



Generator Deactivation Assessment Cayuga Units 1 & 2 (Retirement)

A Report by the
New York Independent System Operator

April 8, 2020

Background

On July 1, 2019 the Cayuga Operating Company, LLC's ("Cayuga Operating Company's") Cayuga Unit 2 generator, a 167.2 MW (nameplate) coal-fired generating unit ("Cayuga 2") was placed in an ICAP Ineligible Forced Outage ("IIFO") by the New York Independent System Operator, Inc. ("NYISO"). On August 1, 2019, the NYISO determined that the Cayuga Operating Company had submitted a complete Generator Deactivation Notice¹ for the proposed Mothball of the Cayuga Unit 1 generator, a 155.3 MW (nameplate) coal-fired generating unit ("Cayuga 1"). The Generator Deactivation Assessments the NYISO performed for the Mothball of Cayuga 1² and for the IIFO of Cayuga 2³ did not identify any Generator Deactivation Reliability Needs.

Purpose

On March 2, 2020 the NYISO determined that Cayuga Operating Company had submitted a complete Generator Deactivation Notice for the proposed retirement of Cayuga 1 and Cayuga 2. Cayuga Operating Company reported that it intends to deactivate the Cayuga generators on or before May 15, 2020. Because the retirement date requested in the Generator Deactivation Notice is prior to the expiration of the Cayuga 1 Mothball and Cayuga 2 IIFO, the Notice initiated the Generator Deactivation Process.

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"), New York State Electric and Gas ("NYSEG") and Rochester Gas and Electric ("RG&E"), transmission security analysis 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 and Cayuga 2. The NYISO, along with Transmission Owners National Grid, NYSEG and RG&E, timely completed this analysis within the 90-day period starting from March 2, 2020, which is the Generator Deactivation Assessment Start Date (by May 31, 2020). 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.

¹ Capitalized terms that are not defined herein have the meaning specified in Attachment FF (Section 38) or Attachment Y (Section 31) of the NYISO's Open Access Transmission Tariff ("OATT").

² <https://www.nyiso.com/documents/20142/1396324/Cayuga1-Mothball.pdf>

³ <https://www.nyiso.com/documents/20142/1396324/Cayuga2-Generator-Deactivation-Assessment.pdf>

Assumptions

This assessment evaluates the period five years from the conclusion of the 365-day notice period (March 2, 2021 – March 2, 2026) (the “Study Period”) using the most recent reliability planning process base case updated in accordance with NYISO procedures. For this assessment, the NYISO used the load forecast consistent with the 2019 Load and Capacity Data Report (“Gold Book”)⁴. In accordance with the Reliability Planning Process base case inclusion rules⁵, 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.

This assessment used the major assumptions included in the 2018 Reliability Needs Assessment (“RNA”) and in the 2019-2028 Comprehensive Reliability Plan. Consistent with the NYISO’s obligations under its tariffs, the NYISO provided stakeholders in its shared governance process information on the modeling assumptions employed in this assessment. Details on the study assumptions were reviewed with stakeholders at the March 16, 2020 Electric System Planning Working Group/Transmission Planning Advisory Subcommittee meeting. The meeting materials are posted on the NYISO’s public website⁶.

Findings

This assessment finds that reliability criteria would be met without Cayuga 1 and Cayuga 2 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 and Cayuga 2 the resource adequacy criterion is met throughout the Study Period.

Additionally, the NYISO performed a transmission security assessment for the Bulk Power Transmission Facilities (“BPTF”) and National Grid, NYSEG, and RG&E performed a transmission security assessment of their non-BPTFs. The NYISO reviewed and verified the analysis performed by National

⁴ This Cayuga 1 & 2 Generator Deactivation Assessment utilizes the 2019 Gold Book baseline summer peak load forecast.

⁵ NYISO Reliability Planning Process Manual, December 12, 2019.

See: https://www.nyiso.com/documents/20142/2924447/rpp_mnl.pdf

⁶ https://www.nyiso.com/documents/20142/11350020/03%202020GDA_Cayuga1&2_KeyAssumptions.pdf

Grid, NYSEG, and RG&E. Without Cayuga 1 and Cayuga 2 in-service, no transmission security-related Need was identified in the Study Period.

Conclusions

This assessment does not identify a Generator Deactivation Reliability Need following the retirement of Cayuga 1 and Cayuga 2 for the Study Period. Cayuga Operating Company has satisfied the applicable requirements under NYISO's Generator Deactivation Process to retire the Generator on or after June 1, 2020.⁷ This concludes the Generator Deactivation Process.

⁷ Cayuga Operating Company must complete all required NYISO administrative processes and procedures prior to deactivation. The NYISO's determination in this Generator Deactivation Assessment 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 and Cayuga 2 within 730 days of the March 2, 2020, Generator Deactivation Assessment Start Date, 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.