

NYISO Consumer Interest Liaison Weekly Summary

September 30 – October 4, 2019

Notices:

- *The NYISO is pleased to announce a **new online process for completing and submitting a Critical Energy Infrastructure Information Request Form and Non-Disclosure Agreement**. As discussed at the October 1st Transmission Planning Advisory Subcommittee, the enhanced online form replaces the previous PDF form required for accessing CEII information, such as FERC 715 power flow cases and maps, interconnection materials, and MyNYISO access.*
- *On October 2, 2019, the NYISO filed comments in response to the Notice Soliciting Comments issued on August 8, 2019 in the New York Public Service Commission **proceeding on motion to implement a large-scale renewable program & clean energy standard (Case No. 15-E-0302)**. A copy of the comments is [here](#) to review and also available on the NYISO website at http://go.pardot.com/e/302901/regulatory-resources/g28qb/150707493?h=K8PfEiZPm0j_Sk9pTKDoLpfTzy4F9lahxHb7A-ofy7Y*

Meeting Summaries:

Tuesday, October 1, 2019

Joint Installed Capacity Working Group/Transmission Planning Advisory Subcommittee

NYISO Interconnection Projects Community Portal Overview

Thinh Nguyen of the NYISO presented an overview of the Interconnection Projects Community Portal. The portal is one of the components that addresses certain administrative process improvements that the Federal Energy Regulatory Commission accepted in December 2017 as a part of the NYISO's Comprehensive Interconnection Process Improvements. The portal allows for a streamlined process that eliminates the two-way communication process required to complete project submissions and obtain status updates.

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This automated portal, or stakeholder interface, provides Developers the ability to submit, revise, and withdraw Interconnection Requests. This allows for a more efficient process by reducing turn-around time and further increases transparency for developers.

Screen shots of the portal were provided and discussed with stakeholders. A user account will be necessary to interact with the system and can be obtained through an automated request form on the site. NYISO will conduct training to prepare stakeholders for the new system. The training course will be archived on the website for future reference. To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8456635/03_InterconnectionPortal_100119_TPAS.pdf/0d42ddc0-6fb5-4bb3-c1dc-43576ea64711

Study Scopes under Consideration for Recommendation for OC Approval

Queue #830

Astoria Energy Storage 2

Energy Storage – Battery

100 MW W/S

Astoria, Queens, NY

Recommended to the OC for approval

Status of Class Year 2019

Ed Cano of the NYISO provided an update on the Class Year 2019 (CY19) process. The NYISO is finalizing the agreements with CY19 candidates. An email notice will be sent out 10 days prior to the posting of the ATBA (Annual Transmission Reliability Assessment), providing Developers the opportunity to withdraw before the ATBA is completed. The ATBA posting is anticipated for the end of October 2019. The NYISO will notify the market when the CY19 projects are finalized, anticipated for mid-November 2019.

Class Year/Interconnection Queue Redesign

Thinh Nguyen of the NYISO updated the Class Year and Interconnection Queue redesign process. Mr. Nguyen walked stakeholders through incremental changes made since the September 24, 2019 TPAS meeting. It was noted that there is a possibility of a delay for the first Mini-Deliverability study as Class Year 2019 (CY19) may go to the Operating Committee prior to the completion of the mini-Deliverability study. Mr. Nguyen provided a timeline diagram to illustrate the blackout period from CY19 OC approval to the Class Year 2020 start date, during which, a mini-Deliverability study cannot move forward.

Other minor changes were highlighted and clarified for the proposal.

Sara Keegan of the NYISO led a review of the incremental changes to tariff language for stakeholder discussion.

An anticipated schedule for the redesign completion was provided including additional working group presentations through October 2019. The NYISO anticipates November 2019 governance action and a December 2019 filing to FERC, leading to an Order prior to the CY19 Notice of Additional SDU Studies in February 2020.

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To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8456635/07_Class%20Year%20Redesign%20100119_TPA_S_ICAPWG_Final.pdf/d510de2c-2cd3-b9a7-532c-4630bb12ff4f

Thursday, October 3, 2019

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

Potential New Carbon Pricing in the NYISO Market

Susan Tierney of The Analysis Group (AG) presented the final report on the potential implementation of a carbon price into the wholesale New York electrical markets. Originally engaged by NYISO to examine potential economic impacts of the proposed carbon-pricing mechanism for NY's wholesale power markets, Ms. Tierney explained that the premise of the analysis changed. The study now looks at how New York will best accomplish its goals and meet the mandates for reducing GHG emissions in the power sector and in the economy at large. The decision to alter the premise was a result of meetings with stakeholders, a thorough look at the original Brattle Group study modeling runs and the enactment of New York's Climate Leadership and Community Protection Act.

