NYISO Management Committee Meeting Minutes

September 28, 2016

10:00 a.m. - 11:00 a.m.

1. Introductions, Meeting Objectives, and Chairman's Report

The chair of the Management Committee (MC), Mr. Andy Antinori (NYPA), called the meeting to order at 10:00 a.m. by welcoming the members of the MC. Members identified themselves and attendance was recorded. A quorum was determined.

2. Approval of Meeting Minutes

The draft meeting minutes for August 31, 2016 were presented for approval.

Motion #1:

The Management Committee (MC) approves the August 31, 2016 meeting minutes.

The motion passed unanimously by show of hands

3. President/COO Report

Mr. Brad Jones (NYISO) announced that Mr. Zach Smith (NYISO) has been selected as the new Vice-President of Planning. Mr. Jones also noted that Mr. Roger Kelly has been announced as the new member of the NYISO Board. Mr. Jones said that Mr. Kelly brings a tremendous amount of electric industry insight and expertise to the Board. He encouraged members to welcome both Mr. Kelly and Mr. Smith when they have the opportunity.

Mr. Jones updated members on the September 22, 2016 Distributed Energy Resource (DER) Workshop. The event was an extraordinary success, with 140 individuals, representing 60 different organizations in attendance. Ms Audrey Zibelman, Chair of the NYS Public Service Commission opened with a strong speech stressing the importance of NY members working together to achieve the DER goals. The DER roadmap is an identification of what is needed over the years to integrate DER into the wholesale market, including opportunities to create pilot programs to test systems and rule sets. He encouraged all members to get involved in the sessions.

Ms. Emilie Nelson (NYISO) provided an update on the market highlights and presented the COO report, included with the meeting material. She mentioned the August 5 market issue NYISO identified, and fixed, with the LBMP calculation for the PJM proxy bus in the RT market. She provided information on the circumstances that led to the issue and noted that Mr. Pallas Lee VanSchaick, would be discussing the MMU's evaluation of the impacts at the September 29 MIWG meeting. Lessons learned have been discussed and process improvements implemented.

4. 2016 Summer Warm Weather Operations

Mr. Wes Yeomans (NYISO) provided an update on 2016 Summer Warm Weather Operations (presentation included with the meeting material). Mr. Yeomans noted that reliability criteria were met and it was a very successful summer for Operations. Market and scheduling systems worked well on the borders and both dispatch and pricing outcomes matched operations. Above average ambient temperatures and above average electric loads occurred across the July 1- August 31 time period. The summer 2016 Actual Peak of 32,076 MW occurred on August 11. Mr. Yeomans also highlighted information on the conditions encountered during specific peak days.

In response to an August 11 pricing concern noted by Mr. Howard Fromer (PSEG), Mr. Mark Younger (Hudson Energy Economics) requested that the NYISO provide more details at an upcoming MIWG on how well RTC did compared to RTD during high price periods; the prices that were set at each of the interfaces, whether there is some particular problem that is going on at the Keystone interface, or whether there are broader issues.

5. 2017 Draft Strategic Plan

Mr. Rich Dewey (NYISO) reported on the draft 2017 Strategic Plan (included with the meeting material). The NYISO Board members met in mid-September with the goal of developing the NYISO Strategic Plan, which is a 3-5 year directional focus outlining the mission, guiding principles, and core values under which the NYISO will operate, along with the company's strategic objectives. Mr. Dewey reviewed details of the annual planning process which includes a review of the existing strategic plan, feedback received from members at the Spring Sector Meetings, and key takeaways from the Joint Board of Directors and Management Committee meeting. New industry drivers that might result in a change in the direction or variation of the Plan are also considered. The final Strategic Plan is approved in October, published in December, and then becomes the work plan for the NYISO.

Ms. Jane Quin (Con Edison) asked if the prior year's projects are looked at as part of the process. Mr. Dewey said these are factored in, adding that the project prioritization process has become an important element of the NYISO budget development and strategy.

Mr. Dewey reviewed the NYISO core values and noted a change for this year under "integrity"; the term "transparent" was added into the definition, which is in line with some of the changes the NYISO has instituted this year. The NYISO is always looking to improve transparencies in the way it carries out its mission. The proposed critical focus areas were discussed, which includes:

- 1. Reliability through Evolving Markets Fuel Assurance & Gas/Electric Coordination
 - Energy Markets & Price Formation/Capacity Markets
- 2. Integration of Distributed Energy Resources REV Market & System Integration
 - DER Integration
- 3. Technology and Infrastructure Investment in Cyber and Physical Security
 - Information Technology Strategy/Energy & Market System Replacement/Smart Grid
- 4. Integration of Public Policy Expansion of Renewables and Clean Power
 - Evolution of Transmission Planning
- 5. Sustainable Business Model Enterprise Cost Management

6. 2017 Draft NYISO Budget

Mr. Alan Ackerman (Customized Energy Solutions), Chair of the Budget and Priorities Working Group provided an overview of the 2017 NYISO draft budget. Mr. Ackerman reviewed the timeline and noted that the presentation today is informational only, and will be presented for action at the October 26 MC meeting. Final approval by the Board is slated for November 15.

