



# **Generator Deactivation Assessment**

**James A. FitzPatrick  
Nuclear Generating Facility**

**Original February 11, 2016  
Revised April 22, 2016**

## Purpose

Entergy Nuclear FitzPatrick, LLC (“Entergy”) provided a Generator Deactivation Notice for the proposed retirement of the James A. FitzPatrick Nuclear Generating Facility (“FitzPatrick”) to the New York Independent System Operator, Inc. (NYISO), which the NYISO determined to be complete on November 13, 2015. Entergy reported that the deactivation of the 882 MW facility is intended to occur at the end of the current fuel cycle (i.e., Quarter 4 of 2016 – Quarter 1 of 2017).

Pursuant to Section 31.2.11.2.4 of Attachment Y to the Open Access Transmission Tariff (OATT)<sup>1</sup>, the NYISO performed, in coordination with National Grid and New York Power Authority (NYPA), resource adequacy and transmission security analysis to determine whether a Reliability Need would result from the deactivation of FitzPatrick. On February 11, 2016, the NYISO issued an assessment of the deactivation of FitzPatrick that found a statewide resource adequacy deficiency that constituted a Reliability Need beginning in 2019. The NYISO subsequently undertook to update that analysis to reflect an updated load forecast. As further detailed below, this updated analysis does not identify a Reliability Need for the 2016-2020 near term period.

## Assumptions

The NYISO evaluated the near-term period from 2016 through 2020 using the most recent reliability planning process base case<sup>2</sup>, with the load forecast update consistent with the draft 2016 Load and Capacity Data Report (“Gold Book”)<sup>3</sup>, the capacity resource deactivations and additions (Appendix Table 1 and Table 2), and planned transmission facilities modifications (Appendix Table 3). The only assumption in this assessment that differs from the February 11 assessment is the load forecast. This assessment assumes all generators that are currently mothballed (including Mothball Outage), in an ICAP Ineligible Forced Outage (IIFO), or have issued a notice of intent to mothball or retire are out of service.

## Findings

The NYISO assessed the resource adequacy of the overall 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.<sup>4</sup> No resource adequacy related Reliability Needs were identified in the near-term period.

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<sup>1</sup> All references to Section 31.2.11 of Attachment Y of the OATT refer to the pending revisions to the Reliability Planning Process contained in NYISO’s Reliability Must Run (RMR) compliance filing that was submitted to the Federal Energy Regulatory Commission (FERC) in Docket No. ER16-120-000. The RMR compliance filing requested that the NYISO’s proposed RMR rules be permitted to become effective on October 20, 2015.

<sup>2</sup> The 2014 Comprehensive Reliability Plan (CRP) base case is the most recent reliability planning process base case.

<sup>3</sup> The original FitzPatrick Generator Deactivation Assessment utilized the 2015 Gold Book baseline summer peak load forecast. The updated draft 2016 Gold Book baseline summer peak load forecast with a comparable treatment for solar photovoltaic represents an 843 MW decrease in statewide peak load in 2020.

<sup>4</sup> See R4 of the Northeast Power Coordinating Council, Inc. (NPCC) Regional Reliability Reference Directory #1; Section A-R1 of the New York State Reliability Council, L.L.C. (NYSRC) Rules.

Additionally, the NYISO performed a transmission security assessment for the Bulk Power Transmission Facilities (BPTFs), and National Grid and NYPA each performed a transmission security assessment of their non-BPTFs. The NYISO reviewed and verified the analysis performed by National Grid and NYPA. No transmission security related Reliability Needs were identified in the near-term period.

## **Conclusions**

This analysis does not identify resource adequacy or transmission security-related Reliability Needs for the near-term period from 2016 through 2020. Based upon this updated assessment, it is recommended that the February 16, 2016 solicitation for Gap Solutions be withdrawn.

# Appendix

**Table 1: Updates to Capacity Resource Deactivations**

Plant	Zone	Expected Deactivation Date	Name Plate (MW)	Summer (MW)
Niagara Bio-Gen	A	January 1, 2016	50.5	43.2
Astoria GTs 5, 7, 8, 10, 11, 12, 13	J	January 1, 2016	142.0	104.7
Dunkirk 2	A	January 1, 2016	100.0	75.0
Huntley 67 & 68	A	March 1, 2016	436.0	376.9
Ravenswood GTs 4, 5, 6	J	May 1, 2016	64.2	39.9
FitzPatrick	C	November 12, 2016	882.0	836.8
Ginna	B	April 1, 2017	614.0	581.4
Cayuga 1 & 2	C	July 1, 2017	322.5	304.3

**Table 2: Updates to Capacity Resource Additions**

Plant	Zone	Planned In-Service Date	Name Plate (MW)	Summer (MW)
CPV Valley Energy Center	G	March 2018	820.0	677.6

**Table 3: Updates to Planned Transmission Facilities**

Project	Transmission Owner	Planned In-service Date
Huntley 230kV capacitor banks	National Grid	June 2016
Sawyer load serving transformer reconfiguration and relay additions	National Grid	June 2016
Packard-Huntley 230 kV series reactors	National Grid	June 2016
Ginna Retirement Transmission Alternative (GRTA)	RG&E	June 2017
Station 255	RG&E	June 2020