

October 2020 — Version 10

# NY-Sun Con Edison Program Manual



**NEW YORK**  
STATE OF  
OPPORTUNITY.

**NY-Sun**

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# Program Basics



## PROGRAM SUMMARY

### NY-Sun Incentive Program

The New York State Energy Research and Development Authority (NYSERDA) provides financial incentives and financing options through the NY-Sun Incentive Program for the installation of new grid-connected (solar electric) that offset the use of grid-supplied electricity.

Funding for the program has been allocated by the New York State Public Service Commission through the Clean Energy Fund (CEF) with additional funding made available through the Regional Greenhouse Gas Initiative. Incentives are granted on a first-come, first-served basis, and applications will be accepted through December 31, 2023, or until funds are fully committed.

The program is divided into the following regions and sectors (all capacity measurements used in this document are Direct Current (DC) ratings):

- The region served by Con Edison (Con Ed)
  - > Residential up to 25kW
  - > Nonresidential up to 7.5MW
- The balance of the State (Upstate)
  - > Residential up to 25kW
  - > Nonresidential up to 750kW
  - > Commercial/Industrial 750kW to 7.5MW
- The region served by PSEG Long Island as the LIPA System Operator (Long Island)
  - > Residential up to 25kW
  - > Nonresidential up to 750kW

Community Distributed Generation (CDG) projects are eligible for nonresidential and commercial/industrial incentives and subject to all program rules and any rules adopted by the Public Service Commission. A CDG project sponsor is considered a program customer.

**This program manual contains the terms and conditions applicable to residential and nonresidential projects in the Con Ed region.** Projects in Con Ed previously under the commercial/industrial program have been combined into the Con Ed nonresidential program. NYSERDA shall exercise reasonable discretion in interpreting these terms and conditions and/or making minor adjustments thereto for the effective administration of the program. Any adjustments to the program rules will be timely listed at [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources) and incorporated in periodic amendments to the program manual.

A separate program manual is available for residential, nonresidential and commercial/industrial projects in the Upstate and Long Island regions.

# PROGRAM PARTICIPATION

The residential and nonresidential program relies on contractors and builders to implement new solar electric systems for customers seeking incentives through the program. Contractors are responsible for the contract with the customer, while builders are responsible for the installation of the system. A company approved as both a contractor and builder is responsible for all aspects of the project. Before a contractor and builder can work together, they must establish a contractor-builder relationship agreement through the program. For details on the roles and responsibilities of each, see the Qualifications, Roles, and Responsibilities sections.

Incentives are only available for new solar electric systems that are designed and installed by participating contractors and builders. Incentives will be provided directly to the contractor of record for the project, not to the customer or builder. Nonresidential projects will have the option to assign payment at time of application submission.

To participate in the program, a company must submit a contractor application, which can be found at [nyserdera.ny.gov/become-a-solar-contractor](https://nyserdera.ny.gov/become-a-solar-contractor). Interested companies may apply in either program, as a participating contractor, builder, or both at any time while the program is open.

Once a contractor and/or builder is approved in the program, they will be given access to the NYSERDA Portal to begin submitting project applications. Initially, contractors and builders in the program will be in a provisional status. See the Quality Assurance and Compliance section for details on participation status.

## Qualifications

### Experience

Prior experience with installation, shading analysis, or relevant skills; credentials; employment history; customer satisfaction; and other pertinent experiences will be considered. Applicants are also evaluated on past performance in this or other NYSERDA programs, if applicable.

Applicants are required to submit a standard customer agreement template that meets program requirements, quality assurance (QA) plan, organizational chart, and resumes of key personnel.

### Customer References

Residential and nonresidential program applicants must provide three verifiable solar electric customer references (customer name, address, phone, and email) for completed, grid-connected solar electric installations. System size (kilowatts), interconnection date, and the applicant's role in the project must be specified. Construction photos for the projects listed as a reference are required.

### NYSERDA Programs

An application will not be approved if the applicant has unresolved customer or performance issues in this or other New York State programs.

### Registered DER Provider

Applicant must be registered as a DER provider with the New York State Department of Public Service (DPS) to be eligible to participate in the Program. Additional information can be found at <https://www3.dps.ny.gov/W/PSCWeb.nsf/ArticlesByTitle/EAB5A735E908B9FE8525822F0050A299?OpenDocument>

## Contractor Qualifications, Roles, and Responsibilities

### Contractor Qualifications

A contractor may use any business structure that is legal for conducting business in New York State (corporation, LLC, sole proprietorship, etc.). The contractor must meet all program requirements, including required insurance coverage and have the capability to provide warranty services on all solar electric systems as required by the program and State law.

A contractor must comply with all local authority requirements for registration and licensing that apply to solar system installations.

Visit [nyserderda.ny.gov/find-a-solar-contractor](https://nyserderda.ny.gov/find-a-solar-contractor) for a list of approved contractors.

### Contractor Roles and Responsibilities

- Holds the agreement with the customer
- Responsible for performance of builder
- Receives incentive payments unless payment assignment is identified
- Adheres to terms of participation agreement
- Adheres to terms of contractor and builder relationship agreement
- Responsible for customer complaints, warranties, and production guarantees for the entire system

## SOLARIZE CONTRACTORS

Solarize campaigns are locally organized community outreach efforts aimed at getting a group of homes and businesses in one area to install solar. To participate in a Solarize campaign, contractors must be a NY-Sun participating builder or contractor and must be separately prequalified to submit a proposal to a Solarize campaign request for proposal (RFP). Information about Solarize can be found at [nyserderda.ny.gov/solarize](https://nyserderda.ny.gov/solarize). To become prequalified to participate in a Solarize campaign, a contractor must submit their name, mailing address, and federal employee identification number to [communitysolar@nyserderda.ny.gov](mailto:communitysolar@nyserderda.ny.gov).

By agreeing to participate in a Solarize campaign, the contractor is expected to act in good faith and follow proposed campaign guidelines. Only those Contractors or builders selected to participate in a campaign may use the Solarize name. The name is reserved solely for Solarize selected contractors.

If the status of selected contractor changes to either suspended or terminated, they must surrender all leads generated by the campaign to the Solarize program manager.

Failure to provide adequate services on previous Solarize campaigns may be grounds for rejecting future participation.



# Builder Qualifications, Roles, and Responsibilities

## Builder Qualifications

Builders are responsible for maintaining an on-staff individual who has fulfilled one of the credentialing paths. Companies applying for builder status must include a copy of their credentialing certificate.

