

## X4-003 Mill Creek-Riverview 138kV

### **Generation Interconnection**

#### **Local Network Impacts**

The impact of the proposed generating facility on the AEP System was assessed for adherence with applicable reliability criteria. AEP planning criteria require that the transmission system meet single contingency performance criteria in accordance with the AEP FERC Form 715. Therefore, this criterion was used to assess the impact of the proposed facility on the AEP System. This project was studied as a 130 MW net capacity consistent with the interconnection application. The results are summarized below.

#### Normal System (2015 Summer Conditions Capacity Level)

- None

#### Single Contingency (2015 Summer Conditions Capacity Level)

- None

#### Multiple Contingency (2015 Summer Conditions Capacity Level)

- None

#### Contribution to Previously Identified Overloads (2015 Summer Conditions Capacity Level)

- None

#### Normal System (2015 Summer Conditions Full Output)

- None

#### Single Contingency (2015 Summer Conditions Full Output)

- None

#### Multiple Contingency (2015 Summer Conditions Full Output)

- None

#### Contribution to Previously Identified Overloads (2015 Summer Conditions Full Output)

- None

#### Short Circuit Analysis

- No problems identified

#### Stability Analysis

- Not required

#### Additional Limitations of Concern

- None

#### Local/Network Upgrades

- None

### **Network Impacts**

The Queue Project #X4-003 was studied as a(n) 56.0MW(Capacity56.0MW) injection at Gorsuch 138kV substation in the AEP area. Project #X4-003 was evaluated for compliance with reliability criteria for summer peak conditions in 2015. Potential network impacts were as follows:

#### **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, Line with Failed Breaker and Bus Fault contingencies for the full energy output)*

- No problems identified

#### **Short Circuit**

*(Summary form of Cost allocation for breakers will be inserted here if any)*

No problems identified.

### **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.)*

None

### **New System Reinforcements**

None

**Contribution to Previously Identified Reinforcements**

None