

NYISO Consumer Interest Liaison Weekly Summary

September 21 – September 25, 2020

Notices:

- Based on Stakeholder feedback, the Consumer Impact Analysis for the Hybrid Storage Participation Model has been updated and reposted at the link below. Revisions appearing in blue were made to Slides 17, 19, 20, 21, 23 and 24. The reposted material provides additional information as requested by stakeholders and does not change the consumer cost impacts originally provided. Below are the concerns raised by stakeholders and our response in parenthesis:
 - 1. Provide MW impacts of hybrid penetration in UCAP terms (Provided)
 - 2. Remove cases with 0% impact on capacity requirements and add cases with 75% impact on capacity requirements (Provided)
 - 3. The New York Reliability Council (NYRC) has discussed the impact of intermittent resources on UCAP requirements in IRM studies (The level of intermittent resource penetration modeled in our analysis should not lead to any significant impact on the UCAP requirement. However, this may not be the case as intermittent resource penetration increases in the future.)

The revised presentation is posted <u>here</u>.

Meeting Summaries:

Tuesday, September 22, 2020

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

Notice of Potential Market Problem: Discussion on Demand Curve Reset Net Energy Ancillary Service (Net EAS) Model Gas Pricing Logic

Robb Pike of the NYISO explained that every four years the NYISO and its stakeholders undertake a comprehensive review to determine the necessary inputs and assumptions for developing the ICAP Demand Curves for the four-year period covered by the reset. This process is commonly referred to as the ICAP Demand Curve reset (DCR). As part of this ongoing reset, stakeholders raised concerns about the gas pricing alignment logic in the Net EAS Model to be used for the 2021-2025 reset

period. The issue relates to specific logic in the Net EAS Model for assigning gas prices to electric operating days. This logic was based on an understanding that the date assigned to gas price data published by the data vendor for such pricing (S&P) represents the "trade day" (or the day before the generator would take delivery of and use the gas to produce electricity). To align the published gas price with the day on which the gas would be used by the hypothetical resource, the model shifted the gas prices forward by one day. Further review of this logic, including discussions with S&P, confirmed that the date S&P assigns to a published gas price represents the "flow day" price (or the day the generator would take delivery of and use the gas to produce electricity). Therefore, shifting the published gas price forward one day is not needed to align the gas price date with the date such gas would be used by a generator to produce electricity. The NYISO recommends removing this logic from the Net EAS Model to be used for the upcoming 2021- 2025 reset period, as reflected in the NYISO Staff Final DCR Recommendations report posted on September 9, 2020.

The NYISO has identified a potential Market Problem associated with this discrete aspect of the Net EAS Model for the 2017-2021 DCR. The 2017-2021 DCR includes the ICAP Demand Curves for the 2017/2018 through 2020/2021 Capability Years (May 1, 2017 through April 30, 2021). The NYISO is continuing to evaluate whether the gas price alignment issue constitutes a tariff violation or meets the criteria for designation as an actual Market Problem. The NYISO is evaluating whether additional remedial action or modifications may be appropriate for the remainder of the 2017-2021 DCR period, the nature of such remedial action, if any, and the steps that would need to be taken to effectuate any such remedial action.

In reference to the potential Capacity Market implications, NYISO plans to proceed with conducting both auctions as scheduled. NYISO will provide further information on these auctions expectations in subsequent discussions.

The NYISO will continue to discuss this issue and report on status of ongoing assessments at future ICAPWG meetings.

To see the complete presentation, please go to:

https://www.nviso.com/documents/20142/15473217/2017-

<u>2021%20DCR%20Net%20EAS%20Model%2009222020%20MIWG.pdf/de867888-cb13-3407-49f6-96371ac05033</u>

2021-2025 ICAP Demand Curve Reset: NYISO Staff Final Recommendations

Zachary T. Smith of the NYISO presented the NYISO staff's Final Recommendations for the 2021-2025 ICAP Demand Curve Reset. After reviewing the independent consultant's recommendations, the NYISO staff issues its own recommendations to stakeholders and the NYISO Board of Directors (Board). The Board then reviews both recommendations, along with written and oral comments from stakeholders, before determining the final parameters to file with FERC.

