

# ***Generation Interconnection Feasibility Study Report Queue Position AD2-009***

Interconnection Customer has proposed a 70 MW solar generating facility to be built in the Fulton County, Pennsylvania. PJM recognizes 48.1 MW as Capacity Interconnection Rights for this project. The proposed in-service date is June 30, 2019. **This study does not imply a West Penn Power (“Transmission Owner”) commitment to this in-service date.**

## **Point of Interconnection (“POI”)**

AD2-009 will interconnect with the West Penn Power transmission system by direct injection into McConnellsburg substation, 138 kV bus # 235217.

## **Network Impacts**

The Queue Project AD2-009 was evaluated as a 70.0 MW (Capacity 48.1 MW) injection at the McConnellsburg 138kV substation in the APS area. Project AD2-009 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AD2-009 was studied with a commercial probability of 53%. Potential network impacts were as follows:

### **Summer Peak Analysis - 2021**

#### **Generator Deliverability**

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

None

#### **Multiple Facility Contingency**

*(Double Circuit Tower Line, Fault with a Stuck Breaker, and Bus Fault contingencies for the full energy output)*

None

### **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

### **Steady-State Voltage Requirements**

To be determined at the system impact study stage.

### **Short Circuit**

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.

Only the most severely overloaded conditions are listed. 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 will study all overload conditions associated with the overloaded element(s) identified.

None

### **Light Load Analysis - 2021**

Light Load Studies to be conducted during later study phases (as required by PJM Manual 14B).

### **System Reinforcements**

#### **Short Circuit**

None

#### **Stability and Reactive Power Requirement**

To be determined at the system impact study stage.

### **Summer Peak Load Flow Analysis Reinforcements**

#### **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

**Light Load Load Flow Analysis Reinforcements**

**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