

#M03 Cardiff  
**Generation Interconnection**

**This analysis was completed to assess the reliability impact for a new generator interconnecting to the PJM system as a Capacity resource.**

**Network Impacts**

The #M03 project was studied as a total injection of 450 MW into the Cardiff 230 kV bus, of which 300 MW was studied as capacity and the remaining 150 MW as energy-only. Project #M03 was evaluated for compliance with reliability criteria for summer peak conditions in 2008. Potential network impacts were as follows:

**Generator Deliverability**

No problems were identified

**Multiple Facility Contingency – Tower Line Outages (MAAC Criteria IIC)**

No problems were identified

**Short Circuit**

69 kV circuit breakers Q, K and S at Lewis were found to be overdutied as a result of the addition of M03 generation.

**New System Reinforcements**

Replace Lewis 69 kV circuit breakers Q, K and S. The estimated cost is **\$825,000**, and the estimated construction time is **9 – 12 months**.

**Contribution to Previously Identified System Reinforcements**

None.

**Note: Due to the recently announced generator retirements in Eastern PJM, there a number of unresolved reliability problems identified in 2008. The solution to these problems may impact the results of the Feasibility Study.**