

INSTALLER CONFERENCE CALL SUMMARY

October 8, 2015

NY-Sun Solar PV Incentive Program

GUEST SPEAKERS

Houtan Moaveni, Assistant Director, NY-Sun

Richard Kauffman, NYSEG and RGE (RAKauffman@nyseg.com)

Through 3/4s of 2015, applications have increased by more than 50% over all of 2014 and 2014 was double those received in 2013. We originally estimated 2015 to be double 2014 and that might be how 2015 ends.

Thank you to the developers for their cooperation in implementing our under frequency requirements into their processes. A reminder was also given to include the revised settings that were installed in the inverters in their letter of completion and also that we require the letter of completion to be signed.

After the issues we had late 2014 with meeting required timelines for project reviews we have streamlined our processes, added additional headcount, and take very seriously our compliance with the SIR's time requirements. As a result we are doing very well at staying within the time constraints. With that in mind, if there is any project that you think has slipped past any of its deadlines please contact me immediately.

We have been notified on a couple of occasions that a customer is waiting for their meter exchange to be completed and upon checking have found that the meter exchange form was not emailed to the division but the database indicated that it had been. If you are getting ready to install your project and it has been more than 10 business days since you received your review letter and you notice that the meter has not been exchanged please contact me immediately. I think we have caught all of these but I want to make sure you are not waiting on us to complete the meter exchange after the customer's system is installed.

You, the developer, can help us to help you by:

- when submitting your application package make sure the customer's name is the name on their electric bill
- make sure the customer name, address, and account number match what is on their bill
- confirm that the size of the system as shown on the submitted drawing matches information in Appendix B (or C if applicable)
- to avoid delays, when submitting a larger size system, assume that we will want a site plan showing where you are requesting the interconnection

PROGRAM ANNOUNCEMENTS

Affordable Solar Residential Incentive

- Added incentive for low-to-moderate income residential installations
- Incentive application live through Powerclerk as of October 9th
- Details of requirements and instructions in the updated NY-Sun Program Manual and nysun.ny/gov/get-solar/affordable-solar

OPERATIONS UPDATES < 200KW PROGRAM

NY-Sun website updates – two additional resources (10/9):

Contractor Resources

All documents previously housed on the Partner Portal have moved to the NY-Sun website new Contractor Resources section. This includes updated sample documents, project application guidance documents and QA related documents.

http://ny-sun.ny.gov/For-Installers/Contractor-Resources

Solar Announcements

All Solar Announcements will now be posted to the NY-Sun website under a Solar Announcements section. This includes conference call summaries.

http://ny-sun.ny.gov/For-Installers/Solar-Annoucements.

Using Current Form Versions

Reminder to always submit the most recent version of the forms available on the NY-Sun website: http://ny-sun.ny.gov/For-Installers/Forms-Manuals-Tools

Form updates include:

- Program Manual Rev18
- Residential GJGNY Proforma Tool
- Addendum
- Customer Guide
- Incentive Request Form

New Forms include:

Affordable Solar Residential Project Screening Tool

Project Applications must be submitted using the current Powerclerk reservation application form. **Older versions will not be accepted.** The certification statement must appear and the certification must reflect the sector of the applicant. The 3 sectors are: Residential, Non-Residential and Affordable Solar Residential. The certification statement on the application is generated based on the selected sector. **Applications listing an incorrect sector and therefore incorrect certification statement will not be accepted.**

For Change/Cancel Request Forms, Incentive Request Forms and Extension Request Forms, you may submit a previous version of the form *only if you have already obtained customer signature*.

All signatures must contain original or verifiable electronic signatures for both the Installer and Customer.

Incentive Request Forms

Reminder to follow instructions in the Residential/Small Commercial Program Manual located on the NY-SUN website, section 2.8. The naming convention for the attachment should be the same as the naming convention in subject line of the email. Also, reminder to submit the request form and all supporting documents as 1 (one) pdf document which must be less than 5 MB.

Green Jobs-Green NY Documents Applications using GJGNY Financing

For residential projects using Green Jobs-Green NY financing, the following documents must be submitted through Powerclerk with the project application:

- Loan Preapproval letter from EFS
- GJGNY Proforma worksheet

The customer name and address on the preapproval letter and Proforma worksheet must match the information in Powerclerk. The project cost, NYSERDA incentive, utility company, and customer contact information on the Proforma worksheet must exactly match the information in Powerclerk. The "Annual kWh Produced by System" amount on the Proforma must exactly match the output of the estimate of annual output report (Section 5.5).

The Contractor/Installer is required to enter into Powerclerk, the customer's preferred Loan Type (On-bill or Smart Energy Loan), Loan Term (5, 10, or 15 years) and Loan Amount. These fields must match the customer's desired loan selection information on the Proforma tool. If there is a discrepancy in this information, EFS cannot approve the loan.

A sample preapproval letter and Proforma worksheets are available on the NY-Sun website at http://ny-sun.ny.gov/For-Installers/Contractor-Resources.

