

***PJM Generator Interconnection Request
Queue #V2-009
Plainsboro & Devils Brook 13kV
Feasibility/Impact Study Report***

**October 2009
#561613
Version 2**

V2-009 Plainsboro & Devils Brook 13kV

Feasibility/Impact Study

General

Recurrent Energy Development Holdings, L.L.C. has proposed installing a total of 16 MW of solar panels on eight commercial buildings in the Cranbury, New Jersey area. The eight sites are listed.

One Capital Drive	Cranbury	NJ
Two Capital Drive	Cranbury	NJ
Three Security Drive	Cranbury	NJ
Four Aurora Drive	Cranbury	NJ
1240-48 Cranbury S River Rd.	Cranbury	NJ
283 Prospect Plains Road	Cranbury	NJ
61 Station Road	Cranbury	NJ
66 Station Road	Cranbury	NJ

The anticipated commercial operation date for all of the installations is May 31, 2010.

Direct Connection

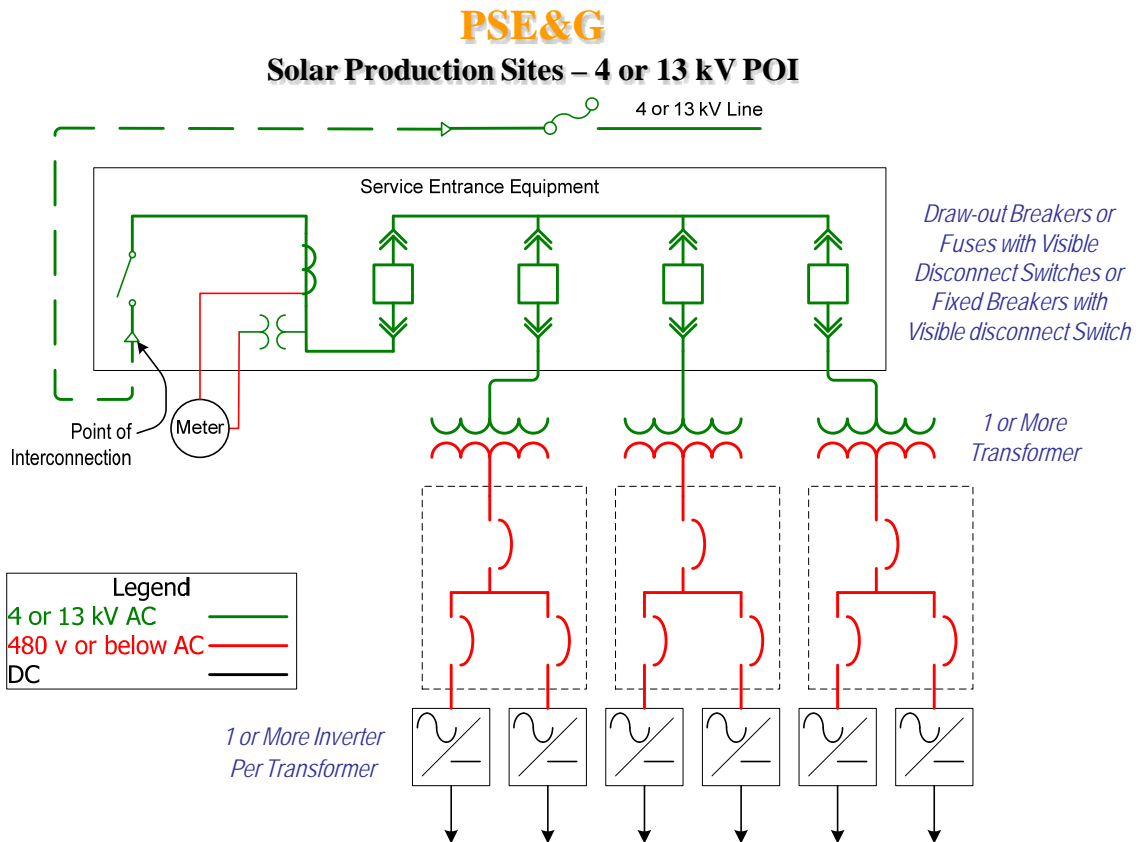
The attached spreadsheet contains estimates (including risk and contingencies) for the interconnection of 16 MW of solar generation by Recurrent Energy in the Cranbury, New Jersey area. Since no specific site plans were provided by the developer, all interconnection costs are based on the most efficient route to the existing Distribution infrastructure. The costs are identified by site for each of the 8 sites with a total cost of **\$2,043,342**. The estimated cost for each individual connection is shown in Attachment #2. This cost 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 low voltage (277/480v) or high voltage (13-kV) service equipment as required for each site. See Figure #1
- 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 6 months from the date of project approval and authorization.

