



## **PJM Reliability Assessment for 2004 Summer**

PJM Transmission Planning completed a reliability assessment for the Atlantic Electric area of PJM for the summer of 2004. An Oyster Creek – Cardiff 230 kV circuit was previously scheduled for an in-service date prior to the summer of 2004 but has encountered delays in the permitting /siting approval process. Several system enhancements, as outlined below, were identified for the Atlantic Electric system to provide additional system support for the summer of 2004 as a result of the Oyster Creek 230 kV circuit delay.

- ✓ Capacitor additions at Cedar
- ✓ Capacitor additions at Motts Farm
- ✓ Landis – Minotola 138 kV upgrade
- ✓ Load reconfiguration at Motts Farm
- ✓ 6 MW of distributed generation at Beach Haven and 6 MW of distributed generation at Shipbottom

Even with these system enhancements, under high load periods and certain generator outage patterns, the results indicate voltage problems along the Atlantic Electric coast for the outage of either the Oyster Creek – Sands Point 230 kV or New Freedom – Cardiff 230 kV circuits. The BL England generators have the largest impact on these potential voltage problem. Thermal and voltage problems have also been identified on several lower voltage facilities (138 kV and 69 kV). There have been no additional system upgrades identified that can be completed prior to June 2004 to eliminate the system problems.

The analysis described in this posting was completed using planning criteria and guidelines. This assessment has been provided to the PJM Operations Analysis Working Group for review during their upcoming 2004 summer reliability assessment.