In general, NYISO staff concurs with the independent consultant's recommendations, except:

- NYISO staff recommends different gas hub pricing for Load Zone C
- NYISO staff recommends revisions to the methodology of translating annual gross cost of new entry (CONE) values to monthly values for use in calculating the maximum clearing prices for each ICAP Demand Curve

NYISO staff has coordinated with Analysis Group to revise the logic for the gas price applied to a given electric market in the net Energy and Ancillary Services (EAS) revenues model:

• The update net EAS revenue offset results in NYISO staff's Final Recommendations and the independent consultant's Final Report reflect this update to the model

NYISO staff's Final Recommendations include additional information regarding certain of the consultant's recommendations/assumptions:

- Owner's development costs
- Estimated costs of gas interconnections outside New York City
- Land lease cost within New York City

NYISO staff's Final Recommendations and the independent consultant's Final Report reflect updates to include the appropriate dataset for the 2021/2022 ICAP Demand Curves:

- Net EAS revenue estimates and winter-to-summer (WSR) updated to reflect data for the period September 1, 2017 through August 31, 2020
- Updated escalation of capital cost estimates to 2021 dollars based on the most recent data available

After providing the NYISO staff's proposed 2021/2022 ICAP Demand Curve Reference Prices, Mr. Smith reviewed the details of the revised recommendations with stakeholders.

The remaining DCR schedule was presented and discussed with stakeholders. It was noted that oral arguments would be conducted virtually, rather than in-person. The NYISO anticipates filing the DCR outcomes with FERC on or before November 30, 2020. A stakeholder suggested that the NYISO request a comment extension with FERC to allow for the Thanksgiving period.

To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/15473217/2019-

<u>2020%20NYISO%20Staff%20Final%20Recommendations.pdf/9b61975a-0eba-fd27-3151-9aab5e383a81</u>

Ancillary Services Shortage Pricing

Pallavi Jain of the NYISO presented on supplemental reserves pricing within the Ancillary Services Shortage Pricing project. Supplemental reserves are additional reserves beyond minimum reliability requirements. Procuring supplemental reserves has been identified as a potential solution to address a number of reliability gaps in the Grid in Transition whitepaper.

The NYISO proposes to establish the process/procedures for implementing or adjusting supplemental reserves when warranted in the future. The NYISO is seeking to implement the necessary tariff revisions to add/adjust these requirements in the future as part of this proposal. The NYISO does not propose to add any supplemental reserve requirements at this time.

Ms. Jain led a discussion with stakeholders on the proposed requirements for the supplemental reserves.

The NYISO proposes to price supplemental reserves, when added in the future, based on the following shortage pricing values in all reserve regions.

- Any supplemental 30-minute reserves= \$10/MWh
- Any supplemental 10-minute total reserves = \$12/MWh
- Any supplemental 10-minute spinning reserves = \$15/MWh

Ms. Jain provided draft tariff revisions to the MST Section 15.4 with a redline version available for stakeholder review. The NYISO will continue to discuss the proposal into October 2020 with a vote scheduled for the October 2020 BIC and MC.

To see the complete presentation, please go to: https://www.nyiso.com/icapwg?meetingDate=2020-09-22

Enhanced Fast Start: Proposed Manual Changes

Stephanie King of the NYISO presented changes to the Transmission and Dispatch and the Day Ahead Scheduling manuals to incorporate the implementation of the Enhanced Fast Start pricing structure. On February 6, 2020, FERC accepted the NYISO's December 31, 2019 Fast-Start Resource compliance filing with implementation on or before December 31, 2020.

Stakeholder feedback was noted for consideration. The NYISO will return to the October 6, 2020 MIWG meeting, if required, for additional discussion prior to presentation to the SOAS. The NYISO will seek stakeholder approval of the manual revisions at the November BIC and OC meetings. Redline versions of the manuals were provided with the meeting materials for stakeholder review. To see the complete presentation please go to: https://www.nyiso.com/icapwg?meetingDate=2020-09-22

<u>Hybrid Storage</u>: <u>Participation Examples and Energy Market Tariff Revisions for Co-located Storage</u> Resources (CSR)

Kanchan Upadhyay of the NYISO provided participation examples and energy market tariff revisions for Co-located Storage Resources (CSR). Stakeholders had requested additional examples for clarity at a prior presentation.

Ms. Upadhyay presented 12 examples covering multiple resource configurations and bidding scenarios for discussion with stakeholders.

Redlined tariff revisions reflecting market participation rules were posted with the meeting materials and discussed with stakeholders. Proposed revisions apply to the following tariff sections:

- MST 2 Definitions
- MST 4 Market Services: Rights and Obligations
- *MST 13 Metering*
- MST 15 Rate Schedules

The NYISO will continue to review its proposed Energy and Ancillary Services Market Tariff revisions with stakeholders as they are developed and will return to future working groups to discuss additional tariff revisions to other sections. To see the complete presentation, please go to: https://www.nyiso.com/icapwg?meetingDate=2020-09-22

Wednesday, September 23, 2020

Management Committee

Motion #1

Motion to approve the draft July 29, 2020 and August 26, 2020 Management Committee meeting minutes

The motion passed unanimously.

