DRAFT

NYISO Management Committee Meeting Minutes January 22, 2020 10:00 a.m. – 1:00 p.m.

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

The chair of the Management Committee (MC), Ms. Jane Quin (Con Edison), called the meeting to order at 10:00 a.m. by welcoming the members of the MC. Members identified themselves and the attendance was recorded. A quorum was determined.

2. Approval of the Draft November 20, 2019 Meeting Minutes

The draft November 20, 2109 meeting minutes were presented for approval.

Motion #1:

Motion to approve the draft October 30, 2019 Management Committee meeting minutes.

The motion passed by show of hands.

3. President/COO Report

Mr. Rich Dewey announced the upcoming Sector Meetings, beginning on March 2 and continuing through March 12. Mr. Dewey noted that these meetings are an important part of the NYISO's strategic planning process and provide an opportunity for stakeholders to advocate and promote topics of importance to them. Mr. Dewey encouraged everyone to attend and stated that he was looking forward to an active discussion. He directed stakeholder to submit agenda topics for their meetings to Kirk Dixon at kdixon@nyiso.com.

Mr. Rick Gonzales provided the Market Operations highlights and Market Operations Report (included with meeting material).

4. State of the Grid

Mr. Rich Dewey (NYISO) provided a "State of the Grid" address, focused on key priorities anticipated, and steps the NYISO would be taking to shape the future grid. Mr. Dewey noted that his report is consistent with content in the Strategic Plan and the recently published <u>Grid in Transition Report</u> which further details the NYISO's key priorities.

Mr. Dewey acknowledged that satisfying the objectives of both State and Federal Energy policies will be challenging, but NYISO's record of accomplishment established with the markets sets the stage and provides for a very effective foundation moving forward. He stated the NYISO is looking forward to working through the necessary changes with the stakeholder community.

Mr. Dewey also acknowledged that the pace of the changes will be important; the goals established by the New York State Legislature and signed by Governor are aggressive, and the timeline to achieve those goals is short and the forward path toward solutions will need to be a very deliberate one.

Mr. Dewey highlighted some of the significant planning work scheduled for 2020, some of which is already underway or completed, including:

Reliability

Mr. Dewey noted that reliability is the foundation upon which the NYISO's markets work and the primary charge of the NYISO; and everything that evolves must be based on a foundation of reliability. The NYISO believes and continues to advocate that markets are the most effective means to attract the resources

needed to maintain reliability, and the most cost effective means to be able to attract those resources. He stated that the markets were established to achieve reliability in the most cost effective manner for consumers.

Mr. Dewey stated that it is important to recognize that, as the industry changes, innovation and technology development is going to be important. The difficult nature of some of these goals will require technology that isn't necessarily commercially available today. Markets are the most effective means to attract new and innovative solutions. The NYISO will continue to promote innovative products and services that are geared to achieve the goals New York has undertaken.

Mr. Dewey said that one of the key objectives is to continue to be the authoritative source of information regarding performance and reliable operation of the power grid. We recognize the need to inform stakeholders, policy makers and the public what the grid of the future is expected to look like, and how reliability will be maintained.

Mr. Dewey highlighted some of the significant planning work scheduled for 2020, some of which is already underway or completed. Mr. Dewey noted that these planning studies will be vital and fundamental to how the NYISO is going to make near term market and policy decisions to begin moving the electric grid toward achieving New York's goals. This will be the first step in setting the stage for a reliable future with a high penetration of intermittent and renewable resources.

Planning

- Congestion Assessment and Resource Integration Study (CARIS), which will include a scenario to
 evaluate moving to 70% renewable energy by 2030. The study will identify opportunities for transmission
 investment to un-bottle renewable energy to enable the State's renewable energy production goals.
- Reliability Needs Assessment, the cornerstone of our comprehensive planning process, which will
 include assessments of planned facility additions, modifications, and retirements through 2030 to
 identify any reliability needs that may arise. In addition to those baseline assessments, the study will
 include a scenario that builds off the CARIS scenario of 70% renewable energy by 2030 to help identify
 potential additional reliability challenges that may be encountered 10 years down the road.
- Climate Change Impact and Resilience Study, which originated from our stakeholders, will build upon recently completed work to consider the changes in load forecasts resulting from warming temperatures coupled with the projected electrification of the transportation and heating sectors, and to evaluate potential changes in the resource mix. In 2019 NYISO developed new and innovative load forecasting capability, which is necessary to look into the future. NYISO will also consider a zero carbon electric grid in 2040. The study of these potential future conditions will identify system attributes that are necessary for reliable grid operation to help inform market design objectives and define the path forward.