### 1. NABCEP (North American Board of Certified Energy Practitioners) PV Installation Professional Certification

Builders who choose to become credentialed through NABCEP must have a NABCEP certified PV Installation Professional on-staff.

### 2. IBEW-NECA Electrical Journeyman & Apprentice Training (International Brotherhood of Electrical Workers and National Electrical Contractors Association)

Builders who choose to become credentialed through the IBEW must have a journeyman electrician who completed an IBEW/NECA, NABCEP, Underwriter's Laboratory (UL) approved 40-hour PV training course on staff.

### 3. UL (Underwriters Labs) PV System Installer

Builders who choose to become credentialed through UL must have a UL certified PV System Installer on staff.

## NYSERDA Logo Use

Contractors and builders are prohibited from using NYSERDA's logo on their website or any marketing materials.

## Builder Roles and Responsibilities

- Responsible for installation and quality of project
- Responsible for maintaining a credentialed person on-staff
- Agrees to terms of contractor and builder relationship agreement

# CONTRACTOR AND BUILDER RESOURCES

Contractors and builders are encouraged to visit [nyserdera.ny.gov/solar-contractor-resources](http://nyserdera.ny.gov/solar-contractor-resources) for sample program documents, instructional guides, technical fact sheets, QA checklists and inspection criteria, and other program documents.

## SOLAR ANNOUNCEMENTS

Contractors and builders are responsible for staying current on all program updates by registering for email announcements at [nyserdera.ny.gov/solar-announcements](http://nyserdera.ny.gov/solar-announcements). NYSERDA provides email updates on upcoming conference calls, stakeholders meetings, and other program announcements.

## TAX CREDITS

Customers may be eligible for State and federal tax credits or qualify for real property tax exemptions and tax abatement programs, along with accelerated depreciation allowances. The contractor or builder should inform customers about the availability of tax credits and other governmental assistance, and advise them to consult with an attorney, accountant, or tax professional to determine eligibility.

New York City residents may be eligible for the Real Property Tax Abatement Program. Contractors installing systems in New York City should consult with The New York City Department of Buildings for specific information.

Real property tax information can be found at the New York State Department of Taxation & Finance Office of Real Property Tax Services website. The real property tax exemption Form RP487 may be found at [http://www.tax.ny.gov/pdf/current\\_forms/orpts/rp487\\_fill\\_in.pdf](http://www.tax.ny.gov/pdf/current_forms/orpts/rp487_fill_in.pdf).

A list of jurisdictions that have opted out of the real property tax exemption and where access to Form RP487 does not apply may be found at <http://www.tax.ny.gov/research/property/legal/localop/487opt.htm>.

# INCENTIVE STRUCTURE

Solar incentives are available on a first-come, first-served basis and are based on DC module wattage ratings at standard test conditions (nameplate rating).

The program is based on a megawatt (MW) block model—an incentive structure designed to provide certainty and transparency around incentive levels; account for regional market differences; clarify that New York State intends to phase out cash incentives in a reasonable time frame; and eliminate those incentives sooner in regions where market conditions can support it, based on market penetration, demand, and payback.

The MW block approach allocates MW targets to specific regions of the State, breaks those targets into blocks, and assigns incentives per block. Incentives are awarded based on the block in effect at the time of submission. Once all blocks within a region/sector are fully subscribed, the incentive is no longer available to that region/sector. NYSERDA will monitor market conditions and MW block subscription and adjust accordingly. NYSERDA will notify stakeholders in advance of any planned changes.

## Regional MW Blocks and Sectors

- The region served by Con Edison (Con Ed)
  - > Residential up to 25kW
  - > Nonresidential up to 7.5MW

Incentives are reserved at the incentive level designated in the MW block in effect at time of application submission. Program incentives are not awarded until a project has achieved an approved status.

Information on the MW block design, including real-time data on the current incentive levels, can be found by visiting [nyscrda.ny.gov/ConEdison-dashboard](https://nyscrda.ny.gov/ConEdison-dashboard).

The type of incentive is based by the residential or nonresidential service classification of the meter, as determined by the utility. A site/meter is where the solar electric system will be interconnected to the utility. Farms meeting the Agriculture and Markets Law 301 definition of “farm operation” will be considered nonresidential.

If multiple existing meters serving customer load are present, multiple systems may be eligible for incentives. The incentive cap will apply to each meter. For example, a shopping mall with four existing separately metered businesses constitutes four “sites/meters,” each of which may be eligible for incentives, subject to the kilowatt and usage caps.

Co-location of nonresidential solar electric systems on the same site or tax parcel in which a significant portion of the generation is credited to off-site accounts are not eligible.

Incentives for New York Power Authority (NYPA) customers will be the same as those for non-NYPA customers.

Once a project application has been submitted in the portal, no changes to the contractor, payee, site address, metering type, or customer name are allowed. If such a change is requested, the application will be canceled and an updated application will need to be submitted, at the current incentive level.

NYSERDA reserves the right to deny newly submitted applications if the contractor or builder is delinquent in installation milestones for other solar electric projects with an approved status.

For direct purchase transactions, the agreement between the customer and contractor must clearly show the full amount of the NYSERDA incentive being applied to the total solar electric system price. For lease or power purchase agreement (PPA) transactions, the value of the NYSERDA incentive must be applied to reduce the kilowatt-hour cost.

Any contractor or builder who moves forward with the installation of a project that does not yet have an approved status, does so at their own financial risk. Projects completed prior to being submitted to NYSERDA are not eligible to receive program incentives.

Once the project is approved, the contractor or builder will be notified of the incentive amount. This amount will not change assuming the solar electric system is installed as approved and within the terms and conditions of the program.

Nonresidential projects submitted before June 18, 2018 may not cancel and reapply. Change orders for these projects to obtain an additional incentive up to 7.5MW will not be processed. Contractors or builders will be allowed to submit a new application for an expansion to a completed project.

## System Size Cap

Project incentives are capped at the following system sizes:

Sector	PV System Size Cap
Residential	25kW DC
Nonresidential	7.5MW DC

Residential projects calculated to offset more than 110% of the systems annual electric usage are not eligible for incentives or financing. New construction residential systems must not exceed 110% of the calculated yearly projected kilowatt-hour of electric usage. The 110% limit does not apply to nonresidential projects. Nonresidential projects in Con Ed are capped at 7.5MW

## Expansion of Completed Systems

Additional incentives for the expansion of a project previously completed in the program may be requested. The initial application must be completed in its entirety, and the new application must indicate that it is an expansion system.

