

**PJM Generator Interconnection  
Y2-074 Hopewell 230 kV  
8 MW Capacity  
Combined  
Feasibility & System Impact Study Report**

*February 2013  
DMS #740798v1*

## **Introduction**

This Combined Feasibility & System Impact Study has been prepared in accordance with the PJM Open Access Transmission Tariff, §110, as well as the Feasibility Study Agreement between Interconnection Customer, (IC), Hopewell Cogeneration Limited Partnership, and PJM Interconnection, LLC (PJM), Transmission Provider (TP). The Interconnected Transmission Owner (ITO) is Virginia Electric and Power Company.

## **Preface**

The intent of this combined study is to determine a plan, with preliminary cost and construction time estimates, to connect the subject generation interconnection project to the PJM network at a location specified by IC. As a requirement for interconnection, IC may be responsible for the cost of constructing Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM and the underlying system. All facilities required for interconnection of a generation interconnection project must be designed to meet ITO technical specifications.

## **General**

The queue project Y2-074 was studied as an 8 MW Capacity injection at the Hopewell 230 kV substation in the ITO area. Project Y2-074 was evaluated for compliance with reliability criteria for summer peak conditions in 2016. Potential network impacts were as follows:

### **Network Impacts (Primary Option):**

#### **Impactful Contingencies**

*(The following contingencies resulted in overloads identified below)*

None identified.

#### **Generator Deliverability**

*(Single or N-1 contingencies for the Capacity portion only of the interconnection)*

None.

#### **Multiple Facility Contingency**

*(Double Circuit Tower Line Contingencies only with full energy output. Stuck Breaker and Bus Fault contingencies will be applied during the Impact Study)*

None.

**Contribution to Previously Identified Overloads**

*(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project. This project may have % allocation of cost responsibility which will be calculated and reported for the Impact Study.)*

None.

**Short Circuit**

*(Report Overduty breakers here)*

No changes to previously studied facilities; not required.

**Steady-State Voltage Requirements**

*(Results of the steady-state voltage studies should be inserted here)*

Not required; existing unit already evaluated.

**Stability and Reactive Power Requirement**

*(Results of the dynamic studies should be inserted here)*

Not required; existing unit already evaluated.

**Attachment Facilities**

Existing facilities are sufficient.

**Direct Connection Network Upgrades**

Existing facilities are sufficient.