Mr. Kevin Lang (City of NY) expressed his appreciation to the NYISO for undertaking these long-range studies. Mr. Dewey thanked Mr. Lang and noted his appreciated to the City of NY for helping to engage and for sharing the work it has done. Mr. Dewey said he is looking forward to working with stakeholders.

Mr. Mark Younger (Hudson Energy Economics) agreed that the system, designed around assuring and securing reliability, has worked well for the last 20 year, but stated that new contracting mechanisms coming out of the PSC have the potential to disrupt that. He added that ultimately, people sell into the real time market; they can sell and can take a position in the DA market, but then if conditions change they have a real incentive to buy out of that position – the State has put together mechanisms where people will sell into the RT market but get paid the DA price. Mr. Younger asked if the NYISO has looked at whether those changes potentially pose any reliability risks since there is no longer a straight financial connection of not wanting to sell at a loss in real time. Mr. Younger stated that it is not clear that contract holders would have an interest in cutting back their real time output if the DA price was good, even when the RT price is very negative. Mr. Younger stated that he is focused on the incentives for when these resources produce energy and whether

that might conflict with the NYISO's interest in having them not producing energy in real time. Mr. Younger stated that he thinks the NYISO needs to work through this and have a discussion with stakeholders.

Mr. Dewey noted that there has been a lot of discussion on markets and how can they continue to add value and incentivize the right kind of development going into the future. He acknowledged that the current rules in place today were built to very successfully achieve a different set of policy objectives and have done an amazing job of exceeding the original objectives. However, there is now a different set of drivers that NYISO markets must evolve to satisfy. Mr. Dewey discussed some items that are high priority:

Markets

- Integrating Carbon Pricing into the markets as the most efficient, immediate and effective means to pursue the state's public policy goals for clean energy production detailed in the CLCPA. NYISO is very encouraged by the recent endorsements by third parties who have a stake in this and advocated on behalf of including the social cost of carbon in the energy price. NYISO will continue to advocate for including the cost of carbon in the energy price, as we think it is the right path forward.
- Energy and ancillary services design enhancements to promote system flexibility.
- Improving the resource adequacy model to better align compensation with performance given the changing power grid.
- Comprehensive Mitigation Review: the NYISO is actively engaging stakeholders to conduct a comprehensive review of NYISO market rules aimed at maintaining competitive market structures that will continue to support reliability. Mr. Dewey's address reflected his vision of the mission and the leadership necessary to achieve the unprecedented transformation of New York's power system. By collaborating with stakeholders and policymakers, the NYISO is committed to achieving this transformation through competitive markets while maintaining its core missions of reliability and economic efficiency.

Mr. Jim D'Andrea (Ravenswood) asked if the NYISO has met with the NYS PSC on their recently issued Index REC pricing order; how this could impact the current carbon plan, and any insights on if this seems to be a signal from the Commission or Governor's office.

Mr. Dewey stated the NYISO has filed comments on the order, and while he does not have information that would link the PSC's decision to NYISO's carbon pricing proposal, the NYISO is in favor of the PSC's decision and supports it. Mr. Dewey noted that some of the opposition from stakeholder initially was the notion that including the cost of carbon in the energy price would drive excessive costs because entities would receive RECs in addition to a social cost of carbon energy price. Some stakeholders viewed this as excessive or double payments. Mr. Dewey said the implementation of the index RECs for the onshore resources is similar to what was done for off shore; he thinks this would make more compatible what NYSERDA is doing with the RECs and more compatible with the carbon pricing proposal.

Mr. John Cordi (NYPA) stated that NYPA encourages new clean resources, said that upstate is a different story, and 92% emissions free, which is remarkable. He noted that it is important as we transition to the new resources that the market incentives and operational capabilities that have brought us reliability are not lost. While we are changing market mechanisms, traditional generators will be needed in this renewables world. He stated that some of the challenges in upstate are how do we protect renewables that we have and keep them going and interacting with the grid, but also how do we have the transmission necessary to have the future state work. He stated that NYPA supports New York's goals and has taken on a lot of innovation projects. He stressed the need to focus on valuing transmission to achieve the future state.

Mr. Rich Dewey replied that carbon pricing goes a long way toward satisfying some of those objective, and the need to continue to focus on transmission to build out of the infrastructure to make sure we can move renewable energy down to the load centers continues to be a point that NYISO advocates for. He stated that NYISO will continue to explore how to work with New York State to achieve this.

