DRAFT

NYISO Management Committee Meeting Minutes September 27, 2017 10:00 a.m. – 1:00 p.m.

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

The chair of the Management Committee (MC), Ms. Patti Caletka (NYSEG/RGE), 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 the Draft July, August 2017 Meeting Minutes

The draft meeting minutes for July 17 and August 30, 2017 were presented for approval.

Motion 1

The Management Committee (MC) approves the June 13 July and August 30, 2017 meeting minutes. *The motion passed unanimously by show of hands*

3. President/COO Report

Mr. Brad Jones (NYISO) expressed his appreciation to Mr. Bob Boyle (NYPA) who was retiring. He thanked him for his dedication to the committees, and noted that over the years, Mr. Boyle had chaired the Market Issues Working Group (MIWG), Installed Capacity Working Group (ICAPWG), ICAP WG, NYSRC ICS and the BPWG, and attended over 2000 stakeholder meetings. Mr. Jones noted that the governance process is very important and thanked him for his commitment. Ms. Caletka also thanked Mr. Boyle for the support and expertise he provided to the committees and wished him well in his endeavors. Mr. Boyle, in turn, thanked everyone and stated it has been an exceptional time working with everyone.

Mr. Jones reported that an announcement on a Carbon Pricing Task Force would be forthcoming. The goal of the task force is to provide stakeholder input, guidance and recommendations on the relevant issues associated with carbon pricing. The group would also be discussing a work plan, as many stakeholders have expressed a desire to move forward quickly on resolving the issues. Mr. Jones stated that this will require a significant amount of stakeholder time and effort in ensuring the effort of the task force is a success. He encouraged everyone to get involved.

Mr. Rick Gonzales (NYISO) reviewed the Market Performance Highlights and Operations Performance Report (presentation include with meeting material).

4. NYISO Summer 2017 Hot Weather Operating Conditions

Mr. Wes Yeomans (NYISO) provided an update (presentation include with meeting material).

5. NYISO 2018 Budget Overview

Mr. Alan Ackerman (Customized Energy Solutions) provided an overview (presentation included with meeting material). Key Priorities and projects, budget highlights, and 2019-2020 draft budget projections were reviewed.

Mr. Rich Bolbock (MEUA) stated that he fully supports the additional headcount in the Planning Department, given the number of Public Policy initiatives.

Mr. Kevin Lang (City of NY) noted his appreciation to the NYISO for managing to keep the budget flat over a number of years and understands that this was not going to be sustainable every year. Mr. Lang stated that he is not objecting to the increase for 2018, but noted the higher increase in 2019 and encouraged the NYISO to minimize that increase as much as possible. Ms. Cheryl Hussey agreed and stated that this was the plan.

6. Consumer Impact Analysis – 2018 Projects

Mr. Tariq Niazi (NYISO) presented the list of projects identified for consumer impact analysis for 2018 (presentation included with meeting material). The projects identified for analysis are:

- Integrating Public Policy
- BSM Repowering
- Constraint Specific Transmission Demand Curves
- DER Participation Model
- Energy Storage Integration and Optimization

7. Market Transparency Initiative Status

Mr. Peter Lemme (NYISO) provided a summary of progress to date with respect to Market Participant suggestions for improving market transparency (presentation included with meeting material).

Mr. Mike Kramek (Boston Energy Trading and Marketing) asked if real-time rating changes were logged by the operators and, if so, could the log be published. Mr. Gonzales replied that the majority of the real time rating changes are communicated via the SCADA system and implemented automatically within the EMS. He added that this was the reason that a significant software effort to extract the information from the EMS would be required. Mr. Kramek noted that real-time ratings changes are sometimes noted in the Operations Report and asked if this information could be summarized and posted. Mr. Gonzales said that he would look into it.

Mr. Bruce Bleiweis (DC Energy) stated that NYISO has done a great job over the last couple of years with transparency, adding that there can still be room for improvement, such as making virtual energy public.