Residential projects will continue to be capped at 110% of the systems annual electric usage and 25kW.

Nonresidential solar electric projects will be capped so the aggregate system size between the initial system and expansion system does not exceed 7.5MW. All required documents must be submitted.

## Available Incentive Adders

The contractor or builder is responsible for selecting an adder, if any, on the solar electric project application prior to submission. No array or solar panel can have more than one incentive adder.

### Affordable Solar Residential Incentive

Additional incentives for solar electric installations are available for households that qualify as low- to moderate-income, through the Affordable Solar Residential Incentive. To apply, the customer must submit the Affordable Solar incentive eligibility application found at [nysesda.ny.gov/affordable-solar](http://nysesda.ny.gov/affordable-solar) to NYSEDA's income eligibility service provider.

Projects eligible for the Affordable Solar Residential Incentive will receive a total incentive of \$0.80/W of nameplate capacity. In cases where the standard incentive would be reduced due to losses from shading, azimuth, and tilt, the Affordable Solar Residential Incentive will be likewise reduced, per the System Losses section in the System Technical Requirements.

### To be eligible for the Affordable Solar Residential Incentive, a solar electric project must meet all requirements of the program, and:

- Service the owner-occupied residence of an eligible customer according to program rules, or service a residential affordable housing property that has documented eligibility. See Applying for Incentives section for details.
- Have a nameplate capacity equivalent to but not greater than the lower of
  - > 110% of projected annual energy usage after implementation of electric efficiency measures identified by the required audit or confirmation that these measures are already in place.
  - > 100% of current annual energy usage.

- Provide annual cost savings to the customer for the full lifetime of the solar electric system installation, as demonstrated through the Residential Savings Calculator for Affordable Solar.
- Include an escalation of monthly payment or energy rate no greater than 1.5% annually, if financed through a lease or PPA.

The Affordable Solar Residential Incentive cannot be applied to an expansion of a completed system project.

### **Multifamily Affordable Housing Incentive**

Additional incentives for solar electric installations are available for nonresidential projects serving multifamily affordable housing properties. Eligible projects will receive a total incentive of \$1.00/W for the first 200kW of the project: the applicable nonresidential base incentive plus an added incentive. The added incentive will be adjusted as the base incentive steps down to maintain the \$1.00/W total. Project capacity above 200kW will receive the applicable nonresidential base incentive. Projects submitted prior to May 14, 2020 under the previous 50kW added incentive cap may not be modified or cancelled in order to obtain incentives under the higher cap and/or incentive level.

#### **To be eligible for the Multifamily Affordable Housing Incentive, a solar electric project must meet all requirements of the program, and:**

- Project must be sited at an affordable housing property that has documented eligibility (see required documents under Applying for Incentives section); and
- Offset the usage of the affordable housing property (behind-the-meter) or its residents (Community Distributed Generation from system located on property).
- Community Distributed Generation projects on eligible properties with offsite subscribers must meet one of the following conditions:
  - > Demonstrate that no less than 40% of the project capacity will be dedicated to low-to-moderate income subscribers.
  - > The eligible property must be owned by a public housing authority or nonprofit organization and demonstrate that no less than 20% of the project capacity will be dedicated to low-to-moderate income subscribers.
  - > The eligible property must be owned by a public housing authority or nonprofit organization and demonstrate that no less than 20% of the project capacity will be dedicated to an eligible affordable housing building within the same affordable housing portfolio or development.

Community Distributed Generation projects on eligible properties will receive an additional \$0.15/W (total of \$1.15/W) if the eligible property is owned by a public housing authority or nonprofit organization and the project demonstrates that no less than 60% of project capacity will be dedicated to low-to-moderate income subscribers, with a minimum bill credit discount of 20% or equivalent; and with any remaining capacity dedicated to an eligible affordable housing building within the same affordable housing portfolio or development (including the project site). Projects submitted prior to May 14, 2020 may be modified to receive the higher incentive level if they can document that the increased LMI participation and savings requirements will be met.

Documentation for the low-to-moderate income subscriber requirements for Community Distributed Generation projects have been met must be submitted to NYSEERDA for approval and prior to the payment of the additional and base incentives. Visit [nyserda.ny.gov/solar-contractor-resources](https://nyserda.ny.gov/solar-contractor-resources) to view the Multifamily Affordable Housing Incentive Eligibility Criteria document for more detailed documentation requirements.

### **Rooftop Solar Canopy Incentive**

Additional incentives are available for newly constructed rooftop canopy structures. In addition to the standard nonresidential incentive, eligible solar electric projects will receive an extra incentive for the first 25kW of the project. Project capacity above 25kW will receive the applicable nonresidential base incentive.

Rooftop canopies are solar electric arrays elevated above the roof to mitigate obstructions such as HVAC equipment. Rooftop solar canopies must be designed to meet or exceed minimum structural code requirements while providing adequate and code compliant access and clearance that allows for individuals to walk under the structure.

The rooftop solar canopy added incentive must be identified at time of application. Any part of the system that is not a canopy will receive the base incentive. Visit [nyscrda.ny.gov/ConEdison-incentives](https://nyscrda.ny.gov/ConEdison-incentives) for information on current incentive adder levels.

### **Parking Solar Canopy Incentive**

Additional incentives are available for newly constructed solar parking canopies. In addition to the standard nonresidential incentive, eligible solar electric projects will receive an extra incentive. Parking solar canopies are elevated above parking lots or added to the open top deck of a parking garage structure to provide both shade and energy production. Parking solar canopies must be designed to meet or exceed minimum structural code requirements while providing adequate vehicle and pedestrian clearance.

The parking solar canopy added incentive must be identified at time of application. Any part of the system that is not a canopy will receive the base incentive. Visit [nyscrda.ny.gov/ConEdison-incentives](https://nyscrda.ny.gov/ConEdison-incentives) for information on current incentive adder levels.

### **Brownfield/Landfill Solar Incentive**

Additional incentives are available for ground mounted solar electric systems on brownfields or landfills for nonresidential projects. In addition to the standard incentive, eligible projects will receive an additional \$.15/W incentive. Eligible systems must be located on a designated brownfield or landfill site as defined by the New York Codes Rules and Regulations (NYCRR), Title 6, parts 375 or 360 respectively or United States Environmental Protection Agency (EPA). See [dos.ny.gov/info/nycrr.html](https://dos.ny.gov/info/nycrr.html), [epa.gov/brownfields](https://epa.gov/brownfields), or [epa.gov/landfills](https://epa.gov/landfills).

