 and noted stakeholder feedback. The NYISO will provide tariff language for stakeholder review and comment at an October 2019 MIWG/ICAPWG meeting.

The approval for the CRIS expiration rule revisions will be included in the BIC vote for the Class Year Redesign project. To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8372822/CRIS%20Expiration%20Rules.pdf/4d29efa9-25be-ba23-c34a-3c5329a1230c>

Wednesday, September 25, 2019

Management Committee

Motion #1:

Motion to approve the draft May 20, 2019 and the July 31, 2019 Management Committee meeting minutes.

The motion passed unanimously by show of hands.

Wednesday, September 25, 2019

Budget and Priorities Working Group

EMS/BMS Update

Dianne Peluso of the NYISO provided an update on the Energy Management System/Business Management System (EMS/BMS). The system has been running for five weeks in parallel with the legacy Ranger system to complete testing. The current implementation date is October 22, 2019, with a “drop dead” date of October 31, 2019.

The NYISO will continue to update stakeholders on the progress of the switch-over. In the event of a delay beyond October 31, 2019, the implementation would be changed to March 1, 2019. A contingency plan is being developed and will be announced to stakeholders in the near future.

2020 NYISO Budget Overview

Cheryl Hussey of the NYISO updated the presentation of the 2020 budget overview from the initial presentation on September 9, 2019.

Per a stakeholder request and for informational purposes only, Ms. Hussey included the estimated 2020 FERC fee in the Rate Schedule 1 figures. It was noted that the FERC fees are not part of the NYISO budget or Rate Schedule 1 collections.

A second update was contained in the Salaries and Benefits section of the presentation. Due to the projected impact of interest rates, actuarial assumptions, level of benefit payments, and funded status; NYISO will have a 2020 funding requirement of approximately \$1.0M. In order to avoid this incremental cost in 2020, this funding will be accelerated into 2019. The \$1M figure is an increase from \$900K.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8384551/2020%20DRAFT%20Budget%20Presentation.pdf/f33ce0f8-feb6-2458-60e4-bb5be921237c>

Thursday, September 26, 2019

Joint Installed Capacity/Market Issues Working Group/Transmission Planning Advisory Subcommittee

Enhanced Fast Start Pricing

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 NYISO or the discussions that take place at the meetings.

Pallavi Jain of the NYISO presented the proposal to enhance fast-start pricing in response to the April 18, 2019 FERC Order. The order requires the NYISO to:

- *Modify pricing logic to allow fast-start resources' commitment costs (i.e., start-up costs and minimum generation (no-load) costs) to be reflected in prices*
- *Allow the relaxation of all dispatchable fast-start resources' economic minimum operating limits by up to 100 percent for the purpose of setting prices.*

The fast-start pricing Order was issued with a December 31, 2019 compliance filing date and with an implementation date of December 31, 2020.

The proposed fast-start pricing will extend the existing logic to dispatchable units so that 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 will be included. Revised fast-start pricing logic will include the start-up and minimum generation costs of all fast-start resources in the LBMP calculation in the ideal dispatch. Revised fast-start pricing logic will also apply in the withdrawal state, for fast-start resources that are eligible to submit commitment costs.

The NYISO is considering how to allocate commitment costs across the minimum run time period of fast-start resources. Potomac Economics (MMU) recommended that the NYISO amortize start-up costs in a front-loaded manner since their analysis “strongly suggests that these units have the greatest value early in the commitment period.”¹ Potomac also recommended that the NYISO dynamically adjust the amortization weighting based on advisory prices.

Based on all of the analysis by NYISO and the MMU, the NYISO is considering amortizing the start-up costs over the first fifteen minutes after the Fast Start Unit is started. Data was provided to illustrate the sequence.

An example was discussed with stakeholders reflecting the NYISO's initial proposal to incorporate commitment costs into the incremental cost curve of fast-start resources in the ideal pass. A revision to the initial process provided by a stakeholder adds an additional step to enhance the proposal. The revised proposal was illustrated with an example to provide clarity of the process. A write-up of the proposed alternative is provided with the meeting materials.

