

RTEP Retool Due to Withdrawal of Projects B15, B16, C03, D05_W17, and E17_W26

Network Impacts

The system, as planned, was evaluated for compliance with reliability criteria due to the withdrawal of five generation projects (B15, B16, C03, D05_W17, and E17_W26). A description of these projects can be found at <http://www.pjm.com/geninter/geninter.html>. The results of the retool are summarized below.

Single Contingency (MAAC Criteria IIA)

No identified problems.

Second Contingency (MAAC Criteria IIB)

No identified problems.

Multiple Facility Contingency (MAAC Criteria IIC)

No identified problems.

Generator Deliverability

1. The Graceton – Raphael 230 kV circuit is overloaded for the outage of Brighton – Conastone 500 kV. The cost allocation for all impacted projects is listed below.
2. The Conastone – Peach Bottom 500 kV circuit was overloaded for the outage of Hunterstown – Conastone 500 kV and the Hunterstown 500/230 kV transformer. The cost allocation for all impacted projects is listed below.

Stability (MAAC Criteria IV)

No additional stability analysis was completed for the withdrawal of these projects.

CETO/CETL (MAAC Criteria III / VIIB)

No identified problems.

Short Circuit Analysis

No identified problems.

System Reinforcements and Cost Allocation

Overload # 1 can be eliminated by rebuilding the Gracetone – Raphael 230 kV circuit to result in a new rating 753 MVA normal / 888 MVA emergency (the existing rating is 559 MVA normal / 659 MVA emergency). The cost is estimated at \$17 million with an in-service date of 2006.

Overload #2 can be eliminated by replacing an ammeter at Peach Bottom 500 kV to result in a new emergency rating of 2901 MVA (the existing emergency rating is 2598 MVA). The cost is estimated \$0.05 million with a 2003 in-service date.

<u>Upgrade #</u>	<u>System Upgrades</u>	<u>Cost Estimate (\$ Millions)</u>	<u>B48</u>	<u>C12</u>	<u>C13</u>	<u>D18</u>	<u>D19</u>	<u>D20</u>	<u>D27</u>	<u>E21</u>	<u>TOTAL</u>
249	Rebuild the Gracetone - Raphael 230 kV circuit	17.000	48%	15%	15%					21%	100%
250	Replace ammeter at Peach Bottom 500kV	0.050			4%		30%	30%		36%	100%
249	Rebuild the Gracetone - Raphael 230 kV circuit	17.000	87 MW	28 MW	28 MW					38 MW	N/A
250	Replace ammeter at Peach Bottom 500kV	0.050			14 MW		105 MW	105 MW		125 MW	N/A