Motion #2

The Management Committee ("MC") hereby approves revisions to the NYISO's Market Administration and Control Area Services Tariff and Open Access Transmission Tariff as more fully described in the presentation titled "New York City Steam Exemption" made to the MC on September 23, 2020 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 with an abstention.

Motion #3

The Management Committee ("MC") hereby recommends that the NYISO Board of Directors ("Board") approve changes to Sections 5.12 of the NYISO's Market Administration and Control Area Services Tariff as more fully described in the presentation "ESR Bidding Rules for ICAP Suppliers with an Energy Duration Limitation" made to the MC on September 23, 2020.

The motion passed unanimously.

Motion #4

The Management Committee ("MC") hereby approves revisions to the NYISO's Market Administration and Control Area Services Tariff as described in the presentation titled "Large Scale Solar on Dispatch Tariff Revisions" made to the MC on September 23, 2020 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.

Motion #5

The Management Committee (MC) hereby approves, and recommends to the NYISO Board, revisions to Attachment K of the Market Administration and Control Area Services Tariff as described in the presentation entitled "Unsecured Credit for Public Power and Governmental Entities," made at the September 23, 2020 MC meeting.

The motion passed by majority with objections and abstentions.

Motion #6

The Management Committee (MC) hereby approves, and recommends to the NYISO Board, revisions to Attachment K of the Market Administration and Control Area Services Tariff and Attachments M and N of the Open Access Transmission Tariff as described in the presentation entitled "Proposed TCC Credit Policy Enhancements," made at the September 23, 2020 MC meeting.

The motion passed unanimously with an abstention

Wednesday, September 23, 2020

Budget and Priorities Working Group

2020 Project Schedule Milestone Update

Michael DeSocio and Diane Peluso of the NYISO provided a status update for 2020 projects. Mr. DeSocio began with a list of market design projects whose status has changed since the last presentation:

•	Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	At Risk/Delayed
•	Mitigation Thresholds Review	Cancelled
•	Reserves for Resource Flexibility	Complete

Mr. DeSocio next presented projects that will continue with working group discussion:

•	BSM Renewables Exemption Study	Study Complete
•	Demand Curve Reset	Study Complete

Comprehensive Mitigation Review
 Enhancing Fuel and Energy Security
 Proposed
 Market Design Complete
 Market Design Concept

• NYISO Pilot Framework Study Complete

• Reserving Capacity for TCC Balance-of-Period (BOP) Auctions Market Design Complete

• 5 Minute Transaction Scheduling Study Complete

• Ancillary Services Shortage Pricing (SOM)

Market Design Complete

Grid in Transition Discussion
 Hybrid Storage Model
 Issue Discovery
 At Risk/Delayed

Next, Ms. Peluso provided status updates to the implementation schedule:

Transactions Modifications and Confirmation Tool
 ESR Participation Model
 Complete

• DAM Congestion Settlement Re-Allocation Reprioritized

Ms. Peluso also noted projects that are continuing or will be underway in the near future:

• Enhanced Fast Start Pricing At Risk/Delayed

• Expanding Capacity Eligibility On Schedule

• Automated Default Bid Mitigation On Schedule

• Climate Change Impact and Resilience Study On Schedule

To see the complete presentation, please go to:

NYISO 2021 Budget Overview

Cheryl L. Hussey and Patrick Kelly of the NYISO presented an overview of the 2021 Draft Budget following the BOD meeting to review high level draft budget summary.

The NYISO's draft 2021 budget totals \$167.4M, allocated across a forecast of 147.3 million MWh, for a Rate Schedule 1 charge/MWh of \$1.137. Comparatively, the 2020 budget was \$168.0M, allocated across 154.3 million MWh for a Rate Schedule 1 charge/MWh of \$1.089. Ms. Hussey noted that 2021 represents the second consecutive year the NYISO has proposed a decrease to the budgeted revenue requirement. The reason for an increase in Rate Schedule 1 from 2020 to 2021 is the 7 million MWh (4.7%) decrease in forecasted MWh volume for 2021 from 154.3 million to 147.3 million.

Mr. Kelly led a review of the budget highlights including a comparison of the 2020 budget to the 2021 budget.

To see the complete presentation, please go to:

 $\frac{https://www.nyiso.com/documents/20142/15479095/2021\%20Budget\%20Presentation.pdf/b4968fc4-d4a7-bbad-8b31-64960ce664a5}{d4a7-bbad-8b31-64960ce664a5}$

Thursday, September 24, 2020

$\begin{tabular}{ll} \textbf{Joint Electric System Planning Working Group/Transmission Planning Advisory Subcommittee} \\ \underline{STAR~(Q3)/RNA~Timing} \end{tabular}$

Kevin DePugh of the NYISO presented the timing of the Q3 Short Term Assessment of Reliability (STAR) process and the Reliability Needs Assessment (RNA).

