

## Statement Regarding Identification of Near-Term Reliability Needs For the 2020 Quarter 3 Short-Term Assessment of Reliability November 16, 2020

In 2019, the NYISO established the Short-Term Reliability Process ("STRP") with its requirements prescribed in Attachments Y and FF of the NYISO's Open Access Transmission Tariff. The STRP evaluates the first five years of the planning horizon, with a focus on needs arising in the first three years of the planning horizon. Section 38.3.6.2.2 of the NYISO OATT states that the NYISO "shall...Provide to Stakeholders and post on its website a full and supported written explanation of the ISO's decision to solicit a regulated, non-generation Short-Term Reliability Process Solution solely from a Responsible Transmission Owner, including an explanation of the other transmission and non-transmission options that the ISO considered, but concluded would not sufficiently address the Near-Term Reliability Need, the circumstances that generated the need, and an explanation of why the need was not identified earlier." Pursuant to OATT Section 38.3.6.2.3, the NYISO posts this statement to the Electric System Planning Working Group ("ESPWG") and the Transmission Planning Advisory Subcommittee ("TPAS") for stakeholder review and comments. Comments may be submitted to the NYISO via email to DeveloperSolution@nyiso.com. Please submit comments by November 24, 2020.

The Short-Term Assessment of Reliability ("STAR") for 2020 Quarter 3 finds Short-Term Reliability Needs<sup>1</sup> on the Bulk Power Transmission Facilities ("BPTF") starting in 2023 and increasing in scope and scale through 2025.<sup>2</sup> The Short-Term Reliability Needs include both thermal overloads on the bulk system as well as dynamic instability. For thermal loading, several 345 kV circuits in the Con Edison service territory are overloaded under N-1-1 conditions beginning in year 2025. The specific violations are listed in Appendix A of the STAR. Dynamic instability is observed starting in 2023 and continuing through 2025. The issues include low transient voltage response, loss of generator synchronism, and undamped voltage oscillations. The transient voltage response issues arise on transmission facilities owned by Con Edison in its transmission district but extend into areas adjacent to Con Edison's service territory.

The issues identified are primarily driven by a combination of forecasted peak demand and the

<sup>&</sup>lt;sup>1</sup> OATT Section 38.1 contains the tariff definition of a Short-Term Reliability Process Need.

<sup>&</sup>lt;sup>2</sup> Link to STAR posting: <u>https://www.nyiso.com/documents/20142/16004172/2020-Q3-STAR-Report-vFinal.pdf</u>.



assumed unavailability of certain generation in New York City affected by the New York State Department of Environmental Conservation's "Peaker Rule."<sup>3</sup> The NYISO has accounted for the unavailability of generators affected by the DEC Peaker Rule as reflected in those generators' compliance plans in accordance with the Reliability Planning Process base case inclusion rules.<sup>4</sup> The plans indicate approximately 1,500 MW of peaker capability would be unavailable during the summer by 2025 to comply with the emissions requirements. A subset of those generators would be unavailable starting in 2023. A summary of the list of peaker generation removals is provided in Figure 1 of the STAR.

The NYISO, in consultation with Con Edison, reviewed whether the adoption of alternative operating procedures could address the needs identified in the STAR, and whether updates to Con Edison's Local Transmission Owner Plan could address the needs.<sup>5</sup> The review did not identify operating procedures or updates to Con Edison's Local Transmission Owner Plan at this time.<sup>6</sup> The NYISO also reviewed the status of tracked projects and did not identify other transmission or non-transmission solutions that would likely meet the need in 2023.<sup>7</sup> On November 16, 2020 the NYISO posted an updated peak load forecast to account for the expected impact of COVID-19 and the associated economic and societal effects.<sup>8</sup> In consideration of the updated forecast, the NYISO found that dynamic instability is no longer observed under N-1 conditions, but the issues remain under N-1-1 conditions in 2023.

"Near-Term Reliability Needs" are reliability needs that are observed within the first three

<sup>&</sup>lt;sup>3</sup> The "Peaker Rule" is the commonly-used name for a New York State Department of Environmental Conservation ("DEC") regulation that limits nitrogen oxides (NOx) emissions from simple-cycle combustion turbines, as discussed in greater detail within the STAR.

<sup>&</sup>lt;sup>4</sup> *See* NYISO Reliability Planning Process Manual Section 3, December 12, 2019. Link: <u>https://www.nyiso.com/documents/20142/2924447/rpp\_mnl.pdf</u>

<sup>&</sup>lt;sup>5</sup> See OATT Section 38.3.5.2.

<sup>&</sup>lt;sup>6</sup> Con Edison proposed and subsequently withdrew an update to its Local Transmission Owner Plan in the NYISO's stakeholder process. October 23, 2020: <u>https://www.nyiso.com/documents/20142/16309511/03</u> <u>CECONY's 2020 LTP Update.pdf</u> and November 2, 2020: <u>https://www.nyiso.com/documents/20142/16507723/09 CECONY Series Reactor Status Final.pdf</u>/.

<sup>&</sup>lt;sup>7</sup> As part of its ongoing Reliability Planning Process, the NYISO monitors and tracks the progress of marketbased projects and regulated backstop solutions, together with other resource additions and retirements, consistent with its obligation to protect confidential information under its Code of Conduct. *See* OATT Section 31.2.13.

<sup>&</sup>lt;sup>8</sup> Meeting material for November 19, 2020 ESPWG/TPAS: <u>https://www.nyiso.com/espwg</u>



years of the relevant STAR study period<sup>9</sup>. The Short-Term Reliability Needs observed in 2023 arise within the first three years of the study period. The needs arise within the Con Edison transmission district, therefore Con Edison is the Responsible Transmission Owner that is responsible for developing regulated solution(s). The reasons the identified Near-Term Reliability Needs have arisen and were not identified earlier are: (1) the DEC's adoption of the final Peaker Rule in December of 2019 requiring NO<sub>x</sub> emission reductions that drive needs starting in summer 2023, and (2) the DEC Peaker Rule compliance plans were required to be submitted by the affected Generators to the DEC by March 2, 2020. The NYISO could not identify the reliability needs until the compliance plans were fully understood.

Consistent with Sections 38.3.6 and 38.4 of the OATT, for the reasons explained in this Statement, the NYISO plans to solicit a regulated non-generation solution solely from Con Edison for the Near-Term Reliability Needs in 2023. The NYISO will also solicit market-based and other permitted solutions to the 2023 needs consistent with Section 38.4.2 of its OATT. The needs observed in years 2024 and 2025 are identical to those identified in the 2020 RNA, and therefore will be addressed in the long-term Reliability Planning Process.<sup>10</sup>

The DEC Peaker Rule includes a provision to allow an affected generator to continue to operate up to two years, with a possible further two-year extension, after the compliance deadline if the generator is designated by the NYISO or the local transmission owner as needed to resolve a reliability need until a permanent solution is in place.<sup>11</sup> The NYISO will address the solution identification process relative to the Peaker Rule in its STRP solicitation letter.

<sup>&</sup>lt;sup>9</sup> OATT Section 38.1 contains the tariff definition of a Near-Term Reliability Need. *See also*, OATT Section 38.3.6.

<sup>&</sup>lt;sup>10</sup> See OATT Section 38.2, which explains that the long-term Reliability Planning Process is the preferred process for addressing non-Generator Deactivation needs that arise on the BPTF more than three years after the completion of a STAR study.

<sup>&</sup>lt;sup>11</sup> See 6 NYCRR § 227.3-6, Electric System Reliability.