

# PJM Generator Interconnection Request Feasibility Study Report

Queue Position U3-031

January 30, 2009  
DOCS No. 523742

## **Network Impacts**

The queue project #U3-031 was studied as a 40MWE (energy) and 40MWC (Capacity) injection into the ComEd system at the TSS 112 Wilton Center 345kV facility. Project #U3-031 was evaluated for compliance with reliability criteria for summer peak conditions in 2012. Potential network impacts were as follows:

### **Direct Connection**

The proposed generation project will be connected to the Commonwealth Edison transmission system at the existing point of interconnection identified above. The proposed interconnection will not require any additional construction.

The following assumptions were used in the preparation of this high-level cost estimate:

- The existing relay protection and communications equipment associated with the protection of the Commonwealth Edison system is adequate for the increased generation. The relay settings will be reviewed in the Impact Study to determine if any changes are required.
- The customer will be responsible for the engineering, purchasing and construction of any changes required to the customer substation.
- The customer's substation and equipment beyond the Commonwealth Edison metering point shall be coordinated and must meet all National, State, Local, and Commonwealth Edison requirements.

### **Generator Deliverability**

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

No problems were identified.

### **Multiple Facility Contingency**

*(Double Circuit Tower Line contingencies only were studied for the full energy output. The contingencies of Line with Failed Breaker and Bus Fault will be performed for the Impact Study)*

No problems were identified.

### **Short Circuit**

*(Summary of impacted circuit breakers)*

To be determined in the System Impact Study.

### **Contribution to Previously Identified Overloads**

*(#U3-031 project contributes to the following contingency overloads, i.e. “Network Impacts”, identified for earlier generation or transmission interconnection projects in the PJM Queue)*

None

### **Stability Analysis and Reactive Power Requirements**

To be determined in the System Impact Study.

### **New System Reinforcements**

*(Upgrades required to mitigate reliability criteria violations, i.e. “Network Impacts”, initially caused by the addition of this project generation)*

None.

### **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.

### **Potential Issues**

Impacts on the MISO member transmission systems are not included in this analysis, but they will be included in the Impact Study, which may reveal upgrades needed in the MISO system not identified in this Feasibility Study.

### **Preliminary Cost Estimate**

There are no Direct Connection costs anticipated for new equipment for this existing connection. Similarly, no New System Reinforcements have been identified as a result of this project. However, this project will require a protective relaying system review that may result in relay setting changes. Therefore the preliminary cost estimate for the proposed generator project is **\$25,000.00**.

### **Construction Lead Time**

Other than the time necessary to address the aforementioned relaying issues, this project will not require any additional time to complete from the date of receipt of a signed Interconnection Service Agreement (ISA) because this project will utilize an existing interconnection point and no New System Reinforcements were identified.