



Solar Thermal Incentive Program
Program Opportunity Notice (PON) 2149
\$24,965,000 Available

**Solar Thermal Incentive Applications and Solar Thermal
Installer Applications Accepted December 10, 2010
through December 31, 2015
By 5:00 PM Eastern Time***

The New York State Energy Research and Development Authority (NYSERDA) requests applications from qualified Solar Thermal (ST) installers for eligibility in a financial incentive program for approved Solar Thermal systems installed for eligible New York State customers. Solar Thermal system installers and dealers are required to submit applications to become eligible installers. Installers can apply for eligibility at any time while the program is open. Eligible installers can then apply for financial incentives for approved Solar Thermal end-use systems meeting the requirements of this Program. Additional funding may be made available, depending on funding availability, customer demand, and program success. The program will be implemented on a first-come, first-served basis.

ST Incentive Application submission: Eligible Installer must submit one [1] clearly labeled, completed and signed application package as detailed in Attachment A (Customer Step-by-Step Guide) and mail to:

**Solar Thermal Program PON 2149
Attn: Marci Brunner, Project Manager
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399**

Installer Eligibility Application submission: Potential ST Installers must submit one [1] clearly labeled, completed and signed application package as detailed in Attachment F (Solar Thermal Installer Eligibility Application Instructions and Application) to:

**Solar Thermal Installer Application PON 2149
Attn: Marci Brunner, Project Manager
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399**

All Program questions should be directed to Marci Brunner at (518) 862-1090, ext. 3415 or mlb@nyserda.org.
All Contractual questions should be directed to Venice Forbes at (518) 862-1090, ext. 3507 or ywf@nyserda.org.

Installers may direct any questions to Diane Stacey at (518) 862-1090, ext. 3297 or dms@nyserda.org or STInstallers@nyserda.org.

Please indicate that you are calling in reference to PON 2149.

*Late, incomplete, or unsigned applications will be returned. Faxed or e-mailed applications will not be accepted. Applications will not be accepted at any other NYSEDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSEDA's website at www.nyserda.org.

I. INTRODUCTION

WHAT IS THE SOLAR ST INCENTIVE PROGRAM?

The New York State Energy Research and Development Authority (NYSERDA) provide incentives for the installation of new Solar Thermal systems for the production of hot water displacing electrically heated hot water. System incentives are capped at \$4,000.00 per site/meter for residential systems and \$25,000.00 per site/meter for nonresidential applicants. Funding for the Solar Thermal Incentive Program ("Program") has been allocated by the New York State Public Service Commission through the Renewable Portfolio Standard (RPS) program. The goal of the program is to install 45.54MW of Solar Thermal capacity by 12/31/2015. Incentives will be granted on a first-come, first-served basis, and applications will be accepted through December 31, 2015, or until funds are fully committed, whichever comes first. There is also a small amount of non-RPS funding available for projects which use fossil fuels to heat their domestic hot water. Please call NYSERDA for availability of non-RPS funding.

HOW DOES THE PROGRAM WORK?

Financial incentives are available for qualified customers who wish to install Solar Thermal systems through applications submitted by an "Eligible Installer." Eligible Installers are those who have demonstrated technical competence in the Solar Thermal field and who have signed written agreements with NYSERDA (see Attachment F) to abide by certain ST Program terms and conditions. Incentives are paid directly to the Eligible Installer, but must be passed on in full to the customers. Eligible Installers are responsible for preparing and submitting all necessary incentive paperwork to NYSERDA.

On average, incentives for a typical residential or commercial system are expected to cover approximately 15 to 20% of the installed cost of a ST Systems.

II. PROGRAM REQUIREMENTS

GENERAL PROGRAM RULES

The following rules apply to the Program and to the payment of incentives:

- **Eligibility for Solar Thermal Program Incentives.** Incentives are available to electricity distribution customers of Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities, Inc. and Rochester Gas and Electric Corporation who contribute to the Renewable Portfolio Standard/System Benefits Charge (sometimes referred to as 'RPS'/'SBC' on utility electric bills).
- **Eligible Installers.** Solar Thermal system installers who have received and are current in their NABCEP (North American Board of Certified Energy Practitioners) Solar Thermal Installer Certification, Home Performance with Energy Star Contractors, Journeymen Plumbers and heating contractors with ST system installation training and experience are encouraged to submit applications to become Eligible Installers. Preference will be given to those installers who have completed 40 hours of NABCEP solar thermal training and/or 18 hours of manufacturer certified solar thermal training or its equivalent and demonstration of experience in installing systems. Installers can apply for Eligible Installer status, as described in Attachment E, Solar Thermal Installer Application, at any time while the program is open. NYSERDA may request additional data or material to support applications. In order to become eligible, installer applicants will be required to sign the Eligible Installer Agreement (Attachment F). Once approved, Eligible Installers can apply for financial incentives for ST Systems meeting the requirements of this ST Program. Although NABCEP certification is not required at this time, all Eligible Installers must be NABCEP certified by June 30, 2012.
- **If you are a residential customer, expect a "Clipboard" Energy Efficiency Audit to be performed.** To access the ST Program incentives, the Eligible Installer must complete a clipboard energy audit which consists of two main components: an interview of the home/building owners to ascertain energy use habits and the age of the building, and an inspection of the building to identify potential energy efficiency measures, especially low- and no- cost measures that could reduce the electricity load of the building. This audit would include an inspection of the hard-wired lighting systems and free-standing light fixtures, appliance ages and whether they are ENERGY STAR[®] qualified, the presence of advanced power strips for consumer electronics, existence of "vampire loads" related to consumer electronics and battery chargers, use of programmable thermostats or timers for air conditioners, age and condition of the doors and windows, and inquiries to the owner regarding any recent installation of insulation.

The Eligible Installer must conclude the audit with a homeowner debriefing. The installer will leave a copy of the inspection form with the owner at the end of the inspection, which will include a description of the home, recommendations of changes to reduce electric consumption, and easy fixes the homeowner can do. The installer will also leave a list of Home Performance Contractors that could install more complex energy efficiency measures, informational brochures informing the owner of the details of utility or NYSERDA energy efficiency programs available to the home owner, and a brochure of low-cost/no-cost tips for reducing energy consumption. The inspection should

likely last no more than 60 minutes. Customers will not be required to implement energy efficiency measures as a pre-requisite to receiving a ST incentive.

- **Non-residential building owners** must be provided with information on ENERGY STAR's Portfolio Manager Benchmarking Tool or other equivalent tool and, if requested by the building owner, the Eligible Installer shall assist them with entering utility bill information into the Tool in order to produce an EUI (Energy Use Index) and, where applicable, an ENERGY STAR score. Customers will not be required to benchmark or implement energy efficiency measures as a pre-requisite to receiving a ST incentive.

Incentive highlights:

- Incentives are paid directly to Eligible Installers but must be passed on in the full amount to the customer. They will not be provided directly to customers purchasing or installing ST Systems.
- Incentives are only available for new equipment and ST Systems that have not been installed (partially or completely) prior to NYSERDA approval of an incentive application submitted in accordance with the terms and conditions of this Program.
- Incentives are calculated based upon estimated displaced electrical usage. Incentives are available to residential (single and multifamily), commercial, and non-profit customers who use an Eligible Installer for new end-use Solar Thermal water heating system. Equipment and systems must be certified by the Solar Rating and Certification Corporation (SRCC). Incentives are based on SRCC or RETScreen performance estimates. Typical Solar Thermal systems can only displace 50-80% of the thermal load. Therefore, the displaced kWh cannot exceed 80% of the total calculated existing thermal load.
- NYSERDA reserves the right to establish and enforce a per month capacity limit on Eligible Installers and Affiliated Entities. Applications received after this limit is reached will not be accepted

Incentive levels may be changed at two month intervals based on participation in the program and market conditions. Any revisions in the incentive levels will be posted on NYSERDA's website and all Eligible Installers will be informed via email.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing any application. NYSERDA reserves the right to accept or reject any or all applications received, and to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

I. APPLICATION REQUIREMENTS
Solar Thermal Incentive Application Form – see Attachment B
Eligible Installer Application – see Attachment E

ADDITIONAL INFORMATION AND ATTACHMENTS

Information for Eligible Installers and Customers

Customer Step-by-Step Guide	Attachment A
ST Incentive Application Form*	Attachment B
Incentive Payment Form and Checklist*	Attachment C
Addendum to Customer Purchase Agreement*	Attachment D
*Needs to be completed by an Eligible Installer	

Information to Become an Eligible Installer

Eligible Installer Instructions and Application	Attachment E
Sample Eligible Installer Agreement	Attachment F

Specific Program Rules

NYSERDA Solar ST Program Manual	Attachment G
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PON 2149 – SOLAR THERMAL PROGRAM

Attachment A

Customer Step by Step Guide

HERE ARE SOME STEPS TO HELP YOU GET STARTED

Do you use electricity to heat your domestic hot water? Is your electric bill too high? Are you planning to build a new house? If you answered yes to any of these questions, you may be a candidate for participation in the NYSERDA Solar Thermal Program (Program). Solar thermal is a technology that uses the sun to heat water. It is not the same as photovoltaics (PV) which uses the sun to create electricity. Also, if you use a fossil fuel (propane, natural gas, or oil) to heat your hot water, there is a small amount of funding available for you, too. These funds may or may not be available at all times, so please call NYSERDA for availability of funding for fossil-fueled applications.

Look at your utility bill. Only New York electricity distribution customers of the following utility companies who pay into the Renewable Portfolio Standard (RPS)/System Benefits Charge (SBC) are eligible to participate in the Program: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities and Rochester Gas and Electric Corporation. A copy of your utility bill or other proof (for new construction applications) that you pay (or will pay, in the case of new construction) the Renewable Portfolio Standard/System Benefits Charge must be included.

Find a Solar Thermal (ST) Eligible Installer to learn about installation options and requirements. Only Eligible Installers can apply for incentives from the Program. A list of Eligible Installers is available on NYSERDA's website. In order to be a Solar Thermal Eligible Installer with NYSERDA, installers must demonstrate that they have the technical expertise and training required to install a solar thermal system that maximizes thermal output and efficiency. NYSERDA recommends that you contact at least three Eligible Installers to receive cost proposals for your system. Installers should conduct a site visit to assess the solar resource and your site before providing a cost proposal. Additional information about the Program's rules and procedures is available in the Solar Thermal Program Manual (see Attachment G).

Ask the Eligible Installer questions such as:

- Are they a NABCEP-certified Solar Thermal Installer? Or do they have at least 18 hours of Manufacturer Certified Solar Thermal training?
- How many solar thermal hot water systems they have installed?
- What are their typical prices based on system size, etc?
- Will you need a building permit?
- Does your system need to be approved by the local code official?
- What other approvals are required in your jurisdiction?

Call your town, city, or local government and the utility to learn more about their requirements for your Solar Thermal System. Be sure you know who is responsible for obtaining and paying for any and all permits, inspections, and approvals. These responsibilities should be addressed in your written agreement with an Eligible Installer.

If you are a residential customer, expect a "Clipboard" Energy Efficiency Audit to be performed. To access the ST Program incentives, your Eligible Installer must complete a clipboard audit which consists of two main components: an interview of the home/building owners to ascertain energy use habits and the age of the building, and an inspection of the building to identify potential energy efficiency measures, especially low- and no-cost measures which could reduce the electricity load of the building. This audit would include an inspection of the hard-wired lighting systems and free-standing light fixtures, appliance ages and whether they are ENERGY STAR® qualified, the presence of advanced power strips for consumer electronics, existence of "phantom loads" related to consumer electronics and battery chargers, use of programmable thermostats or timers for air conditioners, age and condition of

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Attachment A

Customer Step by Step Guide

the doors and windows, and inquiries to the owner regarding any recent installation of insulation. The ST Installer must conclude the audit with a homeowner debriefing. The installer will leave a copy of the inspection form with you at the end of the inspection, which will include a description of the home, recommendations of changes to reduce electric consumption, and easy fixes the homeowner can do. The installer will also leave a list of Home Performance Contractors that could install more complex energy efficiency measures, informational brochures informing you of the details of utility or NYSERDA energy efficiency programs available to you, and a brochure of low cost/no cost tips for reducing energy consumption. The inspection should likely last no more than 60 minutes. You will not be required to implement energy efficiency measures as a prerequisite to receiving a ST incentive.

If you are a non-residential building owner, you must be provided with information on ENERGY STAR's Portfolio Manager Benchmarking Tool or other equivalent tool and, if requested, the Eligible Installer will assist you with entering utility bill information into the Tool in order to produce an EUI (Energy use index) and, where applicable, an ENERGY STAR score. You will not be required to benchmark or implement energy efficiency measures as a prerequisite to receiving a ST incentive.

Completing and submitting an Incentive Application. Once you have decided to install a Solar Thermal hot water heating system and you have chosen an Eligible Installer, the following forms need to be completed, signed, and submitted to NYSERDA by your Eligible Installer:

- A completed application that is legible and accurate
- Customer Purchase Agreement. This is the contract between you and the Eligible Installer for the installation of a qualified Solar Thermal hot water system. This agreement should outline everything the Eligible Installer will be doing for you with respect to the installation, and should include details such as system costs, installation and payment schedule, responsibilities related to all permitting, etc. The Agreement must clearly apply the full amount of the NYSERDA incentive towards the price of the system. You may wish to consult an attorney before signing.
- The Addendum to the Customer Purchase Agreement (Attachment D). Attachment D must be signed and attached to the written Customer Purchase Agreement. Attachment D includes provisions designed to protect you. The eligibility of your system for the payment of incentives will depend on the Eligible Installer's adherence to its terms.

