PJM Generator Interconnection Request
Queue W2-031
Gloucester 26.4kV
Feasibility/Impact Study Report

October 2010
#614510

W2-031Gloucester 26.4kV Feasibility/Impact Study

General

Hartz Solar, LLC has proposed installing an 8.5 MW DC solar project at the National Park Landfill site at the intersection of Grove Avenue and Woodlawn Avenue in National Park, Camden County, New Jersey. The commercial operation date is December 31, 2012.

Direct Connection

The interconnection will consist of a single line, 26-kV service supplied from Gloucester Switching Station. The total interconnection cost of $212,200 is based on the most efficient possible route to the existing 26-kV Distribution infrastructure

Project Item		26-kV Single Line Service
Inside Plant		
Line Position/Feeder Row		-
Relay Protection		-
Manholes/Conduit		-
Other/Misc.		-
	Sub Total	$0
Outside Plant		
Overhead Line		$152,200
Underground Line		-
Manholes/Conduit		-
Other/Misc.		-
	Sub Total	$152,200
Metering/Monitoring		
Revenue Metering/Telemetering/SCADA		$60,000
Feeder Metering		-
Other/Misc.		-
	Sub Total	$60,000
Total Cost		**$212,200**
Acceptable Generation Level		Up to 10 MW

The cost in the Interconnection Agreement is exclusive of work required to be performed by the developer as specified in PSE&G's Information & Requirements for Electric Service Handbook. This work includes, but may not be limited to, the following:

- Developer is responsible for purchase and installation of all high voltage (26-kV) service equipment as required
- Developer will adhere to specifications detailed in the PSE&G Information and Requirements for electric service handbook
- Developer is responsible for all trenching and the installation of conduits and manholes as normally required and specified by PSE&G
- Developer must obtain all permits and easements required to install the interconnection facilities
- Developer must provide access for the installation, maintenance and operation of all service equipment

It is anticipated that material procurement and construction will require 5-6 months from the date of project approval and authorization.

Below is the schedule of work PSE&G has proposed for the project:

March 1, 2012

ISA and CSA are fully executed and authorization is received to proceed with construction

Long lead time construction material is placed on order

April 15, 2012

Developer submits preliminary site plan, 13-kV switchgear one-line diagram and equipment specifications for approval

May 1, 2012

PSE&G provides comments on project lay-out and design

June 1, 2012

Developer submits final site plan, 13-kV switchgear one-line diagram and equipment specifications for approval

June 15, 2012

PSE&G provides final comments and approval of 13-kV switchgear lay-out and design

