

NYISO Consumer Interest Liaison Weekly Summary

September 24 – September 28, 2018

Notices:

- At Stakeholder request, the September 27 and September 28, 2018 ICAP/MIWG/PRLWG meetings have been cancelled. Agenda items from the meetings will be discussed on **October 9** and **October 10, 2018**.
- Pursuant to the New York State Public Service Commission ("PSC") Orders in Case Number 00-E-1380, dated August 14, 2000 and August 23, 2000, the staff of the PSC has requested all input data files used by the NYISO in the General Electric Multi-Area Production Simulation (GE MAPS) for the Base Case in the current Congestion Assessment and Resource Integration Study Phase 2 (CARIS 2).

The NYISO will make the requested Generator specific information available to PSC staff on or about October 5, 2018 confidentially in accordance with the provisions contained in NYISO's Code of Conduct set forth in Attachment F to the NYISO's Open Access Transmission Tariff.

Meeting Summaries:

Monday, September 24, 2018

Integrating Public Policy Task Force

Summarizing the Consumer Impact of Incorporating the Cost of Carbon Emissions in the Wholesale Electric Market

Tariq Niazi of the NYISO presented a summary of the anticipated impacts to consumers as a result of incorporating the Social Cost of Carbon into the wholesale electricity markets. The presentation was intended to supplement the analysis performed by The Brattle Group.

Mr. Niazi led a review of the analysis and highlighted the methods that will be employed to reduce the cost impact to consumers, such as:

- Customer credit from emitting resources
- Lower ZEC prices
- Lower REC prices

- Increased TCC value
- Market adjustments to Static Analysis
- Carbon price-induced abatement

Mr. Niazi summarized the results of the analysis as a slight increase to consumers in the implementation year, a decrease in the cost impact through 2025 and a net cost decrease by 2030. Following the format of the traditional Consumer Impact Analysis, Mr. Niazi also summarized the impacts on the environment, reliability and transparency.

The environmental impacts are positive impacts for consumers due to the anticipated reduction in carbon emissions, fuel switching and a potential shift of renewables to areas of higher population density.

In reference to reliability, as the state continues to gain more renewable resources in the future, incorporating the cost of carbon into the wholesale energy market will help attract and maintain needed resources in a competitive manner.

Incorporating the cost of carbon in the wholesale market will enhance transparency and lead to more innovative solutions as the market deals with the cost of carbon.

To see Mr. Niazi's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg_ipptf/meeting_mate_rials/2018-09-24/Consumer%20Impact%20of%20Carbon%20Pricing%20-%20Final.pdf

Benefits and Costs of New York's Carbon Pricing Initiative

Daniel Shawhan of Resources for the Future (RFF) presented an independent analysis of the benefits and costs of incorporating the Social Cost of Carbon into the wholesale electricity markets. The plan for the study is to produce an academic paper for peer review. The study employed a detailed power sector model, E4ST, to project the effects of the NY carbon pricing policy throughout the Eastern Interconnection. Mr. Shawhan identified key elements from the NYISO Carbon Pricing Straw Proposal and Draft Recommendations used in the analysis and detailed the assumptions and methodology used to conduct the analysis.

Mr. Shawhan noted differences in assumptions between the RFF analysis and the analysis conducted by Brattle for the NYISO using MAPS.

The results of the RFF analysis were provided relevant to the "Business as Usual" base case in several areas:

- Effects of Policy on CO₂ statewide emissions
- Effects of Policy on CO₂ zonal emissions
- Effects of Policy on RGGI pricing
- Effects of Policy on NYISO LBMP
- Effects of Policy on LBMP throughout the Eastern Interconnection
- Effects of Policy on Damages by Emissions

The cost to New York end use consumers was estimated to be 0.29 cents per kWh in 2025. Mr. Shawhan noted that the stated cost does not include the environmental benefits to end use consumers which were determined to be positive.

Several other results were presented including increased revenue to generators, the impacts on RECs and ZECs and increased revenue to government entities through RGGI, taxes on increased revenue, etc.

To see the complete RFF presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg_ipptf/meeting_materials/2018-09-24/revised%20RFF%20NYCarbonAnalysis%20for%20Sep24%20IPPTF.pdf

Revenue Allocation and Seams Options

Samuel Newell of The Brattle Group (Brattle) presented the Allocation Options and Seams Issues set forth in the NYISO Carbon Pricing Straw Proposal and Draft Recommendations.