8. Western NY Public Policy Transmission Planning Report

Mr. Rob Fernandez (NYISO) noted that at the September Business Issues Committee meeting, it was announced that the Board would be amenable to entertaining oral presentations by stakeholders on the Report. Several entities have expressed a desire to reserve their right to speak and to submit additional written comments. NYSEG has asked to address the Board. Supplemental written comments on matters not already raised in prior written comments can be submitted by close of business on Friday. After discussion among stakeholders, it was agreed that the written comments should be provided and posted by Friday afternoon, to allow members an opportunity to review the comments, followed by a deadline of close of business on Tuesday to notify NYISO if they would like an opportunity to make an oral presentation to the Board. Mr. Zach smith noted that comments already submitted or oral comments provided during the meeting would be shared with the Board. A notice with logistics would be sent out following the meeting.

The NYISO has committed to having a lessons learned discussion in parallel with the work being done on AC transmission. This discussion will start in October.

Mr. Paul Gioia (WOH) stated that one of the elements of the lessons learned process will be defining the treatment of local upgrades in the planning process. He said that now that the NYISO is moving ahead with the AC Transmission process, the NYISO should the issues before it completes the AC process.

Mr. Zach Smith (NYISO) stated that defining the issues and areas of improvement will be discussed in the lessons learned process and that there are a lot of details surrounding the issue that the NYISO will

be discussing with stakeholders. He said that the NYISO will be pushing forward with completing the AC transmission in parallel with dealing with the issues, and that the NYISO will be open and transparent on how the issues are addressed.

The lessons learned will be in three tiers. First, to the extent the NYISO can make the process more efficient without requiring changes to the manual or tariff we will do that. Second, changes can be made to the Public Policy Transmission Planning Process Manual, and third, some changes will require changes to the tariff. To the extent changes need to be reflected in a manual or tariff, they will have to be addressed in 2018.

Mr. Dave Clark (LIPA) stated that, as mentioned at BIC, it would be useful from LIPA's perspective to understand the zonal impacts of proposed transmission projects on production costs. Mr. Clark said that such cost data are a good proxy for LIPA in terms of production costs that are unhedged in the Long Island zone. He said the information will help LIPA identify how projects make the short list and the differences in terms of impacts on LIPA customers, including who are the beneficiaries of the project will be helpful for us. He said that the way it works in LIPA's system is that LIPA passes through fuel costs, so to the extent that a project changes LIPA's fuel cost, that will help LIPA to understand what portion of those costs are directly passed through. This would be a good bookend to help understand the whole value proposition of the line.

Mr. Dawei Fan (NYISO) stated that we will consider this in the lessons learned process.

Mr. Lawrence Willick (LS Power) commended the NYISO staff on the work done. He stated that it is clear there was a significant amount of analysis done, however, there really aren't distinguishing factors identified that support the recommendation of T014 as the most efficient and cost effective project. Mr. Willick noted the bullet on the slide presentation which identified the additional connections at Dysinger as providing benefits. There is some additional transfer from that, but it comes with an additional cost that isn't justified. Mr. Willick said that the PAR does provide some additional transfer benefits but that it comes at a significantly higher cost and that cost isn't justified. He said that the NYISO called the cost estimate among lowest for project T014, however, the lowest is T006. It's also noted that the cost for MW ratio is among the lowest for T014 but it is not the lowest. There is some rounding in the table and the project with the lowest cost per mw ration is actually T006. When you take into account the cost of the other elements above, they don't provide additional benefits on a per MW basis. The only distinguishing factor identified here in the recommendation is the production cost savings. He said that T014 does have the highest production cost savings but when you look at the rest of the production cost analysis those costs savings come with significantly higher CO2 emissions, less Western NY congestion relief and higher LBMP payments for Western NY. So the conclusion isn't that T014 is more efficient and cost effective for the Western NY Public Policy Transmission Process, because those production cost savings aren't coming from Niagara and Ontario imports, they are coming from fossil generation either from the Somerset coal plant or the Homer City coal plant, which is not consistent with the Western NY Public Policy Transmission Need. What is missing is any conclusion or statement of those distinguishing factors. He said that T014 does have 7 million tons of reduced CO₂ emissions, but T006 has 11.4 million of reduced CO₂ emissions; which said is 50% more reduction in CO2 system wide. It's been said that the state needs to do whatever it can to meet its CO₂ emission reduction goals and here is a recommendation that doesn't go that far and it doesn't state the production cost savings offset the relatively CO2 or LBMP payments.

