

# Management Response to the Analysis Group’s Report *Fuel and Energy Security in New York State: An Assessment of Winter Operational Risks for a Power System in Transition*

November 2019

## **Background**

The NYISO management team would like to thank Analysis Group, Inc. (“AG”) for its efforts in producing the report titled *Fuel and Energy Security in New York State: An Assessment of Winter Operational Risks for a Power System in Transition*. We would also like to thank stakeholders for their engagement throughout the development of this report.

AG has provided analysis on a number of disruptions and scenarios. Each involves circumstances that could lead to reductions in fuel and energy security and potentially result in emergency actions, reserve shortages, and/or load shedding. The final report outlines a number of key observations regarding the possible fuel security risks that were examined in the cases. It also provides an evaluation of New York’s preparedness to manage those risks.

In its report, AG observes that based on the resource fleet and operating capability assumed in the study, “the New York grid is well-equipped to manage energy/fuel security risks.” Furthermore, AG notes that “NYISO has already taken many steps to address potential risks associated with fuel and energy security concerns.” While AG does not recommend specific market changes in response to the study, they do offer several options for the NYISO and its stakeholders to consider. The majority of these options involve continued monitoring and assessment of various factors that could impact fuel security.

Based on the results of this study, the NYISO management team agrees with AG that the report does not appear to identify any short-term reliability risk that warrants the development of market rule enhancements at this time. The NYISO also agrees that maintaining awareness of relevant factors will help inform our understanding of New York’s evolving fuel security needs. The ongoing changes to the resource fleet (and the grid as a whole) will require the NYISO to expand its monitoring practices to analyze variables that could affect future fuel security. The remainder of this Management Response discusses certain relevant considerations that the NYISO intends to continue monitoring, as well as potential enhanced monitoring in response to AG’s analysis.

## **Continued Monitoring**

The NYISO management team recommends continued monitoring of certain key factors that could impact fuel and energy security in New York.

The first factor is deployment of new renewable and other clean energy resources. In their observations, AG highlights that: “Meeting the state’s renewable and clean energy resource goals can provide valuable reliability support, and this may be particularly true with respect to offshore wind.” Furthermore, the report states “Over the longer term, the potential magnitude and pace of change of the resource fleet stemming from requirements under the [Climate Leadership and Community Protection Act (CLCPA)] may be of far greater importance for evaluation than the considerations, scenarios and physical disruptions evaluated in this fuel and energy security study with respect to winter operational risks.”<sup>1</sup> The NYISO will continue to monitor the ongoing changes to, and transition of, the resource fleet. This includes continued monitoring of new resource entry through the interconnection process.

A second important factor to continue monitoring is generator outages due to lack of fuel. The NYISO already examines and tracks instances where generators are unavailable due to insufficient fuel supplies. Understanding the magnitude and frequency of these events along with the root cause is critical. Continued monitoring and assessment of such outages, including any observed changes in magnitude and/or duration thereof, will be informative as the NYISO evaluates the adequacy of fuel availability on an ongoing basis.

Third, the NYISO will continue to monitor gas pipeline constraints and contingencies that may impact fuel availability to generation resources. As demand for natural gas shifts across the economy, gas availability to generators could be altered. The NYISO will remain cognizant of changes to gas demand and infrastructure and analyze the associated implications.

Next, the NYISO will continue monitoring environmental and other regulatory requirements that may affect the operation of supply resources. Restrictions on output based on fuel type and location is a dynamic variable that could have significant impacts on grid reliability. The NYISO will continue to evaluate the expected reliability outcomes due to changing environmental and other regulations, including emissions requirements applicable to generation resources.

The NYISO will also continue to monitor retirements of dual-fuel generators and reductions in alternate fuel capability. It is evident from AG’s study results that dual-fuel capability is a critical factor towards our current level of fuel and energy security. Significant reductions in dual-fuel capability could present a challenge to reliable grid operations.

In addition, the NYISO will continue to monitor the status of transmission upgrades, including but not limited to upgrades selected in response to the Western New York and AC Transmission Public Policy Transmission Needs, to maintain awareness of any potential delays in the anticipated in-service dates for such upgrades. Such projects will alter the means by which New York serves its electric load and the capability of the transmission system to deliver power across New York.

## **Enhanced Monitoring**

In addition to continuing current monitoring procedures, the NYISO management team recommends potential enhancements to current monitoring practices. These enhancements seek to bolster awareness

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<sup>1</sup> See Analysis Group, Inc., *Fuel and Energy Security in New York State: An Assessment of Winter Operational Risks for a Power System in Transition*, November 2019, available at the following link: <https://www.nyiso.com/documents/20142/9312827/Analysis%20Group%20Fuel%20Security%20Final%20Report%2020191111%20Text.pdf/cbecabaf-806b-d554-ad32-12cfd5a86d9e>

of potential indicators that could signal a need to commence further efforts to develop market or operational changes to proactively respond to burgeoning reliability risks related to fuel security.

A primary enhancement will be to develop a process to revisit this study in the future. The NYISO will explore potential opportunities to incorporate aspects of this model into existing planning processes. The NYISO will also look for ways to enhance and streamline routine examinations of fuel security going forward.

In addition, the NYISO plans to extend its current weekly fuel inventory evaluation process to project/assess the adequacy of fuel supplies 14 days into the future. Currently, the NYISO assesses fuel adequacy over a 7-day forward period. These assessments utilize the fuel inventory data submitted by supply resources in conjunction with forecasted weather, dispatch assumptions, and potential system conditions to evaluate short-term operational fuel sufficiency.

The NYISO also plans to assess the feasibility and benefits of potentially incorporating some form of fuel security evaluation within its Winter Assessment or other seasonal studies that are reviewed with stakeholders annually. This could provide an additional layer of regular fuel security evaluation going forward.

## **Conclusion**

The NYISO management team appreciates the efforts of AG in considering the security of the New York electric grid with respect to possible fuel disruptions. The NYISO also appreciates the valuable feedback provided by stakeholders throughout this process. The NYISO management team has carefully considered this feedback in light of the existing and emerging needs of the power system. The NYISO management team recognizes and appreciates many of the monitoring/evaluation concepts highlighted in AG's report. They are informative towards the efforts of the NYISO and its stakeholders in continuing to ensure that the markets seek to meet future fuel and energy security needs.