The NYISO proposes to adopt the alternative method, because it should:

- **Reduce gaming opportunities resulting from manipulation of the minimum generation and startup cost blocks**
- **Promote better convergence between ideal and physical dispatch**
- **More accurately reflect commitment costs in pricing.**

This approach is not expected to impact solve times or add significant complexity to implementation.

Ms. Jain also provided a brief review of the methodologies employed by other ISO/RTOs in addressing fast-start pricing for reference.

To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8414685/Enhanced%20Fast%20Start%20Pricing_MIWG_09262019_final.pdf/1a29ab7a-6e8b-493c-a8b1-32881b95fbc4

Consumer Impact Analysis: Methodology for Enhanced Fast Start Pricing

Tariq Niazi of the NYISO provided the methodology to be used in the consumer impact analysis for the Enhanced Fast Start Pricing initiative. The fast-start pricing initiative is the result of an April 18, 2019 FERC order with a December 31, 2019 compliance filing date. The order requires the NYISO to:

¹ See Comments of the New York ISO's Market Monitoring Unit, Filed February 13th, 2018 in FERC Docket No. EL18-33-000

- *Modify pricing logic to allow fast-start resources' commitment costs (i.e., start-up costs and minimum generation (no-load) costs) to be reflected in prices*
- *Allow the relaxation of all dispatchable fast-start resources' economic minimum operating limits by up to 100 percent for the purpose of setting prices.*

Following a review of the current methodology for fast-start pricing, Mr. Niazi explained the revised fast-start pricing proposal to provide the necessary background for the development of the analysis methodology.

The methodology to analyze the energy market impact to consumers will include:

- Re-running past market periods with the new pricing logic applied to all fast-start units, based on “typical” market days
- Resulting LBMPs will be compared to original prices
- LBMP delta will be used to estimate the consumer impact on energy and ancillary service cost

A request was made by a stakeholder to calculate a production cost impact along with the LBMP analysis. As with all consumer impact analyses performed by the NYISO, impacts will be evaluated for Reliability, Environmental and System Transparency effects. The analysis will be presented to stakeholders on October 18, 2019.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8414685/CIA%20-%20Methodology%20for%20Enhanced%20Fast%20Start%20Pricing.pdf/fe8644db-7c07-4da3-bd97-a071c30db1c7>

Reserves for Resource Flexibility

Ethan Avallone of the NYISO presented the proposal to secure reserves for resource flexibility. The variability and unpredictability of wind and solar generation resources and the potentially large quantities of each present a challenge for future grid operations. The grid will need responsive and flexible resources to address changes in net load, and procuring additional reserves may be an appropriate consideration. Additional reserves are proposed for returning transmission elements to Normal Transfer Criteria following a contingency (“Normal Transfer Criteria”). Currently, reserve procurements are designed to facilitate returning transmission assets to Emergency Transfer Criteria after suffering a contingency. Additional reserves may need to be procured as the amount of weather-dependent generation on the grid increases (“Uncertainty Analysis”).

The NYISO proposes to procure an additional 500 MW of 30-minute reserves in the SENY reserve region (zones G-K). The 500 MW of 30-minute reserves would not be in addition to the current level of 2,620 MW NYCA-wide, but rather reserves procured in zones G-K as part of the NYCA-wide total. Mr. Avallone provided a chart illustrating how the proposed reserve demand curve would be employed to return transmission facilities to Normal Transfer Criteria post contingency.

Mr. Avallone explained the methodology used for the Uncertainty Analysis. The NYISO analyzed uncertainty by calculating the net load error in the 30-minute timeframe. Net load error is defined in this context as the load forecast error net of the wind forecast error; (Forecast Load – Actual Load) – (Forecast Wind – Actual Wind). In response to a stakeholder question on how the NYISO will measure reserve requirements on a future grid with many more intermittent resources, Mr. Avallone explained that the NYISO will continue to improve metrics and the methodology as the grid transitions. Net Load Error is one possible metric that the NYISO could use to monitor system conditions as we transition to the grid of the future.