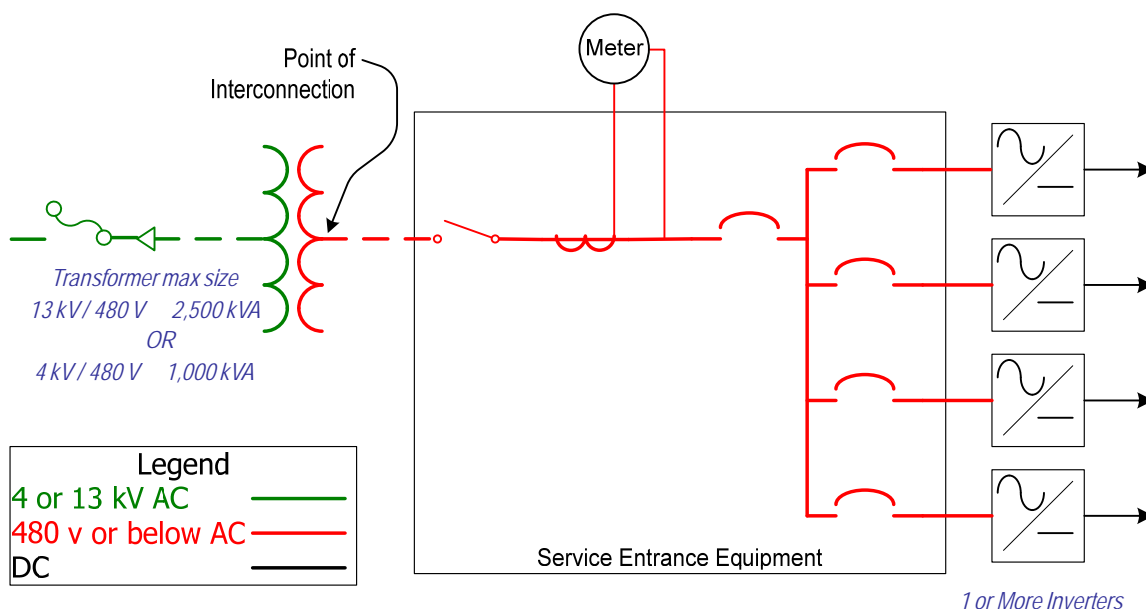
As can be seen on Attachment #2, Plainview circuit 8004 will have 7.374 MW connected, Plainview circuit 8006 will have 6.282 MW connected and Devils Brook 8022 circuit will have 2.36 MW connected. The total ME connected to Plainview 13kV station is 13.656 MW and the total connected to Devils Brook 13kV station is 2.36MW.

Figure #1



PSE&G

Solar Production Sites – 480 volt POI



Network Impacts

The queue V2-009 project was studied as a 16.11MW injection (6.12MW of which was capacity) into PSEG's system. The project was modeled at four different points of interconnection on the 13kV system: Devils Brook 1, Devils Brook 2, Plainsboro 1, and Plainsboro 2. The study was performed on a combined feasibility-impact basis which utilizes an AC analysis, and incorporates all contingency types. V2-009 was evaluated for compliance with reliability criteria for summer peak conditions in 2013. 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 under 30 MW.

System Reinforcements

None.

Cost Allocation

The V2-009 project is responsible for 100% of the estimated \$2,043,342 cost for the direct connection facilities described above.

Attachment #2

RECURRENT ENERGY SOLAR PROJECT - CRANBURY

Site Selection

Name	Address	City	State	Zip	AC Output (MW)	Interconnection Circuit			Service Type		Interconnection Cost					
						DVB8022	PLI8004	PLI8006	13-kV Primary	277/480v	Service	Revenue Metering	Tele Metering	Feeder Metering	Site Subtotal	
Cranbury Buss Park #1	One Capital Drive	Cranbury	NJ	08512	0.5270	0.527				x	\$94,119	\$15,725	\$35,000	-	\$144,844	
Cranbury Buss Park #2	Two Capital Drive	Cranbury	NJ	08512	0.6890		0.6890			x	\$103,630	\$15,725	\$35,000	-	\$154,355	
Cranbury Buss Park #3	Three Security Drive	Cranbury	NJ	08512	0.7220		0.7220			x	\$101,756	\$15,897	\$35,000	-	\$152,653	
Cranbury Buss Park #4	Four Aurora Drive	Cranbury	NJ	08512	1.8330	1.8330			x		\$65,110	\$26,675	\$35,000	\$74,600	\$201,385	
Exit 8A Dist Ctr #01	1240-48 Cranbury S River Rd.	Cranbury	NJ	08512	3.6100		3.6100			x	\$325,171	\$26,675	\$42,000	\$74,600	\$468,446	
Exit 8A Dist Ctr #07	283 Prospect Plains Road	Cranbury	NJ	08512	2.3530		2.3530			x	\$67,675	\$26,675	\$35,000	*	\$129,350	
Exit 8A Dist Ctr #08	61 Station Road	Cranbury	NJ	08512	3.6940			3.6940		x	\$400,014	\$26,675	\$42,000	\$23,133	\$491,822	
Exit 8A Dist Ctr #10	66 Station Road	Cranbury	NJ	08512	2.5880			2.5880		x	\$238,812	\$26,675	\$35,000	*	\$300,487	
MW Total:					16.016	2.360	7.374	6.282			Total Cost:	\$1,396,287	\$180,722	\$294,000	\$172,333	\$2,043,342

* - Feeder metering will be required if other circuit site is eliminated