Mr. Newell led a review of the proposed Allocation Options, consisting of:

- A. Load-Ratio Allocation
 - a. Each LSE receives the same \$/MWh residual allocation
- B. Proportional Percentage Levelization Allocation
 - a. All LSEs face same % increase in net energy payments over non-carbon LBMPs; that is, equalize (LBMPc-\$/MWh Residual Allocation) / (LBMP -LBMPc)
- C. Proportional Allocation
 - a. Allocation covers equal % of carbon payments; that is, equalize (\$/MWh Residual Allocation) / LBMPc
- D. Levelizing Allocation
 - a. Each LSE faces the same \$/MWh net carbon payments

The NYISO draft recommendation was Option D: Levelizing Allocation.

Mr. Newell explained the process used by Brattle to determine the energy costs to Load Serving Entities (LSEs) for 2025. The total carbon residuals were estimated at \$1,590 Million to be allocated to NYCA load. Brattle evaluated each of the proposed methods of allocation and determined the cost allocated through an Upstate/Downstate split. The choice of approach shifts allocations between Upstate vs. Downstate customers by up to \$126 million. The pattern in net carbon cost outcomes were similar for the 2020 and 2030 evaluations.

Mr. Newell next led a review of the Seams Issues, explaining that charging only internal resources unlevels the playing field between internal and external resources. It shifts production outside NY, increasing imports and decreasing exports, increases production costs, and leaks emissions. Two approaches were proposed in the NYISO Carbon Pricing Straw Proposal and Draft Recommendations:

- Option 1: External transactions compete on a status-quo basis.
 - Assess charges on imports (or credits on exports) such that all effects of carbon charges are invisible to imports and exports and imports/exports remain unchanged
- Option 2: External transactions compete on a green power basis, accounting for all emissions and NY's view of their externalities.
 - Levy import charges and export credits based on the marginal emissions consequences
 of transactions; this favors clean imports and exports when they provide cost-effective
 abatement

The NYISO draft recommendation was Option 1: external transactions compete on a status-quo basis. The evaluation revealed that it would be extremely difficult to track the ensuing resource shifting that would take place in the external control area and on the external control area's non-NYISO seams. Brattle determined that among NYISO's neighbors, there was no evidence of underutilized low-emitting resources whose output could increase if only offered a higher price.

Brattle supports the NYISO's draft recommendation of Option 1. However, Mr. Newell suggested that something should be done to complement Option 1 to provide a signal for new investment in low-emitting external resources (such as new hydro and transmission from HQ).

To see the complete Brattle presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg_ipptf/meeting_materials/2018-09-24/2018_09_20%20Zonal%20and%20Seams%20Issues.pdf

Tuesday, September 25, 2018

Joint Electric System Planning Working Group/Transmission Planning Advisory Subcommittee

Proposed Pilgrim Generator Deactivation Solutions

Keith Burrell of the NYISO provided an update to the Generator Deactivation Solution Solicitation process regarding the deactivation of Pilgrim GT1 and Pilgrim GT2. A proposed Generator Deactivation Solution was submitted by the Responsible Transmission Owner, PSEG Long Island. The NYISO did not receive any market-based solutions. The OATT, in Section 38.4.5 states the NYISO may disclose Generator Deactivation Solutions and plans proposed. However, the NYISO will maintain as confidential the Responsible Transmission Owner's permanent solution designated as Confidential Information, except for "its proposed project type, general geographic location, and inservice date." In response to a stakeholder question, Mr. Burrell noted that the proposed solution details will be available to the public upon the posting of the viability and sufficiency evaluation. The NYISO will post on its website a written determination regarding the selected transmission solution. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2018-09-25/PilgrimGT1and2_GDA_SubmittedSolutions.pdf

Short Term Improvements to Planning Processes

Yachi Lin of the NYISO updated the proposal for short term improvements to the Planning Processes. The purpose of this endeavor is to speed up the public policy transmission planning process while maintaining transparency. Ms. Lin highlighted recent updates resulting from stakeholder comments. The NYISO had originally proposed a two stage information submission process. Stakeholder comments noted that this change is not necessary and imposes confidentiality risks. The NYISO will instead formalize the process by adding the following steps:

- Discuss the baseline assessment with stakeholders at ESPWG/TPAS
- Set up a technical conference for interested developers to ask in-depth questions regarding the *PPTN*.
- Prepare an FAQ to document the baseline assessment and the metrics for evaluation and selection, including PSC criteria. The document should be released at the same time as the formal project solicitation.