In response to a stakeholder request, Mr. Avallone led a review of the data analysis in the appendix posted with the meeting materials for a more complete understanding of the conclusions.

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The NYISO will continue to discuss the proposal with stakeholders prior to presenting a market design complete proposal in Q4 2019 with the anticipation of a 2020 implementation. To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8414685/9_26_2019_Reserves_for_Resource_Flexibility_FI_NAL.pdf/ba7fb774-49d5-0c96-1d2c-664a2c9c3c05

Friday, September 27, 2019

Load Forecasting Task Force

New York ISO Climate Load Impact Study: State Policy Scenario Assumption

Eric Fox of Itron presented the New York State policy scenario assumptions that will be used in the NYISO climate load impact study. Several state and regional policy assumptions were identified and evaluated, including:

- *Energy Efficiency*
- *Electric Vehicles*
- *Electrification*
- *Residential Heating -- Water Heating, Dryers, Cooking*
- *Behind the Meter Solar*
- *Battery storage*

Mr. Fox detailed the policy goals for energy efficiency with the statewide efficiency goal of 30,000 GWh of new energy savings by 2030. The methodology of how energy efficiency is to be measured for the study was presented. Data was provided on residential vs. commercial usage for reference. Electrification will primarily consist of electric vehicles, heat pumps and all-electric homes. The anticipated impact on load by electric vehicle use was projected through 2045. Heat pump technology advancements and impact on load was discussed with stakeholders. The study will assume an addition to load by 2030 of 1700 MW in summer and 2,000 MW in winter due to electrification, excluding electric vehicles.

New York State has a behind-the-meter solar target of 6,000 MW by 2026. The forecast beyond 2026 follows the same trajectory as the NYISO gold book forecast.

Itron evaluated the system load peak using the historical trend of 0.7 degrees per decade and contrasted it with the extreme trend of 1.4 degree increase per decade and provided resulting forecasts for stakeholder discussion. Mr. Fox explained that the study will use the extreme case of 1.4 degree increase per decade as an upper bound for the most extreme possible temperatures.

Following this presentation, Itron will finalize the policy scenario assumptions which will lead to finalizing the forecasts. The final forecasts will be presented to the LFTF. The second stage of the study will be to use the forecasts to deliver hourly zonal forecasts to transmission planning.

Other trends such as humidity, rainfall, wind speed and cloud cover will also be evaluated as the study progresses.

To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8417880/ClimateStudy_PolicyScenario.pdf/810e0f4c-f194-328e-75ec-1be3b9790c69

NYSRC Fall Forecast Update – Preliminary 2019 Weather Normalization and 2020 IRM Forecast

Max Schuler of the NYISO led an overview of the preliminary 2019 weather normalization and 2020 IRM forecast. Mr. Schuler began by providing the methodology used by the NYISO and Transmission Owners (TOs) to determine the weather normalization process. Weather normalization models were presented and discussed for each Transmission District.

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The ten-year rolling average of coincident and locality peaks table was updated for use in obtaining the required ratio of non-coincident peaks to coincident peaks. From the above information, the following preliminary forecasts are derived:

- *2020 IRM Coincident Peak Forecast by Transmission District*
- *2019 IRM Locality Peak Forecast*
- *2020 IRM Coincident Peak Forecast by Transmission District and Zone*
- *2019 IRM Non-Coincident Peak Forecast by Transmission District and Zone*
- *2019 IRM G-to-J Locality Forecast by Transmission District and Zone*

To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8417880/2020_Preliminary_NYSRC_Forecast_LFTF.pdf/d9e6a48f-7ffb-127e-a17c-bd16bf2a0cf2

FERC Filings

FERC Orders

Filings and Orders:

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