The brownfield/landfill incentive adder must be identified at time of application and a site registry number from the NYSDEC or EPA is required. If a municipal landfill is not listed by the NYSDEC or EPA, an attestation from the Authority Having Jurisdiction or similar documentation may be submitted for consideration.

### **Solar Plus Energy Storage Incentive**

Incentives for an energy storage system installed alone, or paired with a nonresidential or commercial/industrial solar system are available through the [Retail Energy Storage Incentive Program](#). If a project is pairing a solar system with an energy storage system, that Contractor must be approved in both the NY-Sun Program and Retail Energy Storage Incentive Program. The Contractor should submit the NY-Sun project application first and identify the accompanying 10-digit NY-Sun project application number when submitting the Retail Energy Storage project application.

# FINANCING

## Residential Customers

A residential customer with an existing home of four units or less may be eligible to finance the purchase of their solar electric system through NYSERDA's Green Jobs – Green New York (GJGNY) loan program using either a Smart Energy Loan or On-Bill Recovery. Residential members of CDG projects are not eligible for GJGNY financing.

To access the loan, a contractor must register with the GJGNY loan service provider. To register, visit [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources) and complete and submit the loan servicer's contractor application packet.

### **The packet consists of the following documentation:**

- Contractor Application
- Participation Agreement
- ACH Authorization Form (allows for electronic transfer of loan proceeds – optional)
- IRS form W-9
- Certificate of Insurance

Contractors should email a completed application packet to: [efs@energyfinancesolutions.com](mailto:efs@energyfinancesolutions.com). Notification of approval or request for additional information can be expected within five days.

Customers can apply online or download an application at [www.energyfinancesolutions.com](http://www.energyfinancesolutions.com).

## Nonresidential and Not-for-Profit Customers

A nonresidential or not-for-profit customer may be eligible to finance the purchase of their solar electric system through NYSERDA's GJGNY loan program. A customer who wishes to finance their system will rely on the contractor to submit a request for financing to NYSERDA on their behalf. NYSERDA will review the request for financing and provide the customer with a letter approving or denying the eligibility of the system. If the system is approved as eligible by NYSERDA, the customer must submit the approval letter to a participating lender as part of their loan application. If the customer is approved for financing by the lender, the customer will receive the loan proceeds directly from the lender. Go to [nyserdera.ny.gov/small-commercial-financing](https://nyserdera.ny.gov/small-commercial-financing) for additional information on nonresidential and not-for-profit customers.

Contractors should email a completed application packet to: [efs@energyfinancesolutions.com](mailto:efs@energyfinancesolutions.com). Application packets can be found at [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources). Notification of approval or request for additional information can be expected within five days.

Commercial members of CDG projects are not eligible for GJGNY financing for systems not located at the member's premises.

# ASSIGNMENTS

## Residential Projects

Incentive payments will be made to the contractor only. Payment assignments and/or full assignments are not allowed for residential projects.

## Nonresidential Projects

### Payment Assignments

Nonresidential projects may request payments be made to another entity. The contractor or builder must identify the payee at the time of project application submission. Payment assignments, including any eligible incentive adders, will only be made to another entity in the amount of the entire incentive. Projects requiring a payment assignment after a project application has been submitted must cancel and submit a new application. The contractor or builder, customer, and payee must sign the project application agreeing to the payee assignment. All rights and responsibilities will remain with the contractor and builder.

Once the application has been submitted, the payee will receive a payee registration form via email. This form must be completed for the application to move forward. Payees will not have access to the portal.

### Full Assignments

Full assignments are not allowed for nonresidential projects.

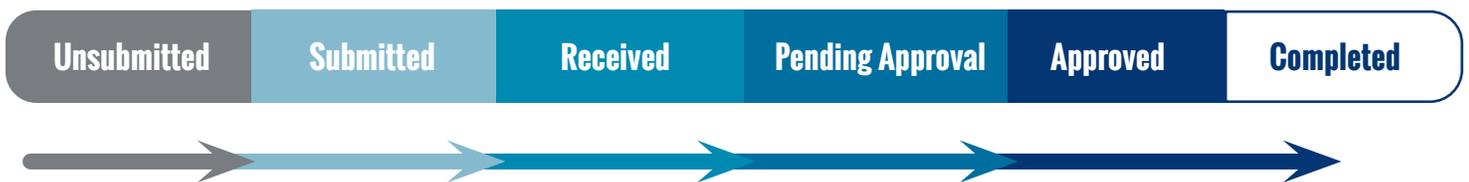
# Applying for Incentives



Approved contractors or builders can submit project applications for incentives, monitor the status of applications, and perform other program-related activities via the NYSERDA Portal.

The project application will progress through each status shown below.

## Project Application Flow



## Unsubmitted Status



All project applications are generated in and submitted through the portal. Unsubmitted status is reached once a contractor or builder generates the application. The incentive rate is not confirmed until the application has been submitted.

## Submitted Status



The project application moves to submitted status once the contractor or builder submits the application along with all the required documents to the portal. Use the chart to determine which documents are required with each project application. Once the application is submitted, the current incentive rate (at that time) is locked in.

## Document Details

### Project Documents to Reach Submitted Status

Required for All Projects: Must Submit with Project Application
Project application signed by customer and payee, if applicable
Site map (site plan)
Site photos
Electrical drawing
Shading report
Customer utility bill – only required for NYPA and municipality owned utilities
Additional Items Required for Nonresidential Projects
If CESIR required: Final CESIR, proof of 25% interconnection upgrade payment
If no CESIR required: signed and executed interconnection agreement
Coastal Assessment
SEQRA and lead agency
Additional Items Required for Projects Using GJGNY Financing
GJGNY ProForma tool
GJGNY preapproval letter
Additional Items Required for Projects Using Affordable Solar Residential Incentive
Affordable Solar income eligibility letter
Residential Savings Calculator for Affordable Solar
Additional Items Required for Projects Using Multifamily Affordable Housing Incentive
Documentation of eligibility
Additional Items Required for Projects Using Brownfield/Landfill Incentive
Brownfield/landfill eligibility documentation

### Documents Not Required with Submission: Must be Available Upon Request

Required for All Projects
Customer agreement
Customer utility bill
Permits - <b><i>required with project invoice submission</i></b>
Environmental assessment - <b><i>for projects more than 4,000 square feet</i></b>
Clipboard energy efficiency assessment - <b><i>for residential projects only</i></b>
Nonresidential energy assessment - <b><i>for nonresidential projects only</i></b>
Construction photos of the completed installation

A detailed description of each document can be found on the following pages.