On a last item, Mr. Dewey noted that the buyer side mitigation (BSM) regime, which is presently in place is unsustainable and inconsistent with the anticipated future of increased renewable intermittent resources. In the near term subsidized resources may be necessary to help New York achieve its goals. NYISO recognizes that there are inconsistencies in current BSM tests and rules. NYISO has initiated a comprehensive project in the stakeholder process to develop needed BSM improvements.

Mr. Fromer asked if Mr. Dewey has had an opportunity to assess the significance of the FERC decision in PJM, and what that potentially means for efforts in NY.

Mr. Dewey stated that we do not definitively know the impact of FERC's PJM order yet. The mitigation regime that's been established in NY to maintain the competitive supply and demand balance is very different from what PJM had in place. He added that as NYISO has maintained, and the Market Monitor has confirmed in every State of the Market Report, that supply and demand still results in competitive outcomes in New York. He added that PJM does mitigation very different from NYISO, but said it would be concerning, if the principles behind the PJM decision were rigidly applied to New York.

Ms. Doreen Saia expressed concern on applying these new concepts to Class Year 2019, and asked that the NYISO consider whether it would be appropriate to include sunset provisions so that we have a way to look at the impact of rule changes and make sure they are working as intended. She added that during the thought process generators raised significant concerns about the physical withholding ramifications and there was a much greater willingness to listen to the generators' concerns and to work through revisions. As we move forward, continued cooperation will be critical. Ms. Saia highlighted that this was a very good effort and should be one that is a model going forward.

Mr. Matt Picardi (Shell) thanked Mr. Dewey for the discussion and asked that as we embark on this process of looking at the grid in transition, we make sure we keep the risk with developers. Historically developers have had to go out and get hedges for development risk, and as new products are created, we need to continue to think about the impacts on the forward markets and the way energy will be exchanged. He said if you create a new product that can't be traded on a forward basis your goal of trying to promote merchant development and keep that risk with developers will fade away. Mr. Picardi's concern is we will end up in a situation where significant additional revenues are derived from the capacity market.

Mr. Dewey thanked Mr. Picardi and explained that NYISO strives to be transparent with any new products it is contemplating. He stated that there are a lot of new participants and developers and business models that are different. To the extent NYISO can learn what is important from a business model standpoint it will help NYISO develop complete and innovative products.

Mr. Dewey stated that he thinks we have an outstanding foundational model with the NYISO's markets and a stakeholder process that can get things done collaboratively and he is looking forward to the new year and what NYISO and its stakeholders will develop to achieve these new goals.

5. 2021-2025 ICAP Demand Curve Reset: Proposed Tariff Revisions for Gross CONE Adjustments
Mr. Ryan Patterson (NYISO) reviewed the presentation included with meeting material. The proposed
changes relate to the methodology for adjusting the gross cost of new entry values as part of the annual
update process for the ICAP Demand Curves. As part of the last demand curve reset a comprehensive set of
revisions to the process were implemented, including extending the period between resets to 4 years,
implementing annual updates between resets, and revising the methodology for estimating potential net
Energy and Ancillary Services revenues earned by the hypothetical peaking plants.

Motion #2

The Management Committee ("MC") hereby: (i) approves changes to the NYISO's Market Administration and Control Area Services Tariff with regard to the modifications for calculating the gross cost of new entry

composite escalation factor as presented to the MC on January 22, 2020; and (ii) recommends that the NYISO Board of Directors authorize NYISO staff to file such revisions under Section 205 of the Federal Powers Act. *The motion passed unanimously by show of hands.*

6. Relocating the IESO Proxy Bus

Mr. Tolu Dina (NYISO) provided an update (presentation included with meeting material).

With respect to impact of the proposal on the TCC auction, Mr. Andy Pebbles (Saracen) asked if limiting this to the 6-month product in the auction means we will forgo the 2-year and 1-year product, which together make up about 25 percent network capability being sold in the TCC auction. Will that 25 percent be added for the 6-month product for the Ontario NY interface capability being auctioned off?

Mr. Greg Williams (NYISO) replied that yes, we are planning on restricting the bidding at the IESO proxy bus for the single two year round and the three 1-year auction rounds.

Motion #3

The Management Committee ("MC") hereby recommends that the Board of Directors approve for filing under Section 205 of the Federal Power Act revisions to Section 4.4.4 and 17.1.5 of the NYISO's Market Administration and Control Area Services Tariff, as more fully described in the "Relocating the IESO Proxy Bus" presentation made to the MC on January 22, 2020.

The motion passed unanimously by show of hands.

7. New Business

There was no new business.

The meeting adjourned at 12:15.