

From: [DeveloperSolution](#)
To: [DeveloperSolution](#)
Subject: [EXT] ESPWG/TPAS/Preliminary STAR Discussion Follow Up
Date: Sunday, February 14, 2021 9:25:51 PM
Attachments: [image001.png](#)

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Good evening. Thank you for walking through a number of questions regarding the preliminary STAR report published for and presented at last week's ESPWG/TPAS. Representatives for NRG sought information regarding two aspects of the report and proposed transmission solution for which either NYISO or ConEd would provide follow-up responses. They were:

1. What is the dynamic reactive headroom above 340 MVA created in the 345kV New York City TLA by the operational change proposed by Con Ed to the series reactors?
2. Are there other system considerations and impacts (eg., short circuit duty) caused by changing the status of the series reactors?

We look forward to the responses when available. Thank you for your attention to this matter.



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Via E-mail to DeveloperSolution@nyiso.com,

To: New York Independent System Operator (“NYISO”)
From: Matthew Schwall, Director of Market Policy & Regulatory Affairs
Date: February 17, 2021
Re: **Short-Term Reliability Process Report & Market Price Signals**

On behalf of its members who are market participants in the New York Independent System Operator, Inc.’s (“NYISO”) administered markets, Independent Power Producers of New York, Inc. (“IPPNY”) submits these comments in response to the NYISO’s Short-Term Reliability Process Report: 2023 Near-Term Reliability Need (the “Preliminary STRP Report”).¹ There are two separate, but inter-related, issues that must be resolved this spring to ensure accurate and adequate Locational Capacity Requirements (“LCRs”) are set for Capability Year 2022-2023. IPPNY hereby urges the NYISO to review the recommendations made herein and work through the stakeholder process to expeditiously remedy clear incongruities between the NYISO’s reliability planning and resource adequacy processes and rectify inconsistencies in the application of LCR assumptions that have become apparent over the past few months.

Background

The 2020 Reliability Needs Assessment (“RNA”) first identified that a Reliability Need would occur on the NYC bulk power transmission facility (“BPTF”) system beginning in 2023 and increasing in severity through 2030, primarily due to anticipated generation retirements resulting from the New York State Department of Environmental Conservation’s (“DEC”) “Peaker Rule.”² The Q3 Short Term Assessment of Reliability (“Q3 STAR”) subsequently confirmed this Reliability Need and designated the Need arising in 2023 as a Short Term Reliability Process Need.

For the purposes of both the 2020 RNA and Q3 STAR, and for the LCR setting process, as discussed *infra*, the NYISO assumed a change to the historic operating protocol for seven (7) series reactors operated by Con Edison due to the retirement of Indian Point Unit 2. The NYISO’s Open Access Transmission Tariff (“OATT”) requires the NYISO to review whether

¹ Short-Term Reliability Process Report: 2023 Near-Term Reliability Need Preliminary Written Determination of Proposed Selection (“STRP Report”), available at <https://www.nyiso.com/documents/20142/19159155/2020%20Quarter%203%20Short%20Term%20Reliability%20Process%20Report.pdf/4b4e86ab-4825-8694-89bd-c01c5ae8100d>.

² 2020 RNA Report, available at <https://www.nyiso.com/documents/20142/16333532/06%202020%20RNA%20Presentation.pdf/a2d72cbc-3c4e-502d-84a6-8e2aca360ca8>, and STRP Report at pg. 4.

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the adoption of alternative operating procedures or updates to Con Edison's Local Transmission Owner Plan ("LTP") could address the Reliability Needs identified in the Q3 STAR.³ The Preliminary STRP Report states that, and stakeholders have been advised that, subsequent to completing the Q3 STAR but prior to soliciting solutions, the NYISO consulted with Con Edison.⁴ On October 23, 2020, Con Edison proposed as an update to its LTP that it would implement an alternative operating procedure to immediately revert the operating status of its seven series reactors back to the state that existed when both Indian Point units were operating. Instead, however, Con Edison subsequently retracted the updated LTP on November 2, 2020. While the NYISO was certainly aware of this alternative operating procedure by virtue of Con Edison's October 23 identification of it, it apparently did not review it to determine whether reverting to the historic operating procedure might resolve the identified needs. Therefore, the NYISO's review did not identify operating procedures or updates to Con Edison's LTP that could address the Reliability Need.⁵

