W4-085 Grays Ferry 2 MW
Feasibility Study

Network Impacts

Network Impacts
Queue project W4-085 was studied as a 2.0 MW energy only (no capacity) injection into PECO's system at Grays Ferry 13.8 kV substation. Project W4-085 was evaluated for compliance with reliability criteria for summer peak conditions in 2014.

Potential transmission network impacts are as follows:

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

Not required for an energy only resource.

Multiple Facility Contingency
(Double Circuit Tower Line contingencies only with full energy output. Stuck Breaker and Bus Fault contingencies will be applied during the Impact Study)

No violations 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 violations 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 required.

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 required.

Short Circuit
(Report over-dutied breakers.)

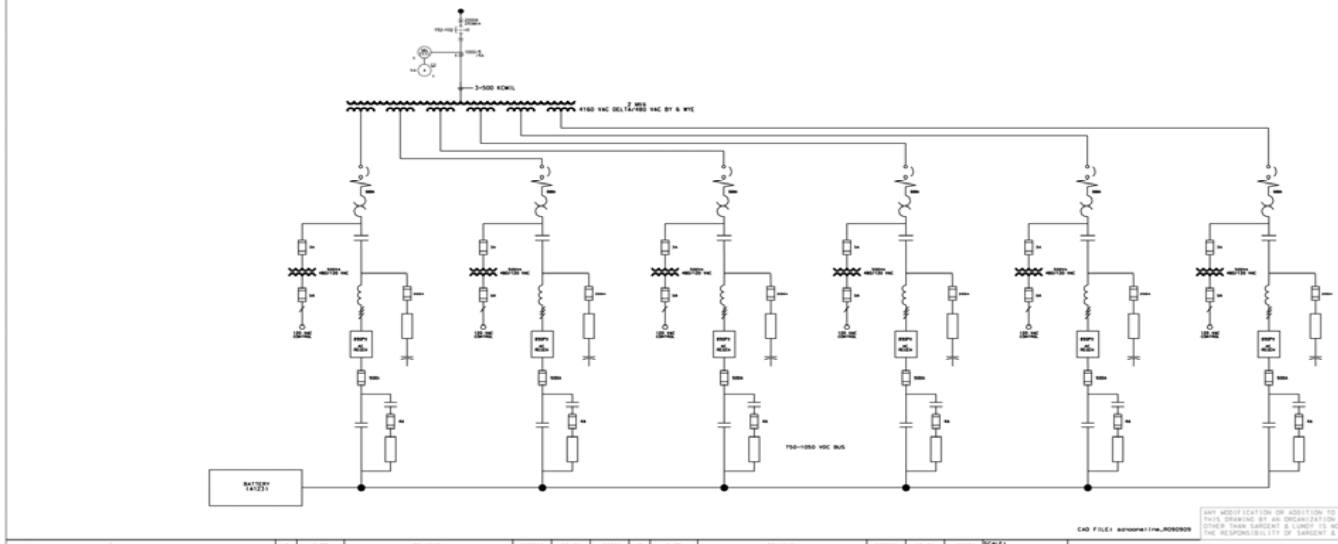
None required.

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 violations identified.

ATTACHMENT 1

One Line Diagram



CAD FILE: sanoranline_R050505

Sargent & Lundy

NO.	DATE	REVISION	PREP'D	REV'D	APPR'D
1	02-16-11	AS-BUILT	MJB	WCJ	

NO.	DATE	REVISION	PREP'D	REV'D	APPR'D

SCALE: NONE

DWN. DATE --

CHK. DATE --

APPR. DATE --

AES CORPORATION

CONCEPTUAL ONE LINE DIAGRAM SKETCH
POWER EQUIPMENT
AES - NAVY YARD STORAGE FACILITY

PROJECT NO.: 11831-024

CLIENT:

DWG. NO.: E-XXXX

REV. 1