

## NYISO Consumer Interest Liaison Weekly Summary

**April 13 – April 17, 2020**

### **Notices:**

- *The Cayuga Units 1 and 2 Generator Deactivation Assessment has been posted to the following link: [Generator Deactivation Assessment](#)*
- *Please be advised that a draft of the **2020 Load and Capacity Data Report** (also known as the "Gold Book") is now available for your review and comment and has been posted to the NYISO website at the link listed below. The draft for review is the public version which has Table VI-1 redacted, as it may contain Critical Energy Infrastructure Information. This information will be available to individuals with a MyNYISO account when the final version is posted. [Draft 2020 Load and Capacity Data Report](#)*

### **Meeting Summaries:**

#### **Monday, April 13, 2020**

##### **Load Forecasting Task Force**

##### **Load Forecast Uncertainty Models for the 2021 IRM Study**

Riaz Khan of the NYISO presented a summary of the 2021 Load Forecast Uncertainty Model. The load forecast uncertainty (LFU) model captures the impacts of weather conditions on future loads. Recognizing the unique LFU nature of individual NYCA zones, the LFU model is subdivided into five separate areas: New York City (Zone J), Long Island (Zone K), Zones H and I, Zones F and G, and the rest of New York State (Zones A-E).

Mr. Khan presented the load forecast ranges based on probability. Forecast values were provided in tabular and graphic format. Each area was discussed in detail with stakeholders.

To see the complete presentation, please go to:

[https://www.nyiso.com/documents/20142/11883362/LFU\\_Summary.pdf/9b2bed11-0fe5-ed3-fdd5-0c592564e78a](https://www.nyiso.com/documents/20142/11883362/LFU_Summary.pdf/9b2bed11-0fe5-ed3-fdd5-0c592564e78a)

##### **Impacts of COVID-19 on NYISO Demand**

Chuck Alonge of the NYISO presented the impact of COVID-19 pandemic on energy demand. Mr. Alonge noted that Q1 2020 was warmer than anticipated.

The week leading up to the New York State on PAUSE restrictions, the week of March 15–21, 2020, reflected a weather adjusted impact to energy demand of 4%. Mr. Alonge explained the changes to the daily load curves with the restrictions in place. Con Edison, due to a large commercial share of load, has had significant reductions in energy relative to other load zones. Residential energy use has increased during the mid-day (partially offsetting drop in commercial sector). Mr. Alonge noted the largest decrease to demand is occurring in the HB5:00 to HB7:00 with load tracking closer to normal as the day advances. Overall, the impact has resulted in an energy demand decrease of approximately 8%.

The NYISO will present this update to the Operating Committee for information. NYISO Operations and Demand Forecasting Team will continue to monitor and assess the impacts of the COVID-19 shutdowns.

In response to a stakeholder question, the NYISO responded that there will be an in-depth analysis of the impacts of COVID-19 on energy demand following a return to normal conditions.

To see the complete presentation, please go to:

[https://www.nyiso.com/documents/20142/11883362/NYISO\\_COVID.pdf/3660412f-c7a7-89a4-a2c5-0af3ff33d90c](https://www.nyiso.com/documents/20142/11883362/NYISO_COVID.pdf/3660412f-c7a7-89a4-a2c5-0af3ff33d90c)

## **Tuesday, April 14, 2020**

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

#### **Enhancing Fuel and Energy Security Update**

Wesley Yeomans of the NYISO outlined the NYISO's plan to enhance fuel security monitoring. The scope of the project is to enhance monitoring by adding additional fuel security elements to the Winter Capacity Assessment (Fall) and Cold Weather Operations (Spring) as shown (or will be) in the respective presentations. The effort will also develop forward load forecasts to be used as an input for internal fuel and energy security assessments and further define and incorporate on-going initiatives.

Mr. Yeomans detailed the many elements involved in fuel security monitoring. Issues for enhanced monitoring include:

- *Generation mix*
- *Gas Infrastructure*
- *Generator Outages*
- *Dual Fuel Availability*
- *Fuel Disruptions and Impact*
- *Forecasting (Load, EE, EV, Electrification, DER, DR, etc.)*

The NYISO will coordinate this effort with a related project, B688 - GFER Upgrade, which features enhancements to the generator fuel inventory survey application to better inform on generator winter preparation/fuel availability.