## Required Documents That Must Be Submitted with Each Application

### > Project Application

The contractor or builder must submit all project applications electronically through the portal. Applications submitted to the residential and nonresidential program must list both a contractor and builder. Applications submitted to the commercial/industrial program must list a contractor only. The project application form must be signed by the customer, and if applicable, the payee.

Electronic signatures may be obtained through NYSERDA's DocuSign account, which is available in the portal. If a contractor prefers to use their own electronic signature account, the tool must be NYSERDA approved and a signature verification report must be provided. Approved electronic signature tools include DocuSign, CudaSign, EchoSign, Adobe, and Seamless Doc. **Under no circumstances is a contractor or builder permitted to sign on behalf of the customer.**

### > Site Map (Site Plan)

The site map must include:

- Location of all solar electric system components, including solar electric modules, inverters, disconnects, point of interconnection, and utility meter.
- Layout of solar electric array, showing the tilt, azimuth, and number of solar electric modules on each roof face or sub-array.
- Length of all wire runs more than 100 feet.
- Indication of which trees, if any, will be removed prior to system installation.
- For roof mounted projects, structural/mounting details stamped by a professional engineer (PE) or registered architect (RA) as required by New York State law. A stamped engineer's roof letter also meets this requirement.
- Customer name and address.

Go to [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources) for a sample site map.

### > Site Photos

The contractor or builder must take photos of the array location, from both the ground and roof level, and photos taken looking south. The application must also include photos of the existing electrical service and the proposed location of the inverter. A single aerial photo does not meet this requirement.

Go to [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources) for a sample set of site photos.

### ***Preexisting Conditions***

Photos must document preexisting conditions that do not meet current codes and standards, including damaged items. As part of the work scope, the contractor or builder will repair or replace substandard conditions that are hazardous or impact the installation of the solar electric system.

- When encountering structural deficiencies, all repairs or replacement will be done under the direction of a State licensed engineer or registered architect.
- Split bus panelboard and load centers, by any manufacturer, will not be used for supply side or load side connection, including fused and circuit breaker styles.
- Panelboard and load centers manufactured with FPE Stab-Lock® circuit breakers or Bulldog/ITE pushmatic-style circuit breakers will not be used for supply side or load side connection.
- Damaged or severely corroded panelboards, disconnects, or switchboards will not be used for supply side or load side connection.

- Missing or undersized grounding electrodes, including the grounding electrode conductor (GEC) and water meter jumpers, must be replaced.
- Existing roof damage in the area of the array must be repaired or replaced.
- When installing a supply side disconnect, at a minimum, the enclosure and the overcurrent protection device must meet or exceed the available fault current (AIC Rating) of the existing main service disconnects.

## > **Electrical Drawing**

A legible electrical diagram is required, using standard symbols to clearly describe the solar electric system. Either a one- or three-line drawing is acceptable and must indicate:

- Quantity, conductor size, and insulation type of all energized (hot) conductors, neutral/grounded conductors, and ground conductors.
- Type and characteristics of all raceways, conduit, and enclosures.
- The configuration of solar electric array into electrical strings.
- The voltage and amperage ratings of all combiner boxes, overcurrent protection devices, switches, inverters, batteries, electrical panels, and other relevant equipment as applicable. The rating of the main service panel and its main breaker must be given.
- Customer name and address.

Go to [nyserdera.ny.gov/solar-contractor-resources](http://nyserdera.ny.gov/solar-contractor-resources) for a sample wiring diagram and a list of design issues.

## > **Shading Report and Estimate of Annual Output**

### ***Shading Report***

The shading report must describe the percentage of the available solar resource the solar electric array will receive, accounting for losses from shading, array azimuth, and tilt. Projects with a total solar resource fraction (TSRF) below 70% will receive a reduced incentive, as described in System Losses under the System Technical Requirements section.

Projects submitted before July 3, 2019 may not cancel and reapply for purposes of obtaining a larger incentive. Change orders for these projects to obtain an additional incentive will not be processed.

Reports generated by Solmetric Suneye, Solar Pathfinder, Bright Harvest, Solar Census, Lightmile, HelioScope, Wiley ASSET, Aurora and Scanify are acceptable.

In cases where trees or other obstructions must be removed, an incentive payment will not be made until a new shading report has been submitted to and approved by NYSERDA.

When the solar electric system consists of multiple arrays with different azimuths, tilts, or shading profiles, a shading report must be run for each array and a weighted average taken to find the overall TSRF and must be indicated on the shading report.

### ***Estimate of Annual Output***

The estimate of annual output will be calculated in the portal using NREL's PVWatts tool, based on information provided by the contractor or builder, including system size, location, and TSRF. A separate calculation of the solar electric system's expected annual production is not necessary.

This estimate will determine if the system offsets more than 110% of the customer's annual electric use and is required for residential projects only. The contractor or builder must use this figure when completing the GJGNY ProForma worksheet for financing and the Affordable Solar residential project screening tool, if applicable.

### > **Customer Utility Bill – required only for NYPA and municipal projects**

For projects in NYPA or a municipal utility, a copy of the utility bill is required with application submission.

## **Required for Nonresidential Projects**

### > **Final CESIR – if CESIR is required**

The contractor must submit a copy of the final CESIR if the utility requires it. The following item must also be included for projects requiring a CESIR:

#### ***Proof of 25% interconnection upgrade payment***

The contractor must provide email confirmation from the utility that the 25% interconnection upgrade payment has been made.

### > **Signed and executed interconnection agreement – if no CESIR required**

If the utility determines a CESIR is not required for the project, the contractor or builder must provide a copy of the signed and executed interconnection agreement.

### > **Coastal Assessment**

The contractor must provide a screen capture from the [New York State Department of State online GIS tool](#) showing if the project site location is or is not located in a New York State coastal boundary area and/or local water front revitalization program zone.

### > **SEQRA and lead agency**

For projects larger than 4,000 sq. ft, it is the contractor or builder's responsibility to initiate the SEQRA process, including filing of the SEQRA form (found on [dec.ny.gov](#)), at the local level and ensure a lead agent is identified. The contractor or builder will be required to submit the first half of the SEQRA Form to NYSERDA.

Some projects, such as systems installed on rooftops, brownfields, and landfills, may qualify as Type II actions (do not require further SEQR review). For these projects, the contractor must provide a statement indicating why it is a Type II action.

