

W3-162 Baker 345kV

Generation Interconnection

Network Impacts

Queue project W3-162 was studied as a(n) 20.0 MW (20.0 MW of which was Capacity) injection into AEP's system at the Baker 345.0 kV substation. Project W3-162 was evaluated for compliance with reliability criteria for summer peak conditions in 2014.

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

System Reinforcements

None

Energy Portion of Interconnection Request

(PJM also studied the delivery of the energy portion of the surrounding generation. Any potential 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 Transmission Interconnection request.

Note: 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 analyzes all overload conditions associated with the overloaded element(s) identified. As a result of the aggregate energy resources in the area, the following violations were identified.)

No problems identified.

Generation Modeled

W3 Queue generation modeled

- Project #W3-005, 500 MW, Wind at Fostoria Central 345 kV substation
- Project #W3-011, 300 MW, Wind on a tap of East Lima - Fostoria Central 345 kV line
- Project #W3-012, 300 MW, Wind on a tap of North Findlay - Fostoria Central 138 kV line
- Project #W3-014, 300 MW, Wind on a tap of Galion - Fostoria Central 138 kV line
- Project #W3-021, 300 MW, Wind on a tap of Jackson Ferry – Peak Creek 138 kV line
- Project #W3-024, 149 MW, Wind at Columbia 138 kV substation
- Project #W3-051, 60 MW, Wind at Dorton 138 kV substation
- Project #W3-060, 120 MW, Wind at Kendallville 138 kV substation
- Project #W3-085, 185 MW, Wind on a tap of Chatfield - South Tiffin 138 kV line
- Project #W3-088, 200 MW, Wind at South West Lima 345 kV substation
- Project #W3-111, 20 MW, Solar at South Cumberland 69 KV
- Project #W3-112, 20 MW, Solar at South Cumberland 69 KV
- Project #W3-113, 20 MW, Solar at South Cumberland 69 KV
- Project #W3-128, 790 MW, Thermal (Gas) generation on a tap of Sout Porn - Waterford 345 kV line
- Project #W3-161, 13 MW, Waste burning plant at Kanawha River 138 kV substation