



# **Generation Interconnection**

## **Queue Project AE1-054**

### **Mill Run 25 kV**

## **Feasibility Study Report**

**Capacity : 7.5 MW / Energy : 0 MW**

January, 2019

## General

Interconnection Customer has proposed a battery storage uprate project located in Fayette County, Pennsylvania. The total capability of installed facilities will be 0.0 MW Energy and 7.5 MW Capacity Interconnection Rights.

The proposed in-service date for this project is September 1, 2020. **This study does not imply a Monongahela Power Company (Transmission Owner or Mon Power) commitment to this in-service date.**

## Point of Interconnection

The AE1-054 facility will interconnect with the Mon Power system by tapping the Somerset – Allegheny Power 25 kV REA line.

## Network Impacts

The Queue Project AE1-054 was evaluated as a 0 MW (Capacity 7.5 MW) generator interconnected with the Mill Run substation, bus # 236530, in the APS area (FirstEnergy, Mon Power zone). Project AE1-054 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AE1-054 was studied with a commercial probability of 53%. Potential network impacts were as follows:

## Summer Peak Analysis - 2022

### 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

## **Short Circuit**

None. (No overdutied circuit breakers identified)

## **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

## **System Reinforcements**

### **Short Circuit**

None.

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

Will be determined at a later study stages.

## **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.

# Appendix 1: Facility Location

**PJM Queue Position: AE1-054**

Mill Run Battery Storage

GPS Coordinates: 39.914484°, -79.391643°



# Appendix 2: One-Line Diagram

## PJM Queue Position: AE1-054