Ms. Tierney led an outline review of the report with stakeholders. In response to a stakeholder question concerning the report being final, the NYISO clarified that stakeholder comments are always encouraged and that changes could be made if necessary.

AG representatives will return to the NYISO to address stakeholder questions and comments on the report during the week of October 21, 2019. Notice will be provided for the date when confirmed. The NYISO will continue with stakeholder engagement and outreach to discuss the carbon pricing proposal benefits.

To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8524371/2%20Potential%20New%20Carbon%20Pricing%20in%20the%20NYISO%20Market.pdf/e257e203-26b1-f316-fa04-c4d246fb3d1c>

To see the complete "Clean Energy in New York State: The Role and Economic Impacts of a Carbon Price in NYISO's Wholesale Electricity Markets", please go to:

<https://www.nyiso.com/documents/20142/2244202/Analysis-Group-NYISO-Carbon-Pricing-Report.pdf/81ba0cb4-fb8e-ec86-9590-cd8894815231>

DER Pilot Program Status Update

Michael Ferrari of the NYISO updated the status of the Distributed Energy Resource (DER) pilot program. In 2017, the DER Roadmap process initiated an effort to develop DER pilot projects to guide the NYISO in understanding how the integration of new technologies will affect NYISO systems. In 2018, the NYISO selected three proposals from a Final Review Process. Mr. Ferrari led a review of the telemetry used for the pilot program which will also continue to be tested throughout the pilot program.

Project #1 successfully demonstrated the capability of iES/Axon's pilot project in NYISO's pilot test environment. The aggregation, consisting of Demand Response resources, had a declared value of 0.6 MW.

Project #2 consists of 2 battery storage units in Zone J, totaling 0.5 MW. This project is expected to commence testing in November 2019.

Project #3 is solar-plus-storage in Zone G with a total injection capability of 4 MW. The anticipated start date for this project is January 2020.

Mr. Ferrari detailed the anticipated objectives of the pilot program such as:

- *Demonstrate use of a third party vendor to provide telemetry aggregation services*
- *Demonstrate operational coordination with NYISO for non-wholesale activity*

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- *Demonstrate measurement and verification of an aggregation of energy storage assets co-located with generation (i.e. solar)*
- *Demonstrate regulation service with distribution-connected DER aggregation*

NYISO will continue working with the relevant utilities to conduct coordination exercises in line with those discussed for DER participation. To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8524371/NYISO%20DER%20Pilot%20Status%20Update%20100319.pdf/f112d865-3d93-c885-fe28-9dad17e96a99>

Preliminary LCR Values

Dr. Nathaniel Gilbraith of the NYISO presented the preliminary Locational Capacity Requirement (LCR) values for the 2020 Capability Year. Dr. Gilbraith led a review of the inputs used to calculate the 2019 LCR values and noted the inputs that would be updated prior to establishing the final 2020 LCR values. It was stressed that the preliminary values are informational only. The preliminary LCRs for 2020 are:

- 90.3% Zones G-J
- 86.7% Zone J
- 103.2% Zone K

The NYISO will return to ICAPWG in November and present the updated preliminary LCRs based on the final IRM (Installed Reserve Margin) case, as presented to the New York State Reliability Council. The NYISO will calculate and present the final LCRs to the OC in January 2020. To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8524371/ICAPWG_Info_LCR%20100319.pdf/063100e8-9b73-957d-f4af-fd803078b9aa

Friday, October 4, 2019

Electric System Planning Working Group/Transmission Planning Advisory Subcommittee

CARIS 1 Scenario Load Forecast Development

Arvind Jaggi of the NYISO updated the 2019 Congestion Assessment and Resource Integration Study (CARIS) forecast development. Starting with zonal ‘Topline’ hypothetical projections¹, the NYISO layered on separate forecasts of the impacts of Electric Vehicles (EV), Space Heating electrification, Energy Efficiency including Codes & Standards (EE), and behind-the-meter Solar (PV) to arrive at the ‘net’ load forecasts.

