

BL England Units 2 and 3 Generator Deactivation Notification

Deactivation Study Results – March 23, 2017

Updated November 21, 2017

Updated February 1, 2018

General

On December 28, 2016 BL England (RC Cape May Holdings, LLC) submitted a generator deactivation notification to PJM for the BL England generating units 2 (155 MW) and 3 (148.9 MW) with a deactivation date effective as of April 30, 2017.

Reliability Analysis

PJM's System Modeling Department and the affected Transmission Owner performed a study of the Transmission System and found reliability concerns (contingency thermal overloads of transmission lines and contingency voltage violations) resulting from the deactivation of these generating units. The specific reliability impacts are:

Load Deliverability Study:

- Overload of the Dorothy – Lewis 138 kV circuit for the loss of the New Freedom – Cardiff 230 kV line.

N-1-1 Thermal Study:

- Overload of the Dorothy – Lewis 138 kV circuit for the loss of the New Freedom – Cardiff 230 kV and Oyster Creek – Cedar 230 kV circuits.
- Overload of the Landis – Minotola 138 kV circuit for the loss of the New Freedom – Cardiff 230 kV and Oyster Creek – Cedar 230 kV circuits.
- Overload of the BL England – Middle Tap 138 kV circuit for the loss of the New Freedom – Cardiff 230 kV and Oyster Creek – Cedar 230 kV circuits.
- Overload of the Dorothy – Minotola 138 kV circuit for the loss of the New Freedom – Cardiff 230 kV and Oyster Creek – Cedar 230 kV circuits.

N-1-1 Voltage Study:

- Multiple voltage drop violations identified for the loss of New Freedom – Cardiff 230 kV and Oyster Creek – Cedar 230 kV circuits or Oyster Creek – Cedar 230 kV and Cardiff – Cedar 230 kV.
 - Note: The study indicated that these violations were improved by energizing the existing capacitor banks prior to applying the contingencies.

Study Results and Required Upgrades:

All the required upgrades needed due to the deactivation of the BL England generating units 2 and 3 are previously approved baseline upgrades. These baseline upgrades were approved in 2014.

The BL England generating units 2 and 3 are required for system reliability until these transmission system upgrades are completed. The current expected completion date for all the upgrades is May 2019. PJM will re-evaluate the need for the BL England generating units once some of the required upgrades are completed.

On March 1, 2017 BL England (RC Cape May Holdings, LLC) submitted to FERC an RMR rate filing for BL England Units 2 and 3.

November 21, 2017 Update:

Based upon the new outage schedule provided by the TO for completion of the required upgrades, PJM has determined that U3 is no longer needed for an RMR and can deactivate on 1/24/2018.

February 1, 2018 Update:

BL England U3 deactivated on 1/24/2018.

Required transmission upgrades and expected completion dates:

Upgrade Id	Description	Transmiss ion Owner	Projected In Service Date	Actual In Service Date	Status
b2476	Install new Dennis 230/69 kV transformer	Atlantic City Electric	06/01/2016	06/01/2016	IS
b2477	Upgrade 138 kV and 69 kV breakers at Corson substation	Atlantic City Electric	12/31/2016	12/31/2016	IS
b2478	Reconductor 2.74 miles of Sherman - Lincoln 138 kV line and associated substation	Atlantic City Electric	3/31/2016	03/31/2016	IS

	upgrades				
b2479	New Orchard - Cardiff 230 kV line (remove, rebuild and reconfigure existing 138 kV line) and associated substation upgrades	Atlantic City Electric	05/19/2019		EP
b2480.1	New Upper Pittsgrove - Lewis 138 kV line and associated substation upgrades	Atlantic City Electric	05/31/2019		EP
b2480.2	Relocate Monroe to Deepwater Tap 138 kV to Landis 138 kV and associated substation upgrades	Atlantic City Electric	05/31/2017	5/24/2017	IS
b2480.3	New Landis - Lewis 138 kV line and associated substation upgrades	Atlantic City Electric	12/31/2018		EP
b2481	New Cardiff - Lewis #2 138 kV line and associated substation upgrades	Atlantic City Electric	05/19/2019		EP
b2489	Install a 86.4 MVAR capacitor at BL England 138 kV bus	Atlantic City Electric	05/31/2017	3/15/2017	IS