Projects located where the local Authority Having Jurisdiction (AHJ) has adopted a moratorium that prevents local approval of the project are not eligible to apply to the program while the moratorium is in effect. For projects where the local AHJ declines to be lead agent for roof mounted systems, NYSERDA shall issue an independent review.

## **Required Documents If Using GJGNY Financing**

For residential projects using GJGNY financing, the following documents must be submitted in the portal with the project application:

- GJGNY ProForma worksheet
- Loan preapproval letter

All information in the preapproval letter and ProForma worksheet must match the information in the portal.

The contractor or builder is required to input the customer's preferred loan type (Smart Energy Loan or On-Bill), loan term (5, 10, or 15 years), and loan amount. These fields must match the customer's desired loan selection information on the ProForma tool. If there is a discrepancy in this information, the loan will not be approved.

Visit [nyserdera.ny.gov/solar-contractor-resources](#) to access a sample preapproval letter and ProForma worksheets.

## Required Documents If Accessing Affordable Solar Residential Incentive

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

- Income eligibility letter (application available at [nyserdera.ny.gov/affordable-solar](https://nyserdera.ny.gov/affordable-solar))
- Residential Savings Calculator for Affordable Solar (available at [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources))

## Required Documents If Using Multifamily Affordable Housing Incentive

For projects applying for the additional incentive for Multifamily Affordable Housing Incentive, the contractor or builder must provide proof the site is located at an affordable housing property. Go to [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources) for list of acceptable eligibility documents.

## Required Documents If Using Rooftop Canopy Incentive

For projects applying for the rooftop canopy additional incentive, the contractor or builder must include structure details on the site map.

When invoicing, the contractor or builder must provide construction photos of the total array and panel wattage and provide an as-built 3-line stamped by a New York State Professional Engineer (PE) or Registered Architect (RA).

## Required Documents If Using Parking Canopy Incentive

For projects applying for the parking canopy additional incentive, the contractor or builder must include structure details on the site map.

When invoicing, the contractor or builder must provide construction photos of the total array and panel wattage and provide an as-built 3-line stamped by a New York State Professional Engineer (PE) or Registered Architect (RA).

## Required Documents If Using Brownfield/Landfill Incentive

The brownfield/landfill added incentive must be identified at time of application. Projects that have a United States Environmental Protection Agency or NYS Department Environmental Conservation registry number must submit the eligibility documentation at time of project application submission.

## Documents Not Required with Application: Must be Available Upon Request

The following additional documents must be on file with the contractor. They may be requested by NYSERDA, but do not need to be submitted with the project application to achieve submitted status.

### > Customer Agreement

The customer agreement is an important document outlining the direct relationship between the contractor and the customer. As a condition of participation in the program, contractors must abide by the terms and conditions in the participation agreement. The customer agreement may be in the form of a purchase contract or a lease/power purchase agreement. This does not apply to CDG projects.

#### ***A. All customer agreements must be signed by both parties and include the following:***

- **Installation location:** town, street, and lot or building number.
- **Installation schedule:** realistic installation and interconnection schedule taking into account timeline requirements of NYSERDA and utility review requirements.

- **System description:** description of the solar electric system being purchased and an outline of system specifications, the make and model of major system components, identification and location of easy-to-read meter, references to UL listing, etc.
- **Estimate of annual energy output:** in kilowatt-hours and summarizing the results of the system loss analysis.
- **Applicable incentives:** customer agreement must reflect the entire amount of the anticipated NYSERDA incentive and incentives and warranties must pass to the customer.
- **Explanation and estimate of additional customer-incurred costs:** for development; installation; operations and maintenance; and commissioning of the system and a payment schedule, if applicable.
- **Assignment of responsibilities:** for scheduling or obtaining and paying for permits, inspections, or other regulatory requirements.
- **Addendum to customer agreement:** completed and signed by both the customer and the contractor.

Electronic signatures may be obtained through NYSERDA's DocuSign account, which is available in the portal. If a contractor prefers to use their own electronic signature account, the tool must be NYSERDA approved and include a signature verification report. Approved electronic signature tools include DocuSign, CudaSign, EchoSign, Adobe, and Seamless Doc. **Under no circumstances is a contractor or builder permitted to sign on behalf of the customer.**

***B. If the customer agreement is for the purchase of the system, the agreement must also include the following:***

- **Total system and itemized costs:** broken down into cost of modules; cost of inverters; balance of system (wires, racks, etc.); and labor and overhead (labor, permitting, etc.).
- **System warranty** (see System Technical Requirements section).

***C. If the customer agreement consists of a lease or power purchase agreement (PPA), it must include all items listed under "A," and the following:***

- **Total agreement cost and applicable incentives:** lease or PPA must reflect the entire amount of the approved NYSERDA incentive.
- **Production warranty** (see the System Technical Requirements section).
- **Other terms:** such as the party (customer or contractor) responsible for costs related to movement and reinstallation of the system or parts and the terms under which those actions will be taken, as well as any insurance coverage related to the system.
- **Escalation rates or factor for a lease or PPA:** clearly described.

**> Utility Bill**

For project applications, a copy of the utility bill must be available upon request. For new construction residential projects, anticipated electric usage is required and detailed calculations must be submitted for review. For projects in NYPA or a municipal utility, a copy of the utility bill is required. Bills are not required for Community Solar Projects.

## > **Permits**

The contractor or builder must have applied for all necessary permits, approvals, and certificates, to the appropriate agencies or municipalities for construction of the solar electric project before submitting the application to the program. While submission of required permits is not necessary with the project application submission, the contractor or builder must produce all documents immediately upon NYSERDA's request.

The building permit must be submitted with the final project invoice for all projects. Nonresidential projects must also include the electrical inspection certificate with final project invoice or commercial operation payment request.

All permits must clearly reference installation of the approved solar electric system at the customer site. If permits are not needed for installation, a signed letter from the town code officer, or Authority Having Jurisdiction (AHJ) must be submitted stating no building permit is required.

## > **Energy Assessment**

### ***Residential Clipboard Energy Efficiency Assessment***

For residential project applications, a clipboard energy efficiency assessment must be performed. A clipboard assessment consists of two components: an interview of the home owners to determine energy-use habits and age of the home, and a home inspection to identify energy-saving opportunities. Certification an assessment has been completed must be indicated on the project application at time of submission.