Affordable Solar Residential Incentive Documents Applications using Affordable Solar incentive

For residential projects applying for the additional Affordable Solar incentive, the following documents must be submitted through Powerclerk with the project application:

- Income eligibility letter from EFS (application available http://ny-sun.ny.gov/Get-Solar/Affordable-Solar)
- Affordable Solar Residential Project Screening Tool

If choosing Affordable Incentive, you must select the Sector labeled "Affordable Solar Residential" under Customer Site Info tab.

Affordable Solar – GJGNY Third Party Owner Pilot Documents Applications participating in TPO Pilot

For projects participating in the TPO Pilot, the following must be submitted through Powerclerk with the project application:

- TPO Pilot Prepaid lease/PPA documentation verifying that the lease or PPA has been fully prepaid with no further financial obligations by the customer to the third party owner of the system installation.
- GJGNY Proforma worksheet

New Statuses appearing in Power Clerk:

Response Requested and Response Received – Two new status in Powerclerk which will be used during initial review and design review stages.

In instances where a Project Application has missing or inaccurate information or documents, as determined by the Initial Review or Technical Review, NYSERDA/PSEG will contact the Contractor/Installer requesting the missing information be provided and/or inaccurate information be corrected.

The application will be moved to "Response Requested" status in Powerclerk. If the information is not provided or corrected within 10 calendar days of being requested by NYSERDA/PSEG, the Project Application will be denied. The project can be re-submitted at a later date.

The application may be in "Response Requested" for a total of 20 calendar days maximum during the length of the project – 10 calendar days for the initial review and 10 calendar days for the technical review.

A new email address has also been created in order to track responses: PVResponses@nyserda.ny.gov.

Where we are installations under NY-Sun

Since the beginning of 2015, to date October 7, 2015, <200kW program has installed 128 MW of PV capacity and the >200kW program has installed 20 MW for a total of 148 MW of installed capacity in 2015. An additional 462 MW are in development.

TECHNICAL UPDATES < 200KW PROGRAM

Design Review and Technical Assistance

- Please be sure to enter the array azimuth and tilt into Powerclerk. If you are installing multiple arrays, enter each of them as a separate line item. Don't leave the default 180 degrees south and 30 degrees tilt unless that is the actual azimuth and tilt for the system.
- When calculating the PV system's output with a tool such as PVWatts, be sure to adjust the derate factor to account for shading.
- The more clear your applications are, the more quickly we can approve them. Before pressing the "submit" button, go through your documents and make sure that the project cost, system size, and modules and inverters are correct. This will save you time and prevent unnecessary backand-forth.

Code Update

2014 NEC topic: Additional Auxiliary Electrodes at the Array. This applies to roof, pole or ground mounted Arrays.

690.47 (D) Additional Auxiliary Electrodes for Array Grounding. A grounding electrode shall be installed in accordance with 250.52 and 250.54 at the location of all ground- and pole-mounted PV arrays and as close as practicable to the location of roof-mounted PV arrays. The electrodes shall be connected directly to the array frame(s) or structure. The dc grounding electrode conductor shall be sized according to 250.166. Additional electrodes are not permitted to be used as a substitute for equipment bonding or equipment grounding conductor requirements. The structure of a ground- or pole-mounted PV array shall be permitted to be considered a grounding

electrode if it meets the requirements of 250.52. Roof-mounted PV arrays shall be permitted to use the metal frame of a building or structure if the requirements of 250.52(A)(2) are met. Exception No. 1: An array grounding electrode(s) shall not be required where the load served by the array is integral with the array.

Exception No. 2: An additional array grounding electrode(s) shall not be required if located within 1.8 m (6 ft) of the premises wiring electrode.

QA Issues

Some contractors are having difficulty on QA inspections with Supply Side Connections

The disconnecting means must be service rated, a minimum ampere rating (60 amps) and have overcurrent protection. It must also be able to withstand the available fault current. Typically off the shelf service equipment at your local big box store will be rated 22KAIC

The QA inspectors will be looking for a 22kAIC minimum, or a utility letter stating the available fault current, or engineered calculations.

Often it may be easier to use a service rated fused disconnect switch, with current limiting fuses.

Included with the follow up notes is a Mike Holt link http://www.mikeholt.com/technical-available-short-circuit-current.php

Also you can take a look at the following:

- NEC230.79(D) states that 60Amp is the minimum rating for the disconnect.
- NEC230.42(B) states that the conductors must be rated for the reference 230.79(D)
- NEC 408.36(D) requirements for additional securing of back feed plug in breakers.

COMMERCIAL/INDUSTRIAL >200KW PROGRAM UPDATES

Developers should take notice that we have posted a new version of the C/I Program Manual, version 1.6

QUESTIONS FROM INSTALLERS

Solar Thermal – PON 2149

INTRODUCTIONS

The Solar Thermal program is transferring to NYSERDA's new Renewable Heating and Cooling group. Donovan Gordon is the new Director, and Bill Mitchell and Matt McQuinn are Project Managers in this new group. The Renewable Heating and Cooling program will also include air source heat pumps, ground source heat pumps, and renewable wood heating.