On October 27, 2020, subsequent to Con Edison's initial posting of its updated LTP but prior to the retraction, the NYISO presented its preliminary Locational Capacity Requirements ("LCRs") for the 2021 Capability Year, which indicated there is a large excess of generation in NYC, reducing the NYC LCR by roughly 5 percentage points.⁶ The LCR study assumed that the Con Edison series reactors were in the same post Indian Point Unit 2 retirement operating state that was assumed for the 2020 RNA and Q3 STAR. Though neither corroborated nor refuted by NYISO analysis, it is reasonably speculated that the series reactor assumption was a major driver of the reduction in LCR given that the changed assumption raised the UPNY/ConEd transfer limit by 1000 MW.⁷ Con Edison's October 23 decision to revise its LTP designation likewise would have had a major impact on the LCR in the opposite direction. As the NYISO's LCR studies progressed, it further became obvious that non-alignment on how Transmission Security Limits ("TSLs") and load forecast assumptions are addressed caused further significant disconnect and artificial suppression in the LCR results. The LCR that was ultimately adopted for the NYC Locality in January 2021 was 6.3 percentage points lower than the LCR currently in place for the 2020 Capability Year. As IPPNY made known to the NYISO at that time, the reduction in LCR was, and continues to be, viewed by suppliers as a significant and counterintuitive decline in the LCR, particularly given that the 2023 BPTF Reliability Need is the direct result of a capacity shortfall.

Meanwhile, as the LCRs were being developed, the NYISO issued a solicitation letter on December 3, 2020, requesting the submission of solutions to address the Reliability Needs identified in the Q3 STAR. The NYISO received a solution from the Regulated Transmission

³ OATT Section 38.3.5.2.

⁴ Q3 STAR at pg. 21, available at <https://www.nyiso.com/documents/20142/16004172/2020-Q3-STAR-Report-vFinal.pdf/>,

⁵ STRP Report at Footnote 12.

⁶ Information LCR Results, available at https://www.nyiso.com/documents/20142/16364783/4%202021_PrelimLCRs_Final.pdf/92c2773a-1aca-259a-efc6-81a224316e37.

⁷ Locational Minimum Installed Capacity Requirements Study: For the 2021-2022 Capability Year at pg. 3, available at https://www.nyiso.com/documents/20142/18341101/04_LCR2021_Report.pdf/34432c47-e66b-a49c-4ed2-efc676dd73b5.

Owner, Con Edison, and a market-based solution from NRG Berrians East Development. Con Edison's solution was to revert back to the operating protocol that existed prior to the Indian Point Unit 2 retirement for seven series reactors on its system – the very same operating change that had been submitted and subsequently retracted by Con Edison as an LTP update. NRG Berrians East Development proposed its Astoria East Replacement Project. After review, the NYISO determined that Con Edison's proposal is the viable and sufficient solution to the 2023 BPTF Reliability Need and presented its Preliminary STRP Report on February 11, 2020.

Reliability Planning & Resource Adequacy Process Incongruity; Flaws in the NYISO's Current Application of the Alternative LCR Methodology

The aforementioned series of events has revealed that the NYISO's reliability planning process findings and the market signals that are being sent to maintain resource adequacy through the LCR/Installed Reserve Margin ("IRM") setting processes are incongruous. The NYISO's reliability planning process demonstrates that the LCR established for NYC is too low to maintain the long-term reliability of the system, and, therefore, is sending inaccurate and inadequate price signals that may harm reliability. According to the 2020 RNA and Q3 STAR, 779 MW of capacity will retire beginning in the 2023 summer capability period,⁸ resulting in Short-Term Reliability Needs on the BPTF starting in 2023 and increasing in scope through 2025. These studies establish, "The primary driver of the deficiencies observed in 2023 is the compound effect of load forecast increases and the assumed unavailability of peaking generation in NYC, as affected by the DEC's Peaker Rule," i.e., the 779 MW of retirements.⁹ The LCRs that were calculated and ultimately adopted by the Operating Committee for the 2021/2022 Capability Year with votes in opposition and abstention, however, indicate that available capacity in NYC exceeds the amount necessary to maintain reliability by roughly 900 MW. This "excess" was calculated by Mark Younger of Hudson Energy Economics, in consultation to IPPNY, by comparing the level of capacity that cleared in the August 2020 monthly capacity auction against the minimum capacity requirement for the summer 2021 Capability Period based on an LCR of 80.3%.¹⁰