Your incentive application is submitted by your Eligible Installer. Once you have signed all of the paperwork, your Eligible Installer will submit your application package to NYSERDA for review. You may want to ask the Eligible Installer for a copy of the package for your records.

NYSERDA's review of an application package takes approximately 20 business days from the date the application is received. NYSERDA will:

- Review for Completeness.** An application package may be denied if it is not complete or legible, or if it presents eligibility or technical issues. Typically, NYSERDA will notify the Eligible Installer if more information or clarification is needed. If the Eligible Installer does not respond or provide clarification as requested within a specified period of time, the application may be denied or returned to the Eligible Installer. After NYSERDA has received all requested information, the application will be reviewed. Incentive applications with significant deficiencies, eligibility, or technical issues may be **returned to the Eligible Installer** immediately. Incomplete applications will not be reviewed by NYSERDA and will be returned to the Eligible Installer.
- Technical Review.** NYSERDA will perform the technical review and contact the Eligible Installer regarding any questions that NYSERDA may have.

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Attachment A

Customer Step by Step Guide

- C) **Notification.** The Eligible Installer will be notified directly of the approval or denial of each application package. Notices of approval will specify the amount of the incentive and the timeframe in which the system must be installed. The installer is responsible for notifying the customer of the approval or denial by NYSERDA of applications. Notices of denial will detail deficiencies in the application. The Eligible Installer can make corrections and re-submit an application.

Note that systems partially installed or completed prior to the Installer receiving written notification of approval may jeopardize the incentive payment. **Do not let an Eligible Installer begin installing the Solar Thermal system until you have confirmation that NYSERDA has approved the system and that the incentive funds have been reserved for your project. Funding will only be reserved for a customer once the application for incentives has been approved by NYSERDA.** The installer is responsible for notifying the customer of the approval by NYSERDA.

It is important that you, the customer, keep track of any deadlines. The eligibility of your Solar Thermal system for incentive payments depends on meeting the deadlines (as outlined in the ST Program Manual, Attachment G). Project Extensions may be granted, upon written request, on a case-by-case basis if there are legitimate and verifiable issues related to new construction or equipment availability. Project extension requests must provide a detailed description of the issues and provide any back up documentation. The request must be signed by the customer and the installer. If the installation of your Solar Thermal system is not progressing according to schedule, contact your Eligible Installer!

The Installer submits a request for payment of the incentive amount. Once the Solar Thermal system has been installed and you receive written approvals from all appropriate jurisdictions that the system has passed requirements, the Eligible Installer can then request the incentive by submitting the Incentive Request Form (See Attachment C).

Attachment G, the Solar Thermal Program Manual, provides additional and more detailed information about the program. If you have any questions regarding the program or an application, you can e-mail NYSERDA at solarthermal@nyserda.org. In the subject line please reference the Solar Thermal Incentive Program.

Attachment B
PON 2149 – SOLAR THERMAL PROGRAM
INCENTIVE APPLICATION FORM

Eligible Installer _____ Installer No. _____ Phone Number _____

Eligible Installer Company _____ Eligible Installer E-mail _____

Customer Name _____ Customer Phone No. _____

Customer Installation Address _____ City _____ State _____ Zip _____

Customer Email _____ If Customer mailing address is different from installation address, please list:

_____ City _____ State _____ Zip _____

Utility Service Territory _____ Expected Date of Installation _____

Attach proof of payment by customer into Renewable Portfolio Standard (as shown on utility bill or letter from utility)

Building or Customer type (check all that apply):

New Construction Existing Governmental Multi family

Residential Non Residential Not for Profit

Equipment

Solar Thermal System: SRCC OG-300 Certified? (circle one) Yes No

Manufacturer _____ System Model Number _____

Solar Thermal Collectors: SRCC OG-100 Certified? (circle one) Yes No

Manufacturer _____ Collector Model Number _____ Quantity _____

Location _____ Orientation _____ Tilt _____

Freeze Protection (if applicable) _____

Solar Water Tanks (Location) _____ Size (in gallons) _____

Manufacturer _____ Model Number _____ Quantity _____

Total Annual Electric Usage _____ kWh Hot water heater portion of usage _____ kWh or BTUh for Non-RPS

Displaced by ST (not to exceed 80% of hot water portion) _____ kWh ST System Efficiency _____ %

Submit calculations with application and check off below the method used to calculate displaced kWh: SRCC OG-300 _____

RETscreen _____ Solar Pathfinder Thermal _____ **Other (requires NYSERDA pre-approval)** _____

For **Existing Building**, no. of people in household _____ or for **New Construction**, no. of bedrooms plus 1 _____

Existing Hot Water appliance

Manufacturer _____ Model Number _____ Quantity _____

Incentive

Total Cost before Incentive \$ _____ **Incentive Total: \$** _____

Incentive Calculation _____

Clipboard Audit: The Company/Installer agrees to complete a clip board audit consisting of two main components: an interview of the home/building owners to ascertain energy use habits and the age of the building, and an inspection of the building to identify potential energy efficiency measures, especially low and no cost measures that could reduce the electricity load of the building. This would include an inspection of the hard-wired lighting systems and free-standing light fixtures, appliance ages and whether they are ENERGY STAR, the presence of advanced power strips for consumer electronics, existence of "vampire loads" related to consumer electronics and battery chargers, use of programmable thermostats or timers for air conditioners, age and condition of the doors and windows, and inquiries to the owner regarding any recent installation of insulation. The Solar Thermal installer would conclude the audit with a homeowner debriefing. The installer would leave a copy of the inspection form with the owner at the end of the inspection. The form will include a description of the home, recommendations of changes to reduce electric consumption, and easy fixes the homeowner can do. The installer will also leave a list of Home Performance Contractors that could install more complex energy efficiency measures, informational brochures informing the owner of the details of utility or NYSERDA energy efficiency programs available to home owner, and a brochure of low cost/no cost tips for reducing energy consumption. The inspection should last no more than 60 minutes. _____(initial to acknowledge requirement and adherence).

or

Non Residential Energy Assessment: The Company/ Installer will provide non-residential building owners with information on Energy Star's Portfolio Manager Benchmarking Tool or other equivalent tool and, if requested by the building owner, assist them to enter utility bill information into the Tool in order to produce an EUI (Energy use index) and, where applicable an Energy Star score. The installers should also provide informational brochures on NYSERDA and utility energy efficiency programs. Customers will not be required to benchmark or implement energy efficiency measures as a pre-requisite to receive a ST incentive. _____(initial to acknowledge requirement and adherence).

REQUIRED APPLICATION DOCUMENTATION

Each Incentive Application must include all documentation listed on the attached checklist.

CERTIFICATION STATEMENT – I certify that all information provided in this application, including worksheets, analysis, permits and approvals, is true and correct to the best of my knowledge.

Installer Signature _____ **Date** _____

Print Name _____

Company Signature _____ **Date** _____

Print Name _____

Customer Signature _____ **Date** _____

Print Name _____

<p>For Internal Use Only</p> <p>Date Received by NYSERDA _____</p> <p>Completed Form and All Required Attachments: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> Date _____</p> <p>Signature _____</p>
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**PON 2149 – SOLAR THERMAL PROGRAM
INCENTIVE APPLICATION CHECKLIST**

	Attachment B - Incentive Application, completed
	ST system owner name, installation address and contact information
	ST Collector(s) information (Manufacturer, Model, Quantity)
	ST Hot Water Tank (Manufacturer, Model, Size, Quantity)
	Orientation (in degrees)
	Tilt (in degrees)
	Customer's Annual Electric Usage
	Annual kWh Displaced by Solar Thermal system
	ST System Efficiency
	Incentive amount must match Power Clerk
	System Calculation Method
	Acknowledgement and Adherence of Clipboard Audit (Residential) or Non Residential Energy Assessment (Commercial)
	Signed by Installer, Company, and Customer

	Signed copy of Installer-Customer Purchase Agreement which includes:
	Installation location, schedule, and date
	Description of system including:
	Make and model of major system components
	Estimate of annual ST kWh Displacement
	Total system and itemized costs broken down as follows:
	Cost of Collector(s) and Storage Tank(s) (listed separately)
	Balance of system (pipng, insulation,, racks, etc.)
	Labor and overhead (labor, permitting, etc.)
	Applicable incentives
	An explanation and estimate of any costs the customer will incur that are not in the price quote
	Payment schedule

	Attachment D - Addendum to Customer Purchase Agreement
	Signed by the customer installer and authorized company on page 3

	Utility Bill that provides:
	Proof of customer's payment into Renewable Portfolio Standard (RPS) System Benefit Charge (SBC)
	Indicates annual electric usage** (Past 12 months billing or projected calculations for new Construction)
	The address on electric bill must match the installation address on the incentive application form and Customer Purchase Agreement.

	System Schematic drawing
	Identification and location of all major components including collectors, storage tank, heat exchanger(s)controls, pipe sizes and types, insulation, valves, etc. necessary to describe the complete system and its basic operation.

	Site Map
	Photos of Collector location
	Building Permit (to be submitted prior to Incentive Request)

** ConEd annual usage is not on utility bill but can be downloaded from ConEd's website

Attachment C

**PON 2149 – SOLAR Thermal PROGRAM
Incentive Request Form**

Name of Eligible Installer _____ NYSERDA Application No. _____ — _____

Billing Address for Eligible Installer _____

General & Automobile Liability Insurance Expiration Date _____ (If expired, attach updated copy of additional insured certificate)

Customer Name _____

Installation Address _____

Date of Installation _____ Total Approved Incentive Amount _____

NYSERDA PO # _____

INCENTIVE PAYMENT REQUESTED \$ _____

ITEMS TO BE INCLUDED WITH THIS REQUEST (This request will be denied if the following are not included)

- ___ Acceptance of system by the Authority having Jurisdiction (AHJ)
- ___ Any and all required permits including applicable utility, state, city and town permits.

CERTIFICATION STATEMENT Review and sign for NYSERDA's review.

I certify that all information provided in this form, including all attachments, are true and correct to the best of my knowledge.

Installer Signature _____ Date _____

Company Signature _____ Date _____

Customer Signature _____ Date _____

Attachment D
PON 2149 – Solar Thermal Program
ADDENDUM to the CUSTOMER PURCHASE AGREEMENT

All Customer Purchase Agreements must include an executed copy of this Addendum to be eligible to apply for Solar Thermal Program incentives. The Eligible Installer is identified below as “Installer”, the Customer/Owner is identified below as “Customer,” and the Eligible Installer’s Affiliated Entity is identified as the “Company.”

Solar Thermal Program incentives are only available for the installation of new equipment and Solar Thermal Systems that have not been installed (partially or completely) prior to NYSERDA approval of the Incentive Application. Incentives will not be provided directly to Customers but are paid to the NYSERDA Eligible Installer, who must then apply the entire approved amount to the Customer’s system cost. The Final Invoice Checklist, completed and signed by the Installer and Customer at the time of commissioning, must accompany the Final Incentive Payment Form submission.

Review of System Design: NYSERDA will review the design of the Solar Thermal System considering issues including, but not limited to, system layout, orientation, shading, expected output, etc. NYSERDA approval of the Incentive Application is contingent on adherence to the proposed system design. Installers must receive approval from NYSERDA for any material modification of the proposed system or its components, or the incentive may be revoked.

All potential system output losses (after all equipment losses are applied) associated with shading, system orientation, tilt angle, must be included. Such losses must be detailed in each application package using industry accepted shading and orientation tools, verifiable assumptions and calculations. In cases where trees or any other obstruction must be removed or moved in order to meet the program rules, incentive payments will not be made until the obstructions are removed and a new shading analysis and photos have been submitted and reviewed by NYSERDA. Any trees or obstructions must be clearly labeled in the site map.

Qualified Customers: Incentives are available to electricity distribution customers of Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities, Inc. and Rochester Gas and Electric Corporation who contribute to the Renewable Portfolio Standard/System Benefits Charge (sometimes referred to as “RPS/SBC” as a line item on utility electric bills).

Warranty: Both the Eligible Installer and the Affiliated Entity shall offer a full transferable warranty to the purchaser of the Solar Thermal System installed under this Customer Purchase Agreement for a period of five (5) years after the Eligible Installer has completed the installation and NYSERDA’s final approval has been provided. This warranty covers all components of the system against breakdown or degradation in thermal output of more than ten percent from their original rated thermal output. This warranty covers the full costs, including labor and repair or replacement of defective components or systems.

Title to Renewable Energy Credits: Renewable Energy Credits (RECs), which may also be referred to as green power attributes or tradable renewable credits (TRCs), are the environmental benefits associated with electricity that is generated from renewable sources such as wind or solar. Funding from New York State's Renewable Portfolio Standard (RPS) contributed to develop the Solar Thermal System identified in this Customer Purchase Agreement. The parties acknowledge that for the first three years of operation of the Solar Thermal System funded under this program, NYSERDA will hold title to the RECs.