Mr. Fan stated that regarding emissions and lower payments, the objective of the production cost simulation is to minimize the production cost. Production cost savings are the primary consideration for all the production costs related to the production cost simulation. Mr. Fan said that the NYISO did consider emissions, LBMP, and load payments, but the primary consideration for production cost

simulation is production cost savings. For coal units, Mr. Fan said that the NYISO did consider a scenario that captured the impact of the coal units and NYISO's finding is that output from one specific coal unit was not a distinguishing factor in the ranking and selection process. Regarding the Dysinger substation design and the PAR proposed by T014, Mr. Fan stated that in the report, in Section 4.2, the NYISO did compare the project in the top tier and identified some of the distinguishing factors for all the tier 1 projects. He concluded that the NYISO did find that the benefits due to the substation design and the PAR exceeds their cost.

Mr. Howard Fromer (PSEG) asked what happens in the event that the PSC does not propose a cost allocation agreement and the developer is allowed to propose it and then develops an approach that the NYISO fundamentally disagrees with and does not want to sign an agreement. Mr. Patka summarized the process by which the PSC may prescribe a cost allocation methodology in the Public Policy Requirement. He said that if the PSC does not do so, the selected Developer may submit a proposed cost allocation methodology to the PSC and that there is a process for the Developer and the PSC to reach agreement. If agreement is reached, the Developer submits the agreed upon cost allocation methodology to the FERC. If there is no agreement reached, the Developer submits its preferred cost allocation methodology and the PSC's preferred methodology for the PSC's consideration. If FERC approves an alternative cost allocation methodology the NYISO will use it. If not, the NYISO will apply the load ratio share methodology already approved by FERC as the default in the NYISO's tariff.

Mr. Kevin Lang (CNY/MI) noted that on behalf of the City of NY and Multiple Intervenors, we think that the NYISO did a very fair and thorough job in going through this process. As mentioned earlier, we would like to see the process expedited a little more and will work with Zach and the Planning staff. While we support what the NYISO did and have no issues with the report that was issued, we feel that we are not in a position to be picking winners or losers. Our view is that is for NYISO to do under the process, and for that reason we are abstaining, but that should not be interpreted with and concerns we have with the process.

Mr. Miles Farmer (NRDC) stated that NRDCs view – we appreciate all of the work that NYISO has put in and we are going to be voting yes because we think that it is very important for NY to move forward with transmission projects to serve public policy needs in an expedited fashion. At the same time, we do think that the concerns regarding the evaluation of emissions impacts not being fully accounted for the social cost of carbon raised by LS Power should be looked into. Further, in future projects we will be reaching out to Mr. Zach Smith and team to talk about ways in which the state can define the Public Policy needs in a manner that production costs doesn't act as the overriding concern in project selection and that the social cost of carbon is fully accounted for.

Jane Quin stated that Consolidated Edison will be voting yes, but cost allocation is still a big concern for them, and provided the following statement for the meeting minutes.

Con Edison applauds the NYISO's and the Public Service Commission's efforts to support transmission buildout driven by critical public policy requirements. We recognize that under the NYISO's tariff an appropriate cost allocation methodology in the Western New York process is the responsibility of the New York Public Service Commission and/or the developer of the selected project. If a methodology is not proposed by the NY Public Service Commission or developer the cost allocation will default to a load ratio share basis. Based on the NYISO's Draft Report, we note that the majority of the benefits accrue to certain Western and Upstate regions of the New York Control Area. Left unchanged, the Western New York cost allocation will be based on a load ratio share basis, which will inappropriately allocate significant project costs to regions that experience limited benefits from the project. The New York Public Service Commission has not yet issued a proposed cost allocation methodology that may resolve this issue, but on behalf of our customers we remain

focused on a methodology that is commensurate with the beneficiaries pay principles inherent in FERC Order 1000.

Ms. Margaret Janzen (National Grid) provided the following statement for the minutes noting that they will be abstaining from today's vote:

Regarding the NYISO's implementation of its Public Planning Process for transmission needs in WNY, National Grid would like to express constructive feedback regarding the evaluation and comparison process, and the results of the production cost analysis.

Regarding production cost results, the NYISO should provide more detailed information on factors such as flows over internal and external interfaces, changes in generation dispatch and describe the causation of LBMP/production cost changes to give market participants a clearer view on how these projects impact the dynamics of the NY markets.

Regarding the evaluation and selection process, NYISO should clearly identify metrics that are of primary interest relative to other metrics used in selection and before project solicitation. In addition, NYISO procedures should clearly reflect responsibilities of developers and local TO with regards to the non-BPTF system.