The STAR process began on July 15, 2020 and will end on October 13, 2020. Bulk Power Transmission Facility (BPTF) Reliability Needs identified in Years 1-3 will be handled through the Short-Term Reliability Planning Process (STRP) as Near-Term Reliability Needs while Years 4-5 will likely be handled in the 2020 RNA.

The NYISO will issue a 60-day solicitation shortly after STAR is posted for solutions including:

- Market –based solutions which may include generation, transmission, or demand response
- Responsible Transmission Owner regulated solution

The 2020 RNA will be presented at the October 15, 2020 OC and the October 28, 2020 MC meetings. To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/15571004/02%20RNA%20STAR_Timeline.pdf/2e5d314b-861f-2361-a8f9-febc11067865

CARIS Phase 2 Assumptions Review

Nischal Rajbhandari and Jason Frasier of the NYISO presented the input assumptions for the Congestion Assessment and Resource Integration Study (CARIS) Phase II (CARIS II).

Mr. Rajbhandari reviewed the schedule for the CARIS 2 process with the final results scheduled for the November 19, 2020 ESPWG/TPAS meeting.

The CARIS 1 database is updated and extended for the CARIS 2 study. Mr. Rajbhandari provided the generation additions and deactivations to be added to the CARIS 2 base case. The changes to the NYCA network model were detailed with the anticipated dates for the revisions.

Mr. Frasier provided Additional updates, including:

- Load Forecast
- Natural Gas Price Forecasts
- CO2 Emission Allowance Price Forecast Updates
- NO_X and SO₂ Emission Allowance Price Forecast Updates

Mr. Frasier reviewed the requirement to address Transmission Security and Resource Adequacy needs identified in the draft 2020 RNA. Mr. Frasier explained that the 2020 CARIS 2 assumptions to address reliability needs will be presented at the October 5, 2020 TPAS meeting for discussion with stakeholders.

To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/15571004/03%202020_CARIS_2_ESPWG.pdf/1775a310-7bbc-9254-4c6a-8c668f6fd9f1

Economic Planning Process Improvement Strawman Review

Jason Frasier of the NYISO presented the process to review the Economic Planning Process for potential process improvement. Discussions were held with stakeholders in August 2020 on potential areas for improvement and ideas on process improvements to resolve inefficiencies.

Mr. Frasier identified the potential areas of improvement for discussion, including:

- Phase 1
 - o Base Case Study Period
 - o Number of Transmission Paths Evaluated
 - Generic Solutions
 - o ICAP Metric
 - o Public Information Session
 - o Energy Deliverability
- Phase 2
 - o Energy Deliverability (Informational Only)

Mr. Frasier detailed changes that would be required to implement the improvements and noted stakeholder feedback for consideration. Associated tariff sections that would require revision were also identified and discussed with stakeholders.

An additional suggestion is to change the name of the Economic Planning Process. This would also require a tariff change. The concept is to rename the Congestion Assessment and Resource Integration Study (CARIS) to reflect the updated scope. An updated name for the process has not been determined at this time.

In reference to additional CARIS Studies, Mr. Frasier noted that the tariff states "Additional CARIS Studies can be performed anytime during the Economic Planning process. Additional CARIS Studies could be used for Energy Deliverability analysis."

The NYISO will provide proposed tariff language for stakeholder review and discussion at the October 23, 2020 ESPWG/TPAS meeting. To see the complete presentation, please go to: https://www.nyiso.com/documents/20142/15571004/04%20EPP_Improvement_Strawman.pdf/49f5e068-c073-758b-2249-6fa2a5ffb5b8

Friday, September 25, 2020

Transmission Planning Advisory Subcommittee/ Interconnection Projects Facilities Study Working Group (IPFSWG)

Status of NYISO Studies/Activities

Thinh Nguyen of the NYISO updated the Class Year 2019 (CY19) study. Mr. Nguyen began with a review of the 78 CY19 members, their locations and the connecting Transmission Owners (TOs). The decision process and timing was reviewed for reference.

Mr. Nguyen identified the projects undergoing Part 1 studies, the connecting TOs for the studies, and the costs associated with the studies. Mr. Nguyen next identified the Part 2 studies and results.

The cost allocation for each member of CY19 was provided and discussed with stakeholders.