Data Monitoring and Reporting: For Non-SRCC OG-300 systems, the Installer _____ Customer _____ [Please designate and initial], must take readings, measuring the displaced energy generated by the Solar Thermal System every 3 months for the first year and report findings to NYSERDA.

Quality Control: For quality control purposes, Customer must provide NYSERDA or its representative with reasonable access to the Solar Thermal System for inspection purposes. Final incentive payments may be contingent on NYSERDA inspection of the installed Solar Thermal System.

Publicity and Site Events: Customers and Installers are required to collaborate with NYSERDA’s Director of Communications should they prepare any press release or plan any news conference related to the Solar Thermal System.

Attachment D
PON 2149 – Solar Thermal Program
ADDENDUM to the CUSTOMER PURCHASE AGREEMENT

NYSERDA is authorized to use Solar Thermal System photographs in brochures, on its website, and in other print materials.

Tax Incentives: Customers are encouraged to consult the Internal Revenue Service (See www.irs.gov), the NYS Department of Taxation and Finance (See www.tax.state.ny.us) and an accountant/tax adviser for details on eligibility for the credit provided in the law, regardless of whether the Installer has provided information regarding the expected tax benefits (real property, federal or state tax incentives, or sales and use tax exemptions).

Cost Estimate/Total System Price: The Customer has relied upon the Company/Installer to include any and all costs associated with the complete installation of the proposed Solar Thermal system in the Customer Purchase Agreement. If additional costs are sought from the Customer, the Customer Purchase Agreement may be cancelled without penalty and the customer may seek a full refund of any deposit paid to Company/Installer or costs the Customer incurred under this Agreement, less any reasonable site visit fees charged by the Company/Installer.

Incentive Estimate: If the Installer does not submit a completed Incentive Application to NYSERDA, or if the Incentive Application (a) is not approved by NYSERDA or (b) if NYSERDA approves a lower incentive, the Customer may terminate this Customer Purchase Agreement without penalty and seek a full refund of any deposit paid to Installer or costs he or she incurred under this Customer Purchase Agreement, less any reasonable site visit fees charged by the Company/Installer.

Solar Thermal system completion/commissioning: The Company/Installer agrees to complete the installation of the Solar Thermal system, and request all necessary inspections, within 120 days of NYSERDA's approval of the Incentive Application. Unless written approval of an extension has been issued by NYSERDA, the Company/Installer will be required to return any and all incentive payments to NYSERDA if this milestone has not been met.

Clipboard Audit (residential): The Company/Installer agrees to complete a clip board audit consisting of two main components: an interview of the home/building owners to ascertain energy use habits and the age of the building, and an inspection of the building to identify potential energy efficiency measures, especially low and no cost measures that could reduce the electricity load of the building. This would include an inspection of the hard-wired lighting systems and free-standing light fixtures, appliance ages and whether they are ENERGY STAR, the presence of advanced power strips for consumer electronics, existence of "phantom loads" related to consumer electronics and battery chargers, use of programmable thermostats or timers for air conditioners, age and condition of the doors and windows, and inquiries to the owner regarding any recent installation of insulation. The Solar Thermal installer would conclude the audit with a homeowner debriefing. The installer would leave a copy of the inspection form with the owner at the end of the inspection. The form will include a description of the home, recommendations of changes to reduce electric consumption, and easy fixes the homeowner can do. The installer will also leave a list of Home Performance Contractors that could install more complex energy efficiency measures, informational brochures informing the owner of the details of utility or NYSERDA energy efficiency programs available to home owner, and a brochure of low cost/no cost tips for reducing energy consumption. The inspection should last no more than 60 minutes. Customers will not be required to implement energy efficiency measures as a pre-requisite of receiving a Solar Thermal incentive.

Or

Non Residential Energy Assessment: The Company/ Installer will provide non-residential building owners with information on Energy Star's Portfolio Manager Benchmarking Tool or other equivalent tool and, if requested by the building owner, assist them to enter utility bill information into the Tool in order to produce an EUI (Energy use index)⁶ and, where applicable an Energy Star score. The installers should also provide informational brochures on NYSERDA and utility energy efficiency programs. Customers will not be required to benchmark or implement energy efficiency measures as a prerequisite for receiving a Solar Thermal incentive.

Consumer Information: New York consumers and customers are encouraged to consult the New York State Office of the Attorney General web site for consumer information:
http://www.ag.ny.gov/bureaus/consumer_frauds/tips/home_improvements.html

Attachment D
PON 2149 – Solar Thermal Program
ADDENDUM to the CUSTOMER PURCHASE AGREEMENT

The NYS Consumer Protection Board offers additional information with the following publications:
http://www.nysconsumer.gov/educating/home_ownership/home_improvement_series.htm

Conflicting Terms: In the event of a conflict between the terms of the Customer Purchase Agreement (including any and all attachments thereto and amendments thereof) and the terms of this Addendum, the terms of this Addendum shall control.

Communication with Customer: Installer, Company and Customer agree that NYSERDA may, at NYSERDA's discretion, communicate by voice and/or written format with any Solar Thermal System Customer with respect to any matter relevant to a proposed or installed SOLAR THERMAL System. Such communications may be in reply to an inquiry from a Customer or at NYSERDA's initiation.

Disclaimer: The Customer understands that neither NYSERDA nor the State of New York: (1) endorse any Eligible Installer; or (2) guaranty, warranty, or in any way represent or assume liability for any work proposed or carried out by an Eligible Installer. Additionally, NYSERDA is not responsible for assuring that the design, engineering and construction of the project or installation of any solar thermal generation system is proper or complies with any particular laws, regulations, codes, licensing, certification and permit requirements, or industry standards. NYSERDA does not make any representations of any kind regarding the results to be achieved by the solar generation systems or the adequacy or safety of such measures.

Certification Statement: By signing, all parties certify that they have read and understand the above information and requirements and agree to abide by them. NYSERDA will not accept an application from an Installer if the date of the signed contract with the customer is over 30 days prior.

Customer: By signing below, the customer certifies that he or she contributes to the Renewable Portfolio Standard (RPS)/ System Benefits Charge (SBC) through a monthly electric utility bill.

Please email NYSERDA at SOLARTHERMAL@nyserdera.org regarding any questions, or to check the status of your application.

Customer Signature _____ Date _____

Print Name _____

Eligible Installer: By signing below, the Installer certifies that he or she is: (1) Eligible to participate in NYSERDA's Incentive Program; (2) in compliance with Terms and Conditions of NYSERDA's program; and (3) is bound by the Terms and Conditions of this Customer Purchase Agreement.

Eligible Installer Signature _____ Date _____

Print Name _____

Affiliated Entity: By signing below, the Authorized Representative of the Eligible Installer's Affiliated Entity (Company) certifies that the Eligible Installer is working for said company and is in compliance with NYSERDA's Incentive Program. By signing below, the Company is bound by the Terms and Conditions of this Customer Purchase Agreement.

Authorized Company Signature _____ Date _____

Print Name _____

Attachment E
PON 2149 – SOLAR THERMAL PROGRAM

SOLAR THERMAL INSTALLER ELIGIBILITY APPLICATION INSTRUCTIONS AND APPLICATION

The New York State Energy Research and Development Authority (NYSERDA) is accepting applications from individuals to become Eligible Installers under the Program. Prospective installers can apply for Eligible Installer status any time while the Program is open. Once approved to participate as an Eligible Installer, and after execution of the Eligible Installer Agreement, Eligible Installers can apply for financial incentives for approved Solar Thermal systems meeting the requirements of the Program.

Installer Eligibility - Installers interested in applying to be an Eligible Installer after June 30, 2012 must be Solar Thermal NABCEP (North American Board of Certified Energy Practitioners) certified or have nationally accredited Solar Thermal training or Solar Thermal training provided as part of an accredited apprentice training program or its equivalent and demonstration of experience in installing systems. Consideration will also be given to installers who have completed 18 hours of Manufacturer Certified Solar Thermal training. However, all participating Eligible Installers must become NABCEP certified within two years of becoming an Eligible Installer. Installer eligibility status will be maintained based on factors such as, but not limited to: acceptance of all program terms and conditions; responsiveness and adherence to all Solar Thermal Program requirements and requests for information; verifiable training and installation experience, and documentation of experience and contact information to verify all experience, performance in other state and utility programs, overall performance, monitoring, customer references, customer satisfaction, response to NYSERDA staff and inspectors, design quality, system inspection results, and commitment to becoming certified through a national certification program. **Installers working for more than one company must submit a separate application for each company for which they intend to submit incentive applications. In most cases, Installers who are removed from the program but have approved applications will be able to complete them. Installer eligibility will be determined based on, but not limited to, the following additional criteria:**

Experience - Installers will be evaluated on past performance (including photovoltaic (“PV”) systems installed under PON 716, PON 1050 and PON 2112), Multifamily Performance Program, Home Performance with Energy Star, or Energy Star Labeled Homes Program, current areas of responsibility within their firm or organization, installation experience, experience in performing shading analyses, system orientation factors, credentials, employment history, customer satisfaction, and other relevant experience. References and contact information must be provided so that all experience and responsibilities can be verified. It is important to be clear about job responsibilities as an installer or employee in the application. Applications with information that cannot be verified may be denied.

Customer References - A minimum of three references for completed installations, preferably where the installer had a primary role in installing the system, are required. References for specific projects should be accompanied by a brief description of the systems installed, services provided, the outcome achieved, the schedule, and the applicant’s role in the project. NYSERDA must be able to verify all references provided in an application.

Program Performance and Customer Satisfaction - Eligible installers must demonstrate that they are meeting all program requirements for each installation and will be evaluated through planned and random system inspections. Eligible installers may have employees working under his/her supervision; however the eligible installer will be considered the responsible party under this program and will be required to ensure that all of his or her employees or assistants meet the program requirements. Additionally, any subcontractors performing work for an eligible installer must meet all applicable program requirements including, but not limited to, insurance and publicity requirements. Installer eligibility may be removed at any time as outlined in the Program and for failing to meet any program requirements or the requirements outline in the Programs Terms and Conditions. Written complaints received by NYSERDA from customers of NYSERDA incentivized Solar Thermal systems will be documented and investigated by NYSERDA or its representatives, shared with installers. If the complaints can be substantiated and are significant or repetitive, may result in revocation of installer eligibility to participate in the Program.

Performance under NYSERDA’s SOLAR THERMAL Program, PON 716, 1050, 2112 and other NYSERDA Programs - An Eligibility Application Form will **not** be processed if the applicant is listed as the Eligible Installer on a

Attachment E
PON 2149 – SOLAR THERMAL PROGRAM

delinquent system or where unresolved customers or performance issues still exist with respect to a PON 716, 1050, 2112, 2149 or any similar NYSERDA program. An Eligible Installer cannot subcontract to any person or company that has been terminated from PON 716, 1050, 2112, 2149 or any other NYSERDA program. NYSERDA will not process an Incentive Application Form submitted by an installer whose Eligible Installer status has been revoked, or where the non-customer party to the Customer Purchase Agreement has open delinquent Solar Thermal Systems or where such Solar Thermal Systems have unresolved customer or performance issues.

ELIGIBLE INSTALLER AGREEMENT

Once approved as an Eligible Installer, applicants will be required to execute an Eligible Installer agreement with NYSERDA, and to abide by its terms and conditions. The Eligible Installer Agreement consists of the Eligible Installer terms and conditions, Solar Thermal Program Policies and Procedures Manual, the Standard Terms and Conditions for all NYS Agreements, and NYSERDA's Prompt Payment Policy. You may want to consult with an attorney before signing.

MAINTENANCE OF ELIGIBLE INSTALLER STATUS

Continuation of Eligible Installer status is contingent upon the adherence to Program's Eligible Installer Agreement, which installers must sign in order to gain Eligible Installer status. If an Eligible Installer, his or employees, or subcontractors do not meet all program terms and conditions or program requirements, the Eligible Installer may be subject to disciplinary actions, including suspension, and/or termination as described in Attachment F?

THE SUCCESS AND FUTURE OF THIS PUBLICLY-FUNDED PROGRAM DEPENDS ON THE PERFORMANCE AND INTEGRITY OF ELIGIBLE INSTALLERS IN THEIR DEALINGS WITH THE PUBLIC AND THE INSTALLATION OF SOLAR THERMAL SYSTEMS. THE INSTALLER GUIDELINES AND ELIGIBLE INSTALLER AGREEMENT HAVE BEEN DESIGNED TO PROTECT THE INTEGRITY OF THE PROGRAM AND WILL BE ENFORCED. IN ITS ROLE AS ADMINISTRATOR OF THE PROGRAM, NYSERDA RESERVES THE RIGHT TO DENY ELIGIBLE INSTALLER STATUS TO ANY APPLICANT AND TO REVOKE SUCH STATUS WHERE IN ITS JUDGMENT SUCH ACTION IS IN THE BEST INTERESTS OF THE PROGRAM.