Mr. Ackerman provided an overview of the 2017 key priorities and projects. Ms. Patti Caletka (NYSEG) asked how the EMS-BMS project compares to SMD2 in terms of cost and impact to the NYISO. Mr. Dewey stated that the total cost of the project is half of the cost of SMD2. From an impact standpoint, the actual resource impact should be less as well; SMD2 included new market rules and a completely new real-time commitment and dispatch system in place. The EMS-BMS project is targeted to replace the functionality that we already have with a new more modern platform that performs better and is more scalable.

Mr. Ackerman provided the budget highlights:

- NYISO's draft 2017 budget totals \$148.2M, allocated across a forecast of 158.3 million MWh, for a Rate Schedule 1 charge/MWh of \$0.936. Comparatively, the 2016 budget was \$148.1M, allocated across 159.5 million MWh for a Rate Schedule 1 charge/MWh of \$0.928
- NYISO's draft 2017 budget represents a 0.07% increase in revenue requirement from the 2016 budget and a 0.75% decrease in projected MWh, for an overall Rate Schedule 1 increase of 0.86% (less than 1%)
- NYISO's draft 2017 budget represents the fourth consecutive year of a flat revenue requirement (excluding FERC fees)
- NYISO continues to maintain the lowest Budgeted Revenue Requirement in \$ and lowest number of Full-Time Equivalents of all ISOs and RTOs

Mr. Ackerman provided an overview of the 2018-2019 Budget projections. Mr. Kevin Lang noted his appreciation to the NYISO for holding the budget flat next year.

7. Hybrid GT Pricing Improvements

Mr. Ethan Avallone (NYISO) reported on hybrid GT pricing improvements (included with meeting material). The objective is to modify the hybrid GT pricing logic to model GTs as dispatchable in the pricing pass, while continuing to exclude certain out of merit (OOM) types from the pricing pass, which is expected to improve price transparency and the alignment of prices and schedules for GTs.

Mr. Avallone provided background, an analysis of the proposal, and proposed tariff revisions.

Motion #2:

The Management Committee (MC) hereby approves revisions to the NYISO's Market Administration and Control Area Services Tariff (MST), as more fully described in the presentation entitled "Hybrid GT Pricing Improvements," made to the MC on September 28, 2016 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 unanimously with abstentions*

8. 2016 Reliability Needs Assessment Laura Popa

Ms. Laura Popa (NYISO) provided an overview of the presentation (included with the meeting material). The RNA evaluates the adequacy and security of the bulk power system over a ten-year study period and identifies reliability needs. Ms. Popa provided details on the planning process, major assumptions, resource adequacy, and also reviewed ministerial changes approved by the Operating Committee.

Mr. Miles Farmer (NRDC) asked if it would be possible, in the event that the nuclear units do not retire, to run an additional scenario. Ms. Popa replied no, the plan is to complete this RNA, but said the NYISO will reevaluate its assumptions and scenario analyses at the time of the Comprehensive Reliability Plan (CRP).

Mr. Kevin DePugh (NYISO) reported on the 2016 RNA transmission security results, which included:

- Reliability needs identified in the preliminary and final RNA base case analysis
- The Western NY public policy scenario
- The 90/10 forecasted load scenario

Ms. Popa addressed next steps in the process. If the RNA is approved by the MC, it will be submitted to the NYISO Board for approval. After the RNA is approved, the NYISO will request updates to the Transmission Owners' local transmission plans before issuing a solicitation, if necessary, for regulated backstop, market-based, and alternative regulated solutions to meet the reliability needs identified in the RNA. Each Responsible Transmission Owner will report to stakeholders information regarding any updates in its LTPs that could affect the reliability needs.

Motion #3:

WHEREAS, the ESPWG and TPAS have held a series of meetings with NYISO Staff to discuss and review the studies and analyses underlying the NYISO's findings regarding Reliability Needs in New York State; and WHEREAS, NYISO Staff has provided a draft Reliability Needs Assessment ("RNA") dated September 20, 2016, including Appendices, for the September 28, 2016 Management Committee ("MC") meeting; and WHEREAS, NYISO Staff has incorporated modifications to this document based on comments received at eight ESPWG/TPAS meetings from May 5, 2016 through August 25, 2016, and made a presentation of its findings based on the 2016 Reliability Needs Assessment Draft Final Report ("RNA Report") at the September 19, 2016 OC meeting; and

WHEREAS, the OC reviewed and concurred with the RNA Report, with the limited modifications discussed at the OC meeting, and recommended that the MC concur with the RNA Report, as revised at the September 19, 2016 OC meeting, and that the MC recommend approval of such revised RNA Report by the NYISO Board of Directors;

NOW, THEREFORE, based on the presentation made by the NYISO at the September 28, 2016 MC meeting, the MC hereby concurs with the RNA Report as presented and discussed at the September 28, 2016 MC meeting, and hereby further recommends the approval of such RNA Report by the NYISO Board of Directors.

The motion passed unanimously

8. New Business

There was no new business.

The meeting adjourned at 1:00pm