

## NYISO Consumer Interest Liaison Weekly Summary

**December 16 – December 20, 2019**

### **Notices:**

- *Strong winds across New York State over the weekend pushed electricity generated by wind power to a new record. The **new record wind power output of 1,675 megawatts (MW)** was set during the 11:00 p.m. hour on Saturday, December 14, eclipsing the previous record of 1,651 MW which was set during the 8:00 p.m. hour on April 26, 2019.*
- *The NYISO has released the **Reliability and Market Considerations for a Grid in Transition** report. The report can be found [here](#). The report will be discussed with stakeholders at the January 8, 2020 working group meeting.*
- *The **Enabling Technologies for DER Study Report** has been posted at the link below. [Report](#)*

### **Meeting Summaries:**

**Monday, December 17, 2019**

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

**Climate Change Study Phase 1**

Eric Fox of Itron presented the results of the NYISO “*Climate Change and Resilience Study*”. The study was commissioned by the NYISO in order to:

- Develop long-term energy, peak, and 8,760 hourly load forecasts that reflect the potential impact of climate change
- Evaluate temperature trends and state climate impact studies
- Construct scenarios that reflect state policy goals with climate change impacts

Mr. Fox reviewed the approach used to develop the weather scenario for the period of 2020 – 2050 using several documented climate studies for reference. The result of the weather analysis indicates that although there is little statistically significant change in average high temperatures, the majority of

the temperature change is resulting from increasing minimum temperatures. The average state-wide temperature increases were estimated at 0.7 degrees/F per year going forward.

Mr. Fox next detailed the modeling approach for developing a long term (2050) load forecast. Three cases were developed:

1. Reference Case – 2019 NYISO Gold Book assumptions
2. Policy Case – Adding in higher Energy-Efficiency (EE) and Photo-Voltaic Solar (PV) market penetration based on the New York State Clean Energy Standard
3. CLCPA Case – Additional policy requirements based on the Climate Leadership Community Protection Act.
4. Itron developed a “bottom-up” forecasting framework to integrate the end-use intensities with economics, price and weather. Utilizing the changes to peak values and load curve shapes, the effects of state policy were layered into the daily load profiles to reflect the change to system load. Forecasts were provided to compare the impacts on the three specific cases. The winter peak gradually surpasses the summer peak in the 2030s.
5. This presentation represents the completion of Phase 1 of the *Climate Change and Resilience Study*. Phase 2 of the study will continue through 2020. To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/9802057/NYISO%20Climate%20Impact%20Study%20Dec%2017%20posting.pdf/28c0031c-5b86-dfd4-69dd-c80c57d354dd>

#### Informational LCR Results

Dr. Nathan Gilbraith of the NYISO updated the informational Locational Capacity Requirement (LCR) values. With the recent notification of a large generator retirement (Somerset), the New York State Reliability Council (NYSRC) initiated a “Special Sensitivity Case” to inform stakeholders using the previous Final Base Case with the deactivation of Somerset in the calculation. The NYSRC reviewed the Special Sensitivity Case, adopted it as the IRM Final Base Case, and approved the 2020- 2021 Capability Year IRM of 18.9%. This case uses the approved NYSRC IRM and IRM Final Base Case assumptions to calculate informational LCRs for the G-J Locality, Zone J and Zone K. All other inputs are consistent with the November 21, 2019 ICAPWG “Final Base Case LCRs” case.

Dr. Gilbraith provided the revised Informational LCRs with a comparison to the November 21, 2019 results:

	<b>NYCA IRM</b>	<b>G-J</b>	<b>NYC</b>	<b>LI</b>
11/21/2019	19.0%	90.6%	86.9%	103.3%
2020 FBC	18.9%	89.4%	86.4%	103.3%

In response to a stakeholder question on why the LCRs are lower in the new calculation, Dr. Gilbraith explained that reduced ICAP in Zone A decreases congestion, allowing additional ICAP to be shifted from downstate Localities into the Rest-of-State region. The NYISO will provide the Final LCR values to stakeholders following the posting of the Final ICAP Load Forecast, in January 2020. To see the complete presentation, please go to:

[https://www.nyiso.com/documents/20142/9802057/ICAPWG\\_LCRs-clean.pdf/0e687a7e-d3ca-263a-7db6-8518229bdfb6](https://www.nyiso.com/documents/20142/9802057/ICAPWG_LCRs-clean.pdf/0e687a7e-d3ca-263a-7db6-8518229bdfb6)

#### Energy Storage Resources: Opportunity Costs and Mitigation Measures

Nicholas Shelton of the NYISO gave an overview of the methodology for determining the opportunity cost portion of a supplier’s reference level. The NYISO developed a standardized methodology for calculating the opportunity cost of these resources based on expected LBMPs which it plans to use as a baseline. NYISO will add a means for all Generators to reflect changes to their opportunity costs while

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injecting or withdrawing that will work similar to a thermal unit utilizing the fuel cost adjustment functionality.