Attachment E
PON 2149 – SOLAR THERMAL PROGRAM

SOLAR THERMAL INSTALLER APPLICATION

A. CONTACT INFORMATION

Installer Name _____

Mailing Address _____ City _____

State _____ Zip _____ - _____ Phone Number (_____) _____ Fax (_____) _____

Job Title _____ No. of Years in Current Position/Company _____

E-mail (required) _____

Previous Employment if in Current Position for Less than 2 Years: _____

Affiliated Entity and contact name: _____

Mailing Address _____ City _____

State _____ Zip _____ - _____ Phone Number (_____) _____ Fax (_____) _____

E-mail (Required): _____

B. TRAINING/EDUCATION

Provide documentation of Applicant's formal education, relevant training, and relevant certifications. A successful applicant's ST specific training should include a minimum of (40) hour NABCEP-recognized Solar Thermal entry level course, as required to satisfy NABCEP's Entry Level Exam requirements. If applicant is a NABCEP-Certified Solar Thermal Installer, submit a copy of current NABCEP Certificate. If installer has completed (18) hour manufacturer training and is certified by the manufacturer, submit a copy of the certificate or its equivalent and demonstration of experience in installing systems.

and/or

C. EXPERIENCE

Number of years professionally installing Solar Thermal systems _____

Number of years designing Solar Thermal systems for installations _____

Total number of installations completed _____

Attachment E
PON 2149 – SOLAR THERMAL PROGRAM

Past Solar Thermal Customer References

Name of Customer	Phone No.	System Size/Type
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

Installation experience of at least three Solar Thermal systems is preferred. If three references for completed installations are not available, please attach relevant documentation to demonstrate experience related to installing a Solar Thermal system. Additional references may be attached.

D. INSTALLER CREDENTIALS - Please list previous or current participation in any other state or utility program:

Has your eligibility for any NYSERDA program ever been suspended or revoked? Yes / No (Circle one). Have you or the Affiliated Entity been debarred or suspended by any government agency? If yes, please attach explanation on a separate page.

Have you been indicted/convicted for a felony within the past 5 years? Yes / No (Circle one) If yes, explain on separate page.

Has the Affiliated Entity or any of its officers, partners, directors, or members been indicted/convicted for a felony within the past 5 years? Yes / No (Circle one) If yes, explain on separate page.

Confirm experience in the use of a Solar Pathfinder or other analytical tool to conduct a shading analysis for each installation. Yes / No (Circle one) **Shading analysis is a requirement of this program.** Confirm performance estimation experience using Solar Rating Certification Corporation (SRCC), RETScreen or other method.

Once approved as an Eligible Installer, applicants will be required to execute the PON 2149 Attachment F - Eligible Installer Agreement with NYSERDA and to abide by its terms and conditions. NYSERDA will not execute the Eligible Installer Agreement until the applicant has provided the insurance certificates as specified in Article 7 of the Eligible Installer Agreement. NYSERDA will not approve incentive applications nor pay incentives unless complete and current insurance certificates are filed with NYSERDA's Office of Contract Management.

CERTIFICATION STATEMENT - I certify that all information provided in this Form, including any attachments, is true and correct to the best of my knowledge. [Both signatures are required for NYSERDA to accept and review this Application]

Installer Signature _____ Date _____

Installer name [print name] _____

Affiliated Entity Signature _____ Date _____

Corporate officer [print name] _____

Applications and attachments should be sent to: ST Installer Application PON 2149, Attn: Program Manager, NYS Energy Research and Development Authority, 17 Columbia Circle, Albany, NY 12203-6399

The success and future of this publicly-funded program depends on the performance and integrity of eligible installers in their dealings with the public and the installation of Solar Thermal systems. The Installer Guidelines and Eligible Installer Agreement have been designed to protect the integrity of the Program and will be enforced. In its role as administrator of the SOLAR THERMAL Program, NYSERDA reserves the right to deny Eligible Installer status to any applicant and to revoke such status where in its judgment such action is in the best interests of the program.

Attachment F

**PON 2149 – SOLAR THERMAL PROGRAM
ELIGIBLE INSTALLER AGREEMENT (SAMPLE)**

ELIGIBLE INSTALLER AGREEMENT No. _____

This Eligible Installer Agreement (“Agreement”), including Exhibits A and B hereto (attached), and incorporating by reference the Solar Thermal Program Manual (Attachment G to PON 2149), is entered into by and between the New York State Energy Research and Development Authority (“NYSERDA”), having its principal place of business at 17 Columbia Circle, Albany, New York 12203-6399; the “Eligible Installer” and the “Affiliated Entity” (the Eligible Installer and Affiliated Entity hereinafter referred to, collectively, as “the Parties”), to govern the rights and responsibilities of the Parties with respect to the procurement, construction and installation (“Installation”) of Solar Thermal Systems approved under and through NYSERDA’s Solar Thermal Program Opportunity Notice (PON) 2149 (“Solar Thermal Program”), and to otherwise effectuate the purposes of the Solar Thermal Program. The terms, conditions and provisions of the Solar Thermal Program are incorporated herein and made part hereof by reference.

WHEREAS, NYSERDA has been designated by the New York State Public Service Commission as the administrator of the New York State Renewable Portfolio Standard program, which program was established to increase the percentage of electricity consumed in the State that is derived from renewable generation sources; and

WHEREAS, NYSERDA has issued the Solar Thermal Program for the purpose of furthering the objectives of the Renewable Portfolio Standard by supporting the development of the Solar Thermal industry in New York State and by providing financial incentives (“Incentives”) for the Installation of Solar Thermal Systems that meet the requirements of the Solar Thermal Program, NYSERDA and the Parties agree to be bound, for purposes of the Solar Thermal Program, by the following terms and conditions; and

WHEREAS, the success and future of this publicly-funded program depends on the performance and integrity of the Parties in their dealings with the public and their Installation of Solar Thermal Systems; and

WHEREAS, this Agreement has been designed to foster and protect the integrity of the Solar Thermal Program, and will be enforced; and

WHEREAS, in its role as administrator of the Solar Thermal Program NYSERDA reserves the right to deny Eligible Installer status to any applicant and to revoke such status where in its judgment such action is in the best interests of the Solar Thermal Program.

Article 1: Eligible Customers

RPS-funded incentives are available to electricity distribution customers of Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities, Inc. and Rochester Gas and Electric Corporation who contribute to the Renewable Portfolio Standard/System Benefits Charge (sometimes referred to as 'RPS'/'SBC' on utility electric bills). Non-RPS funded incentives are available to all residents of NY State. Customers may not receive incentives from both the RPS and non-RPS funded programs for the same system.

Article 2: Participation in the SOLAR THERMAL Program

Section 1: The Eligible Installer is authorized to submit Incentive Application(s) to the Solar Thermal Program on behalf of the Affiliated Entity and their Customer(s). The Eligible Installer will be responsible for all Solar Thermal System Installations for which an Incentive Application is submitted under this Agreement, regardless of whether the Installation was performed partially or completely by others. The Eligible Installer may have employees or subcontractors of the Affiliated Entity working under his/her supervision, but remains responsible for ensuring that all persons performing work under this Agreement are qualified, and comply with requirements of the Solar Thermal Program and with this Agreement.

Section 2: Solar Thermal System installations must comply with the "Solar Thermal Program Manual - Attachment G to PON 2149" (Program Manual) in effect at the time of NYSERDA's acceptance of the Incentive Application, and must conform to the corresponding NYSERDA-approved Incentive Application. The Program Manual identifies the current Incentives, rules for participation, submission requirements, Solar Thermal System requirements, technical review processes, site visit protocols, and the procedures for securing Incentive payment. The Solar Thermal Program and Program Manual may be changed by NYSERDA at any time, and changes will be applicable to all Solar Thermal Systems not yet approved by NYSERDA. Notice of all such changes will be provided to the Parties via their designated E-Mail Addresses, as identified on the signature page of this Agreement. Notice of all such changes will also be posted on NYSERDA's website.

Section 3: The Parties and their employees and subcontractors shall treat Customers fairly and in good faith, and shall deliver promised services in a timely, responsible, professional, and competent manner. The Parties shall fairly represent NYSERDA's Solar Thermal Program and their relationship to NYSERDA to Customers and the public. If it is determined that the Parties are not fairly representing NYSERDA's Program and/or their relationship for NYSERDA to customers and the public, an Eligible Installer's status within the Solar Thermal Program may be affected. Eligible Installer performance may be evaluated through planned and random system inspections. Written complaints received by NYSERDA from Solar Thermal System Customers

will be documented and investigated by NYSERDA or its representatives, and shared with the Eligible Installer.

Section 4: The Parties shall not subcontract to, employ, nor hire any individual to perform work related to an Incentive Application whose participation in PON 716, PON 1050, PON 2112, or PON 2149 (the SOLAR THERMAL Program), or any other NYSERDA program has been suspended or terminated, without NYSERDA's prior written permission.

Article 3: Solar Thermal Program Incentives and Payments

Section 1: The amounts, limitations, and availability of Incentives are as defined in the Program Manual in effect at the time that NYSERDA accepts the Incentive Application.

Section 2: NYSERDA reserves the right to change the Solar Thermal Program Incentives in accordance with the "Customer-sited Tier Program Goals and Funding Plan (2010-2015), dated June 29th, 2010" and approved by the Department of Public Service on June 30th, 2010. Notice of all such changes will be provided to the Parties via their Designated E-Mail Address as identified on the signature page of this Agreement. Notice of all such changes will also be posted on NYSERDA's website. Any change in Incentive levels will not affect Incentive Applications previously approved by NYSERDA. Incentive Applications not yet accepted by NYSERDA will be adjusted to the then-current Incentive level.

Section 3: Incentive payments which result from this Eligible Installer Agreement will be paid to the Affiliated Entity listed in this Eligible Installer Agreement. Acceptance by the Affiliated Entity of final payment shall release NYSERDA from all claims and liability of the Eligible Installer, the Affiliated Entity, representatives, and assigns to this Agreement. The Affiliated Entity is required to pass the entire approved Incentive to the Customer in a timely manner.

Section 4: NYSERDA reserves the right to withhold approval of Incentive Applications at any time, for any reason. NYSERDA will not process an Incentive Application submitted by an Eligible Installer whose status designation is Probationary, or if their Agreement has been terminated, or where the non-customer party to the Customer Purchase Agreement is the non-customer party where such Solar Thermal Systems are the subject of unresolved application, installation, performance or customer dissatisfaction issues.

Section 5: NYSERDA may charge the Parties for any additional costs incurred if more than two design reviews or two site visits are necessary for any given Incentive Application, due to the failure by the Eligible Installer to respond to, make corrections, or complete modifications requested by NYSERDA.

Section 6: Notwithstanding any other provision of this Agreement, NYSERDA reserves the right to deny or alter payment of an Incentive, to exercise its Set-Off rights, or to seek reimbursement of incentives paid if, at any time, it learns that the approved Solar Thermal system was not actually installed, was not installed by or under the supervision of the Eligible

Installer, was not installed as required under the Solar Thermal Program or this Agreement, was not installed according to the approved system design, or if a system was partially or completely installed prior to NYSERDA approval of the Incentive Application. NYSERDA may: (a) elect to not pay the incentive; (b) require changes before making any payments; (c) require reimbursement of incentives already paid unless the requested changes are made; or (d) withhold approval of Incentive Applications for other Solar Thermal Systems.

Section 7: Incentive payments will be made pursuant to NYSERDA's Prompt Payment Policy as outlined in Exhibit B of this Agreement, subject to NYSERDA's Standard Terms and Conditions as described in Exhibit A of this Agreement.

Article 4: Obligations between the Parties and Eligible Customers

Section 1: The Parties shall execute a Customer Purchase Agreement with the Customer for each unique Solar Thermal System. Each Customer Purchase Agreement shall meet the requirements identified in Section 5.10 of the Solar Thermal Manual, inclusive of a full warranty to the Customer. The "Addendum to Customer Purchase Agreement - Attachment D of PON 2149" must also be executed between the Parties and the Customer, and must be incorporated into the Customer Purchase Agreement. An executed copy of the Customer Purchase Agreement and Addendum must accompany the Eligible Installer's Incentive Application submission. NYSERDA may reject an Incentive Application received by NYSERDA more than (30) days from the Customer's execution of the Customer Purchase Agreement.

Section 2: The Parties agree that NYSERDA may, at NYSERDA's discretion, communicate by voice and/or written format with any Solar Thermal System Customer with respect to any matter relevant to a proposed or installed Solar Thermal System. Such communications may be in reply to an inquiry from a Customer or at NYSERDA's initiation.

Article 5: Renewable Attributes

NYSERDA will own the rights, and any and all claims, to all environmental characteristics, claims, credits, benefits, emissions reductions, offsets, allowances, allocations, howsoever characterized, denominated, measured or entitled ("RPS Attributes"), attributable to all kilowatts of electrical energy generated by the Solar Thermal System installed hereunder during the first three years of operation of the Solar Thermal System. RPS Attributes, which may also be referred to as renewable energy credits ("RECs"), green power attributes or tradable renewable credits are the environmental benefits associated with electricity that is generated from renewable sources such as wind or solar.

Article 6: Eligible Installer Status Designation

Section 1: Eligible Installers are assigned one of the Eligible Installer status designations (Designation): Full, Provisional, Probationary, or Terminated. Each Designation shall be subject to the limitations or requirements associated with that Designation, as detailed below.

NYSERDA reserves the right to modify the definitions, limitations, and requirements of these Designations at any time. NYSERDA retains sole discretion for determining the Eligible Installer's progression into and through each Designation. If NYSERDA determines that a remedy is required, the Eligible Installer's promptness in response will be considered when evaluating any change in status Designation. In all cases, NYSERDA's written decision is final.

