

**PJM Generator Interconnection
W3-105 Dickerson
5 MW Capacity / 5 MW Energy
Feasibility & System Impact Study Report**

*January 2011
DMS #630406v1*

Introduction

This Combined Feasibility & System Impact Study has been prepared in accordance with the PJM Open Access Transmission Tariff, §36.2 and §201, as well as the Feasibility Study Agreement between Mirant Mid-Atlantic, LLC, the Interconnection Customer (IC), and PJM Interconnection, LLC (PJM), Transmission Provider (TP). The Interconnected Transmission Owner (ITO) is Potomac Electric 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.

The Feasibility Study estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. IC is responsible for its right of way, real estate, and construction permit issues.

General

Queue W3-105 is an IC 5 MW energy (5 MW Capacity) generation increase request to an existing combustion turbine. W3-105 is at Dickerson Station in the ITO area. The requested in-service date is June 1, 2011. The project was studied with its primary interconnection point at Dickerson 230 kV substation. Project W3-105 was evaluated for compliance with reliability criteria for summer peak conditions in 2014.

Network Impacts:

Generator Deliverability

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

No problems identified.

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)

No problems identified.

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.)

No problems identified.

Contribution to Previously Identified System Reinforcements

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

None.

Short Circuit

(Report Overdutied breakers here)

No problems identified.

ITO Analyses

Existing facilities are adequate to accommodate the IC request.