The LCR for NYC for the 2021-2022 Capability Year is thus sending a price signal that indicates there is an "excess" of 900 MW of generation that can retire in NYC without resulting in a Reliability Need at the very same time that the NYISO's reliability planning studies indicate that the retirement of 779 MW in NYC causes Reliability Needs in 2023. A primary difference driving the two findings of Reliability Needs in 2023 and none in 2021-2022 is that the NYISO evaluated the reliability impact of the 779 MW of proposed retirements for 2023 but did not evaluate whether a similar retirement earlier would also cause a reliability need. However, with the 2021 LCR for NYC signaling that 900 MW of capacity is not needed for reliability, retirement notices could very well come sooner, creating a Reliability Need prior to 2023. This

⁸ 779 MW is the sum of the generation that will not be operating in the summer of 2023. See 2020 RNA at pgs. 4 and 23.

⁹ *Id.* at pg. 21.

¹⁰ August 2020 UCAP sold was 9,551 MW, which adjusted for the August average EFORD of 3.51% is 9,898 MW ICAP. When the NYC peak load forecast used to set the 2021 LCR (11,199 MW) is multiplied by the NYC LCR of 80.3%, the ICAP requirement is 8,992.8 MW ICAP. The delta between the August 2020 ICAP sold and the 2021 minimum ICAP requirement is 905.2 MW.

incongruity demonstrates the LCR that the NYISO has set for 2021 is sending market price signals that are inconsistent with the Q3 STAR's demonstrated amount of capacity needed to maintain reliability.

Moreover, Con Edison's proposal to deviate from its historic operating protocol for 2021 and 2022 before reverting back to this operating protocol in 2023 to address the Reliability Need is made possible due to the very capacity on the system that the 2021 LCR indicates is the level of "excess." If something close to the "excess" capacity indicated by the LCR for 2021/2022 was to retire in NYC today it would result in an immediate Reliability Need and the likely viable and sufficient solution would be for Con Edison to initiate the operating protocol that it has proposed to solve the 2023 BPTF Reliability Need, which in turn would apply upward pressure on future LCR calculations to provide price signals consistent with the Reliability Need. This up-again down-again see-sawing of the LCR based on choices concerning an operating protocol will not promote long term reliability, the core purpose of capacity markets as the Federal Energy Regulatory Commission has long cited.

Likewise, this series of events has revealed that the alternative LCR setting methodology that was adopted by market participants on February 28, 2018, on the premise that it would optimize for least cost procurement and be stable, robust, and predictable has thus far not functioned as intended. Issues with the manner in which the NYISO optimizes the model while addressing TSLs and its use of different load forecasts have both come to light. There is also a lack of transparency in the process that prevents market participants from replicating, or even anticipating, LCRs on a year-to-year basis.

Recommended Solutions to Align Processes

IPPNY recommends the following steps to better align the NYISO's reliability planning processes with its resource adequacy processes to ensure that the NYISO's markets provide the price signals necessary to maintain a reliable system.

1. The NYISO is currently in the process of developing multiple whitepaper studies on behalf of the New York State Reliability Council ("NYSRC") which examine methodology changes that will better align the IRM and LCR setting processes. Most critical among these whitepaper studies is an examination of applying TSLs during the IRM setting processes as well as during the LCR setting process, and an examination of shifting from a simplified model to a more granular representation of energy limited resources in the IRM model. It is absolutely necessary these white papers, the TSL whitepaper in particular, be completed in time for the NYSRC to vote to incorporate any changes into the IRM setting process for 2022, the topologies for which are locked down in late spring/early summer.
2. To ensure the long-term reliability of the system, the NYISO must assume for the purposes of the topology for the 2022-2023 IRM/LCR studies that the seven Con Edison series reactors are operating as they are proposed to operate in 2023, and as they did when the Indian Point units were in operation, to assure that market signals are

consistent with the Reliability Needs of the system.

3. The NYISO must develop a schedule to resolve the issues with the current way in which it applies the Alternative LCR Methodology by this spring, including whether it believes any tariff modifications will be required. IPPNY understands the NYISO will be coming to the February 25, 2021 ICAPWG meeting with a presentation defining the full schedule and steps to be taken. It is critical for this work to begin immediately so that it can be completed before any assumptions have to be locked down in the IRM process to set the IRM and LCRs for the 2022-2023 Capability Year. Having identified these issues, they cannot go unaddressed for another year.

Without understanding how and what changes in the market can impact the LCRs, market participants are unable to make informed investment decisions. IPPNY appreciates NYISO's consideration of the concerns and recommendations outlined herein, and looks forward to working towards a timely solution.