Ms. Lin detailed additional steps and tariff language changes that will enhance clarification and reduce the amount of time required for the process. Timelines for the original proposal and the recently enhanced proposal were provided for comparison.

The following proposed updates will remain unchanged:

- Eliminate the pause point¹
- Change the interest rate to the actual interest rate earned by the NYISO
- Clarification and/or relocation of languages for project information requirement
- Clarify that the scope of work by the NYISO to evaluate transmission projects for which developers pay is the work specified in Sections 31.4.7 through 31.4.11, and any supplemental evaluation or re-evaluation of the proposed projects
- Confidentiality of Solutions
 - Developers of a proposed Public Policy Transmission Project will submit two versions: (i) unredacted, and (ii) "Confidential Information" redacted. The definition is clarified in Section 31.4.15. CEII must be requested and provided in accordance with NYISO procedures.

¹ PSC would retain the ability to cancel or modify the identified Public Policy Transmission Need prior to the NYISO Board of Director's selection of the more efficient or cost-effective solution, which would halt the NYISO's evaluation or result in an out-of-cycle process to address the modified need.

• Revising the pro forma Operating Agreement in the tariff to conform with TransCo's Operating Agreement approved by FERC

The NYISO had sought to extend the evaluation period of the CARIS Study to 20 years to provide consistency with the longevity of transmission assets. Stakeholders commented that there is not sufficient analysis to support extending the period to 20 years. NYISO has removed the proposed tariff revisions for the period extension in this short-term process improvement proposal, but will integrate the discussion into the later Comprehensive System Planning Process review.

Following a final summary presentation, the NYISO plans to seek approval at the October BIC/OC/MC meetings for tariff changes, and approval for a Section 205 tariff filing from the Board of Directors at its November meeting.

To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2018-09-25/ESPWG_short_term_tariff_revisions.pdf

Wednesday, September 26, 2018

Management Committee

Motion #1

Motion to approve the draft June 26, 2018 Management Committee meeting minutes.

The motion passed unanimously by show of hands.

Motion #2

WHEREAS, the Electric System Planning Working Group ("ESPWG") and the Transmission Planning Advisory Subcommittee ("TPAS") held a series of meetings with the NYISO Staff to discuss and review the studies and analyses underlying the NYISO's findings regarding Reliability Needs in the New York Control Area; and

WHEREAS, the NYISO Staff incorporated modifications to the draft Reliability Needs Assessment Report, including Appendices (together "the draft 2018 RNA Report") based on comments received at ESPWG/TPAS meetings from February 22, 2018 through August 22, 2018;

WHEREAS, the NYISO Staff provided and presented on the draft 2018 RNA Report, at the September 12, 2018 Operating Committee meeting; and

WHEREAS, the Operating Committee voted unanimously to concur with the draft 2018 RNA Report as presented at the September 12, 2018 Operating Committee meeting, and to recommend that the Management Committee concur with and recommend approval of the RNA Report by the NYISO Board of Directors;

WHEREAS, the NYISO provided and presented on the draft 2018 RNA Report at the September 26 Management Committee meeting;

NOW, THEREFORE, based on the presentation made by the NYISO at the September 26, 2018 Management Committee meeting and the information available and presented by the NYISO to the Market Participants at that time, the Management Committee hereby concurs with the draft 2018 RNA Report as presented at the September 26, 2018 MC meeting.

The Management Committee hereby further recommends approval of the draft 2018 RNA Report by the NYISO Board of Directors.

Motion passed unanimously by show of hands

Motion #3

The Management Committee ("MC") hereby: (i) approves revisions to Attachment L of the Open Access Transmission Tariff, as more fully described in the presentation entitled "Revisions to OATT

Attachment L" made to the MC on September 26, 2018; and (ii) recommends that the NYISO Board of Directors authorize the NYISO staff to file such revisions under Section 205 of the Federal Power Act. *Motion passed unanimously by show of hands*

Motion #4

The Management Committee (MC) hereby approves, and recommends to the NYISO Board for filing under Section 205 of the Federal Power Act, revisions to Attachment K of the Market Administration and Control Area Services Tariff as described in the presentation entitled "Proposed Change to Unsecured Credit Scoring Model," made at the September 26, 2018 MC meeting.

Motion passed unanimously by show of hands

Wednesday, September 26, 2018

Budget and Priorities Working Group

2019 Draft Incentive Goals

Emilie Nelson of the NYISO presented the draft incentive goals for 2019. Each year the NYISO presents performance incentive goals for stakeholder review and discussion as part of the budget process.