Developer begins construction based on approved design

July 1, 2012

PSE&G commences line construction

August 15, 2012

Switchgear inspection and approval by PSE&G

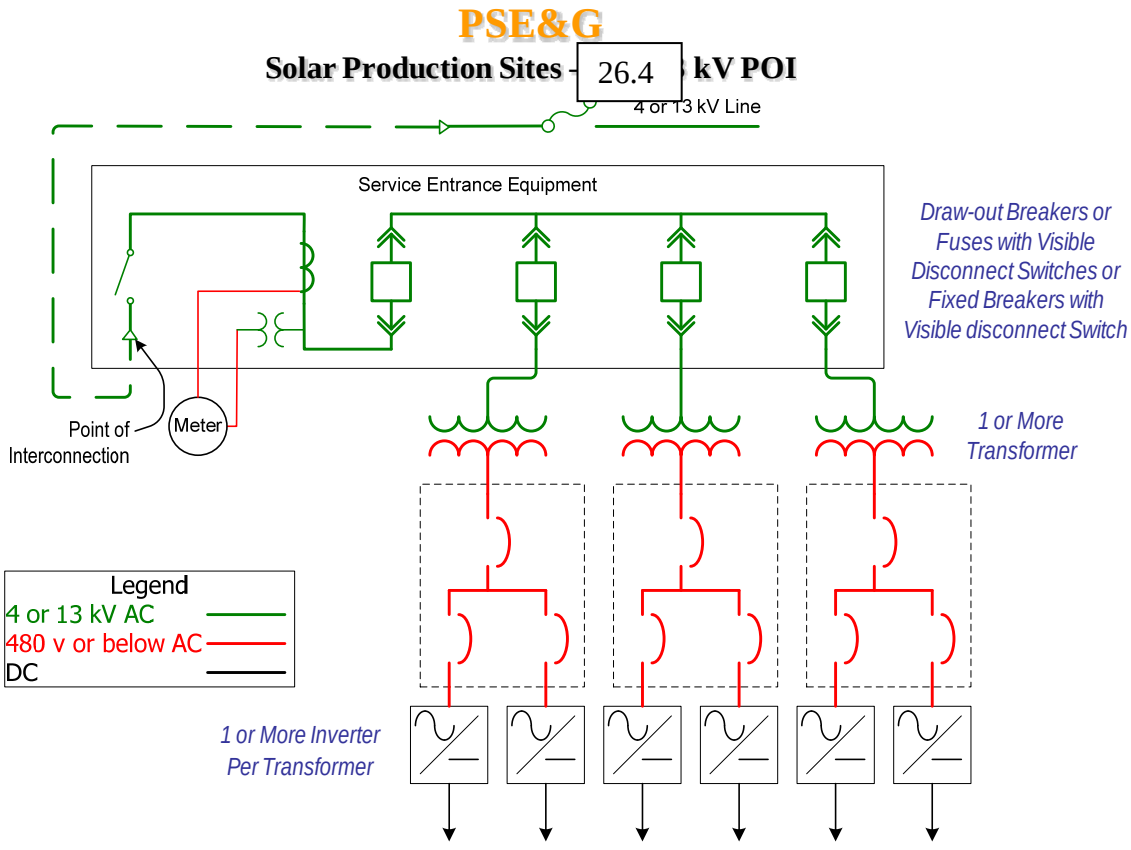
September 1, 2012

Completion of interconnection work and service cut-in

Notes:

1) Customer will abide by PSE&G Information and Requirements for electric service hand book
2) Customer is responsible to provide trench, conduit and manholes were applicable
3) Customer is responsible to provide access and easements
4) Customer is responsible to provide permits and associated costs.
5) Electric service route was based on most efficient route
6) Material procurement will be six months from project approval/authorization

Figure #1



Network Impacts

Queue project W2-031 was studied as a(n) 8.5MW (3.2MW of which was Capacity) injection into PSEG's system at the Gloucester 26kV substation. The project was studied on a combined feasibility-impact basis which utilizes an AC analysis, and incorporates all contingency types. Project W2-031 was evaluated for compliance with reliability criteria for summer peak conditions in 2014. Potential network impacts were as follows:

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

Stability

Not required because the project is less than 30 MW.

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.)

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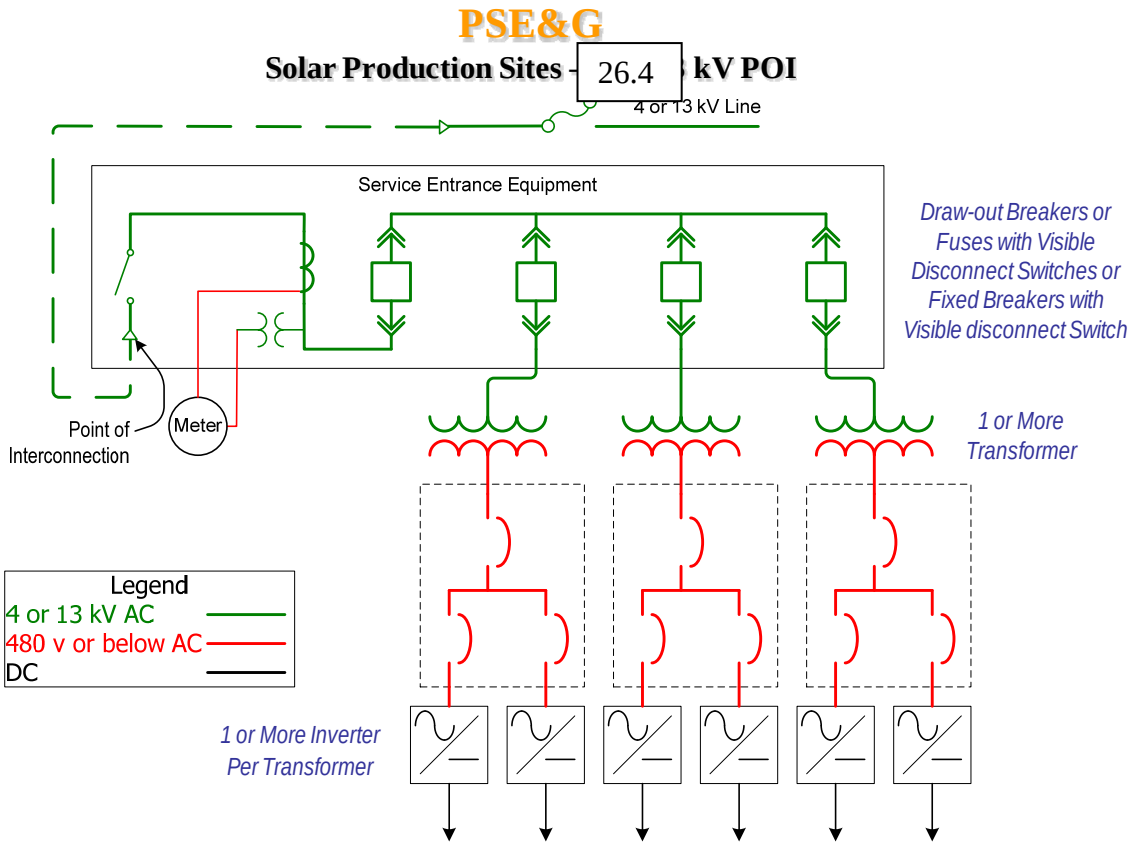

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