Mr. Shelton led a review of the assumptions and explained that the NYISO will use the expected LBMP path for the day to determine the Energy Storage Resource's (ESR's) maximum revenue for each MW segment included in the units Reference Curve in the reference level software (RLS) for each hour of the day. The difference in the maximum revenue between the MW segments is used to determine the opportunity cost for that MW range for each hour.

Mr. Shelton detailed the calculations to be used to optimize the ESR revenues and calculate the opportunity cost. Examples were provided in an opportunity cost matrix for additional clarification. Reference Levels for ESRs will consist of opportunity costs plus any additional adders that the Market Participants can substantiate.

Mr. Shelton also led a review of the mitigation measures for ESRs. An example was provided illustrating a high withdrawal offer to benefit other generators. The parameters for a conduct test were also provided and discussed with stakeholders.

Because the price spread between offers to withdraw and inject may influence the scheduling and dispatch of NYISO-managed ESRs, the price spread offered will need to be monitored. The approach for monitoring price spreads was detailed and an example was provided.

Other issues concerning market mitigation include uneconomic withdrawals and decreasing real-time incremental energy offers and virtual bidding.

To see the complete presentation, please go to:

[https://www.nyiso.com/documents/20142/9802057/ESR%20-%20MIWG%20-%202012\\_17\\_19.pdf/1dfbbd94-d9fe-0cad-bbf0-775950f723bd](https://www.nyiso.com/documents/20142/9802057/ESR%20-%20MIWG%20-%202012_17_19.pdf/1dfbbd94-d9fe-0cad-bbf0-775950f723bd)

### **Wednesday, December 18, 2019**

#### **Management Committee**

##### **Motion #1:**

Motion to approve the draft October 30, 2019 Management Committee meeting minutes.

*The motion passed unanimously by show of hands.*

##### **Motion #2**

The Management Committee ("MC") hereby recommends that the Board of Directors approve the proposed revisions to the Open Access Transmission Tariff and the Market Services Tariff that were developed to implement the Short-Term Reliability Planning Process, as presented and discussed at the December 18, 2019 MC meeting, including the changes to Services Tariff Sections 23.4.5.6 and 30.4 that were posted on December 17, 2019 at IPPNY's request, and discussed at the meeting.

*The motion passed unanimously by show of hands.*

##### **Motion #3**

The Management Committee (MC), in accordance with Section 9.2 of the Management Committee By-Laws, hereby recommends for consideration by the NYISO Board of Directors the candidates presented by the Board Selection Subcommittee (BSSC) in Executive Session at the MC meeting on December 18, 2019.

*The motion passed by secret ballot vote.*

### **Thursday, December 19, 2019**

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

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## 2020 Market Projects

Zachary T. Smith of the NYISO introduced an overview of the 2020 Market Design projects, including anticipated schedules, deliverables and the person primarily responsible for the project design. Mr. Smith noted that the New York electric system and wholesale markets are facing a tremendous amount of change driving more urgency to make market changes faster. The NYISO will be relying on strong stakeholder engagement to ensure significant progress continues. To help with the teamwork, the project leads introduced themselves to stakeholders and led the project reviews.

The proposed Capacity Market Design projects, with the identified project lead, include:

- *BSM Renewables Exemption Study* Amanda Myott
- *Enhanced BSM Mitigation Study Period* Amanda Myott
- *Enhancing Fuel and Energy Security* Amanda Myott
- *Comprehensive Mitigation Review* Sarah Carkner
- *Expanding Capacity Eligibility* Sarah Carkner
- *Demand Curve Reset* Ryan Patterson
- *Locational Marginal Pricing of Capacity* Ryan Patterson
- *Tailored Availability Metric* Emily Conway

Under the Distributed Energy Resource Design group, the projects and project leads were provided as:

- *DER Participation Model* Michael Ferrari/Harris Eisenhardt
- *Dual Participation* Harris Eisenhardt
- *NYISO Pilot Framework* Michael Ferrari

The projects identified for the Energy Market Design were:

- *Ancillary Services Shortage Pricing* Pallavi Jain
- *Enhanced Fast Start Pricing* Pallavi Jain
- *ESR Participation Model* Pallavi Jain
- *Reserves for Resource Flexibility* Ethan Avallone
- *Carbon Pricing* Ethan Avallone
- *Mitigation Thresholds Review* Ethan Avallone
- *Hybrid Storage Model* Kanchan Upadhyay
- *Const. Specific Trans. Shortage Pricing* Kanchan Upadhyay
- *5-Minute Transaction Scheduling* Ashley Ferrer
- *Relocating the IESO Proxy Bus* Ashley Ferrer
- *Rel. & Mkt Cons. for Grid in Trans. Disc.* Emily Conway/Ashley Ferrer
- *More Granular Operating Reserves* Ashley Ferrer

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/9869531/2020%20Market%20Design%20Project%20Outlook.pdf/324f466d-42cb-7435-a74a-94fb470627e8>

## Uneconomic Production

Zachary Stines of the NYISO led a discussion with stakeholders outlining the proposed enhancements to market rules concerning uneconomic production. In the MST Attachment H, Section 23.2.4.1.3, the tariff defines uneconomic production as:

***“Uneconomic production from an Electric Facility, that is, increasing the output of an Electric Facility to levels that would otherwise be uneconomic in order to cause, and obtain benefits from, a transmission constraint”***

Mr. Stines identified some limitations to the current rules and highlighted potential enhancements to the process. It was noted that although the current conduct test and uninstructed deviation measures are

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sufficient, the definition of uneconomic production could be enhanced by describing uneconomic production as increasing the output of an Electric Facility to levels that would otherwise be uneconomic. Mr. Stines noted feedback from stakeholders for consideration.

Enhancements to the uneconomic production Impact Test are under consideration to account for the following:

- *An increase or decrease in Energy prices*
- *Increase in congestion cost*
- *Increase in either BPCG or DAMAP*

Mr. Stines described another potential enhancement to Mitigation Measures by providing language that clarifies the applicable mitigation measure for uneconomic production that fails the conduct test and has impact. Applying financial sanctions would be consistent with the mitigation measures for uninstructed deviation from base points. Mr. Stine expressed the importance of consultation with the Market Participant prior to applying mitigation.

The NYISO will consider stakeholder feedback and return to a future MIWG with proposed tariff language for further discussion. To see the complete presentation, please go to:

[https://www.nyiso.com/documents/20142/9869531/12-19-19\\_Stines\\_UneconomicProduction\\_Final.pdf/e6e60e7f-217b-9bae-e252-b19fad5624e7](https://www.nyiso.com/documents/20142/9869531/12-19-19_Stines_UneconomicProduction_Final.pdf/e6e60e7f-217b-9bae-e252-b19fad5624e7)

#### 2021-2025 ICAP Demand Curve Reset: Proposed Process Changes

Ryan Patterson of the NYISO presented two proposed changes to the Demand Curve Reset (DCR) process. Mr. Patterson noted that only one of the proposals is moving forward for governance action at this point.

The first tariff revision discussion was for modifying the calculation of the Gross CONE composite escalation factor. At the December 5, 2019 ICAPWG/MIWG/PRLWG meeting, the NYISO discussed its modified proposal in response to the NYTOs' comments related to the calculation methodology for the Gross CONE composite escalation factor. The NYISO has updated the proposed tariff revisions to simplify the identification of the baseline period. Redline tariff language was provided for stakeholder review. The NYISO proposes to bifurcate discussions of the Gross CONE composite escalation factor from the NYTOs' proposal to extend the collar mechanism and will seek stakeholder approval of the proposed changes to the Gross CONE composite escalation factor at the January 2020 BIC and MC meetings.

Mr. Patterson also led a discussion on the extension of the collar mechanism. Mr. Patterson suggested that if stakeholders supporting the collar mechanism extension desire to bring that matter to a vote, the NYISO recommends that such stakeholders present a proposal for a "conceptual vote" at either the January 2020 or February 2020 BIC meeting. If a conceptual vote is approved by stakeholders, the NYISO will coordinate with stakeholders to further develop the details of an extended collar mechanism and associated tariff revisions at the ICAPWG prior to seeking stakeholder approval of a proposal at a subsequent MC meeting.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/9869531/DCR%20Process%20Changes%20121919%20ICAPWG.pdf/3e16016e-8f56-d6de-e72d-a78c4d5081b7>

#### ESR Bidding Changes

Padam Singh of the NYISO presented new bidding parameters developed for Energy Storage Resources (ESRs). The new parameters must be submitted along with an ESR's economic offers into the Market Information System (MIS). Mr. Singh highlighted the new parameters and provided a diagram to illustrate where the new parameters are placed in the MIS bidding submission form.