Notification of any change in status Designation will be provided via letter from NYSERDA Program staff. This letter will provide:

- Identification of the new Eligible Installer Status Designation
- Explanation of the what caused the Designation change
- Limitations, if any, associated with the newly assigned Designation
- Identification of specific corrective actions that must be taken, and applicable timelines

Failures or violations that may result in a loss of applicable Incentives and possible termination of this Agreement include, but are not limited to:

- a. Failure to conform to the Eligible Installer Responsibilities.
- b. Failure to act professionally, fairly, and in good faith with the customer, NYSERDA, or NYSERDA's representatives.
- c. Failure to follow the Solar Thermal Program requirements and procedures.
- d. Failure to conform to the Solar Thermal System Requirements, approved Incentive Applications, and Prompt Delivery and Installation Requirements, as set forth herein.
- e. Providing inaccurate, false or misleading information verbally or in writing pertaining to the Solar Thermal Program or the Eligible Installer's status in the Solar Thermal Program to NYSERDA's representatives, customers, utility staff, local officials, the general public, or others.
- f. Failure to adequately and promptly address Solar Thermal System problems as identified by NYSERDA or the customer.
- g. Repetitive errors in Solar Thermal System design or performance calculations, or in the Solar Thermal System Installation.
- h. Customer complaints that are substantiated and significant or that indicate repetitive failure to conform to Solar Thermal Program requirements.
- i. Failure to honor the required minimum 5-year full system warranty.
- j. Failure to meet all reporting needs in a timely manner, including submission of performance data for each installed system for three years
- k. Failure to adhere to the requirements of the Program Manual.

Section 2: Eligible Installers not previously assigned any other Designation who have met all requirements of the Solar Thermal Program, have and continue to demonstrate their ability to provide quality services utilizing industry standards and best practices, and abide by all other terms and conditions of this Agreement, shall be assigned the status of **Full** Eligible Installer.

- a. After June 30, 2012, **Full** Eligible Installers are required to be NABCEP-certified Solar Thermal Installers (North American Board of Certified Energy Practitioners).

Failure to satisfy this Solar Thermal Program requirement by June 30, 2012 will result in automatic Designation to **Provisional status**.

- b. **Full** Eligible Installers shall submit a copy of their NABCEP Solar Thermal Installer certificate or re-certification to NYSERDA, as needed to confirm this certification has been acquired or maintained.

Section 3: Eligible Installers shall be assigned the status of **Provisional** Eligible Installer until they have satisfied all requirements to achieve **Full** status, including demonstration to NYSERDA of their ability to provide quality services utilizing industry standards and best practices. A **Provisional** Eligible Installer who fails to meet all requirements of the Solar Thermal Program, and abide by all other terms and conditions of this Agreement, may be assigned **Probationary** status.

- a. **Provisional** Eligible Installers are not listed on NYSERDA's website
- b. **Provisional** Eligible Installers are limited to submission of one (1) Incentive Application at a given time. Additional Incentive Application(s) shall not be submitted to and will not be accepted by NYSERDA until the previous Solar Thermal System Installation has been satisfactorily completed by the Installer, and notification has been provided to the Eligible Installer that NYSERDA has completed a site inspection of the Solar Thermal System to confirm compliance with all Solar Thermal Program requirements. Following achievement of this milestone, **Provisional** Eligible Installers may then request NYSERDA evaluate their status designation.
- c. After June 30, 2012, **Provisional** Eligible Installers must be NABCEP-certified Solar Thermal Installers for NYSERDA to consider a change in status to **Full** Eligible Installer
- d. **Provisional** Eligible Installers, including Journeymen Plumbers, are required to maintain their Solar Thermal System Installation skills by either successfully completing one SOLAR THERMAL System a year, or by attending at minimum (15) hours of Solar Thermal System training per year.

Section 4: Assigning the status of **Probationary** to an Eligible Installer will be based on his or her consistent failure to satisfy requirements of the Solar Thermal Program, including failure to abide by the terms and conditions of this Agreement.

- a. **Probationary** Eligible Installers are not listed on NYSERDA's website
- b. **Probationary** Eligible Installers are not allowed to submit Incentive Applications
- c. **Probationary** Eligible Installers are only permitted to complete Solar Thermal System Installations associated with previously submitted and approved Incentive Applications
- d. **Probationary** Eligible Installers shall complete Solar Thermal System Installations associated with Incentive applications previously approved by NYSERDA in a manner which meets all Solar Thermal Program requirements, to NYSERDA's satisfaction.
- e. **Probationary** Eligible Installers status designation is retained until such time as NYSERDA determines a change in status is in the best interests of the Solar Thermal Program.

Section 5: NYSERDA may, in its sole discretion, **terminate** the Eligible Installer Agreement. **Termination** revokes the Eligible Installer Agreement and ends the Eligible Installer's on-going relationship with the Solar Thermal Program. **Terminated** Eligible Installers shall not represent themselves as Eligible Installers nor are they allowed to submit new Incentive Applications. The Eligible Installer's name will be permanently removed from the list of Eligible Installers posted on NYSERDA's website. Grounds for **termination** include, but are not limited to, the following:

- a. The **Probationary** Eligible Installer has either been unresponsive to, or failed to adequately fulfill, expectations required for their **Probationary** status to be upgraded;
- b. An Eligible Installer of any status misrepresents the Solar Thermal Program, its relationship to the Solar Thermal Program or information about the Solar Thermal Program to potential or existing Customers;
- c. An Eligible Installer of any status falsifies documents (i.e. falsifying signatures and/or documents);
- d. An Eligible Installer of any status misrepresents the status of or information regarding a project to Solar Thermal Program staff.

Article 7: Insurance Requirements

Section 1: The Affiliated Entity, at no additional cost to NYSERDA, shall maintain or cause to be maintained throughout the term of this Agreement, insurance of the types and in the amounts of this Agreement. All such insurance shall be evidenced by insurance policies, each of which shall: (1) reference this Agreement number and name or be endorsed to cover the Eligible Installer and the Affiliated Entity as the insured, and NYSERDA and the State of New York as additional insured, and reference all work to be performed under the Solar Thermal Program; (2) provide that such policy may not be cancelled or modified until at least 30 days after receipt by NYSERDA of written notice thereof; (3) indicate that insurance covers NYSERDA's Solar Thermal Program, including PON 716, PON 1050, PON 2112, and PON 2149 for installing end-use Solar Thermal Systems; and (4) be reasonably satisfactory to NYSERDA in all other respects. NYSERDA reserves the right to request insurance documentation and copies of subcontractor agreements for any subcontractor, and to request the identity of all individuals participating in the Solar Thermal System installation.

Section 2: The types and amounts of insurance required to be maintained under this Section are as follows: (1) commercial general liability insurance for bodily injury liability, including death, and property damage liability, incurred in connection with the performance of this Agreement, with minimum limits of \$1,000,000 in respect of claims arising out of personal injury or sickness or death of any one person, \$1,000,000 in respect of claims arising out of personal injury, sickness or death in any one accident or disaster, and \$1,000,000 in respect of claims arising out of property damage in any one accident or disaster; and (2) commercial automobile liability insurance in respect of motor vehicles owned, licensed or hired by the Eligible Installer for bodily injury liability, including death and property damage, incurred in connection with the performance of this Agreement, with minimum limits of \$500,000 in respect of claims arising

out of personal injury, or sickness or death of any one person, \$1,000,000 in respect of claims arising out of personal injury, sickness or death in any one accident or disaster, and \$500,000 in respect of claims arising out of property damage in anyone accident or disaster.

Section 3: Not less than 15 days prior to the date any policy furnished or carried pursuant to this Agreement will expire, the Affiliated Entity or the Eligible Installer shall deliver to NYSERDA a certificate(s) of insurance evidencing the renewal of such policy(s), and the Affiliated Entity or the Eligible Installer shall promptly pay all premiums thereon due. No work shall be performed under this Agreement without current insurance. NYSERDA will not accept Incentive Applications or make payments under this Agreement without current insurance certificates.

Section 4: In the event of threatened legal action, claims, encumbrances, or liabilities that may affect NYSERDA hereunder, or if deemed necessary by NYSERDA due to events rendering a review necessary, the Eligible Installer or the Affiliated Entity shall deliver to NYSERDA a certified copy of each policy upon request.

Section 5: Within five working days, or contemporaneously with the requirements of each insurance policy, the Eligible Installer or the Affiliated Entity shall notify NYSERDA in writing of the occurrence of any accident, event or incident involving personal injury or property damage that might reasonably result in any complaint or claim, in law or in equity, against the Eligible Installer, the Affiliated Entity, any non-Customer party to the applicable Customer Purchase Agreement or NYSERDA.

Article 8: Indemnification

The Eligible Installer and the Affiliated Entity shall protect, indemnify, and hold harmless NYSERDA and the State of New York from, and against, all liabilities, losses, claims, damages, judgments, penalties, causes of action, costs and expenses (including, without limitation, experts' and/or attorney's fees and expenses) imposed upon, or incurred by, or asserted against, NYSERDA or the State of New York resulting from, arising out of or relating to the Eligible Installer's or the Affiliated Entity's performance of this Agreement. The obligations of the Eligible Installer and the Affiliated Entity under this section shall survive any expiration or termination of this Agreement, and shall not be limited by any enumeration herein of required insurance coverage.

Article 9: Miscellaneous

Section 1: NYSERDA does not endorse, guarantee, or warrant any particular manufacturer, product, the Eligible Installer, or the Affiliated Entity, and NYSERDA disavows and provides no warranties, expressed or implied, for any product or services that may be rendered hereunder. The Eligible Installer's and the Affiliated Entity's reliance on warranties is limited to any warranties that may arise from, or be provided by contractors, vendors, manufacturers, etc.

Section 2: The Parties acknowledge that neither NYSERDA nor any of its representatives are responsible for assuring that the design, engineering, construction and/or Installation of the Solar Thermal System is proper or in compliance with any particular laws (including patent laws), regulations, codes, or industry standards. NYSERDA does not make any representations of any kind regarding the results to be achieved by any Solar Thermal System, or the adequacy or safety of such measures. The scope of review by NYSERDA of the Installation of the Solar Thermal Systems is limited solely to determining whether such Solar Thermal Systems conform to Solar Thermal Program terms, conditions, and requirements.

Section 3: This Agreement is the entire Agreement between NYSERDA, the Eligible Installer, and the Affiliated Entity and supersedes all other communications and representations. If either NYSERDA or the Parties desire to modify this Agreement, the modification must be in writing and signed by an authorized representative of the party against which enforcement of the modification is sought.

Section 4. The status of the Eligible Installer and the Affiliated Entity under this Agreement shall be that of an independent contractor and not that of an agent, and in accordance with such status, the Eligible Installer, the Affiliated Entity's subcontractors, the Affiliated Entity and their respective officers, agents, employees, representatives and servants shall at all times during the term of this Agreement conduct themselves in a manner consistent with such status and by reason of this Agreement shall neither hold themselves out as, nor claim to be acting in the capacity of, officers, employees, agents, representatives or servants of NYSERDA nor make any claim, demand or application for any right or privilege applicable to NYSERDA, including, without limitation, rights or privileges derived from workers' compensation coverage, unemployment insurance benefits, social security coverage and retirement membership or credit.

Section 5: The Parties shall collaborate with NYSERDA's Director of Communications to prepare any press release and to plan for any news conference concerning Solar Thermal Systems installed under the Solar Thermal Program. In addition the Eligible Installer or Affiliated Entity shall notify NYSERDA's Director of Communications regarding any media interview involving Solar Thermal Systems installed under the Solar Thermal Program.

Section 6: Commercial promotional materials, advertisements, informational brochures, and web site content produced by the Eligible Installer, the Affiliated Entity, or customer shall credit NYSERDA and shall be submitted to NYSERDA for review and recommendations to improve their effectiveness prior to use. Such content may be approved in advance by NYSERDA, and, after initial approval, such content may be used in subsequent promotional materials or advertisements without additional approvals. In the event that NYSERDA determines that the Eligible Installer or Affiliated Entity is presenting or publishing incorrect or misleading information regarding the Solar Thermal Program or Eligible Installer's status in the Solar Thermal Program the Eligible Installer or Affiliated Entity agrees to make appropriate modifications promptly upon notification by NYSERDA. If a website maintained by or for the Eligible Installer or Affiliated Entity includes references to NYSERDA and/or the Solar Thermal Program, the website must include the following link: <http://www.nyserda.org>.

Section 7: This Agreement does not commit NYSERDA to approve an Incentive Application, pay any costs incurred in preparing an Incentive Application, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all Incentive Applications received, to negotiate with all qualified sources, or to cancel in part or in its entirety PON 2149 when it is in NYSERDA's best interest.

Section 8: This Agreement may be terminated by NYSERDA at any time upon notice to the Eligible Installer. If the Eligible Installer wishes to cancel or terminate this Agreement, NYSERDA may seek reimbursement of any incentives provided by NYSERDA regarding Solar Thermal Systems that have not been completely installed, interconnected, and commissioned or that have not submitted three full years of Solar Thermal System data readings as required in this Agreement.