Mr. Yeomans noted that a future consideration for the NYISO is to determine if/when it may be prudent to re-run a Fuel and Energy Security study.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/11904936/Fuel%20and%20Energy%20Security%20-%20Recommendations%20Update.pdf/f9e830a6-fbed-fd28-651f-ba72d0113f79>

#### **Bidding Rules and Bidding Template updates**

Padam Singh of the NYISO presented updates to the bidding rules and templates for Energy Storage Resources (ESRs). ESR bids will be managed using same bidding screens and templates as existing Generator Bids.

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Mr. Singh provided the values that ESRs will be required to submit with their economic offers.

Additional bidding parameters include:

- *Upper Storage Limit(MWh)*
- *Lower Storage Limit(MWh)*
- *Beginning Energy Level (DAM Only) (MWh)*
- *ESR Energy Management Mode (ISO/Self)*
- *ESR Outage Type (“N”, “P” or “F”)*
- *Opportunity Cost*

Mr. Singh reviewed the formatting for each parameter and detailed the information required to submit a validated bid for ESRs. The NYISO will conduct market trials for bidding starting on April 28, 2020 and running through April 30, 2020, to provide an opportunity for stakeholders to interface with the market software prior to deployment.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/11904936/Bidding%20Rules%20and%20Bidding%20Template%20updates%20%20ESR.pdf/11ba558c-cbda-0d26-b3f3-55f641d465dd>

### Hybrid Storage Model: Market Design Overview

Kanchan Upadhyay of the NYISO presented several energy market participation options for Hybrid Storage Resources (HSRs). HSRs are a combination of front-of-the-meter generation and energy storage resources physically located behind a single Point of Interconnection (POI). This project seeks to explore market participation option(s) for large paired/co-located front-of-the-meter generators and energy storage resources. For faster design and implementation, the NYISO proposes that an HSR participate under existing market models, to the extent possible. This may necessitate minor modifications to existing market rules, but would allow for quicker implementation. Stakeholders posed several questions about the interconnection process for these resources and the NYISO maintained that this is an ongoing discussion and committed to have more details at future ICAPWG/MIWG meetings.

There are three options under consideration for implementation:

- Option 1: As distinct generators
- Option 2: As an aggregation behind the same POI
- Option 3: As a self-managed ESR

Diagrams were provided to highlight the differences between each of these options.

Option 1 with HSRs operating as distinct generators is currently available. Each component would participate under its own participation model. In this example, the Solar PV Resource would participate as an Intermittent Power resource (IPR) and the Energy Storage Resource (ESR) will participate under the ESR model (expected to be deployed in Q3 2020). The NYISO is currently evaluating potential enhancements that would enable this option to accommodate HSR projects with an injection limit that is less than the combined capability of its component resources.

Option 2 would provide one PTID, one bid and one schedule for the combined resources within the HSR. The HSR would be subject to the same energy market participation rules that apply to DER Aggregations, but, there would be no 20MW size limit for individual resource components and all components would be required to be behind the same POI. Ms. Upadhyay noted that eligibility to provide reserves and/or regulation would be limited with this model for an HSR comprising of IPRs and ESRs. NYISO expects it would be able to support this option in 2021, following the deployment of the DER model.

Option 3 would provide one PTID, one bid and one schedule for the combined resources within the HSR. The HSR would be subject to the same energy market participation rules that apply to an ESR

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with a Self- Managed Energy Level. The ISO will see the hybrid project as an ESR with Self- Managed Energy Level with the maximum capability limited to the capability of the ESR component(s). Under this option, an HSR comprised of a combination of IPR(s) and ESR(s) will be eligible to provide reserves and regulation. NYISO expects it would be able to support this option in 2021, following the deployment of the ESR model.

Amanda Myott of the NYISO continued the discussion with a review of the key obligations for capacity suppliers under existing models, to inform the NYISO's proposed HSR structures.

For Option 1, the NYISO proposes that ICAP and UCAP for each resource component be calculated based on the existing method applicable to that resource type, using the existing participation models.

The NYISO proposes to calculate ICAP and UCAP under Option 2 using the availability-based method, consistent with existing DER rules, using the UOL of the entire HSR to measure availability. For Option 3, the NYISO proposes to calculate ICAP and UCAP using the availability-based method, consistent with existing ESR rules where the UOL of the ESR asset within the HSR would be used to measure availability.

