

PJM Generator Interconnection Request Feasibility Study Report

**Queue Position #T48
Coldwater-Rossburg 69 kV Project
50 MW
April, 2008**

**DOCS # 479418v1
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Network Impacts

The Queue T48 Project was studied as a 50 MW (10 MWC) injection at the Coldwater – Ft Recovery 69 kV facility. The project was evaluated for compliance with reliability criteria for summer peak conditions in 2012. Potential network impacts were as follows:

Direct Connection Cost:

The interconnection of this facility requires the construction of a three element ring bus facility rated for 69kV and will cost approximately \$1,820,000. This cost estimate does not include the cost to acquire land as it is assumed that it can be located on the land owned by the developer immediately adjacent to the developer's 69/34.5 kV generator substation. Also, there is a requirement for substation transfer trips to/from the generation site substation to both the Rossburg and Coldwater substations. Detailed estimates for cost and schedule are shown below:

New Sub feed to generator Sub - \$1,820,000

- 1) Facilities Design- week 0 to week 14
- 2) Material Procurement- week 3 to week 26
- 3) Substation Construction- week 20 to week 35
- 4) Acceptance Testing- week 34 to week 38

Rossburg Sub Transfer Trip to/from generator Sub - \$64,000

- 1) Facilities Design- week 10 to week 15
- 2) Material Procurement- week 16 to week 30
- 3) Substation Construction- week 31 to week 35
- 4) Acceptance Testing- week 36 to week 38

Coldwater Sub Transfer Trip to/from generator Sub - \$99,000

- 1) Facilities Design- week 11 to week 14
- 2) Material Procurement- week 14 to week 28
- 3) Substation Construction- week 28 to week 34
- 4) Acceptance Testing- week 35 to week 38

Generator Deliverability

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

No problems were identified.

Multiple Facility Contingency

(Double Circuit Tower Line contingencies only for the full energy output. Stuck breaker and bus fault contingencies will be performed for the Impact Study)

No problems were 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)

No problems were identified.

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.

Short Circuit

No problems were identified.

Single Line Diagram