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The Upload/Download templates have also been updated to allow submission of the new bidding parameters. Examples were provided to illustrate the changes to the format.

Training will be offered to stakeholders as the implementation nears and a “sandbox” environment will be provided to allow stakeholders to get familiar with the updates.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/9869531/ESR%20Bidding%20and%20UploadDownload%20Changes.pdf/e6b5b0e4-f318-c1f2-ee28-117782f8ed76>

### Comprehensive Mitigation Review: Revisions to Part A Exemption Test for Public Policy Resources

Jonathan Newton of the NYISO presented the proposal to enhance Buyer Side Mitigation (BSM) based on the MMU’s “*Proposed Enhancements for BSM Part A and Part B Exemption Evaluations*”. The NYISO believes it is necessary to expand the objective of the project to; modify the NYISO Installed Capacity market framework in a balanced manner that (i) preserves competitive price signals and economically efficient market outcomes required to maintain system reliability and (ii) supports the Climate Leadership and Community Protection Act (CLCPA) goals.

The MMU proposal is a two pronged revision of the Part A Exemption and Mitigation Study Period:

- Prong 1 involves changes to the Part A and Part B exemption tests such that Public Policy Resource (“PPR”) Examined Facilities would be placed in the supply stack before non-PPR Examined Facilities
- Prong 2 involves changes to the Part A and Part B exemption tests such that the Mitigation Study Period would be revised to apply to each project based upon the characteristics of the technology that it uses

The NYISO proposal is to revise the order of the Part A Exemption Test to precede the Part B Exemption Test. The order in which resources are evaluated for the Part A Exemption Test would place all Public Policy Resources (PPR) before non-PPR, even if the latter are lower cost. When asked by a stakeholder how the NYISO would order the PPR projects, Mr. Newton explained that the NYISO has not determined that ordering at this time and encouraged stakeholder input.

Mr. Newton explained that the NYISO was developing the proposal including the following design considerations:

- *What would qualify as a PPR resource*
- *How to order PPRs in the BSM evaluations*
- *Partial Exemptions*
- *Integration with Mitigation Study Period changes*

Charts were provided to illustrate the exemption threshold sensitivity and the potential quantity available for exemptions in the coming years.

The NYISO will consider feedback received from Stakeholders and continue with discussions in January 2019. Broader discussion on the Capacity Mitigation Review will continue throughout the year.

To see the complete presentation, please go to:

[https://www.nyiso.com/documents/20142/9869531/CMR%20Part%20A%20Rev%2012192019\\_FINALE.pdf/797e3eb9-e30d-e60a-c8ce-8bff5875e2ec](https://www.nyiso.com/documents/20142/9869531/CMR%20Part%20A%20Rev%2012192019_FINALE.pdf/797e3eb9-e30d-e60a-c8ce-8bff5875e2ec)

## **FERC Filings**

### **December 20, 2019**

NYISO filing of Proposed tariff revisions of enhancements to the Competitive Entry Exemption Under its Buyer-Side Capacity Market Power Mitigation Measures

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**December 20, 2019**

NYISO filing of tariff revisions re: Fast-Start pricing mechanism to comply with FERC April 18, 2019 Order.

**December 20, 2019**

NYISO informational filing related to implementation of the ESR participation model

**December 19, 2019**

Section 205 filing of proposed tariff revisions regarding interconnection process improvements

**December 17, 2019**

NYISO filing of proposed tariff revisions regarding Cost Containment in the Public Policy Transmission Planning Process

**FERC Orders**

**December 20, 2019**

FERC Letter Order accepted a Cost Reimbursement Agreement (SA 2486) between Niagara Mohawk Power Corporation and O'Brien and Gere Inc. of North America

**December 20, 2019**

FERC order accepted part, rejected part and directed a further energy storage resource compliance filing

**December 20, 2019**

FERC order accepts part, rejects part and directs a further energy storage resource compliance filing

**December 20, 2019**

Order accepts in part, and rejects in part NYISO's energy storage resource compliance filing and directs a further compliance filing

**December 16, 2019**

FERC Letter Order accepted revisions to Contract No. 59.1 contained in OATT Attachment 1 Table 1A

**Filings and Orders:**

[http://www.nyiso.com/public/markets\\_operations/documents/tariffviewer/index.jsp](http://www.nyiso.com/public/markets_operations/documents/tariffviewer/index.jsp)