
NYISO Management Committee Meeting Minutes**May 25, 2016****10:00 a.m. – 2:25 p.m.**

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

The chair of the Management Committee (MC), Mr. Andrew 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 MinutesMotion #1:

The Management Committee (MC) approves the March 30, 2016 meeting minutes.

The motion passed unanimously by show of hands with an abstention.

3. President/COO Report

Mr. Rick Gonzales (NYISO), on behalf of Brad Jones, reminded participants of the upcoming June 13 Joint Board of Directors and Management Committee meeting in Cooperstown, NY. The committee chairs have selected the two topics: Clean Energy Standard and Fuel Assurance.

Ms. Emilie Nelson (NYISO) reviewed the April 2016 market and operations performance metric reports included with the meeting material. Mr. Scott Leuthauser (HQ US) asked if the NYISO believed that the Lake Success and Valley Stream PARs would help the Real Time Dispatch-Real Time Commitment convergence. Ms. Nelson said the NYISO thought it would and is interested in the responsiveness of that alignment. In response to a question, Ms. Nelson said the details of the PAR schedules are in an April 5th MIWG presentation.

4. Annual Solicitation of Market Participant Feedback on the External Market Monitoring Unit's (MMU) Performance

Mr. Shaun Johnson (NYISO) reviewed the presentation included with the meeting material.

Mr. Paul Gioia (representing the NYTOs) said that the external MMU should only advise the Board and not "ensure market administered by the NYISO function efficiently and appropriately." He said that is not the external MMU's responsibility and they cannot be expected to ensure anything. Mr. Rich Bolbrock (MEUA) agreed and said a more meaningful approach is for the external MMU to apprise the NYISO of a perceived market design flaw, and it is up to the NYISO to identify the flaw. Mr. Johnson said the MMU does not hesitate to notify the NYISO of a perceived flaw.

In response to a question on the MMU's cyber security measures, Mr. Doug Chapman (NYISO) explained that the MMU is required to use cyber security capabilities to protect sensitive data.

Mr. Bob Boyle (NYPA) asked if the NYISO could share the internal NYISO performance statistics that the NYISO uses to assess the external MMU's performance. Mr. Johnson said he'd have to take that back. Mr. Marc Montalvo (Consultant for Utility Intervention Unit) said if the metrics are not available to be publically shared, it would be helpful to understand the criteria and standards the NYISO uses to measure the quality of the MMU's performance.

Stakeholders are encouraged to submit comments regarding the external MMU's performance to the NYISO by July 15.

5. Reliability Cost Allocation

Mr. Zach Smith (NYISO) reviewed the presentation included with the meeting material.

Mr. Howard Fromer (PSEG) asked, with regards to the 60% contributing load "safety net" threshold for BPTF thermal transmission security issues, who gets cost allocated the remaining 40%. Mr. Smith said that in the extremely unlikely event the remaining 40% of contributing loads are below the contributing materiality threshold, then the 60% of contributing loads that satisfy the materiality threshold get 100% of the cost allocation. Dr. Mayer Sasson (Con Edison) said Con Edison was very concerned about PJM's cost allocation where 20% of those responsible would be getting allocated 100% of the cost and the other 80% are falling below the *de minimis* level. Dr. Sasson said the NYISO's proposal ensures a small number of subzones don't pay for everything and there are no free passes for others, and that in fact the examples previously presented demonstrate that the methodology typically captures 80-90% of contributing load. Mr. Smith agreed that the 60% contributing load threshold functions as a safety net and that it is unlikely to be triggered.

Dr. Kelli Joseph (NRG) said it is important that if there is a gap need, having consistent cost allocation procedures under the reliability planning process and the RMR process is crucial.

Motion #2:

The Management Committee ("MC") hereby approves, and recommends to the NYISO Board for filing under Section 205 of the Federal Power Act, amendments to the cost allocation methodology for the reliability planning process and related provisions contained in Sections 31.5 and 6.10 (Schedule 10) of the NYISO's Open Access Transmission Tariff, as more fully described in the "Reliability Cost Allocation" presentation made to and as discussed at the MC on May 25, 2016.

The motion passed unanimously by show of hands with abstentions.

6. Summer Capacity Assessment

Mr. Wes Yeomans (NYISO) provided an update on transmission upgrades. Mr. Yeomans stated that on May 19 the two, new 230 kV series reactors at Packard were placed in-service. The reactors are installed on the Packard-Huntley 77 & 78 Lines. The reactor switching was successful and the re-distribution of power flows has been as expected. The new Huntley 230 kV capacitor is scheduled to be placed in-service on June 1, 2016. The NYISO appreciates National Grid's efforts to install these upgrades in a relatively short timeframe.