The inspection component of the assessment should take no more than 60 minutes and includes:

- Assessment of the hard-wired lighting systems and free-standing light fixtures.
- Appliance ages and whether they are ENERGY STAR® certified.
- Presence of advanced power strips.
- 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.
- Details on recent energy efficiency upgrades, such as insulation.

After the assessment, the results will be reviewed with the homeowner. A copy of the report will be left with the homeowner along with a list of Home Performance contractors and informational brochures detailing NYSERDA's energy efficiency programs.

Customers will not be required to implement energy efficiency upgrades as a prerequisite to participating in the program.

### ***Nonresidential Energy Assessment***

For all nonresidential projects, building owners are given information on benchmarking tools, such as ENERGY STAR's portfolio manager benchmarking tool. If requested by the building owner, the contractor or builder will help input utility bill information in the tool to calculate an energy-use index and, where applicable, an ENERGY STAR score. Customers will not be required to benchmark or implement energy efficiency upgrades as a program prerequisite. Energy assessment completion must be indicated on the project application at time of submission. Any CDG project is exempt from the energy assessment requirements.

### > Payee W9

For projects eligible for payment assignments, the contractor or builder must provide a copy of the payee's W9 upon request. All payees should register their entity through the portal.

### > Construction Photos

The contractor or builder is required to take construction photos for each project. NYSERDA may request construction photos for purposes of conducting a photo inspection at any time. See the Photo Inspection section for additional information.

Visit [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources) for a photo documentation sample, which contains a complete list of required photos.

## Received Status



The project application moves to received status once it has been received by the program. At this time, the application will move into the queue for technical review.

### Technical Review

Once the application has been received, the project may undergo a full technical review (design review) to confirm the project has been designed appropriately and meets all program rules. For a full description of all requirements, see the System Technical Requirements section.

If a project application has missing or inaccurate information or documents, the contractor or builder will be asked to provide the correct information in the portal.

## Pending Approval Status



When the project passes technical review, the application will automatically move to pending approval status. In this status, the purchase order is finalized and funding for the application is reserved.

# Approved Status

Unsubmitted

Submitted

Received

Pending Approval

**Approved**

Completed

When the project application and system design have been officially approved by the program, the contractor, builder, customer, and payee will receive notification to move forward with the installation of the system. The contractor is responsible for providing the customer with a copy of the approval letter, if no customer email address has been provided.

## Project Timelines

All residential and nonresidential projects have 365 days from the project approval date (the date project is marked approved in the portal) to complete the system installation and submit for final project invoice approval.

## CESIR Milestone Deliverable

For nonresidential projects, the contractor or builder must submit a CESIR milestone via the portal no later than 170 calendar days from the date the utility confirmed payment of the 25% interconnection payment. The contractor or builder must provide an executed Interconnection Agreement and proof from the utility that the remaining 75% interconnection payment has been made.

If a project is removed from the utility interconnection queue, the project must also be cancelled in the MW Block program. If the project reapplies to the utility interconnection queue, that project may reapply to the MW Block Program.

Projects that do not meet the specified deadlines and have no extension on file will be in jeopardy of cancellation.

## Actions in Approved Status

While in approved status, the contractor or builder may submit a project cancellation request, project extension request, project modification request, or project invoice request.

### Project Cancellation Requests

Requests to cancel a project must be done through the portal by submitting a request for cancellation.

Should a project wish to move forward after cancellation, the contractor or builder must submit a new project application. In this case, the incentive level and all rules in effect at the time the new application is submitted will apply.

### Project Extension Requests

To request an extension, the contractor or builder must submit a project extension request in the portal. Projects that exceed the completion deadline date will be in jeopardy of cancellation.

NYSERDA will approve extensions on a limited case-by-case basis. Project extensions will be granted for **legitimate and verifiable reasons which are beyond the control of the contractor, builder, or customer**. No other requests will be considered.

### *Residential Project Extension Requests*

Project extensions may only be granted once for each residential project. If approved, the extension will allow an extra 90 days to complete the project, bringing the total to 455 days.

### ***Nonresidential Project Extension Requests***

Project extensions may be granted twice, in 180-day increments each, for nonresidential projects.

If applicable, the contractor or builder must submit proof that an application has been filed at New York State Education Department.

If approved, the first extension will allow an extra 180 days to complete the project, bringing the total to 545 days from the original project approval date. A second extension may bring the total to 725 days from the original project approval date. Nonresidential projects above 1MW may be eligible for an additional extension if necessary.

### **Project Modification Requests**

A project modification request must state the original equipment quantity and catalog numbers, the proposed equipment quantity and catalog numbers, changes in cost, and any changes in the array configuration or wiring.

Customer signature is required for any project modification request that results in change in approved funding amounts. Electronic signatures may be obtained through NYSERDA's DocuSign account, which is available in the portal. If a contractor prefers to use their own electronic signature account, the tool must be NYSERDA approved and a signature verification report must be provided. Approved electronic signature tools include DocuSign, CudaSign, EchoSign, Adobe, and Seamless Doc. **Under no circumstances is a contractor or builder permitted to sign on behalf of the customer.**

The contractor, builder, customer, and payee if applicable, will receive email approval for project modification requests. The contractor is responsible for providing the customer with a copy of the project modification approval letter, if no customer email address has been provided. All other changes will be approved in the portal. Please check the portal before contacting NYSERDA regarding project modification approvals.

Any system modifications or equipment changes must be submitted in the portal as a project modification request and approved by NYSERDA before project invoice or commercial operation payment is submitted. Failure to submit a change modification may result in revocation of the incentive reservation or nonpayment of the incentive.

### ***Residential Project Modifications***

Residential project modification requests resulting in a larger system size are eligible to receive an increased incentive. NYSERDA will review the request and calculate the new incentive or loan amount (if applicable).

Residential projects funded at a previously higher incentive level have the option of accepting the existing incentive award "as is" or recalculating the entire array at the current incentive level.

### ***Nonresidential Project Modifications***

Nonresidential project modification requests resulting in an increase to system size will not earn an additional incentive; however, projects that result in a smaller system size being built, may result in a smaller incentive.

## **Project Invoice Requests – Incentive Payments**

### ***Residential Incentive Payments***

The contractor receives the total project incentive in one installment. To request the incentive payment, the project invoice must be submitted in the portal for approval.

