



Generator Deactivation Assessment Lyonsdale

**A Report by the
New York Independent System Operator**

June 6, 2018

Purpose

On April 1, 2018, Lyonsdale Biomass, LLC’s (“Lyonsdale LLC”) Burrows Lyonsdale Generator (“Lyonsdale”) was placed in an ICAP Ineligible Forced Outage (“IIFO”) by the New York Independent System Operator (“NYISO”). Lyonsdale totals 21.1MW (nameplate).

Pursuant to Section 38.3.4 of the NYISO Open Access Transmission Tariff (“OATT”), the NYISO performed resource adequacy and, in coordination with National Grid, LLC (“National Grid”), 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 Lyonsdale. The NYISO and National Grid timely completed this analysis within the 90-day period starting from April 1, 2018, which is the Generator Deactivation Assessment Start Date (by June 30, 2018). The Generator Deactivation Process ends if the assessment does not identify a Need or if the reliability 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 38.3.5 – 38.10.5 of the OATT.

Assumptions

The NYISO evaluated the period five years from the conclusion of the 365-day notice period (April 1, 2019 – April 1, 2024) (the “Study Period”) using the most recent reliability planning process base case. Accordingly, the NYISO removed Greenport GT1, Binghamton Power Plant, Indian Point 2, Indian Point 3, Selkirk, Pilgrim, Ravenswood GTs 2-1, 2-2, 2-3, 2-4, 3-1, 3-2 and 3-4, and Ravenswood GT9 in accordance with NYISO procedures. The NYISO used the load forecast consistent with the 2017 Load and Capacity Data Report (“Gold Book”)¹. In accordance with the Reliability Planning Process base case inclusion rules², 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. There are three major generation facilities currently

¹ This Lyonsdale Generator Deactivation Assessment utilizes the 2017 Gold Book baseline summer peak load forecast.

² NYISO Reliability Planning Process Manual, January 3, 2018.

under construction that were included in the base case for this assessment: Bayonne Energy Center II Uprate (Zone J, 120 MW), CPV Valley Energy Center (Zone G, 678 MW), and Cricket Valley Energy Center (Zone G, 1,020 MW).

Consistent with the NYISO's obligations under its tariffs, the NYISO provided stakeholders within its shared governance process information on the modeling assumptions employed in conducting this assessment. Details on the study assumptions were originally reviewed with stakeholders at the April 18, 2018 joint Electric System Planning Working Group/Transmission Planning Advisory Subcommittee. The meeting materials are posted on the NYISO's public website³.

Findings

This assessment finds that reliability criteria would be met without Lyonsdale 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 Lyonsdale 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 performed a transmission security assessment of its non-BPTFs. The NYISO reviewed and verified the analysis performed by National Grid. Without Lyonsdale, no transmission security-related Need was identified in the Study Period.

³ http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2018-04-18/03_Ravenssd%20Lyonsdale-Pilgrim_GDA_Key_Assumt.pdf

Conclusions

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