Mr. Yeomans continued with an update of TOTS infrastructure upgrades and reported that the 345 kV Frasier-Coopers 33 Line reconductoring work is complete but that the circuit is currently out-service as part of the work associated with testing the new series capacitors. The construction of the three series capacitors is complete and energization testing is underway. The three circuits with new series capacitors will be the Marcy-Coopers Corners 2-41, the Edic-Fraser 24-40, and the Frasier-Coopers Corners 33. Mr. Yeomans reported the construction is still underway for the new 345 kV Rock Tavern 76 and that the NYISO anticipates an in-service around June 1. The existing 345 kV Rock Tavern – Ramapo 77 was out for a significant amount of time this spring to provide clearance for construction and this circuit is now back in-service. Regarding the "Staten Island Unbundling" component of TOTS, the project includes unbundling the terminal connections for the G23LM, which will then become the G23L and the G23M cables. The G23M cable is currently in-service and the G23L cable is expected back in-service on June 1. Mr. Fromer requested clarification that the Phase 2 oil cooling was delayed and Dr. Sasson indicated that was correct.

Ms. Doreen Saia (Entergy) requested that the NYISO notify Market Participants through the Technical Information Exchange (TIE) listserv by providing announcements for the remaining TOTS infrastructure in-service dates similar to what the NYISO did for the western New York series reactors. Mr. Yeomans agreed.

Mr. Yeomans reviewed the 2016 Summer Capacity Assessment presentation included with the meeting material. In response to a question, Mr. Joshua Boles (NYISO) said the assumed unavailable capacity values use the most recent five years of annual outage data, whereas market studies use only 17 months of outage data.

Mr. Mark Younger (Hudson Energy Economics) stated it appears the market is signaling that 2,300 MW of capacity can retire without causing reliability problems and asked if NYISO Operations was comfortable with potential future capacity margin shortages of 1,000 MW. Mr. Yeomans said the NYISO Installed Capacity Markets are based on meeting the minimum requirements under the NYSRC's criteria. Mr. Rana Mukerji (NYISO) recommended that further discussion be raised at the NYSRC if capacity margins continue to decrease. Mr. Gonzales said the NYISO has established separate approaches (probabilistic in the longer term planning horizon and deterministic in the nearer term operating horizon) to evaluate system resource adequacy trends.

Ms. Erin Hogan (UIU) suggested the NYISO should consider labeling the Emergency Operating Procedures values as estimates.

7. 2015 State of the Market Report

Dr. Pallas LeeVanSchaick (Potomac Economics) reviewed the presentation included with the meeting material.

Recommendation #1 – Implement location-based marginal cost pricing of capacity that minimizes the cost of satisfying planning reliability criteria

Mr. Gioia asked how the MMU determines reliability value for the purposes of this recommendation. Dr. LeeVanSchaick said the MMU looks at the marginal effect on the targets used in resource adequacy models (NYCA LOLE and NYCA LOLE on additional capacity). Mr. Gioia asked for clarification if reliability value was based on IRM. Dr. LeeVanSchaick said it is based on measuring additional capacity for the same LOLE objective. Mr. Younger expressed a concern with the recommendation because it could result in radical changes as different MARS databases are used and generation capacity changes throughout the state and asked if the MMU evaluated this concern. Dr. LeeVanSchaick said the MMU is waiting to see the NYISO's results at the LCR Task Force and recommended deferring discussion until results are available. Mr. Younger said his concern is that the NYISO is using one IRM base case, but multiple IRM base cases in the future need to be evaluated too because it is not clear if the results from the one IRM base case will be meaningful. Mr. Bob Boyle asked if the recommendation could result in one area decreasing in LOLE and another area of the state increasing. Dr. LeeVanSchaick said the recommendation would maintain the statewide LOLE.

Recommendation #8 – Modify the capacity market and planning process to better account for capacity that is exported to neighboring control areas from import-constrained capacity zones.

Dr. LeeVanSchaick reviewed this recommendation with stakeholders. Mr. Younger said this recommendation should be related to the LCR setting process and the focus should be on fixing the LCRs and then moving onwards. He said there is validity to the recommendation for exporting from mitigated constrained zones and the counterflow impact, but the recommendation does not work smoothly for NYC-PJM on the Linden VFT. Dr. LeeVanSchaick agreed. Mr. Younger said a

market rule change may not be the right way to addressing it, whereas the IRM and LCR setting should be able to fully incorporate the impacts and recognize the location of units in constrained areas. Mr. Younger opined that other capacity zones throughout NYISO should be represented as well, that interface transactions have been ignored, and that now there is a desire to fix the counterflows. Mr. Younger stated that this issue was anticipated when mitigation rules were developed for capacity sales and the expectation was that it would impact the capacity market clearing prices. Mr Younger further stated if the NYISO is going to change the market rules, then it needs to remove mitigation rules related to capacity sales out of localities because they are no different than NYCA export sales. Dr. LeeVanSchaick said the MMU would not propose the removal of the mitigation rule and clarified that mitigation should be applied where the capacity leaves from, but the recommendation should not apply to controllable lines. He added there should be sense of urgency on the recommendation because in addition to capacity obligations that begin in June 2018, ISO-New England is proceeding with a rule change that would allow additional resources that didn't qualify in their 2017 capability period to be capable of selling in its 2017 reconfiguration auction. Mr. Younger said the recommendation is a complicated band-aid on a flawed process.