The NYISO will prepare three scenario load forecasts:

- *High-load Forecast*
 - *Higher penetration of Electric Vehicles (EV) and Heat Pumps for electrified Space Heating plus ‘baseline’ forecasts for EE & PV*
 - *No distinction made between Air Source Heat Pumps and Ground Source Heat Pumps*
- *Low-load Forecast*
 - *Reflects Climate Leadership and Community Protection Act (CLCPA) targets with respect to behind-the-meter photovoltaic (PV) and Energy Efficiency (EE) plus ‘baseline’ forecasts for EV and no Heat Pumps*
- *‘70 x 30’ Load Forecast*
 - *Incorporates scenario forecasts for EV, Space Heating, EE and PV*

¹ Based on data starting in 1993, the hypothetical “Topline” load projection models the energy usage trend in the absence of impacts attributable to EE, PV, EV and Electrification

The decremented effects of the aggressive EE and PV targets outweigh the incremental impacts of EV and Electrification in the high-load and low-load scenario load forecasts.

Mr. Jaggi provided data on the structure of the 70X30 load forecast illustrating that the ‘Topline’ load projection declines to around 136,000 GWh of ‘net’ load due to the cumulative impact of assumed levels of EE, PV, DG and EV and electrification of Space Heating.

To see the complete presentation, please go to:

https://www.nyiso.com/documents/20142/8530408/02%202019_CARIS_ScenarioLoadForecasts.pdf/bc3015b3-26f2-9592-8820-c7eea74c1b4a

Updated 2019 CARIS 1 Base case and Identification of Three Studies

Chen Yang of the NYISO provided updates to the base case and benchmark results for the CARIS 1 study. Following the September 11, 2019 ESPWG/TPAS meeting, NYISO’s analysis revealed numerical instability issues using the current General Electric (GE) MAPS version V14.100. Based on the recommendation of GE, the NYISO proposes to use MAPS V14.300 for the 2019 CARIS1 study. NYISO re-ran the 2019 CARIS1 base case as well as the 2017 benchmark case with MAPS V14.300. Overall, the updated 2017 benchmark results using MAPS V14.300 align better with actual historical values with some minor changes compared to prior benchmark case results. Mr. Yang led a review of the changes for stakeholder discussion.

The updated 2019 CARIS 1 base case results were provided to and discussed with stakeholders. Mr. Yang detailed the key congestion drivers with a timetable of notable events through 2025.

The three selected studies are identified as:

- **Central East**
- **Central East-Knickerbocker**
- **Volney-Scriba**

The NYISO noted stakeholder feedback on the study of Central East congestion related to the pending AC Transmission project. A schedule of the future CARIS 1 presentations was provided to stakeholders with the draft report anticipated for December 16, 2019. To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8530408/03%202019%20CARIS%201%20Base%20Case%20and%20studies.pdf/6ac9c706-565a-4d00-b5c8-ec3d53fb2ea0>

2019 CARIS 1 70x30 Scenario - Energy Storage Modeling

Dr. Benjamin Cohen of the NYISO presented the Energy Storage Resource (ESR) modeling options for use in the 2019 CARIS 1 70x30 Scenario study. The two methods for modeling ESR include the GE MAPS internal “pumped storage” (PS) model vs. the hourly resource modifier (HRM) using externally calculated ESR dispatches.

Dr. Cohen examined the input parameters and modeling processes for both options and presented the comparison testing assumptions. The assumptions are based on the 2019 CARIS 1 base case and use the preliminary zonal ESR capacity distribution based on the New York State Energy Research Development Authority Energy Storage Roadmap. Dr. Cohen noted that these values are for initial comparison testing purposes only. The result metrics were presented as deltas from the CARIS 1 base case for comparison.

The pros and cons for each methodology were provided and discussed with stakeholders.

The NYISO recommends modeling both MAPS and HRM methodologies given the dramatically differing system assumptions for the 70X30 scenario. This allows continued testing/comparison of ESR modeling methodologies to be performed. The NYISO encourages stakeholder feedback and has included detailed dispatch shapes as an appendix to the presentation.

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To see the complete presentation, please go to:

<https://www.nyiso.com/documents/20142/8530408/04%20CARIS1%2070x30Scenario%20ESRModeling.pdf/3e1fc245-ab8d-6d58-a2c4-d3308a80925b>

FERC Filings

October 1, 2019

Joint NYISO and National Grid filing of an executed Large Generator Interconnection Agreement among the New York Independent System Operator, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, and Cassadaga Wind LLC. SA No. 2475

October 4, 2019

Niagara Mohawk Power Corporation and Invenergy Wind Development LLC filing of an Engineering & Procurement Agreement (SA 2477) regarding the Alle Catt II Wind Project

FERC Orders

October 3, 2019

FERC letter order accepting the Engineering, Procurement, and Construction Agreement (SA 2449) among the NYISO, Central Hudson Gas & Electric Corp., Niagara Mohawk Power Corporation d/b/a National Grid, Stony Creek Energy LLC, TBE Montgomery, LLC, and CPV Valley, effective June 28, 2019

Filings and Orders:

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