

# Summary of June 2023 Joint Board / MC Discussions:

## Summary of Main Points / Emilie Nelson - NYISO

### Key Takeaways from Joint Board/MC Discussions

- Several central themes emerged from the individual table discussions that can help guide the NYISO's thinking and strategic plan development.
- Key areas of focus include:
  - Reliability
  - Interconnection process reform
  - Market Design, and
  - Coordination and Communications – coordination and communications were really underlying themes that were called-out as important to resolving many of the discussion topics.
- Reliability
  - Stakeholders overwhelmingly shared concerns about reliability over the entire course of the transition to the grid of the future. In many ways, the concerns stakeholders raised are the same concerns the NYISO addressed in its recently released Power Trends; the importance of a balanced transition that protects system reliability.
  - Although ensuring the continued reliability of the electric system has been a common theme at these discussions since before the CLCPA was enacted into law, the nature of the discussion is changing as some reliability concerns are becoming more immediate in nature.
    - The reliability challenges raised include the technologies needed to maintain reliability in the future, examining the reliability rules themselves, (e.g., the 1 in 10 loss of load expectation) and concerns with the ISO's lack of authority to compel generators to continue operation through reliability must run contracts.
    - Others suggested building out additional planning scenarios to identify the “what if” fact patterns that may cause reliability issues in the future if concerns are not addressed now. Increased electrification and its impact on the load forecast was one area raised as a key factor in achieving a reliable transition. Understanding the potential issues across a range of scenarios and identifying the corresponding solutions is an important role for the NYISO. This work must continue and be refined.
    - Coordination will be essential moving forward including the consideration of reliability challenges that may emerge between transmission and distribution.

- In addition, some stakeholders suggested the NYISO needs to shift its communications about reliability from emphasizing generalized concerns to identifying more specifics on how to resolve the concerns it raises, especially with respect to the NYISO's role as an authoritative source for policymakers.
  - Stakeholders suggested the NYISO's use of real-world examples, such as Winter Storm Elliott in December and the early February deep freeze where regional fuel security concerns arose, is an effective means to articulate the specific challenges associated with reliably managing the grid. The New York Control Areas's ability to withstand extended, extreme cold weather demonstrates the reliability benefits provided by the flexible, dual fuel resources we have in New York and the need for resources that can provide similar reliability attributes in the future.
  - And while we're focused on identifying and resolving reliability needs, the NYISO also heard some caution around how it communicates the solutions to those needs.
  - For instance, if the NYISO is addressing retaining peakers it should make it clear that alternatives will be explored to identify other viable solutions.
- Interconnection
  - The NYISO heard very clearly from its stakeholders that the pace of change on the grid is straining processes, and the NYISO interconnection process is no exception. The NYISO has seen a four-fold increase in interconnection requests since the CLCPA was enacted.
  - Stakeholders generally expressed support for the proposed interconnection process enhancements currently under review, with some emphasizing the importance of certainty and availability of information early in the process. For others, clarity on timing of the process was the most critical factor. There should be a careful balance between establishing more concrete, fixed timeframes and allowing developer flexibility to navigate the process.
  - Some stakeholders said providing developers with greater transparency regarding what the system currently looks like would be helpful. This would allow developers to do more of their own up-front due diligence before moving forward with interconnection requests.
  - Still others flagged the complexities involved in interconnection, permitting, and NYSERDA's REC procurement programs, noting the need for increased coordination with state agencies, transmission owners, developers, and even local officials.
  - In order to be successful with interconnection reform, the ISO, transmission owners and developers all have a role. Reliability is paramount and speed is important.

- Market Design
  - There is a strong interest for the NYISO to paint a clearer picture of what the future may look like to allow the market design to evolve. This clarity will facilitate a greater understanding of how projects in the prioritization process address identified needs or gaps in the existing market design.
  - Some stakeholders expressed fundamental concern over the role of markets if state solicitations guide investment in future resources.
  - Stakeholders voiced support for the NYISO's engagement with demand side resources and suggested that flexible demand management, including coordination with retail programs, will become increasingly important as the supply mix shifts to intermittent resources. Future technologies are an areas of focus. Some recommend that the NYISO emphasize attributes rather than advocating for specific technologies, with the NYISO identifying and incentivizing resources in the markets to provide the reliability attributes needed. Others would like the NYISO to specify the potential role for certain technologies, such as nuclear, on the future grid.
  - Participants raised concerns over the ability to attract investment in the kinds of resources that can deliver reliability services. Some of the concerns focused on the structure of the capacity market, including the upcoming demand curve reset process.
  - Some see challenges with attracting capital to NY given the competition that exists for capital with other investment opportunities across the world. Difficulty with interconnection, siting, and permitting issues creates a hurdle. Others say that capital is available to invest in NY and providing more certainty, including certainty regarding the market design evolution, is important to unlock the potential. The lead times are significant and are an important factor in achieving NY's clean energy goals.
  - Timing is important with respect to introducing market design changes. There is concern that providing a market signal too early exposes consumers to increased costs without sufficient resources to respond. On the other hand, market signals must align with reliability needs to guide investment and avoid reliability must run contracts that would ultimately be more costly over the long term.
  