The first set of goals contain the Gateway Goals. These four goals are critical to the mission of the NYISO and have the potential to result in a 100% reduction in the corporate incentive if not achieved. The 2019 draft Gateway Goals remain the same as the 2018 Gateway Goals and consist of:

- Maintain Load
 - No interruption of load because of improper implementation of NYISO operating procedures by the NYISO
- Reliability Standards Violations
 - The NYISO will maintain compliance with NERC Reliability Standards including Planning and Critical Infrastructure Protection Standards.
 - o The NYISO will maintain compliance with NYSRC rules
- Functionality
 - o DAM schedules are posted 100% of the time
 - *MIS availability* \geq 99.75%
- Excellence in Execution
 - The NYISO, through its actions, will not cause a Market Problem with a material, adverse impact on the market greater than \$100 million in a year (12-month period).

The Quality Goal is designed to support high quality results as measured by the number and magnitude of quality defects. The proposed structure for 2019 provides for quality objectives that recognize the higher and lower magnitude of defects.

The quality goal progresses through threshold, target, and superior payout of 50%, 100% and 150%, respectively.

A Project Initiatives goal consists of meeting the requirements established by the:

- Business Plan
 - o Deliver Market Projects, as identified in the Business Plan on schedule
- Key Project Initiatives
 - o Complete Key Project Initiatives on schedule
 - Preliminary proposed projects include EMS/BMS System Upgrade, Carbon Pricing, ESR Integration & Optimization, More Granular Operating Reserves and Enhancing Fuel & Energy Security Study.

A goal based on customer satisfaction and performance index remains structurally unchanged from 2018. The achievement percentages are under review for 2019.

A new goal under consideration for 2019 is a Professional Development goal. This goal is based on the NYISO providing cross training and professional development opportunities for NYISO staff. This program is structured to support one-year job rotations for staff. Achievement of this goal will be measured based on the number of job rotations completed. Ms. Nelson noted stakeholder feedback on this goal concept for consideration.

An additional new goal concept is entitled Budget/Cost Management Focus. The object of the goal is to incent the NYISO to achieve savings through cost management efforts. The NYISO is seeking stakeholder feedback on appropriate goal and achievement level development.

Comments are encouraged and can be sent to lbullock@nyiso.com prior to the next presentation scheduled for October 31, 2018. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2 018-09-26/2019 Draft Corporate Goals Summary.pdf

2019 Project Prioritization and Budgeting Process

Brian Hurysz provided an update from the September 7, 2018 BPWG meeting, where the NYISO discussed the status of the EMS/BMS System Upgrade Project and the need to adjust the projected Go-Live date from April 1, 2019 to October 1, 2019. The NYISO has completed its assessment of what the schedule change impact will have on the remainder of the 2019 project portfolio.

The Energy Storage Resource (ESR) Participation Model shares many of the same testing resources, applications, and platforms with the EMS/BMS System Upgrade. To accommodate the EMS/BMS schedule change and the extensive testing requirements for the ESR project, the ESR implementation schedule will need to be adjusted from October 2019 to February 2020. The 2019 milestone for the ESR Participation Model project will be adjusted from "Deployment" to "Development Complete." To see the complete presentation, please go

to:http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2018-09-26/2019%20Project%20Prioritization%20Process.pdf

Key Topics Tracker

Leigh Bullock of the NYISO provided stakeholders with an opportunity to provide input to the Key Topics Tracker section of the NYISO web site. The Key Topics Tracker was developed in response to stakeholder requests and provides stakeholders the ability to track key NYISO topics in one location on the NYISO Public Website.

Ms. Bullock presented the projects currently on the Key Topics Tracker and provided the following suggestions for additions to the list:

- Ancillary Services Shortage Pricing
- Climate Change Impact and Resilience Study
- Constraint Specific Transmission Shortage Pricing
- Demand Curve Reset
- Enhancing Fuel and Energy Security
- More Granular Operating Reserves

Ms. Bullock noted that the site offers filter capabilities for Open Topics, On Hold Topics and Closed Topics to keep the list from becoming unmanageable.

Written feedback should be sent to lbullock@nyiso.com.

To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2_018-09-26/Key%20Topic%20Tracker%20Update.pdf

FERC Filings

September 28, 2018

NYISO answer opposing the joint NJBPU/NJRC motion to consolidate EL18-54-000 (the "NJBPU Complaint Proceeding") with nine other dockets (the "PJM RTEP Settlement Proceedings")

FERC Orders

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

Filings and Orders:

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