

NYISO Consumer Interest Liaison Weekly Summary

February 2 – February 6, 2015

Notices:

- As discussed at the February 3, 2015 ESPWG meeting, please submit comments on the **Draft Development Agreement** between NYISO and Developer by Tuesday, February 10 to lbullock@nyiso.com.
- As discussed at the February 3, 2015 ESPWG meeting, please submit comments on Attachment Y Cleanup for Public Policy Transmission Planning Process by Friday, February 13 to lbullock@nyiso.com.
- As discussed at the January 29, 2015 ICAP/MIWG meeting, Market Participants interested in participating in a task force to review the NYISO's **Locational Capacity Requirements process** should send an email to Kirk Dixon at kdixon@nyiso.com.
- The 2015 sector meeting dates have been assigned and are listed below. In preparation for the meetings, the NYISO requests your input on meeting topics. Please provide specific detailed questions along with the topic to Debbie Eckels (deckels@nyiso.com) no later than Friday, March 20th. The sector topics submitted by committee members will be discussed first on the agenda followed by NYISO providing updates on key topics. All meetings are scheduled from 10:00 am 2:00 pm.
 - o 4/13 End Use Sector (Hilton Garden Inn, Troy)
 - o 4/14 Transmission Owners Sector (Hilton Garden Inn, Troy)
 - o 4/17 Generation Owners Sector (Hilton Garden Inn, Troy)
 - o 4/24 Other Suppliers Sector (Hilton Garden Inn, Troy)
 - o 4/28 Public Power/Environmental (Holiday Inn, Wolf Road)

Meeting Summaries:

Monday, February 2, 2015
Transmission Planning Advisory Subcommittee
Moses South Stability Limit Update



Edwin Cano of the NYISO presented the draft study of the Moses South stability limits. The study was conducted as a periodic re-evaluation of the Moses South stability limits and provides recommendations for revised and new Moses South limits. Mr. Cano detailed the system representation and the transfer case development used in the study. Mr. Cano described the results of the study which resulted in 12 up-rates to existing Moses South stability limits and 17 proposed new stability limits. The sub-committee recommended that the study proceed to the Operating Committee for approval. To see Mr. Cano's complete presentation, please go to: https://www.nyiso.com/secure/webdocs/markets operations/committees/oc_tpas/meeting_materials/2015-02-02/03 Moses% 20South % 20Presentation 02022015 TPAS.pdf

Dysinger East/West Central Stability Limit Update

Emeka Ojukwu of the NYISO presented the draft study of the Dysinger East and West Central stability limits. The study was conducted as a periodic re-evaluation of the Dysinger East and West Central stability limits and provides recommendations for revised and new Dysinger East limits. The NYISO is proposing to mothball West Central stability limits on the basis that there is no transfer control on West Central independent of Dysinger East. Mr. Ojukwu detailed the system representation and the transfer development used for the study. The results of the study were detailed and result in a NYISO recommendation to up-rate Dysinger East for two existing configurations and a NYISO proposal for 7 additional system configurations. Two of the scenarios have historically been employed to define West Central stability limits but will now be added to the Dysinger East limits. The sub-committee recommended that the study proceed to the Operating Committee for approval. To see Mr. Ojukwu's presentation, please go to: https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_tpas/meeting_materials/2015-02-02/05 DE WC Stability Limit Draft% 20Presentation02022015.pdf

Western New York Voltage Limit Analysis

Pramila Nirbhavane of the NYISO presented the analysis of the Western New York voltage limits. The purpose of the study was a periodic re-evaluation of the Western New York precontingency low voltage limits. Ms. Nirbhavane presented the summary of results including:

- Recommends revisions to pre-contingency low voltage limits at three western New York stations
- Recommends the elimination of the configuration dependent limits for Station 80 and Pannell
- Confirms the existing pre-contingency low voltage limit at five western NY stations Tables were supplied for specific details of the recommendations. Ms. Nirbhavane detailed the system representation and transfer case development and listed the tested contingencies. The sub-committee recommended that the study proceed to the Operating Committee for approval. To see Ms. Nirbhavane's complete presentation, please go to:

https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_tpas/meeting_materials/2015-02-

 $\underline{02/04_Western\%20New\%20York\%20Voltage\%20Limit\%20Analysis_TPAS_02022015_Present} \\ \underline{ation.pdf}$



Studies under Consideration for OC Approval

Queue #387 -- Cassadaga Wind Farm SRIS

Cassadaga Wind Farm is a proposed wind project in Chautauqua County.

