

# **U4-032 South Bend 500kV Generation Interconnection**

## **General**

The Interconnection Customer (IC) has proposed a 400 MW upgrade to their existing generating facility located near Shelocta, Armstrong County, Pennsylvania. The project was evaluated for compliance with reliability criteria for summer peak conditions in 2013. The in-service date, as identified in the Generation Interconnection Feasibility Study Agreement, is the second quarter of 2013.

## **Point of Interconnection**

U4-032 will interconnect with the AP transmission system at the existing South Bend 500kV substation. U4-032 was studied as a 400 MW injection into the South Bend 500kV substation.

## **Direct Connection Requirements**

### **Transmission Owner Scope of Direct Connection Work**

The Transmission Owner's (Allegheny Power) scope of work for the direct connection facility includes:

- No additional Direct Connection work is required by the TO at this time.

### **Interconnection Customer Scope of Direct Connection Work**

The Interconnection Customer (IC) has assumed full responsibility for the design and construction of all facilities associated with the U4-032 generating facility on their side of the Point of Interconnection (POI). It is assumed that the IC's step up transformer will conform to the AP standard of delta on the low side and grounded wye on the high side.

The IC will be required to install metering and telemetry equipment to provide revenue metering and real-time telemetry data to PJM. The requirements for this equipment are listed in Appendix 2, Section 8 of Attachment O to the PJM Tariff, as well as PJM Manuals 01 and 14D. Protective relaying and metering design and installation must comply with the Allegheny Power Applicable Standards.

## **Cost and Timing Summary**

There are no costs to report for U4-032 at this time.

## **Network Impacts**

Potential network impacts are as follows:

**Generator Deliverability**

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

None

**Multiple Facility Contingency**

*(Double Circuit Tower Line, Line with Failed Breaker, and Bus Fault contingencies for the **Full** energy output.*

None

**Contribution to Previously Identified Overloads**

None

**Short Circuit**

No breakers were identified as being over their maximum interrupting rating.

**Stability and Reactive Power Requirements**

Will be performed during the Queue U4-032 System Impact Study.

**New System Reinforcements**

None

**Contribution to Previously Identified System Reinforcements**

None