MONTH TO DATE BUDGET STATUS

In September the program received 35 projects, totaling \$734,575 in funding.

As of October 8, there were 9 projects received for October, totaling \$290,767 in funding.

The program does not currently have RGGI funding available for projects that do not offset electrically-heated hot water. We have completely expended our RPS annual budget of \$4.3M. At this time we are able to fund additional electric-offset projects using a funding pool shared among other NYSERDA programs.

Contact Information and Next Call

STAFF DIRECTORY

Participating contractors are encouraged to use the NY-SUN Staff Directory when asking questions relating to the program. This is especially important when you have a time sensitive request. NY-Sun contractors should avoid using the General Inquires email or toll free numbers.

NYSERDA Staff					
Director	David Sandbank	518-862-1090 Ext 3104	<u>David.Sandbank@nyserda.ny.gov</u>		
Assistant Director	Houtan Maoveni	518-862-1090 Ext 3016	Houtan.Moaveni@nyserda.ny.gov		
Office Admin	Maryfrancis Keegan	518-862-1090 Ext 3523	Mary.Keegan@nyserda.ny.gov		
Systems Above 200 kW					
	Alison Neligan	518-862-1090 Ext 3397	Alison.Neligan@nyserda.ny.gov		
	Maureen Leddy	518-862-1090 Ext 3318	Maureen.Leddy@nyserda.ny.gov		
	Lillie Ghobrial	518-862-1090 Ext 3093	Lillie.Ghrobrial@nyserda.ny.gov		
Systems 200 kW and below					
Technical Assistance	Frank Mace	518-862-1090 Ext 3433	Frank.Mace@nyserad.ny.gov		
Power Clerk and Contracts	Marci Brunner	518-862-1090 Ext 3415	Marci.Brunner@nyserda.ny.gov		
Installer/Contractor/Application Intake	Leslie Polsinello	518-862-1090 Ext 3473	<u>Leslie.Polsinello@nyserda.ny.gov</u>		
Technical Assistance	Luke Forster	518-862-1090 Ext 3495	Luke.Forster@nyserda.ny.gov		
Incentive Requests	Jason Mangione	518-862-1090 Ext 3482	Jason.Mangione@nyserda.ny.gov		
PSEG-LI Staff - Systems 200kW and below on Long Island					
Manager, Renewable Programs	Robert Boerner	516-408-8328	Robert.Boerner@pseg.com		
Lead Analyst, Solar/Wind Programs	Jennifer Rommel	631-844-3835	Jennifer.Rommel@pseg.com		
Tech Support/Lead Engineer	Elaine Akley	631-844-3746	Elaine.Akley@pseg.com		
Process Lead, Energy Efficiency Support Services	Stacey Wagner	631-844-3508	Stacey.Wagner@pseg.com		
Rebate Processing Lead	Linda Cavalluzzi	631-844-3504	Linda.Cavalluzzi@pseg.com		
Community Solar					
Program Manager	Max Joel	212-971-5342 Ext 3035	Max.Joel@nyserda.ny.gov		
	Lisabeth Tremblay	212-971-5342 Ext 3632	<u>Lisabeth.Tremblay@nyserda.ny.gov</u>		
	Michelle Andry	212-971-5342 Ext 3260	Michelle.Andry@nyserda.ny.gov		

QA/QC Staff				
Program Manager	Kim Lenihan	518-862-1090 Ext 3410	Kimberly.Lenihan@nyserda.ny.gov	
QA Project Manager	Brian Atchinson	518-862-1090 Ext 3382	Brian.Atchinson@nyserda.ny.gov	
Renewable Heating and Cooling				
Director	Donovan Gordon	518-862-1090 Ext 3119	Donovan.Gordon@nyserda.ny.gov	
Project Manager	Bill Mitchell	518-862-1090 Ext 3056	Bill.Mitchell@nyserda.ny.gov	
Project Manager	Matthew McQuinn	518-862-1090 Ext 3053	Matt.McQuinn@nyserda.ny.gov	

General Inquiries not NY Sun specific

• Email: info@nyserda.ny.gov

Phone: 518-862-1090 or 1-866-NYSERDA (Toll free)

• Fax: 518-862-1091

• Hours: 8:30 a.m. - 5:00 p.m., Monday through Friday

NEXT CALL

The next conference call we be held on November 12, 2015 at 9:00am. An agenda will be sent out in advance of the call.

About NY-Sun

NY-Sun, a dynamic public-private partnership, will drive growth in the solar industry and make solar technology more affordable for all New Yorkers. NY-Sun brings together and expands existing programs administered by the New York State Energy Research and Development Authority (NYSERDA), Long Island Power Authority (LIPA), PSEG Long Island, and the New York Power Authority (NYPA), to ensure a coordinated, well-supported solar energy expansion plan and a transition to a sustainable, self-sufficient solar industry. To learn more about NY-Sun, visit **ny-sun.ny.gov**

New York State Energy Research and Development Authority 866-NYSERDA | nyserda.ny.gov