Expected Summer and Winter Capacity of 126MW

Recommended for OC Approval

Queue #395 – Copenhagen Wind Farm SRIS

Copenhagen Wind Farm is a proposed wind project in Lewis County.

Expected Summer and Winter Capacity of 79.9MW

Recommended for OC Approval

Queue #396 – Baron Winds SRIS

Baron Winds is a proposed wind project in Steuben County.

Expected Summer and Winter Capacity of 300MW

Recommended for OC Approval

Queue #403 – Bethlehem Energy Center Uprate SRIS

Bethlehem Energy Center Uprate is an uprate to the Bethlehem Energy Center output in Albany County

Expected Summer addition of 72MW and Expected Winter addition of 51.2MW

Recommended for OC Approval

Queue #431 – Greenridge Unit #4 Project SRIS

Greenridge Unit #4 Project is a coal fueled proposed generator in Yates County

Expected Summer and Winter Capacity of 106.3MW

Recommended for OC Approval

Class Year 2012 Update

Steve Corey of the NYISO announced that Class Year 2012 was concluded in January 2015

Class Year 2015 Update

Steve Corey of the NYISO announced that the Class Year 2015 (CY2015) study will commence on March 1, 2015. The NYISO has not confirmed the projects for CY2015 at this time. A notice has been sent to potential CY2015 candidates stating the requirements for projects to be included in CY2015.

Tuesday, February 3, 2015

Electric System Planning Working Group

NYISO/Developer Agreement – Stakeholder Comments

Carl Patka of the NYISO and Michael Messonnier of Hunton and Williams, representing the NYISO, presented a review of stakeholder comments on the draft "Development Agreement between the NYISO and (Developer)" (Agreement). LSP Transmission (LSP) submitted several comments on the proposed Agreement. Michael Messonnier led a review of each of the



comments and followed with a discussion with stakeholders. Some issues were clarified and resolved at the meeting but it was agreed that other LSP issues required more research by both the NYISO and stakeholders. The discussion extended beyond the allotted time and it was determined by all parties that the request for comments should continue and the subject would be addressed further at the February 18, 2015 ESPWG meeting. To see the draft Agreement and the referenced comments received, please go to:

http://www.nyiso.com/public/committees/documents.jsp?com=bic_espwg&directory=2015-02-03

2015 Gold Book Schedule

Arthur Maniaci of the NYISO presented the schedule of milestones for the completion of the 2015 NYISO Load and Capacity Data Report (Gold Book). The milestone dates are listed below.

- Dec 10, 2014 -- Data request sent to MPs
- Jan 16, 2015 -- Due date for data request to MPs
- Mar 1, 2015 -- Due date for notification of changes to generation units & transmission lines
- April 1, 2015 -- FERC 715 filing date
- April 13, 2015 -- Draft Gold Book distributed
- April 30, 2015 -- Final Gold Book distributed

Summary of 2014 Weather-Adjusted Energy

Arthur Maniaci of the NYISO presented the weather-adjusted energy data for New York State for 2014. The four zones of New York, consisting of the NYCA (A-F), Lower Hudson Valley (G-I), NYC (J) and Long Island (K), showed positive growth through early 2014 and declining negative growth through the remainder of the year. Graphs were provided to reflect the growth trends from 2001 to present day. To see Mr. Maniaci's complete presentation, please go to: http://www.nyiso.com/public/webdocs/markets operations/committees/bic espwg/meeting mate rials/2015-02-03/Agenda%2004 2014 Weather%20Adjusted%20Energy.pdf

Summary of Moody's Analytics Economic Forecast

Arthur Maniaci of the NYISO presented a summary of the economic forecast prepared by Moody's Analytics. Moody's Analytics is forecasting an increase in total statewide employment and GDP through 2017 while anticipating a decrease in statewide unemployment. Several charts and graphs were depicted to illustrate additional economic factors. The forecast was also summarized for the zonal level to demonstrate expected growth for the different areas of New York State. To see Mr. Maniaci's complete presentation, please go

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2015-02-03/Agenda%2004_Economic_Forecast.pdf

Energy Efficiency & Behind-the-Meter Generation: A Summary



Arvind Jaggi of the NYISO presented a summary of the results of New York State energy efficiency and behind-the-meter generation programs. Cumulative energy efficiency impacts are estimated to account for over 5% of the annual weather-normalized energy usage for New York State. Mr. Jaggi presented graphs from 2010 through 2014 representing the program expenditures verses the energy impacts and the dollar/MWh cost of the energy efficiency programs. Behind-the-meter generation was split into two categories:

- 1. Non-Solar Photovoltaic (Non-SPV) Anaerobic Digester Gas, CHP, Fuel Cell Systems, etc. -- Capacity factor of approximately 55%
- 2. SPV Solar Photovoltaic (SPV) Capacity factor of approximately 11.5% (annual) SPV systems are exhibiting much higher capacity growth than the Non-SPV over the second half of 2014 at approximately 10 MW/month. SPV capacity is approximately 300MW at this time. Mr. Jaggi stressed that the NYISO is still receiving and assessing relevant data and the information reported to the ESPWG at this time is preliminary and subject to revision prior to final Gold Book publication. To see Mr. Jaggi's complete presentation, please go to: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2015-02-03/Agenda%2004_GB_EE_PV_DG.pdf

Transmission Security Cost Allocation

Zach Smith of the NYISO presented the methodology to calculate cost for a transmission solution that addresses multiple transmission security Reliability Needs. The objective is to develop a Step 4 in the reliability cost allocation methodology to allocate the costs of bulk thermal security (N-1-1) transmission solutions to those load zones which contribute to the thermal overload, based on their relative contribution. The proposed approach is similar to the cost allocation method proposed for interregional transmission projects where if a transmission solution addresses multiple thermal overloads, weighting factors will be calculated based on the ratio of estimated costs for individual solutions to each overload. Mr. Smith presented an example of how the methodology would be applied. Mr. Smith anticipates additional ESPWG presentations prior to seeking governance approval for a second quarter of 2015 FERC filing. To see the proposal as presented by Mr. Smith, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2015-02-03/Agenda%2005_TS_cost_allocation_ESPWG_2015-02-03.pdf

EIPC Gas-Electric System Interface Study -- Update

John Buechler of the NYISO presented an update on the EIPC Gas-Electric System Interface Study. With Targets 1 and 4 complete, the process is focused on finalizing Targets 2 and 3. An agreement was reached with the Department of Energy (DOE) in December 2014 for Target 2, Infrastructure Adequacy, that:

- Sensitive data will be included in separate Appendices
- These Appendices will be classified as CEII
- Interested stakeholders should follow EIPC CEII procedures posted on the website at: http://eipconline.com/EIPC Documents.html

¹ Energy efficiency impacts are estimates only, based upon information provided to the NYISO or to the NYS DPS.



The Target 2 Draft Report was posted on January 30, 2015. There is an SSC webinar scheduled for February 12, 2015 for review and discussion of the Target 2 Draft Report. A comment period will be open until February 27, 2015 with a final Draft Report to be submitted to the DOE on March 13, 2015 which will complete Target 2. Target 3, Contingency Analysis, is in the process of having the hydraulic models finalized through work with Canadian pipelines and certain LDCs. The Gas and Electric Contingency lists have been developed for each region and analysis is underway. The Draft Report for Target 3 is scheduled for posting by the end of February 2015. There will be an SSC webinar in mid-March for review and discussion of the report. A Final Draft Report for Target 3 will be submitted to the DOE by March 27, 2015 which will complete Target 3. A timeline was presented for the project administration with a date of July 2, 2015 listed as the project completion date with a final report submitted to the DOE. To see Mr. Buechler's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_mate_rials/2015-02-03/Agenda%2006_EIPC%20Gas%20Electric%20Study%20Update.pdf

Attachment Y Clean-Up

Carl Patka of the NYISO presented a high level overview of the types of changes the NYISO has made to Attachment Y in an effort to provide a final version for a FERC filing in the second quarter of 2015. Mr. Patka provided redline versions of Sections 31.1, 31.4 and 31.5 of Attachment Y with the NYISO revisions for stakeholder perusal. After highlighting the types of changes made in the Attachment, Mr. Patka proposed dates for the NYISO to conduct a Webex and perform a page by page review of the document with participating stakeholders. Comments received by the NYISO by Friday, February 13, 2015 will be considered for the Webex presentation. The dates of Monday, February 23 and Friday, February 27 (if necessary) were selected to conduct the Attachment Y Webex walk-through. A follow-up presentation on the resulting revisions will be made to the full ESPWG at the March 3, 2015 meeting. Mr. Patka explained that the NYISO will make a determination following the March 3 meeting concerning further working group discussion prior to presenting the changes to the BIC for governance approval. To see the redline version of the relevant Attachment Y Sections, please go to: http://www.nyiso.com/public/committees/documents.jsp?com=bic_espwg&directory=2015-02-03

Thursday, February 5, 2015

System Operation Advisory Subcommittee

NYISO Operations Report – January 2015

Peak Load

The peak load for the month was 24,648MW which occurred on Wednesday, January 7, 2015, HB18. Reserve requirements were as follows:

Reserve	10 Sync	Non-Sync	30 Min
Requirement	655	1,310	1,965
For Hour	1,420	1,928	2,890
DSASP Cont.	0	0	0



Major Emergencies

None

Alert States -- On 13 occasions Alert State was declared:

- 2 System Frequency 2 Low, 0 High
- 1 ACE Greater than (+or-) 500MW
- 1 Shortage of 10 Min Synchronized Reserve
- 2 Exceeding Central East Voltage Contingency Limit
- 7 Emergency transfer declared

Alert state was declared 35 times during January of 2014

Thunder Storm Alerts – 0

Reserve Activations – 9

Emergency Actions - None

TLR3 Declared – 1

Proposed 2015 Drill Dates

Jon Sawyer of the NYISO presented the proposed drill and test dates for 2015. The event and dates are below:

- April 15 ACC/ICO Drill
- April 22 Restoration Drill
- June 10 Voltage Reduction Test
- June 17 Back Up date for Voltage Reduction Test

NYISO Fuel Assurance Filing to FERC – Docket No. AD13-7-000

Wes Yeomans of the NYISO presented an overview of the proposed response to FERC concerning the process changes the NYISO has undertaken to improve extreme weather operation procedures. In November 2014, FERC issued an order directing the ISO/RTOs to file reports to address fuel assurance issues by February 18, 2015. Mr. Yeomans explained that the NYISO's strategy to address performance concerns is a comprehensive approach through the markets and enhanced Operational awareness, rather than focusing solely on fuel procurement. The NYISO has initiated the following changes:

- Energy Market
 - Comprehensive Shortage Pricing
 - > Graduated Transmission Demand Curve
 - > Increase to Total Operating Reserves and SENY Reserve Requirement
 - ► Enhanced Scarcity Pricing

The incentives created by the energy market enhancements will incent generators to have improved reliability/availability during high stress operational periods.

- Operational Improvements
 - Fuel Surveys Developing a web base fuel survey system
 - Gas-Electric Support Created desk on Operations floor to provide control room improved real time gas-electric coordination



- ➤ NY State Agency Communication Protocol Assist agencies with information for coordination with obtaining waivers, re: Emissions and Fuel Transportation
- > Capability for generation to update fuel costs in real time
- > Operator Visualization Posting OFO information on video wall

The operational improvements create better awareness and coordination in reference to fuel issues.

- Capacity Market Enhancements
 - ➤ Fuel Assurance Performance Incentive An incentive to reward energy suppliers that over-perform during high stress operational periods.

The NYISO will submit the FERC Order compliance filing by February 18, 2015. To see Mr. Yeomans' presentation, please go to:

https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_soas/meeting_materials/2015-02-05/04_SOAS%20February%205%202015%20ISO%20Gaselectric%20Comments%20to%20FERC.pdf

Moses South Stability Limit Update

The SOAS recommended that the Moses South Stability Limit update (summarized above in the February 2, 2015 TPAS), as presented by Edwin Cano of the NYISO, proceed to the Operating Committee for governance approval.

Dysinger East/West Central Stability Limit Update

The SOAS recommended that the Dysinger East/West Central Stability Limit update (summarized above in the February 2, 2015 TPAS), as presented by Emeka Ojukwu of the NYISO, proceed to the Operating Committee for governance approval.

Western New York Voltage Limit Analysis

The SOAS recommended that the Western New York Voltage Limit analysis (summarized above in the February 2, 2015 TPAS), as presented by Pramila Nirbhavane of the NYISO, proceed to the Operating Committee for governance approval.

Technical Bulletin 229 – Default Generator Voltage Schedule

Brad Garrison of the NYISO presented Technical Bulletin 229 (TB229). TB229 is a bulletin to provide Generators operating in the New York Control Area, connected at 100kV and higher, a Default Generator Voltage Schedule and allowable bandwidth, in the event they have not received a more specific schedule from the NYISO or the interconnecting TO. In response to a stakeholder question, Mr. Garrison responded that the new technical bulletin has been provided to enhance compliance with NERC guidelines. Mr. Garrison explained that TB229 will provide generators clear guidance in the event of a lack of schedule. To see the new technical bulletin please go to:

 $\frac{https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_soas/meeting_materials/2015-02-05/08_TB-229_Draft_A_01-15-15.pdf$



FERC Filings

There were no FERC filings by the NYISO for this week

FERC Orders

February 30, 2015

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

Link to FERC Filings and Orders:

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