Going forward, the NYISO is seeking stakeholder feedback and will continue discussions with HSR developers to understand which option(s) best align with their business needs. The NYISO will continue discussions on market participation concepts for hybrid storage resources and present a Market Design Concept Proposal to stakeholders in Q2 2020. A Consumer Impact Analysis of the proposed market design will be provided in Q3 2020. The NYISO plans a Market Design Complete proposal prior to the end of Q3 2020.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/11904936/Hybrid%20Storage%20Model%20MIWG%204142020%20Final.pdf/08841944-5251-4497-c52b-105151f150ad>

#### Grid in Transition Discussion: Reliability & Market Considerations

Ashley Ferrer of the NYISO continued the discussion of the high-level market design improvements recommended in the Reliability Gap Assessment to coherently and efficiently satisfy New York's changing grid reliability needs. The Reliability Gap Assessment identified high-level, potential market design concepts for existing and potential future components of NYISO's wholesale energy and ancillary service markets.

Matrices were provided to illustrate which potential energy and ancillary services projects address particular gaps identified in the assessment. Ms. Ferrer explained the identified gaps that each market design improvement would help to address.

Potential regulation improvements include:

- *Increasing statewide regulation procurement requirements*
- *Investigate benefits of separate "up" and "down" service*
- *Investigate the potential for new resource types to supply frequency response capability*

Operating reserves market design improvements include:

- *Increasing statewide ten and/or thirty-minute operating reserve requirements*
- *Increasing locational thirty-minute total operating reserve requirements*
- *Evaluate the sustainability of 10-minute and 30-minute reserves*

The benefits of these proposed enhancements were detailed and discussed with stakeholders. Ms. Ferrer noted that Ancillary Services Shortage Pricing, Reserves for Resource Flexibility, and More Granular Operating Reserves are examples of the current efforts in market design.

Energy Market mechanics improvements were also presented for discussion. Improvements such as:

- *Developing new capability for operator management of Energy Storage Resources*

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- *Improving NYISO’s Real-Time Market and Day-Ahead Market Energy Processes*
- *Accounting for increased real-time load forecast uncertainty*
- *Promoting more frequent scheduling with neighboring regions*
- *Investigating the need for ramping requirements in NYISO markets*

Ms. Ferrer noted that Energy Storage Resources and 5-Minute Transaction Scheduling were examples of these improvements currently underway.

The next step in this process will occur on May 11, 2020, when the NYISO will be presenting on Inter-Regional Coordination. Stakeholders interested in presenting at a future working group meeting should contact Emily Conway at [econway@nyiso.com](mailto:econway@nyiso.com) and Ashley Ferrer at [aferrer@nyiso.com](mailto:aferrer@nyiso.com). To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/11904936/Grid%20in%20Transition%20Discussion%20MIWG%2004142020.pdf/aa59f891-c7e4-76fe-1c43-30a2be9a9035>

### Discussion of Part A Enhancements

Christina Duong reviewed incremental changes to the tariff language for the Buyer Side Mitigation (BSM) Part A enhancements and provided an additional example. Stakeholder requested clarification on the testing order, specifically related to the nesting locality interaction of Examined Facilities located in a nested locality. At the April 10, 2020 ICAPWG/MIWG meeting, an example of the ordering process was provided and discussed with stakeholders and further clarity was requested. Ms. Duong provided additional details on the ordering process based on the prior example, with some minor changes in language for stakeholder clarification.

Ms. Duong detailed the incremental tariff changes for stakeholder review. Redline tariff sections were provided and reviewed. To see the complete presentation, please go to:

### **Wednesday, April 15, 2020**

#### **Management Committee**

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

The Management Committee hereby recommends that the Board of Directors approve retaining the \$6.4 million remaining from the 2019 budget cycle to potentially offset a shortfall in 2020 Rate Schedule 1 recoveries and unplanned expenditures related to NYISO’s Covid-19 response in 2020 as described in the presentation materials for the April 15, 2020 Management Committee meeting.

***The motion passed unanimously with an abstention.***

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

The Management Committee (“MC”) hereby recommends revisions to the NYISO’s Market Services Tariff (“MST”) as described in the presentation entitled “ESR Scheduling Performance Proposal,” at the April 15, 2020 MC meeting and recommends that the Board of Directors authorize the NYISO staff to file these under Section 205 of the Federal Power Act.

***The motion passed unanimously with an abstention.***

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

The Management Committee (MC) hereby approves the revisions to the Market Administration and Control Area Services Tariff as described in the final revised tariff revisions dated April 15, 2020 accompanying the presentation entitled “Comprehensive Mitigation Review: Revisions to Part A Exemption Test” made at the April 15, 2020 MC meeting, 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 with two in opposition and abstentions.***

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**Thursday, April 16, 2020**

**Operating Committee**

**Motion #1:**

The Operating Committee hereby approves the meeting minutes from February and March 2020.