- Communication and Outreach
  - The role NYISO performs with respect to educating policy makers is vitally important now and in the future. Many stakeholders complimented the NYISO's efforts. The NYISO was encouraged to engage on how progress is measured in the clean energy transition. For example, decreasing run hours from emitting resources is a mark of progress that may shape the narrative beyond plant closures.
  - Publications such as Power Trends continue to be highly regarded. Continuing to make information available that can be easily understood is key.
  - Stakeholders suggested that the NYISO play a strong technical role in the various state proceedings underway at the NY PSC, NYSERDA and NYSDEC. One example of a technical role the NYISO can play is identifying the kinds of services that will be

- needed to support future reliability needs as part of the PSC's proceeding addressing zero emission resources. Similarly, stakeholders encouraged the NYISO to take an active role in New York's development of the cap and invest program.
- With respect to NY energy policy – the NYISO has an opportunity to be influential as a thought leader.
- Closing
    - In close, the scope and scale of the grid transition underway and the challenges that must be managed is a concern for many. The timelines are aggressive and daunting. It is essential that the NYISO and its stakeholders recognize and discuss these challenges and work together toward solutions. Throughout the past two days participants heard many examples of the good work underway here in New York.
    - The NYISO thanks all participants for the insights and perspectives provided over the past two days. Your engagement is invaluable to the NYISO's strategic planning process and is essential to the strong governance process that has been foundational to the ISO.

## Summary of Main Points / Julia Popova – MC Chair

### **Summary of Topic 1 discussion: Industry Challenges for Grid Transition**

There are three main categories of challenges the electric industry faces: (1) whether the current market design is sufficient; (2) whether T&D infrastructure needs to be modernized and expanded to accommodate future electric demand; and (3) what is the most cost effective and affordable path to the cleaner electricity future. The summary below is a condensation of conversations among NYISO stakeholders, the ISO Board of Directors, and state and federal agency staff.

#### ✓ **MARKET SIGNALS**

- **Certain electric grid attributes must be priced in addition to existing market products**
  - Market products must properly reflect the value of what is needed to run the electric grid efficiently and reliably. The NYISO should develop market solutions to incentivize and reward the provision of needed services, not specific technologies or resource types
  - New and technology-neutral products and services priced via markets are needed to accommodate the intermittent nature of renewable resources and encourage innovation in developing DEFRs to firm up supply (implementing a carbon price, for example)
- **Revenue Certainty is a Capital Magnet**
  - Energy and ancillary and capacity markets reforms (e.g., dynamic reserves, balancing intermittency, shortage pricing, capacity accreditation)

undertaken by the ISO need to include a clear narrative explaining how they help to protect or enhance expected future market revenue

- **Interconnection process**
    - Citing, permitting and interconnection studies take a long time to complete
    - Improvements to interconnection studies (for example, adopting a cluster approach and/or CRIS auction) are needed to expedite Class Year processes
  - **Reliability:**
    - Until DEFRs are defined and commercially available (that is, before we have a satisfactory substitute for flexible yet currently undesirable technologies), it is paramount to ensure we don't lose existing resources that provide flexible dispatch services and other needed reliability benefits
    - State policies and programs should be carefully crafted to allow for an expeditions yet smooth transition, while avoiding energy costs spikes, capacity margin thinning and other indica of decreased reliability
  - **Load/Demand Flexibility to Manage Reliability and Supply Variability**
    - It is important to engage the demand side (commercial, industrial, and residential) to help to shape electric load to improve the fit with more variable sources of electric supply.
    - Participants recommended that the NYISO work with its stakeholders to enhance existing demand response program; and with stakeholders, utilities, and legislators to unlock the full potential of demand side resources
- ✓ **INFRASTRUCTURE**
- More T&D is needed to fully utilize renewables and meet electric load growth
    - While significant progress has been made to date in New York State, coordination and carefully thought out planning ahead will be required to unlock the full potential of transmission investments
  - Batteries as a transmission have very limited use and may only be a good fit for highly congested areas
  - Whether hydrogen is the fuel of the future or a mere short- to medium-term solution (bridge), it will be necessary to develop ample infrastructure to produce and deliver hydrogen
  - Regulatory hurdles to developing needed infrastructure may be reduced through coordinated planning
- ✓ **COST and AFFORDABILITY**
- The path to a cleaner future requires careful consideration of costs compared to expected benefits.
  - While dependable alternative technologies exist that may be used to firm up intermittent nature of renewable resources and provide “peaking” services, currently the available alternatives are too expensive or not 100% “clean” or both