Mr. Nguyen provided a timeline of events to illustrate where the NYISO is in the CY19 process and the steps needed to complete CY19.

The IPFSWG/TPAS recommended the CY19 report to the OC for approval.

To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/15597382/02a_CY19_Slides_TPAS-IPFSWG_Sept25-Draft.pdf/3d2ebfcf-27fa-bd2d-8b0e-78689478ccbb

Hillside-East Towanda PAR Class Year 2019 SUF Discussion

Carlos Rodriguez_of Invenergy presented an alternative to a proposed System Upgrade Facility (SUF) for the mitigation of the impact to transfer capability from Alle Catt Wind, Queue #596.

Mr. Rodriguez explained that the SUF applied in the analysis is a 410 MW PAR at the Hillside 230kV station on line 70 (Hillside-E. Towanda 230kV). Per an initial report on its scope, the Phase Angle Regulator (PAR) will have ratings of 498/574/653 MVA and an operational range of $\pm 40^{\circ}$. The estimates on cost and schedule are \$24,086,560 in 2021 dollars and 8 months to construct. From the analysis, allocation is assigned as 20% for Queue #595 and 80% for Queue #596. The NYISO recommendation is based on Good Utility Practice.

Invenergy proposes an alternative to install a series reactor on line 70 (Hillside – East Towarda 230kV). The series reactor would add 35% inductive compensation on the line.

Mr. Rodriguez provided analysis comparing the use of a PAR verses the Series Reactor. A New York State Gas and Electric (NYSEG) representative was on hand to note that NYSEG recommends the use of a PAR.

Invenergy requests that the NYISO reconsider the use of a series reactor in place of the PAR.

To see the complete Invenergy presentation, please go to:

https://www.nyiso.com/documents/20142/15597382/03_Hillside-

ETowandaSUF Sept% 2025% 202020.pdf/07d48308-c868-b2e6-2e00-d9bd6307911f

Friday, September 25, 2020

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

Notice of Potential Market Problem: Discussion on Demand Curve Reset Net Energy Ancillary Service (Net EAS) Model Gas Pricing Logic

Robb Pike of the NYISO led a discussion with stakeholders on Demand Curve Reset Net Energy Ancillary Service (Net EAS) model gas pricing logic. As part of the ongoing 2021-2025 DCR, certain stakeholders raised concerns about the gas pricing alignment logic contained in the Net EAS Model for the 2021-2025 period.

The NYISO identified a potential Market Problem associated with this discrete aspect of the Net EAS Model for the 2017-2021 DCR. The 2017-2021 DCR includes the ICAP Demand Curves for the 2017/2018 through 2020/2021 Capability Years (May 1, 2017 through April 30, 2020).

The NYISO is in the process of developing and validating revised reference point prices. Mr. Pike noted the preliminary results show both increases and decreases over the four year horizon. The NYISO is continuing to review and validate these preliminary results.

The NYISO is currently focusing efforts on validating/finalizing the reference point price recalculations. The NYISO has not determined whether the gas pricing alignment issue represents an actual Market Problem or quantified the potential impact.

The NYISO will return to the September 30, 2020 ICAPWG with the results of further analysis for discussion with stakeholders.

To see the complete presentations, please go to:

https://www.nyiso.com/documents/20142/15673670/2017-

 $\frac{2021\%20DCR\%20Net\%20EAS\%20Model\%2009252020\%20MIWG\%20FINAL.pdf/0efb7e67-7c0d-a343-8686-9f8de35a1c39$

FERC Filings

September 25, 2020

NYISO filing of proposed tariff revisions to a regulatory milestone requirement in the Large Facility Interconnection Procedures

September 24, 2020

Joint NYISO and Niagara Mohawk Power Corporation ("National Grid") 205 filing re: small generator interconnection agreement among NYISO, National Grid and Hecate Energy Albany 1

September 24, 2020

Joint NYISO and Niagara Mohawk Power Corporation ("National Grid") 205 filing re: small generator interconnection agreement among NYISO, National Grid and Hecate Energy Albany 2

September 24, 2020

NYISO filing of post technical conference comments regarding hybrid resources in Docket No. AD20-9-000

September 22, 2020

Joint NYISO and Central Hudson Gas & Electric Corporation ("Central Hudson") 205 filing re: small generator interconnection agreement (SA 2547) between NYISO, Central Hudson and Hecate Energy Greene 1 LLC

September 22, 2020

Joint NYISO and Central Hudson Gas & Electric Corporation ("Central Hudson") 205 filing re: small generator interconnection agreement (SA 2548) between NYISO, Central Hudson and Hecate Energy Greene 2 LLC

FERC Orders

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

Filings and Orders:

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