Section 9: Eligible Installer agrees and consents to receive notices at the Designated E-Mail Addresses provided on the Signature Form of this Agreement.

Section 10: The Eligible Installer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. This disclosure requirement extends to the Affiliated Entity and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the execution of this Agreement, NYSERDA may exercise its stop-work right pending further investigation, or terminate the Agreement; the Eligible Installer and/or Affiliated Entity may be subject to penalties for violation of any law which may apply in the particular circumstances. The Eligible Installer and/or Affiliated Entity must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Attachment F
PON 2149 – SOLAR THERMAL PROGRAM
ELIGIBLE INSTALLER AGREEMENT No. _____
SIGNATURE FORM

The Eligible Installer and Affiliated Entity certify that all of the information provided in the Solar Thermal Program Installer Eligibility Application, including any attachments, is true and accurate, to the best of their knowledge. The Eligible Installer and Affiliated Entity have read and understand this Solar Thermal Program Eligible Installer Agreement and agree to abide by all terms and conditions; agree that all Solar Thermal Systems will be designed and installed in accordance with PON 2149 and the Program Manual and in compliance with all applicable codes, accepted industry standards and best practices. The Eligible Installer and the Affiliated Entity acknowledge that failure to adhere to the terms and conditions of participation in the Solar Thermal Program or to otherwise fail to follow Solar Thermal Program requirements and procedures may result in a change to their status designation, including termination of this Eligible Installer Agreement. NYSERDA reserves the right to modify the provisions of this Agreement at any time during the term of this Agreement.

This Agreement shall become effective and binding when executed by the Eligible Installer, the Affiliated Entity and NYSERDA. A newly signed Signature Form shall be submitted to NYSERDA on or before June 30th of each year following initial execution of this Agreement for the Eligible Installer to retain **Full** or **Provisional** status. If a **Probationary** Eligible Installer's Agreement is not executed by NYSERDA on or before July 1st of any given year, their Eligible Installer status is automatically changed to **Terminated**. The obligation of the Eligible Installer and Affiliated Entity with respect to approved applications shall survive any expiration or termination of this Agreement. Execution of this Signature Form by NYSERDA will continue the Eligible Installer Agreement under the terms and conditions outlined in this Agreement and its attachments.

IN WITNESS WHEREOF, intending to be bound, NYSERDA, the Eligible Installer, and the Affiliated Entity have executed this Agreement.

Eligible Installer Name (print name): _____
Eligible Installer Signature: _____ Date: _____
Designated E-Mail Address: _____

Affiliated Entity – Company name: _____
Legal signatory name and title: _____
Signature of Representative: _____ Date: _____
Designated E-Mail Address: _____

NYSERDA Authorized Representative:
Signature: _____ Date: _____

Name and Title: _____

EXHIBIT A

REVISED 9/06

STANDARD TERMS AND CONDITIONS
FOR ALL NYSERDA AGREEMENTS

(Based on Standard Clauses for New York State Contracts and Tax Law Section 5-a)

The parties to the attached agreement, contract, license, lease, amendment, modification or other agreement of any kind (hereinafter, "the Agreement" or "this Agreement") agree to be bound by the following clauses which are hereby made a part of the Agreement (the word "Contractor" herein refers to any party other than NYSERDA, whether a contractor, licensor, licensee, lessor, lessee or any other party):

1. NON-DISCRIMINATION REQUIREMENTS. In accordance with Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, age, disability or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is an Agreement for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this Agreement shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this Agreement. If this is a building service Agreement as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this Agreement and forfeiture of all moneys due hereunder for a second subsequent violation.

2. WAGE AND HOURS PROVISIONS. If this is a public work Agreement covered by Article 8 of the Labor Law or a building service Agreement covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates

for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

3. NON-COLLUSIVE BIDDING REQUIREMENT. In accordance with Section 2878 of the Public Authorities Law, if this Agreement was awarded based upon the submission of bids, Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further warrants that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to NYSERDA a non-collusive bidding certification on Contractor's behalf.

4. INTERNATIONAL BOYCOTT PROHIBITION. If this Agreement exceeds \$5,000, the Contractor agrees, as a material condition of the Agreement, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the Federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the Agreement's execution, such Agreement, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify NYSERDA within five (5) business days of such conviction, determination or disposition of appeal. (See and compare Section 220-f of the Labor Law, Section 139-h of the State Finance Law, and 2 NYCRR 105.4).

5. SET-OFF RIGHTS. NYSERDA shall have all of its common law and statutory rights of set-off. These rights shall include, but not be limited to, NYSERDA's option to withhold for the purposes of set-off any moneys due to the Contractor under this Agreement up to any amounts due and owing to NYSERDA with regard to this Agreement, any other Agreement, including any Agreement for a term commencing prior to the term of this Agreement, plus any amounts due and owing to NYSERDA for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto.

6. CONFLICTING TERMS. In the event of a conflict between the terms of the Agreement (including any and all attachments thereto and amendments thereof) and the terms of this Exhibit B, the terms of this Exhibit B shall control.

7. GOVERNING LAW. This Agreement shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

8. NO ARBITRATION. Disputes involving this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily required) without the NYSERDA's written consent, but must, instead, be heard in a court of competent jurisdiction of the State of New York.

9. SERVICE OF PROCESS. In addition to the methods of service allowed by the State Civil Practice Law and Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon NYSERDA's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify NYSERDA, in writing, of each and every change of address to which service of process can be made. Service by NYSERDA to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

10. CRIMINAL ACTIVITY. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of any allegation previously unknown to it that the Contractor or any of its principals is under indictment for a felony, or has been, within five (5) years prior to submission of the Contractor's proposal to NYSERDA, convicted of a felony, under the laws of the United States or Territory of the United States, then NYSERDA may exercise its stop work right under this Agreement. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of the fact, previously unknown to it, that Contractor or any of its principals is under such indictment or has been so convicted, then NYSERDA may exercise its right to terminate this Agreement. If the Contractor knowingly withheld information about such an indictment or conviction, NYSERDA may declare the Agreement null and void and may seek legal remedies against the Contractor and its principals. The Contractor or its principals may also be subject to penalties for any violation of law which may apply in the particular circumstances. For a Contractor which is an association, partnership, corporation, or other organization, the provisions of this paragraph apply to any such indictment or conviction of the organization itself or any of its officers, partners, or directors or members of any similar governing body, as applicable.

11. PERMITS. It is the responsibility of the Contractor to acquire and maintain, at its own cost, any and all permits, licenses, easements, waivers and permissions of every nature necessary to perform the work.

12. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this Agreement will be in accordance with, but not limited to, the specifications and provisions of State Finance Law Section 165 (Use of Tropical Hardwoods), which prohibits purchase and use of tropical hardwoods, unless specifically exempted by NYSERDA.

13. COMPLIANCE WITH TAX LAW SECTION 5-a. The following provisions apply to Contractors that have entered into agreements in an amount exceeding \$100,000 for the purchase of goods and services:

- a. Before such agreement can take effect, the Contractor must have on file with the New York State Department of Taxation and Finance a Contractor Certification form (ST-220-TD).
- b. Prior to entering into such an agreement, the Contractor is required to provide NYSERDA with a completed Contractor Certification to Covered Agency form (Form ST-220-CA).
- c. Prior to any renewal period (if applicable) under the agreement, the Contractor is required to provide NYSERDA with a completed Form ST-220-CA.
- d. Certifications referenced in paragraphs (b) and (c) above will be maintained by NYSERDA and made a part hereof and incorporated herein by reference.
- e. NYSERDA reserves the right to terminate this agreement in the event it is found that the certification filed by the Contractor in accordance with Tax Law Section 5-a was false when made.

14. FREEDOM OF INFORMATION. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the contractor wishes to have treated as proprietary, and confidential trade secret information should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to accept it from disclosure, including a written statement of the reasons why the information should be excerpted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 www.nyserda.org/nyserda.regulations.pdf. However, NYSERDA cannot guarantee the confidentiality of any information submitted. Careful consideration should be given before confidential information is submitted to NYSERDA. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes.

15. Omnibus Procurement Act of 1992. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements in accordance with the Omnibus Procurement Act of 1992.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development
Division for Small Business
30 South Pearl Street
Albany, NY 12245

A directory of certified minority- and women-owned business enterprises is available
from:

Empire State Development
Minority and Women's Business Development Division
30 South Pearl Street
Albany, NY 12245

EXHIBIT B

PART 504

PROMPT PAYMENT POLICY STATEMENT

Section 504.1 Purpose and applicability. (a) The purpose of this Part is to implement section 2880 of the Public Authorities Law by detailing the authority's policy for making payment promptly on amounts properly due and owing by the authority under contracts. This Part constitutes the authority's prompt payment policy statement as required by that section.

(b) This Part generally applies to payments due and owing by the authority to a person or business in the private sector under a contract it has entered into with the authority on or after May 1, 1988. This Part does not apply to payments due and owing:

- (1) under the Eminent Domain Procedure Law;
- (2) as interest allowed on judgments rendered by a court pursuant to any provision of law except Section 2880 of the Public Authorities Law;
- (3) to the Federal government; to any state agency or its instrumentalities; to any duly constituted unit of local government, including but not limited to counties, cities, towns, villages, school districts, special districts or any of their related instrumentalities; to any other public authority or public benefit corporation; or to its employees when acting in, or incidental to, their public employment capacity;
- (4) if the Authority is exercising a legally authorized set-off against all or part of the payment; or
- (5) if other State or Federal law or rule or regulation specifically requires otherwise.

Section 504.2 Definitions. As used in this Part, the following terms shall have the following meanings, unless the context shall indicate another or different meaning or intent:

(a) "Authority" means the New York State Energy Research and Development Authority.

(b) "Contract" means an enforceable agreement entered into between the Authority and a contractor.

(c) "Contractor" means any person, partnership, private corporation, or association:

(1) selling materials, equipment or supplies or leasing property or equipment to the Authority pursuant to a contract;

(2) constructing, reconstructing, rehabilitating or repairing buildings, highways or other improvements for, or on behalf of, the Authority pursuant to a contract; or

(3) rendering or providing services to the Authority pursuant to a contract.

(d) "Date of payment" means the date on which the Authority requisitions a check from its statutory fiscal agent, the Department of Taxation and Finance, to make a payment.

(e) "Designated payment office" means the Office of the Authority's Controller, located at 17 Columbia Circle, Albany, New York 12203.

(f) "Payment" means provision by the Authority of funds in an amount sufficient to satisfy a debt properly due and owing to a contractor and payable under all applicable provisions of a contract to which this Part applies and of law, including but not limited to provisions for retained amounts or provisions which may limit the Authority's power to pay, such as claims, liens, attachments or judgments against the contractor which have not been properly discharged, waived or released.

(g) "Prompt payment" means a payment within the time periods applicable pursuant to Sections 504.3 through 504.5 of this Part in order for the Authority not to be liable for interest pursuant to Section 504.6.

(h) "Payment due date" means the date by which the date of payment must occur, in accordance with the provisions of Sections 504.3 through 504.5 of this Part, in order for the Authority not to be liable for interest pursuant to Section 5.06.

(i) "Proper invoice" means a written request for a contract payment that is submitted by a contractor setting forth the description, price or cost, and quantity of goods, property or services delivered or rendered, in such form, and supported by such other substantiating documentation, as the Authority may reasonably require, including but not limited to any requirements set forth in the contract; and addressed to the Authority's Controller, marked "Attention: Accounts Payable," at the designated payment office.

(j)(1) "Receipt of an invoice" means:

(i) if the payment is one for which an invoice is required, the later of:

(a) the date on which a proper invoice is actually received in the designated payment office during normal business hours; or

(b) the date by which, during normal business hours, the Authority has actually received all the purchased goods, property or services covered by a proper invoice previously received in the designated payment office.

(ii) if a contract provides that a payment will be made on a specific date or at a predetermined interval, without having to submit a written invoice the 30th calendar day, excluding legal holidays, before the date so specified or predetermined.

(2) For purposes of this subdivision, if the contract requires a multifaceted, completed or working system, or delivery of no less than a specified quantity of goods, property or services and only a portion of such systems or less than the required goods, property or services are working, completed or delivered, even though the Contractor has invoiced the Authority for the portion working, completed or delivered, the Authority will not be in receipt of an invoice until the specified minimum amount of the systems, goods, property or services are working, completed or delivered.

(k) "Set-off" means the reduction by the Authority of a payment due a contractor by an amount equal to the amount of an unpaid legally enforceable debt owed by the contractor to the Authority.

Section 504.3 Prompt payment schedule. Except as otherwise provided by law or regulation or in Sections 504.4 and 504.5 of this Part, the date of payment by the Authority of an amount properly due and owing under a contract shall be no later than 30 calendar days, excluding legal holidays, after such receipt.

Section 504.4 Payment procedures.

(a) Unless otherwise specified by a contract provision, a proper invoice submitted by the contractor to the designated payment office shall be required to initiate payment for goods, property or services. As soon as any invoice is received in the designated payment office during normal business hours, such invoice shall be date-stamped. The invoice shall then promptly be reviewed by the Authority.

(b) The Authority shall notify the contractor within 15 calendar days after receipt of an invoice of:

(1) any defects in the delivered goods, property or services;

- (2) any defects in the invoice; and
- (3) suspected improprieties of any kind.