- Utilizing a carefully designed and properly implemented policies like a cap-and-invest program may assist in reducing out of market payments and result in a better siting and generation profile
- Efficient market design is to the best way to manage the cost of the transition
- New York State should not put “all its eggs in one basket” and solely rely on a combination of wind, solar and storage to power the grid of the future

## Summary of Main Points / Dana Lazarus – MC Vice Chair

### Stakeholder Summary – Topic 2: Managing a Smooth Transition

Topic 2 focused the NYISO’s role in supporting a reliable clean energy transition.

- An overarching theme from the discussion is that stakeholders view the NYISO as a trusted authority on reliability and market design, and that this expertise is needed to manage the transition to the clean energy future.
- Stakeholders are looking to the NYISO to continue to play a strong role going forward in four key areas: (1) grid reliability, (2) market design, (3) connecting new resources, and (4) serving as an educator and partner to the state.
- NYISO’s role in ensuring **grid reliability**:
  - Reliability is job one. Customers expect and require reliable power, and this will only become more important as key end uses electrify
  - The NYISO should continue to be an authoritative source on grid reliability. Stakeholders generally had positive feedback on the NYISO’s communications and outreach to date.
  - Reliability needs to be a central part of discussions at the state-level on implementing the CLCPA.
  - Stakeholders are relying on the NYISO to send a clear message on the reliability challenges NY faces, but also to position itself as a positive and constructive partner to state policymakers.
- NYISO’s role in designing **efficient markets**:
  - Stakeholders generally voiced continued confidence in the NYISO’s markets. Markets can and should play a key role in incentivizing the grid flexibility needed in the future.
  - Stakeholders are looking to NYISO to define the attributes that will required to operate a flexible grid in the future, and to demonstrate how markets can be an efficient and a cost-effective means for achieving continued electric system reliability.
  - In addition, stakeholders encourage NYISO to work on telling the story of what the market will look like in 2040, and how the various market efforts currently

underway will work together to support future grid reliability and provide market revenues for DEFRRs

- The NYISO also has role to play in addressing technologies that will be needed in the future:
  - Necessary technologies do not exist at commercial scale today, but there is interest in having the NYISO take on a greater role in providing information and convening discussions around new technologies that could be the DEFRRs of the future. The NYISO and its stakeholders need to track the development of promising technologies very closely to make sure we understand the resources that will support future grid reliability, and are able to develop the markets and infrastructure that will be required, in turn, to support the new resources
  - At same time, NY also needs to be fully leveraging the opportunities on the demand-side, and stakeholders look to NYISO to further explore those opportunities as well
  
- NYISO's role in **connecting new resources**:
  - Transmission is one area where we have seen progress in New York, with several transmission projects recently completed or underway across the state
  - To build on that, NYISO needs to make sure that the new transmission can be fully leveraged by new resources seeking to connect to the grid, and is working to do so through its efforts this year on interconnection reform
  - The NYISO and its stakeholders also need to make sure we are planning ahead for future system demand, and proactively identifying future system needs – both from a transmission and generation perspective
  
- NYISO's role as **educator/partner** to policymakers
  - Generally stakeholders provided positive feedback on NYISO's work educating state policymakers and other key parties, and stated a desire for NYISO to continue that effort, focusing on the areas core to its mission and where it will have the most impact
  - Stakeholders want the NYISO to provide fact-based information to help inform ongoing proceedings at the state level – (e.g., the PSC's DEFRR proceeding, and NY's implementation of cap and invest)
    - The NYISO's input should be technology neutral, focused on identifying needs and necessary reliability attributes
    - Work with state to help bridge gap to new technologies
    - Make sure programs are designed with reliability and efficiency in mind
  - The NYISO should seek out allies, trusted partners who can help reinforce its key points

- The NYISO should define “what success looks like” in the clean energy transition, and highlight the significant progress being made by the NYISO and its stakeholders to facilitate the clean energy transition
- Stakeholders look forward to continuing to engage and collaborate with the NYISO during this transformative time in the industry.