Generation Deactivation Notification Update

Transmission Expansion Advisory Committee
July 11, 2019
<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>Cambria (88 MW)</td>
<td>Penelec</td>
<td>9/17/2019</td>
<td>Reliability analysis complete. No violations identified.</td>
</tr>
</tbody>
</table>
Sammis 5, 6, and 7 deactivations – 1491 MW

- The projected deactivation date is 06/01/2022.
- All impacts and associated baseline projects were presented on 11/08/2018.
- FE recently informed of the necessary substation work associated with deactivating the unit – B3123.
  - Install a new control building in the switchyard.
  - Construct a new station access road.
  - Install new switchyard power supply to separate from existing generating station power service.
  - Separate all communications circuits.
  - Separate all protection and controls schemes.

- **Estimated Cost**: $8.0M
- **Projected IS Date**: 06/01/2022
Bruce Mansfield – 1491 MW

- The projected deactivation date is 06/01/2021.
- All impacts and associated baseline projects were presented on 11/08/2018.
- FE recently informed of the necessary substation work associated with deactivating the unit – B3124 for separating metering, station power, and communication.

- **Estimated Cost:** $0.4M
- **Projected IS Date:** 12/31/2020
Davis-Besse 1 deactivation – 896 MW

- The projected deactivation date is 05/31/2020.
- All impacts and associated baseline projects were presented on 06/07/2018.
- FE recently informed of the necessary substation work associated with deactivating the unit – B3125.
  - Install new switchyard power supply to separate from existing generating station power service.
  - Separate all communications circuits.
  - Separate all protection and controls schemes.

- **Estimated Cost:** $1.8M
- **Projected IS Date:** 05/31/2020
Perry deactivation – 1247 MW

- The projected deactivation date is 05/31/2021.
- All impacts and associated baseline projects were presented on 06/07/2018.
- FE recently informed of the necessary substation work associated with deactivating the unit – B3126.
  - Install new switchyard power supply to separate from existing generating station power service.
  - Separate all communications circuits.
  - Construct a new station access road.

- **Estimated Cost**: $0.6M
- **Projected IS Date**: 05/31/2021
Bay Shore 2, 3, and 4 – 495 MW

- The actual deactivation date was 09/01/2012.
- All impacts and associated baseline projects were initially presented on 09/08/2010.
- FE recently informed of the necessary substation work associated with deactivating the unit – B3127.
  - Install new switchyard power supply to separate from existing generating station power service.
  - Separate all communications circuits.
  - Separate metering circuits from switchyard and generation station.

- **Estimated Cost**: $1.5M
- **Projected IS Date**: 12/31/2021
R. Paul Smith 3 and 4 – 115 MW

- The actual deactivation date was 09/01/2012.
- All impacts and associated baseline projects were initially presented on 09/08/2010.
- FE recently informed of the necessary substation work associated with deactivating the unit – B3128 for relocating 34.5 kV lines from generating station roof.

- **Estimated Cost**: $0.4M
- **Projected IS Date**: 12/31/2020
Conesville 4 – 780 MW

- The projected deactivation date is 09/01/2020.
- All impacts and associated baseline projects were presented on 03/07/2019.
- AEP recently informed of the necessary substation work associated with deactivating the unit – B3129.
  - Remove line leads to generating units.
  - Separate and reconfigure protection schemes.
  - Transfer plant AC service to existing station service feeds in the switchyard.

- **Estimated Cost:** $1.5M
- **Projected IS Date:** 12/31/2020
• V1 – 07/08/2019 – Original slides posted
• V2 – 07/09/2019 – Corrected Transmission Zone on slide #3