(c) The existence of any defects or suspected improprieties shall prevent the commencement of the time period specified in Section 504.3 until any such defects or improprieties are corrected or otherwise resolved.

(d) If the Authority fails to notify a contractor of a defect or impropriety within the fifteen calendar day period specified in subdivision (b) of this section, the sole effect shall be that the number of days allowed for payment shall be reduced by the number of days between the 15th day and the day that notification was transmitted to the contractor. If the Authority fails to provide reasonable grounds for its contention that a defect or impropriety exists, the sole effect shall be that the payment due date shall be calculated using the original date of receipt of an invoice.

(e) In the absence of any defect or suspected impropriety, or upon satisfactory correction or resolution of a defect or suspected impropriety, the Authority shall make payment, consistent with any such correction or resolution and the provisions of this Part.

Section 504.5 Exceptions and extension of payment due date. The Authority has determined that, notwithstanding the provisions of Sections 504.3 and 504.4 of this Part, any of the following facts or circumstances, which may occur concurrently or consecutively, reasonably justify extension of the payment due date:

(a) If the case of a payment which a contract provides will be made on a specific date or at a predetermined interval, without having to submit a written invoice, if any documentation, supporting data, performance verification, or notice specifically required by the contract or other State or Federal mandate has not been submitted to the Authority on a timely basis, then the payment due date shall be extended by the number of calendar days from the date by which all such matter was to be submitted to the Authority and the date when the Authority has actually received such matter.

(b) If an inspection or testing period, performance verification, audit or other review or documentation independent of the contractor is specifically required by the contract or by other State or Federal mandate, whether to be performed by or on behalf of the Authority or another entity, or is specifically permitted by the contract or by other State or Federal provision and the Authority or other entity with the right to do so elects to have such activity or documentation undertaken, then the payment due date shall be extended by the number of calendar days from the date of receipt of an invoice to the date when any such activity or documentation has been completed, the Authority has actually received the results of such activity or documentation conducted by another entity, and any deficiencies identified or issues raised as a result of such activity or documentation have been corrected or otherwise resolved.

(c) If an invoice must be examined by a State or Federal agency, or by another party contributing to the funding of the contract, prior to payment, then the payment due date shall be extended by the number of calendar days from the date of receipt of an invoice to the date when the State or Federal agency, or other contributing party to the contract, has completed the inspection, advised the Authority of the results of the inspection, and any deficiencies identified or issues raised as a result of such inspection have been corrected or otherwise resolved.

(d) If appropriated funds from which payment is to be made have not yet been appropriated or, if appropriated, not yet been made available to the Authority, then the payment due date shall be extended by the number of calendar days from the date of receipt of an invoice to the date when such funds are made available to the Authority.

Section 504.6 Interest eligibility and computation. If the Authority fails to make prompt payment, the Authority shall pay interest to a contractor on the payment when such interest computed as provided herein is equal to or more than ten dollars. Interest shall be computed and accrue at the daily rate in effect on the date of payment, as set by the New York State Tax Commission for corporate taxes pursuant to Section 1096(e)(1) of the Tax Law. Interest on such a payment shall be computed for the period beginning on the day after the payment due date and ending on the date of payment.

Section 504.7 Sources of funds to pay interest. Any interest payable by the Authority pursuant to this Part shall be paid only from the same accounts, funds, or appropriations that are lawfully available to make the related contract payment.

Section 504.8 Incorporation of prompt payment policy statement into contracts. The provisions of this Part in effect at the time of the creation of a contract shall be incorporated into and made a part of such contract and shall apply to all payments as they become due and owing pursuant to the terms and conditions of such contract, notwithstanding that the Authority may subsequently amend this Part by further rulemaking.

Section 504.9 Notice of objection. Unless a different procedure is specifically prescribed in a contract, a contractor may object to any action taken by the Authority pursuant to this Part which prevents the commencement of the time in which interest will be paid by submitting a written notice of objection to the Authority. Such notice shall be signed and dated and concisely and clearly set forth the basis for the objection and be addressed to the Vice President, New York State Energy Research and Development Authority, at the address set forth in Section 504.2(e). The Vice President of the Authority, or his or her designee, shall review the objection for purposes of affirming or modifying the Authority's action. Within 15 working days of the receipt of the objection, the Vice President, or his or her designee, shall notify the contractor either that the Authority's action is affirmed or that it is modified or that, due to the complexity of the issue, additional time is needed to conduct the review; provided, however, in no event shall the extended review period exceed 30 working days.

Section 504.10 Judicial Review. Any determination made by the Authority pursuant to this Part which prevents the commencement of the time in which interest will be paid is subject to judicial review in a proceeding pursuant to Article 78 of the Civil Practice Law and Rules. Such proceedings shall only be commenced upon completion of the review procedure specified in Section 504.9 of this Part or any other review procedure that may be specified in the contract or by other law, rule, or regulation.

Section 504.11 Court action or other legal processes.

(a) Notwithstanding any other law to the contrary, the liability of the Authority to make an interest payment to a contractor pursuant to this Part shall not extend beyond the date of a notice of intention to file a claim, the date of a notice of a claim, or the date commencing a legal action for the payment of such interest, whichever occurs first.

(b) With respect to the court action or other legal processes referred to in subdivision (a) of this section, any interest obligation incurred by the Authority after the date specified therein pursuant to any provision of law other than Public Authorities Law Section 2880 shall be determined as prescribed by such separate provision of law, shall be paid as directed by the court, and shall be paid from any source of funds available for that purpose.

Section 504.12 Amendments. These regulations may be amended by resolution of the Authority, provided that the Chair, upon written notice to the other Members of the Authority, may from time to time promulgate nonmaterial amendments of these regulations.

Attachment G



Solar Thermal Program Manual

PON 2149

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New York State Energy and Research Development Authority

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1.0 PROGRAM SUMMARY

1.1 What Is The Solar Thermal (ST) Program?

The New York State Energy Research and Development Authority (NYSERDA) provides incentives for the installation of new Solar Thermal (ST) systems for the production of hot water to displace electrically heated hot water. System incentives are capped at \$4,000.00 per site/meter for residential systems and \$25,000.00 per site/meter for nonresidential applicants. Funding for the Solar Electric Incentive Program (“Program”) has been allocated by the New York State Public Service Commission through the Renewable Portfolio Standard (RPS) program. The goal of the program is to install 45.54MW of Solar Thermal capacity by 12/31/2015. Incentives will be granted on a first-come, first-served basis, and applications will be accepted through December 31, 2015, or until funds are fully committed, whichever comes first. There is also a small amount of non-RPS funding available for projects which use fossil fuels to heat their domestic hot water. Please call NYSEDA for availability of non-RPS funding.

1.2 How Does the Solar Thermal Program Work?

Financial incentives are available for qualified customers who wish to install Solar Thermal systems through applications submitted by an “Eligible Installer.” Eligible Installers are those who have demonstrated technical competence in the Solar Thermal field and who have signed written agreements with NYSEDA to abide by certain ST Program terms and conditions. Incentives are paid directly to the Eligible Installer, but must be passed on in full to the customers. Eligible Installers are responsible for preparing and submitting all necessary incentive paperwork to NYSEDA.

On average, incentives for a typical residential or commercial system are expected to cover approximately 15 to 20% of the installed cost of a ST Systems.

1.3 Eligible Installers

Solar Thermal system installers who have received and are current in their NABCEP (North American Board of Certified Energy Practitioners) certification, Home Performance with Energy Star, Journeymen Plumbers and heating contractors with ST system installation training and experience are encouraged to submit applications to become Eligible Installers. Preference will be given to those installers that have completed 40 hours of NABCEP and or 18 hours of manufacturer certified solar thermal or its equivalent and demonstration of experience in installing systems. Installers can apply for Eligible Installer status at any time while the program is open. Once approved, Eligible Installers can apply for financial incentives for ST Systems meeting the requirements of this ST Program. Although NABCEP certification is not required at this time, all Eligible Installers must be certified by June 30, 2012.

2.0 GENERAL PROGRAM RULES

2.1 Incentives

Incentives are available on a first-come, first-served basis. Incentives will only be reserved for customers once an application has been approved by NYSEDA. Incentives will be available for the Solar Thermal Program beginning in November 2010 and continuing through December 2015. Individual incentives will start at a rate of \$1.50 per kWh (or mmBtu equivalent for Non-RPS funding based on estimated displaced electrical usage) and may be adjusted as necessary in order to meet the program goals, but cannot exceed the incentive cap.

Incentives are reserved for Solar Thermal Systems designed and installed by Eligible Installers. Incentives are available only for new equipment and Solar Thermal Systems that have not been installed (partially or completely) prior to NYSERDA approval of an incentive application submitted in accordance with the terms and conditions of this Incentive Program. Incentives will not be provided directly to customers purchasing or installing Solar Thermal systems.

The full amount of the approved NYSERDA incentive must appear as a credit to the customer in the customer purchase agreement.

When approved, the incentive amount will appear on the approval letter that Eligible Installers receive from NYSERDA. Eligible Installers are responsible for sending a copy of the approval letter to the customer. This amount will not change assuming the ST System is installed, as approved, and within the Terms and Conditions of NYSERDA's Solar Thermal Program.

Incentives for electrically fueled systems are available for Solar Thermal systems installed for qualified customers only. Qualified customers are those who pay the Renewable Portfolio Standard (RPS)/System Benefits Charge (SBC) as part of their electricity bills. Incentives for fossil fueled systems are available to all NY State residents, but are subject to funding availability which is determined quarterly by NYSERDA. Owners of electrically heated systems may not access both RPS and non-RPS funding for the same system.

NYSERDA reserves the right to limit the number of incentives per customer/site/meter.

Incentives are based on displaced electrical usage based upon Solar Rating and Certification Corporation (SRCC) OG-300 estimates of system production and/or standard industry software such as RETScreen, or SolarPathfinder thermal program. For solar panel manufacturers who have SRCC OG-100 panel ratings and have applied for a SRCC OG-300 system rating but have not yet received a rating, an estimate based on the panel's SRCC OG-100 rating and along with calculations from RETScreen, Solar Pathfinder Thermal or other approved method may be provided. In such cases, a meter must be installed on the system and the amount of energy produced in kilowatt hours must be measured every 3 months for the first year and reported to NYSERDA. NYSERDA will review the energy production data to determine the accuracy of the estimated production. Estimates of system production that are determined to be highly inaccurate may result in the manufacturer or installer being disqualified from participation in the Program.

NYSERDA reserves the right to make changes in the incentive levels. Any revisions in the incentive levels will be posted on NYSERDA's website, and Eligible Installers also will be informed via email. Customers' applications that are accepted by NYSERDA after an incentive change will be automatically changed to the new incentive level. Eligible Installers and Customers are prohibited from cancelling submitted applications and re-applying if incentives are increased the following months.

2.2 Standard Incentive Amounts

Incentives are calculated based upon estimated displaced electrical usage. Typical Solar Thermal systems can only displace 50-80% of the thermal load. Therefore, the displaced kWh cannot exceed 80% of the total calculated existing thermal load.

Example:

The Solar family has an annual electrical usage of 12,259 kWh as detailed on their utility bill. They currently have an electric hot water heater, there are 4 persons living in the residence. A RETScreen analysis indicates that 3,309 kWh or 27% of that yearly electric bill is attributed to hot water. The ST system proposed by Eligible Installer is expected to displace 76% (76% < 80%) of their hot water load.
 $3309 \text{ kWh} * 0.76 = 2515 \text{ kWh displaced @ } \$1.50 = \$3,772.50$ as the maximum incentive. You would then apply the Incentive cap listed in 2.2 above to determine the final incentive.

2.3 Total Capacity Limit

NYSERDA reserves the right to establish and enforce a per month capacity limit on Eligible Installers and Affiliated Entities. Applications received after this limit is reached will not be accepted.

2.4 Change Orders

Any system modifications or equipment changes **must be approved** by NYSERDA in writing before a system is installed. Failure to get NYSERDA approval on any and all modifications may result in revocation of the incentive reservation or nonpayment of the incentive.

Change order requests shall state the reason for the change, the original equipment quantity and catalog numbers, the proposed equipment quantity and catalog numbers, changes in cost, changes in incentive amount and any changes in the collector configuration, piping, controls or insulation levels. All proposed change requests must include the customer's signed acknowledgement of the proposed changes.

2.5 Incentive payments

Incentives will be paid to Eligible Installers in one final payment and will be tied to the completion of the installation and acceptance by the Authority Having Jurisdiction (AHJ). The NYSERDA incentive payment will not be paid until all documentation for all applicable utility, state, city or town permits and other inspections and approvals, as appropriate, are obtained and submitted to NYSERDA together with the "Attachment C – Incentive Payment Request Form" and approved by NYSERDA. Eligible Installers have 120 days from the date of award by NYSERDA to complete the installation.

2.6 Incentive structure

Where necessary, NYSERDA reserves the right to structure incentive payments differently to accommodate unique situations as determined by NYSERDA.

