**#Z1-127 – University Park South 138kV**
**Generation Interconnection**

## General

The Interconnection Customer is proposing a 20MW Capacity increase to the existing University Park South generating facility in the ComEd transmission system and located in Will County, IL. The proposed in-service date for this project is October 31, 2013 and is currently under review. **Impacts on the MISO member transmission systems are not included in this analysis, but they will be included in the Facilities Study, which may reveal upgrades needed in the MISO system not identified in this Feasibility Study.**

This Generation Interconnection Feasibility Study provides analysis results to aid the Interconnection Customer in assessing the practicality and cost of incorporating the facility into the PJM system.

## Revenue Metering and SCADA Requirements

**For PJM**: The Interconnection Customer will install equipment necessary to provide Revenue Metering (KWH, KVARH) and real time data (KW, KVAR) for Interconnection Customer's generating Resource. See PJM Manuals M-01 and M-14D, and PJM Tariff Section 24.1 to 24.2.

**For ComEd**: The Interconnection Customer will install equipment necessary to provide bi-directional Revenue Metering (KWH, KVARH) and real time data (KW, KVAR, circuit breaker status, and 138 kV voltage) for IC's generating Resource. See ComEd Applicable Standards available on the PJM website ("TO Standards") – "Exelon Energy Delivery Interconnection Guidelines (Generators Greater than 20 MW)".

## Network Impacts

The Z1-127 project was studied as a 20MW (20MW Capacity) injection into the ComEd area at the University Park 138kV substation. Project Z1-127 was evaluated for compliance with reliability criteria for summer peak conditions in 2017.

Potential network impacts were as follows:

### Generator Deliverability

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

No violations were found.

### Multiple Facility Contingency

*(Double Circuit Tower Line contingencies 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 violations were found.

**Short Circuit**
*(Summary of impacted circuit breakers)*

Not required.

**Contribution to Previously Identified Overloads**
*(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)*

No violations were found.

**New System Reinforcements**
*(Upgrades required to mitigate reliability criteria violations, I.e. "Network Impacts", initially caused by the addition of this project's generation.)*

None.

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

None.

**Delivery of Energy Portion of Interconnection Request**
*PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.*

*Note: Only the most severely overloaded conditions are listed below. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection Request, a subsequent analysis will be performed which shall study all overload conditions associated with the overloaded element(s) identified.*

As a result of the aggregate energy resources in the area, no violations were identified.