***Motion passed unanimously***

**Motion #2:**

The Operating Committee (OC) hereby approves the UPNY-Con Ed Stability Limit Study Report as presented and discussed at the April 16, 2020 OC meeting.

***Motion passed unanimously***

**Motion #3:**

The Operating Committee (OC) hereby approves the UPNY-Con Ed Voltage Limit Study Report as presented and discussed at the April 16, 2020 OC meeting.

***Motion passed unanimously***

**Motion #4:**

The Operating Committee (OC) hereby approves the Joint NYISO & ISO-New England Stability Study Report with implementation currently scheduled for May 12, 2020, as described in the presentation made to the OC and discussed at the April 16, 2020 OC meeting.

***Motion passed unanimously***

**Motion #5:**

The Operating Committee (OC) hereby approves the revisions to the Emergency Operations, Transmission & Dispatch Operations and Ancillary Services Manuals regarding the updates required for the implementation of the Dual Participation rules to become effective May 1, 2020, as described in the presentation made to the OC on April 16, 2020.

***Motion passed unanimously***

**Motion #6:**

The Operating Committee (OC) hereby approves the revisions to the Ancillary Services Manual regarding the updates required for the implementation of the Meter Services Entity rules to become effective May 1, 2020, as described in the presentation made to the OC on April 16, 2020.

***Motion passed unanimously with one abstention***

**Motion #7a:**

The Operating Committee (OC) hereby approves the Q#774 Tracy Solar System Reliability Impact Study (SRIS) report as presented and discussed at the April 16, 2020 OC meeting.

***Motion passed unanimously***

**Motion #7b:**

The Operating Committee (OC) hereby approves the Q#786 Ravenswood Storage System Reliability Impact Study (SRIS) report as presented and discussed at the April 16, 2020 OC meeting.

***Motion passed unanimously***

**Motion #8a:**

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The Operating Committee (OC) hereby approves the Q#825 Setauket Energy Storage System Reliability Impact Study (SRIS) scope as presented and discussed at the April 16, 2020 OC meeting.  
*Motion passed unanimously*

**Motion #8b:**

The Operating Committee (OC) hereby approves the Q#939 Far Rockaway System Reliability Impact Study (SRIS) scope as presented and discussed at the April 16, 2020 OC meeting.  
*Motion passed unanimously*

**Motion #8c:**

The Operating Committee (OC) hereby approves the Q#953 Maple Hill Solar System Reliability Impact Study (SRIS) scope as presented and discussed at the April 16, 2020 OC meeting.  
*Motion passed unanimously*

**Motion #8d:**

The Operating Committee (OC) hereby approves the Q#956 Holbrook Energy Storage System Reliability Impact Study (SRIS) scope as presented and discussed at the April 16, 2020 OC meeting.  
*Motion passed unanimously*

**Motion #8e:**

The Operating Committee (OC) hereby approves the Q#957 Holtsville Energy Storage System Reliability Impact Study (SRIS) scope as presented and discussed at the April 16, 2020 OC meeting.  
*Motion passed unanimously*

**Motion #8f:**

The Operating Committee (OC) hereby approves the Q#974 KCE NY 19 System Reliability Impact Study (SRIS) scope as presented and discussed at the April 16, 2020 OC meeting.  
*Motion passed unanimously*

**FERC Filings**

**April 14, 2020**

NYISO answer to IPPNY Protest of NYISO's March 11, 2020 filed Compliance Plan and Request for Conditional Waiver regarding BSM Rules for new Special Case Resources

**April 17, 2020**

NYISO 205 filing on behalf of Niagara Mohawk Power Corporation of an Engineering and Procurement Agreement (SA2531) between NMPC and NY Transco

**FERC Orders**

**April 16, 2020**

FERC order accepted PPTPP Agreement between NYISO, NYPA, and LS Power Grid NY effective February 3, 2020, as requested

**April 16, 2020**

FERC order granted NYISO's request for waiver of certain language in the definition of "Public Power Entity" in MST Section 2.16

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**April 15, 2020**

FERC Letter Order accepting filing to set an effective date of April 7, 2020, for revisions to the NYISO/PJM Joint Operating Agreement regarding Market-to-Market Entitlements

**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)