2.7 Clipboard Audits

Eligible Installers shall perform an electric energy efficiency clipboard audit for all Residential Customers. A clipboard audit consists of two main components: an interview of the home/building owners to ascertain energy use habits and the age of the building, and an inspection of the building to identify potential energy efficiency measures, especially low-and no-cost measures that could reduce the electricity load of the building. This includes an inspection of the hard-wired lighting systems and free-standing light fixtures, appliance ages and whether they are ENERGY STAR, the presence of advanced power strips for consumer electronics, existence of "phantom loads" related to consumer electronics and battery chargers, use of programmable thermostats or timers for air conditioners, age and condition of the doors and

windows, and inquiries to the Customer regarding any recent installation of insulation. The Eligible Installer shall conclude the audit with a homeowner debriefing. The Eligible Installer shall leave a copy of the inspection form with the owner at the end of the inspection. The form will include a description of the home, recommendations of changes to reduce electric consumption, and easy fixes the homeowner can do. The Eligible Installer shall also leave a list of Home Performance Contractors that could install more complex energy efficiency measures, informational brochures informing the owner of the details of utility or NYSERDA energy efficiency programs available to the home owner, and a brochure of low cost/no cost tips for reducing energy consumption. The inspection should typically last no more than 60 minutes. Customers will not be required to benchmark or implement energy efficiency measures as a pre-requisite to receiving a ST incentive.

2.8 Non Residential Energy Assessment

Eligible Installers shall provide non-residential building owners with information on ENERGY STAR'S Portfolio Manager Benchmarking Tool, or other equivalent tool and if requested by the building owner will help them enter utility bill information into the Tool in order to produce an EUI (Energy use index) and where applicable, an ENERGY STAR score. Eligible Installers shall also provide informational brochures on NYSERDA and utility energy efficiency programs. Customers will not be required to benchmark or implement energy efficiency measures as a prerequisite to receiving a ST incentive.

2.9 System Losses

Applications shall indicate all potential ST system output losses (actual thermal energy generated and equivalent kilowatt hours or kWh displaced after all equipment losses are applied) associated with shading, system orientation, tilt angle, etc. and must be analyzed and detailed by the Eligible Installer for each ST System. Systems which are shaded by trees that face east or west, or that are installed on a flat roof, will have outputs that will be less than ideal. All impacts on system output must be quantified and will be considered during the review of applications submitted by the Eligible Installer.

2.10 Coordination with other NYSERDA Programs

NYSERDA reserves the right to restrict applications for the ST Program where the applicant's participation in another NYSERDA program would constitute double dipping or a conflict between programs.

2.11 Financing

Residential customers may be eligible to participate in loan programs such as PACE (Property Assessed Clean Energy), On-bill financing, the NYS Energy Smart Loan Fundsm, or other financing options should they be available in the future. For customers that participate in the loan programs, the incentive will be reduced by the equivalent "buy down" cost or other cost incurred by NYSERDA to make the loan product available. The total incentive for any customer, including cash and loan product, will not exceed the system incentive cap.

2.12 Tax Credits

Customers may also be eligible for State and Federal tax credits. It is recommended that ST Program participants contact a tax adviser to determine eligibility for tax credits.

3.0 SPECIFIC PROGRAM RULES

3.1 New Components

All components installed as part of an approved ST System must be new. With the exception of the monitoring meter(s), the use of used or refurbished equipment is not permitted under the Program.

3.2 Qualified Solar Collectors

All ST Collectors must be certified as meeting all applicable standards of the Solar Rating and Certification Corporation and detailed in the eligible list found on PowerClerk. PowerClerk is a database used to track applications and installers. Once approved, you will receive log-in information and instructions.

3.3 Hot Water Tanks

All ST Hot Water Tanks must be certified as meeting all applicable standards of the Solar Rating and Certification Corporation and detailed in the eligible list found on PowerClerk.

4.0 SYSTEM REQUIREMENTS

4.1 Displaced Electrical Usage

To be eligible for Incentives, all ST Systems must demonstrate a savings in displaced electrical usage calculated in kWh or equivalent BTUh for non-RPS funded systems. Thermal Energy generated by the ST System must offset the customer's electricity purchases.

4.2 Approved System Design

ST Systems must be installed in accordance with the design and ST System components submitted in the application and approved by NYSERDA. Any change in ST System design from the approved design must be approved in writing by NYSERDA prior to installation of the ST System. Incentives will not be paid for ST Systems that are installed prior to approval from NYSERDA, or for ST Systems that are not installed according to the design submitted to and approved by NYSERDA.

4.3 Code-Compliant Interconnection

The Eligible Installer is required to ensure that all approved ST Systems that are designed to be interconnected to the heating or domestic hot water systems have a code compliant interconnection.

4.4 Other Plumbing and Electrical Components

All other Plumbing and electrical components of each ST System including, but not limited to, piping, fittings, insulations, tanks, vessels, valves, controls, safety devices, and associated wiring must be certified as meeting the requirements of all relevant national and New York State codes and standards.

4.5 Compliance with Laws and Codes

All approved ST Systems, system components, and installations must comply with any and all manufacturers' installation requirements, applicable laws, regulations, codes, licensing and permit requirements including, but not limited to, the New York State Environmental Quality

Review (SEQR), the New York State Building Code, New York State Plumbing Code, the National Electric Code, and all applicable State, city, town, or local ordinances or permit requirements.

4.6 ST System Warranty

The Eligible Installer and the Affiliated Entity must provide the purchaser of the ST System with a full five year transferable warranty. The warranty must cover all components of the generating system against breakdown or degradation in thermal output of more than ten percent from the original rated thermal output. The warranty shall cover the full costs, including labor, of repair or replacement of defective components or systems. The Eligible Installer and the Affiliated Entity are responsible for providing warranty coverage in a timely manner regardless of the level of support from the equipment manufacturer.

4.6 Annual Follow Up Visits

The Eligible Installer or the Affiliated Entity must conduct annual follow up visits for the first two years of operation in order to verify that the system is operating properly and make any necessary adjustments to improve system performance.

4.7 Maintenance Manual

Upon final completion of the installation, the Eligible Installer shall provide the customer with a maintenance manual containing manufacturer information on all the major components along with a schedule or any regular required system maintenance to be performed.

5.0 APPLICATION PROCESS

Each Application for Incentives must include a complete and accurate copy of each of the following:

5.1 Incentive Application Form

The Eligible Installer must submit all application, using PowerClerk.

5.2 Site Map

The site map must include the location of all ST System components including collectors and water tanks, roof type, system orientation and tilt angle, point of connection with existing plumbing system, customer name and address, and Eligible Installer name and Eligible Installer number.

5.3 Photo

There must be photo(s) of the collector location from both the ground and roof level. Photos from the ground must be taken looking south, north, east, and west.

5.4 Schematics Drawing

Schematics diagrams will not be required for residential applications. However, nonresidential applications will require a legible diagram using unique line characteristics and standard symbols to clearly describe the solar thermal system as installed. The one line diagram shall include, but not be limited to, the collectors, water tanks, heat exchanger(s), pumps, piping lengths and sizes, controls, insulation requirements, associated wiring.

Manufacturers' catalog numbers for the key components and other relevant equipment as applicable shall be provided.

5.5 System Production

An estimate of annual system production (displaced kWh) must be submitted. For residential systems installed on one to four family homes, use of the SRCC OG-300 system rating may be used to size and estimate the annual system production in kWh if the properly sized system falls within Program guidelines for maximum displaced load of 80%. For all calculations, installers shall assume a storage tank water temperature of 120 degrees in the design. Should the installer use a higher temperature, they must provide justification of the higher value with the application.

For larger non-residential systems, non OG-300 or residential systems using OG-100 components, a more detailed estimate of system production will need to be provided in conjunction with a more detailed system design including a one-line drawing as noted above. Calculations and methods used to determine the system production in nonresidential systems must be included in the application.

5.6 System Loss Analysis

Installers must calculate all potential system output losses (kilowatt hours or kWh, or equivalent BTU_h for fossil fuel based systems, generated after all equipment losses are applied) associated with shading, system orientation, tilt angle, etc. Such losses must be detailed using industry accepted shading and orientation tools, verifiable assumptions, and calculations. Incentives will not be approved where losses due to system shading and orientation exceed 25% of what the ideal system for that location would be without any site losses. In cases where trees or any other obstruction must be removed or moved in order to meet the program rules, incentive payment will not be made until a new system loss analysis and photos have been submitted and reviewed by NYSERDA.

5.7 Domestic Hot Water Gallons Used

When calculating the usage for residential, the number of persons in the household shall be used. For new construction or where the number is not known, use the number of bedrooms plus one.

Example: A three bedroom house would be sized for four people. In order to determine the number of gallons, use the formula $20 + [15(\text{residents}-1)]$.

$$\begin{aligned} 20 + [15(4-1)] &= \\ 20 + [15(3)] & \\ 20 + 45 &= 65 \text{ gallons per day} \end{aligned}$$

5.8 Utility Bill

A copy of the customer's utility bill or other proof (for new construction applications) that the customer pays (or will pay, in the case of new construction) the Renewable Portfolio Standard/System Benefits Charge must be included. The site address on the utility bill must match the installation site address on the Incentive Application Form. The customer's historic usage for the past twelve (12) months will be required. For new construction, information on anticipated electric usage, including that usage to be displaced by the ST system is required. The Eligible Installer must submit detailed calculations for review. Please provide evidence of other fuel billing for fossil-fuel, non-RPS funding.

5.9 Permits

Copies of all necessary permits, approvals, certificates, etc. must be attached for all non-residential systems. Residential customers may submit permits with the application or with the incentive request. Incentive requests for ST Systems without permits will be rejected. All permits must clearly reference installation of the approved ST System at the customer site. If permit(s) are not needed for installation, a signed letter from the Town Code Officer or Authority Having Jurisdiction (AHJ) must be submitted stating that no building permit is required

5.10 Customer Purchase Agreement

Each Incentive Application must be accompanied by a Customer Purchase Agreement, signed by the Customer and the Affiliated Entity. NYSERDA may reject an Application for Incentives if it is received by NYSERDA more than (30) days from the date of the customer's execution of the Customer Purchase Agreement. Each Customer Purchase Agreement must include the following:

- Installation location including town, street, and number, if applicable;
- Installation schedule (a realistic installation and interconnection schedule that takes into account NYSERDA and utility review requirements). For example, incentive applications should not have an expected installation date that does not include adequate time for NYSERDA to receive, review, and notify an Eligible Installer and the customer regarding the status or approval of an application;
- System description, including a description of the ST System being purchased and an outline of system specifications, the make and model of major system components, identification and SRCC Certification.
- Estimate of annual energy displaced in kWh or equivalent BTUh for non-RPS funding that summarizes the results of the System Loss Analysis;
- Total system and itemized costs broken down as follows: cost of collector(s), cost of water tanks(s), balance of system (piping, fittings, insulation, controls, etc.), and labor and overhead (labor, permitting, etc.);
- Applicable incentives. The Customer Purchase Agreement must reflect the entire amount of the approved NYSERDA Incentive;
- An explanation and estimate of any and all costs that the customer will incur associated with the development, installation, and commissioning of ST Systems that are not included in the Eligible Installer's price quote;
- Payment schedule;
- ST System Warranty. A full warranty to the purchaser of the ST generation system installed under the Agreement for a period of five years after installation. The warranty must cover all components of the ST System against breakdown or degradation in thermal output of more than ten percent from the original rated thermal output. The warranty must cover the full costs, including labor and repair or replacement of defective components or systems.
- Addendum to Customer Purchase Agreement in the form provided at Exhibit E, completed and signed by both the customer and the Eligible Installer.

6.0 INSTALLATION SITE VISIT/INSPECTION

NYSERDA or its representatives may make a reasonable number of visits to the customer site before, during and/or after installation of a ST System. Such visit(s) will be at a time convenient to the customer.

6.1 Purpose of Site Visit

The purpose of the site visit(s) is to provide NYSERDA with an opportunity to evaluate the site, the system design as submitted, and the Installed ST System in order to determine the actual kWh displaced for program evaluation purposes and to verify that the ST System was installed according to the approved system design and all ST Program requirements. Continued installer eligibility in the program may be contingent upon the results of NYSERDA's inspection of an installed ST System.

6.2 Site Visit Report

NYSERDA may provide a written report summarizing the results of the ST System inspection to the Eligible Installer. If the site visit report indicates that there are deficiencies in the ST System or that the ST System was not installed in conformance with the approved application, the requirements of the Program and/or this Agreement, NYSERDA may provide a copy of the site visit report to the customer, all authorities having local jurisdiction, and the interconnecting utility.

Communication with Customer: Installer, Company and Customer agree that NYSERDA may, at NYSERDA's discretion, communicate by voice and/or written format with any Solar Thermal System Customer with respect to any matter relevant to a proposed or installed SOLAR THERMAL System. Such communications may be in reply to an inquiry from a Customer or at NYSERDA's initiation.

7.0 OTHER INFORMATION

Information for Eligible Installers and Customers

Customer Step-by -Step Guide	Attachment A
Incentive Application Form*	Attachment B
Incentive Request Form*	Attachment C
Addendum to Customer Purchase Agreement*	Attachment D

***Needs to be completed by an Eligible Installer**

Information to Become an Eligible Installer

Eligible Installer Instructions and Application	Attachment E
Sample Eligible Installer Agreement	Attachment F

Specific Program Rules

NYSERDA Solar Thermal Program Manual	Attachment G
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