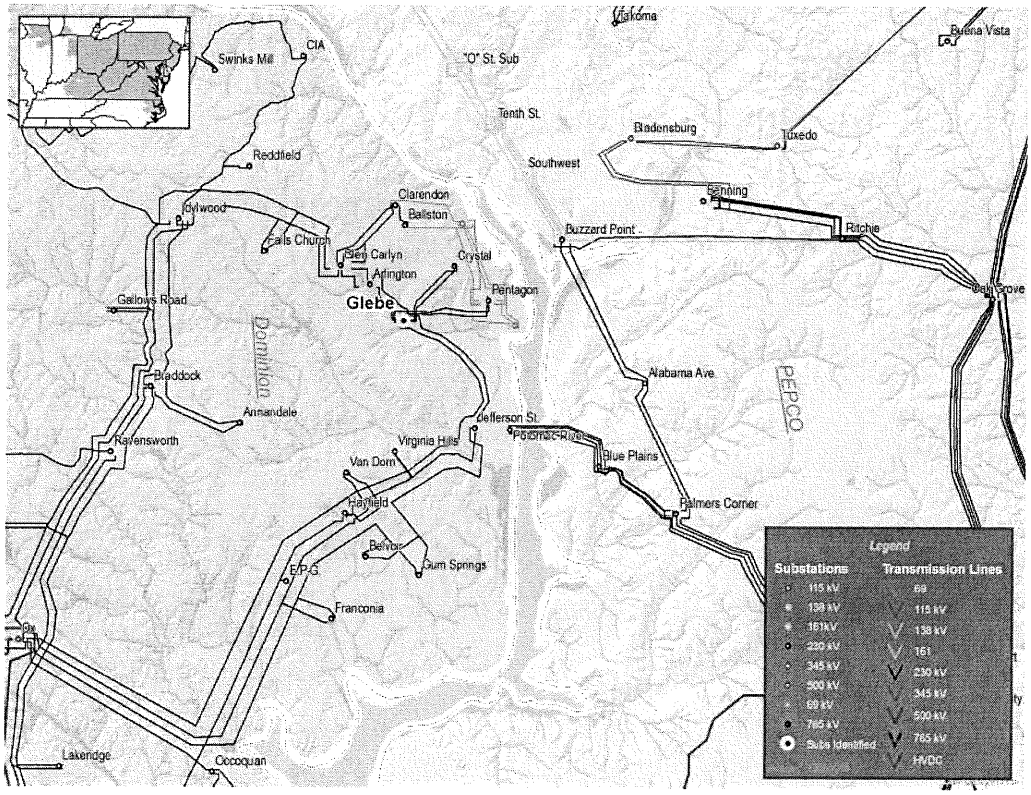
Presented by PJM Staff to the Board Reliability Committee
On February 11, 2014

Dominion Thermal Violations

The 2013 RTEP identified a number of thermal issues on the Dominion 230 kV system. Single contingency (NERC category B) and several N-1-1 contingency overloads were identified in the northern Virginia portion of the Dominion system adjacent to the Washington, D.C metropolitan area in the PEPCo transmission zone. This part of the Dominion system is experiencing significant load growth primarily due to new computer data centers locating in the area. A number of alternatives including new 500 kV and 230 kV lines were evaluated to address the identified reliability criteria violations. Ultimately a new underground 230 kV line between the Glebe substation in the Dominion transmission zone to Station C at Potomac River in the PEPCo transmission zone was selected as the most effective solution. In addition to resolving the thermal issues noted, the project will improve operational flexibility, strengthen the transmission system between the Dominion transmission zone and the PEPCo transmission zone and mitigate thermal problems for a right-of-way outage. The estimated cost for the project is $155.4 M with a required in-service date is June 1, 2018.