Mr. Fromer asked if the approach helped NY prices be competitive with NE prices. He opined that, under the recommendation, market signals would not be sent and could be counter-productive. Dr. LeeVanSchaick said there are higher prices in NE than most areas of NY and that could attract NY resources to sell into NE and the NY-NE interface capability is the only limit. Generators situated in local capacity zones providing their capacity to NE may be dissatisfied with NY prices, but their provision of capacity to NE also provides reliability benefits to the local capacity zone in NY. This benefit should be taken into consideration. Dr. LeeVanSchaick said the MMU is recommending compensation for the generator for the extra reliability benefit it is providing to NY, which is the difference between the local capacity zone and ROS price. Ms. Saia said it is more important to set the IRM and LCRs correctly so it reflects where resources are leaving, and that there are issues if generators are paid twice for the same capacity.

Recommendation #9 – Eliminate fees for CTS transactions at the PJM-NYISO border.

Dr. LeeVanSchaick reviewed this recommendation with stakeholders . Mr. Younger stated that all transaction fees should be eliminated, including LBMP fees, and that the PJM fees have nothing to do with the cost causation of the transactions.

Recommendation #10 – Incorporate the ABC and JK interfaces (between SE New York and PJM) into M2M process.

Dr. LeeVanSchaick noted that Con Edison will no longer have the Con Edison-PSEG wheel agreement in place beginning in May 2017 and the MMU is recommending that the NYISO work with other parties to incorporate the ABC and JK interfaces into the M2M process so they can be used to manage congestion efficiently. In response to a question, Dr. LeeVanSchaick said the PARs do not have characteristics that would allow energy interchange scheduling at discreet ABC and JK interfaces, and this short term recommendation is based on the physical limitations of the current equipment. Ms. Jane Quin (Con Ed) said she did not think this recommendation will cut off discussion on how the ABC and JK PARs will be modeled.

Recommendation #15 – Model 100+kV transmission constraints in the day-ahead and real-time markets.

Mr. Gonzales said the NYISO supports the recommendation to model 100kV transmission constraints as a future project to improve energy market signals, and had four related comments:

1. The issue of market power regarding 115 kV constraint modeling needs to be reconciled because typically there is only a single supplier that can address 115 kV constraints, which

raises market power issues. Dr. LeeVanSchaick responded the MMU agrees the potential exercise of market power needed to be addressed during implementation and may require tighter mitigation thresholds.

2. Much of upstate Out of Merit (OOM) hours of operation were the result of Huntley and Dunkirk units that were retired in December 2015 and March 2016. Dr. LeeVanSchaick responded the transmission solutions have alleviated some of the current issues, but there are still 115 kV constraints that require OOM actions, so the recommendation is still relevant.
3. Mr. Gonzales said the Niagara Plant 230kV and 115kV unit optimization, is a manual process to minimize Western NY congestion and improve market efficiency that is implemented voluntarily by NYPA and NYISO.
4. The two transmission lines on the PJM-NY interface identified in the recommendation are out of service for reliability reasons that are not related to congestion management. Mr. Gonzales explained that the shutdown of coal plants in the Cleveland area, as well as the lack of generation in Northwest Pennsylvania, makes power flows on the two transmission lines insufficiently controllable from a reliability perspective.

In response to a question, Dr. LeeVanSchaick said the MMU has not discussed the cost of implementing the recommendation with the NYISO. Mr. Montalvo expressed a concern with the extent of the recommendation and asked what kinds of improvements will be signaled as a result. Dr. LeeVanSchaick said the MMU could look into providing qualitative metrics to help stakeholders understand the investment signal outcomes of the recommendation.

Closing Remarks

Mr. Fromer said he was surprised that the 2015 State of the Market report did not have any significant discussion of issues that NY is confronting in terms of attracting investment in the state. He referenced the Fitzpatrick deactivation assessment, the Clean Energy Standard's proposal to subsidize upstate NY's nuclear fleet, and renewable energy public policies. Mr. Fromer stated that neighboring ISOs and RTOs are seeing new investment because they have Forward Capacity Markets. Mr. Fromer said it would have been helpful to have the MMU evaluate the lack of private investment in NY. Dr. LeeVanSchaick said it is not clear to the MMU how lack of private investment would be alleviated through a FCM in NY. He said load growth is slow and NY has surplus capacity, and there are indications that new resources will enter the market, however, they are not from private investors. Mr. Fromer said the NYISO did not have good tools to deal with the Fitzpatrick deactivation assessment. He believes the MMU's recommendations are tweaks and that the NYISO may need a fundamentally new capacity market design to bring investment into NY.

Mr. Younger said NY has a problem with a planning process that could overtake market signals. There are conservative planning assumptions that are inconsistent with how the market operates. For years, NY operated with excess, and that excess is going away and we have a market that is exposing the planning process's conservative assumptions. A FCM would address some of those issues and provide market signals. It would better align the markets with the planning process and include the obligations of suppliers to meet forward capacity needs. Mr. Fromer agreed and said it would provide the NYISO and utilities a far greater ability to respond.

Ms. Amanda Trinsey (Multiple Intervenors (MI) and City of NY) said MI opposed a FCM because the NYISO had consultants consider FCM in the past, and each time, the consultants did not support NYISO adopting a FCM.

8. New Business

None

The meeting adjourned at 2:25 p.m.