Generation Deactivation Notification Update

Transmission Expansion Advisory Committee
March 9, 2017
<table>
<thead>
<tr>
<th>Unit(s)</th>
<th>Transmission Zone</th>
<th>Requested Deactivation Date</th>
<th>PJM Reliability Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edgecomb Rock 1-2 (116 MW)</td>
<td>DOM</td>
<td>6/1/2017</td>
<td>Reliability analysis complete. No impacts identified.</td>
</tr>
<tr>
<td>Spruance 1 Rich 1-2 (116 MW)</td>
<td>DOM</td>
<td>6/1/2017</td>
<td>Reliability analysis complete. No impacts identified.</td>
</tr>
<tr>
<td>Spruance 2 Rich 3-4 (86 MW)</td>
<td>DOM</td>
<td>6/1/2017</td>
<td>Reliability analysis complete. No impacts identified.</td>
</tr>
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<tr>
<td>Yorktown Unit 1 (159 MW)</td>
<td>DOM</td>
<td>Orig. 12/31/2014 Rev. 4/15/2017</td>
<td>Reliability analysis complete. Impacts identified. Units requested and were granted an environmental compliance extension to continue to operate until April 15, 2017 to support transmission outages in the area to install needed upgrades.</td>
</tr>
<tr>
<td>Yorktown Unit 2 (165 MW)</td>
<td>DOM</td>
<td>Orig. 12/31/2014 Rev. 4/15/2017</td>
<td>On January 5, 2017 Dominion submitted to FERC an informational filing for a Deactivation Avoidable Cost Rate for Yorktown units 1 and 2.</td>
</tr>
</tbody>
</table>

Zonal Cost Allocation:
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>B.L. England Unit 2 (155 MW)</td>
<td>AE</td>
<td>4/30/2017</td>
<td>Reliability analysis complete. Impacts Identified but will be resolved by previously approved baseline upgrades, which are currently scheduled to be completed in 2 years. Due to the delays in upgrade completion and outages needed to support those upgrades, PJM will request B.L. England Units 2 &amp; 3 to be Reliability Must Run generators until required upgrades are completed or PJM updated reliability analysis shows there is no longer a reliability violation.</td>
</tr>
<tr>
<td>B.L. England Unit 3 (148.9 MW)</td>
<td>AE</td>
<td>4/30/2017</td>
<td></td>
</tr>
</tbody>
</table>
Deactivation Update: Deactivation Notifications

- B.L. England Units 2 & 3
  - AE Transmission Zone
  - 303.9 MW
  - Deactivation date: 04/30/2017
Deactivation – B.L. England Units 2 & 3

- **Load Deliverability Outage:**
- Dorothy – Lewis 138 kV line is overloaded for the loss of New Freedom – Cardiff 230 kV line.
- Existing Baseline Upgrades that were previously approved by the PJM Board resolve the issue.
- Cost estimate: $131.1M (B2479-81, B2489)
- Required IS Date: 04/30/2017
• N-1-1 Thermal Outage:

• Dorothy – Lewis 138 kV, Landis – Minotola 138 kV, BLE – Middle Tap 138 kV, Dorothy - Minotola 138 kV lines are overloaded for loss of New Freedom – Cardiff and Oyster Creek – Cedar 230 kV lines.

• Existing Baseline Upgrades that were previously approved by the PJM Board resolve the issue.

• Cost estimate: $131.1M (B2479-81, B2489)

• Required IS Date: 04/30/2017
- **N-1-1 Voltage Drop Outage:**
- Multiple violations for loss of New Freedom – Cardiff and Oyster Creek – Cedar 230 kV lines.
- Existing Baseline Upgrades that were previously approved by the PJM Board resolve the issue.
- Cost estimate: $131.1M (B2479-81, B2489)
- Required IS Date: 04/30/2017
Projected In-Service 2017

Monroe – Landis 138 kV Line - Relocate Monroe to Deepwater Tap 138 kV to Landis 138 kV and associated substation upgrades. (B2480.2) – AE

Cardiff – Lewis 138 kV Line - New Cardiff – Lewis # 2 138 kV line and associated substation upgrades. (B2481) – AE

BL England Station - Install a 100 MWAR capacitor at BL England. (B2489) – AE
Deactivation – B.L. England Units 2 & 3

Projected In-Service 2018/2019

Orchard – Cardiff 230 kV Line - New Orchard – Cardiff 230 kV line (remove, rebuild, and reconfigure existing 138 kV line) and associated substation upgrades. (B2479) – AE

Upper Pittsgrove – Landis 138 kV Line - New Upper Pittsgrove – Landis 138 kV line and associated substation upgrades. (B2480.1)

Landis – Lewis 138 kV Line - New Landis – Lewis 138 kV line and associated substation upgrades. (B2480.3) – AE
Deactivation – B.L. England Units 2 & 3

Description: B2479-81, B2489

- Estimated Project Cost: $131.1M
  - B2479: $30M
  - B2480.1: $60M
  - B2480.2: $0.57M
  - B2480.3: $31.03M
  - B2481: $5.5M
  - B2489: $4M

- Projected In-Service
  - B2479: 4/30/2019
  - B2480.1: 5/31/2019
  - B2480.2: 5/31/2017
  - B2480.3: 12/31/2018
  - B2481: 5/31/2017
  - B2489: 5/31/2017
• V1 – 3/XX/2017 – Original Slides Posted