Lastly, National Grid agrees with the NYISO conducting a 'Lessons Learned' review of the process, in order to improve it for future public policy projects.

Mr. Glenn Haake (NYPA) stated that they have worked with NYSEG to put comments in writing which restate many of things presented at prior meetings. The comments are posted under MC meeting material. They also acknowledged the hard work put in by NYISO in the process.

Mr. Smith stated that he appreciated everyone's comments and thanked everyone. He noted that it has been a very productive process worked on over the years. Regardless of stakeholder's positions, everyone was very productive in providing feedback, and we value all of the feedback and appreciate the help and support provided.

Mr. Howard Fromer stated that the work that the NYISO did on this was very significant, but as he commented at BIC:

Here we are in Sept 2017, completing the first of two PP that the NYISO is dealing with that stem from a process begun in 2014. We won't be done with the PP cycle for probably 3 ½ years. The emergence of PP projects under consideration is a chilling impact on market activities. People don't know how to plan for it whether economic activities will or will not be there, and it's something that has to be avoided. The low hanging fruit looks good but it is not nearly attractive as the high hanging fruit. There are some huge issues that need to be addressed if we are going to get this cycle bounded in some reasonable way to be orderly with all of our other activities in the market. If we are going to tackle beyond the low hanging fruit, we really have to address the fundamental issues of how do we bring this to some rational timeline. This is first time through, but there will be more of this Public Policy activity and if we don't grapple with that we are going to be really undermining any opportunity for people to be making rational business decisions. The timeline needs to be shortened, decisions made, and we need move forward one way of the other.

Mr. Smith stated that we share the concern; our vision when Order 1000 was issued was for a process that would be more efficient than what we have experienced. There are many lessons learned and the

NYISO will take them very seriously, and is excited for the effort that will be put in next year in thoroughly reviewing our planning process and what we can be doing to improve it.

Mr. Pallas LeeVanSchaick (Potomac Economics) presented the MMU recommendations on the Western NY Public Policy Transmission Planning Report (presentation and report included with meeting material). Under the MMU conclusions, Mr. Gioia questioned the appropriateness of their finding that the NYISO's recommendation of T014 is reasonable. Mr. Gioa stated that the role of the MMU under the tariff relates to whether the project recommended for selection would harm the competitiveness of the NYISO's wholesale electricity markets. He said that making a judgment on selection of a specific project from the projects proposed is outside of the scope of the MMU's role. Mr. LeeVanSchaick stated that he will take this under advisement.

Motion #2:

WHEREAS, the Electric System Planning Working Group ("ESPWG") and Transmission Planning Advisory Subcommittee ("TPAS") have held a series of meetings with NYISO Staff to discuss and review the studies and analyses underlying the NYISO's findings regarding the Western New York Public Policy Transmission Need and a draft Western New York Public Policy Transmission Planning Report; and

WHEREAS, NYISO Staff has incorporated modifications to the draft Western New York Public Policy Transmission Planning Report based on comments received at five joint ESPWG-TPAS meetings from July 20, 2017 through August 28, 2017;

WHEREAS, NYISO Staff made a presentation of a draft Western New York Public Policy Transmission Planning Report, including Appendices, at the September 12, 2017 Business Issues Committee ("BIC") meeting and the September 15, 2017 Operating Committee ("OC") meeting; and

WHEREAS, the BIC reviewed the draft Western New York Public Policy Transmission Planning Report and recommended that the MC recommend approval of such draft Western New York Public Policy Transmission Planning Report by the NYISO Board of Directors; and

WHEREAS, NYISO Staff has posted a draft Western New York Public Policy Transmission Planning Report dated September 20, 2017 ("Draft Report"), including Appendices and limited modifications to incorporate updates related to approval of relevant System Impact Studies at the September 15, 2017 OC meeting, for the September 27, 2017 Management Committee ("MC") meeting.

NOW, THEREFORE, based on the posted Draft Report and the presentation made by the NYISO and discussion at the September 27, 2017 MC meeting, the MC hereby recommends the approval of the Draft Report by the NYISO Board of Directors.

The motion passed with 100% affirmative votes, with abstentions.

9. New Business

There was no new business. The meeting adjourned at 1:00 pm.