

Generator Deactivation Assessment Cayuga 1

A Report by the New York Independent System Operator

October 28, 2019



Purpose

On August 1, 2019, the New York Independent System Operator, Inc. ("NYISO") determined that Cayuga Operating Company, LLC ("Cayuga Operating Company") had submitted a complete Generator Deactivation Notice for the proposed mothball of the Cayuga 1 generator ("Cayuga 1"). Cayuga Operating Company reported that it intends to deactivate the 155.3 MW (nameplate) generator on or about October 1, 2019.

Pursuant to Section 38.3.5 of the NYISO Open Access Transmission Tariff ("OATT"), the NYISO performed resource adequacy and, in coordination with National Grid, LLC ("National Grid") and New York State Electric and Gas ("NYSEG"), transmission security analyses of the New York Control Area ("NYCA") system to determine whether a Generator Deactivation Reliability Need (a "Need") would result from the deactivation of Cayuga 1. The NYISO along with Transmission Owners National Grid and NYSEG timely completed this analysis within the 90-day period starting from August 1, 2019, which is the Generator Deactivation Assessment Start Date (by October 30, 2019). The Generator Deactivation Process ends if the assessment does not identify a Need or if the Need can be timely addressed during the next Reliability Needs Assessment in the NYISO's biennial reliability planning process. If the NYISO finds a Need, then the NYISO follows the process for soliciting and selecting a solution stated in Sections 38.3.6 – 38.10.5 of the OATT.

Assumptions

The NYISO evaluated the period five years from the conclusion of the 365-day notice period (July 31, 2020 – July 31, 2025) (the "Study Period") using the most recent reliability planning process base case. In accordance with the reliability planning process base case inclusion rules¹, generation and transmission projects are added to the base case if they have met significant milestones such that there is a reasonable expectation of completion of the project. Significant changes to the proposed assessment assumptions, as compared to the those used for

¹ NYISO Reliability Planning Process Manual, July 5, 2018



the 2019-2028 Comprehensive Reliability Plan (CRP), include: (i) the AC Transmission Segment A Double Circuits and AC Transmission New York Energy Solution Segment B, which are expected to be in service in December 2023, and (ii) all other New York Transmission Owner firm Local Transmission Plans listed in the 2019 Load and Capacity Data Report ("Gold Book") with the exception of the NYSEG Coopers Corners transformers. The NYISO used the load forecast consistent with the 2019 Load and Capacity Data Report ("Gold Book")².

The NYISO provided stakeholders in its shared governance process with information on the modeling assumptions employed in conducting this assessment. Details of the study assumptions were originally reviewed with stakeholders at the August 20, 2019 joint Electric System Planning Working Group (ESPWG)/Transmission Planning Advisory Subcommittee (TPAS) meeting. The meeting materials are posted on the NYISO's public website³.

Findings

This assessment finds that reliability criteria would be met without Cayuga 1 throughout the Study Period under the assumed and forecasted base case system conditions. The NYISO assessed the resource adequacy of the overall NYCA system, per the one-day-in-ten-years (0.1 per year) Loss of Load Expectation ("LOLE") criterion, which measures the probability of disconnecting firm load due to a resource deficiency. This assessment finds that without Cayuga 1 the resource adequacy criterion would be met throughout the Study Period.

Additionally, the NYISO performed a transmission security assessment for the Bulk Power Transmission Facilities ("BPTF") and National Grid and NYSEG performed a transmission security assessment of their non-BPTFs. The NYISO reviewed and verified the analysis performed by National Grid and NYSEG. Without Cayuga 1, no transmission security-related Need was identified in the Study Period.

² This Cayuga 1 Generator Deactivation Assessment utilizes the 2019 Gold Book baseline summer peak load forecast.

³ <u>https://www.nyiso.com/documents/20142/7983392/01%20GDA_Cayuga1_KeyAssumptions.pdf/fcc3f244-8b35-5f1e-8589-a9241ef7ee8a</u>



Conclusions

This assessment does not identify a Generator Deactivation Reliability Need following the deactivation of Cayuga 1 for the Study Period.

Cayuga Operating Company has satisfied the applicable requirements under the NYISO's Generator Deactivation Process to mothball the Generator on or after October 31, 2019.⁴ This concludes the Generator Deactivation Process.

⁴ Cayuga Operating Company must complete all required NYISO administrative processes and procedures prior to deactivation. The NYISO's determination in this Generator Deactivation Process does not relieve Cayuga Operating Company of any obligations it has with respect to its participation in the NYISO's markets. If Cayuga Operating Company rescinds its Generator Deactivation Notice or does not deactivate Cayuga 1 by July 31, 2021, then it will be required to submit a new Generator Deactivation Notice in order to deactivate the Generators, and will also be required to repay study costs in accordance with Section 38.14 of the OATT.