Customer signature is only required on invoices for projects using GJGNY financing. Electronic signatures may be obtained through NYSERDA's DocuSign account, which is available in the portal. If a contractor prefers to use their own electronic signature account, the tool must be NYSERDA approved and include a signature verification report. Approved electronic signature tools include DocuSign, CudaSign, EchoSign, Adobe, and Seamless Doc. **Under no circumstances is a contractor or builder permitted to sign on behalf of the customer.**

**To receive the incentive payment, the project invoice must include:**

- Signed project invoice – for projects using GJGNY financing only
- Utility interconnect permission to operate (PTO) letter
- Building permit

***Financing-Only Projects – Residential***

The total GJGNY loan amount approved by NYSERDA will be paid on approval of the project invoice. Customer signature is required on project invoices for financing only projects. Once approved, NYSERDA's loan originator is notified to release the loan.

**To release the loan, the project invoice must include:**

- Signed project invoice – for projects using financing only
- Utility interconnect permission to operate (PTO) letter
- Building permit

***Nonresidential Incentive Payments***

The contractor or payee receives the total project incentive in one installment. To request the incentive payment, the project invoice must be submitted in the portal for approval.

For projects already invoiced as of June 14, 2018, payments will continue to be made in four installments as originally awarded. One at commercial operation and three annual performance payments, as program rules specific at time project application was submitted. For approved projects under the Commercial/Industrial Program, payments will be 50% at commercial operation and two annual performance payments, as specified by the program rules in effect at the time project application was submitted. Any projects still in the approved status will receive one installment payment.

**To receive the incentive payment, the project invoice must include:**

- Utility interconnect permission to operate (PTO) letter
- Building permit
- Electrical Inspection Certificate

## Completed Status



The project has achieved completed status once the system has been installed and interconnected and final payment has been approved by NYSERDA.

# System Technical Requirements



## Solar Modules

All solar electric modules must be certified as meeting all applicable standards of the Institute of Electrical and Electronics Engineers (IEEE) and UL 1703 and detailed in the California Energy Commission (CEC) eligible list found in the portal. The manufacturer is responsible for accurate updates to the list.

## Inverters

All inverters must be certified as meeting all applicable standards of IEEE and UL and approved by the IOU that the system will be interconnected to.

The CEC eligible list can be found in the portal. The manufacturer is responsible for accurate updates to the list.

## Solar Production Monitoring Equipment

Each solar electric system must have the ability to record solar production in kilowatt-hours. The contractor has the option of providing this information from a hardwired solar electric production meter, online monitoring system, inverter display recorded production, or other approved method.

When a hardwired meter is provided, it will have the capability to display instantaneous AC power and cumulative total AC energy production. Such meters must have a minimum accuracy of 5% and a certificate of compliance from the manufacturer. Remanufactured utility-style meters are permitted if they are certified as calibrated to the applicable ANSI standards for electricity metering. The meters must include numerical digital displays, or analog (easy-read type) in watts or kilowatts for power and kilowatt-hours or megawatt-hours for energy.

The listed metering and data acquisition and monitoring equipment requirements are separate from the utility meters, which are used to determine customer credits on their bills. The utility meters should be coordinated with the local utility as part of the interconnection process.

## System Losses

Project applications will indicate all potential output losses (actual kilowatt-hours generated after all equipment losses are applied) associated with shading, system orientation, tilt angle, etc., and must be analyzed and detailed by the contractor or builder for each system. Solar electric systems shaded by trees or installed on a flat roof will have less than optimal outputs. All impacts on system output must be quantified and considered during the review of the project application submitted by the contractor or builder. The incentive level for a project will be reduced in proportion to output losses when losses from factors, such as shading and orientation, exceed 30% of ideal kilowatt-hour output, as illustrated in this table.

Shading and Orientation Loss	0 - 30%	31%	32%	33%	34%	35%	36%	37%	38%	39%	40%
Incentive Level	100%	69%	68%	67%	66%	65%	64%	63%	62%	61%	60%

Combined losses from tilt, azimuth, and shading must be shown on the shading report as a Total Solar Resources Fraction (TSRF) figure

## Grid Connection

To be eligible for incentives, all solar electric systems must be grid-connected, end-use applications. End-use means the system is connected on the customer’s side of the electric meter, and electricity generated offsets the customer’s electricity purchases in accordance with current net metering laws and utility guidelines. Projects may benefit from remote net metering of multiple utility accounts or be structured as a Community Distributed Generation (CDG) project.

## Approved System Design

Solar electric systems must be installed in accordance with the design and system components submitted in the application and approved by NYSERDA. However, NYSERDA’s approval of the project application does not guarantee the system design, engineering, construction and/or installation of the solar electric system is proper or in compliance with any particular laws (including patent laws), regulations, codes, or industry standards.

Solar electric systems not installed according to the NYSERDA-approved design must have a project modification submission on file. The project modification must be approved before the incentive payment or commercial payment is made. Upon inspection, if it is determined the system is not installed as approved, the contractor may not be eligible for future incentive payments.

## Interconnection

The contractor or builder is required to ensure all approved solar electric systems have an appropriate interconnection agreement that meets New York State standard interconnection requirements. They must also ensure all approved systems are installed in compliance with that interconnection agreement.

## Other Electrical Components

All other electrical components of each solar electric system including, but not limited to, charge controllers, wiring, and metering equipment must be new equipment and certified as meeting the requirements of all relevant national, New York State, local codes and standards, and any additional requirements of the local Authority Having Jurisdiction (AHJ).

## Structural Requirements

The contractor is responsible for determining that a building is structurally able to support the addition of a solar electric system without overstressing the structure or increasing the load beyond acceptable national and State limits.

## Compliance with Laws and Codes

All approved solar electric systems, system components, and installations must comply with all manufacturers' installation requirements, applicable laws, regulations, codes, licensing, and permit requirements. This includes, but is not limited to, the New York State Environmental Quality Review (SEQR); the New York State Uniform Codes; the National Electric Code (NEC); New York State's Standard Interconnection Requirements; and all applicable State, city, town, or local ordinances or permit requirements, and any additional requirements of the local Authority Having Jurisdiction (AHJ).

Information on New York City fire codes and the NYC Fire Code Section 504.4 can be found at:

- Fire Code-Section FC504:  
<http://bit.ly/bpVFKD>
- Application for a Variance to Fire Code FC504:  
<http://bit.ly/cRLNjp>

## System Warranty for Purchase Agreements

The contractor must provide the purchaser of the solar electric system with a full five-year transferable warranty. The warranty must cover all components of the generating system against breakdown or degradation in electrical output of more than 10% from the original rated electrical output. The warranty will cover the full costs, including labor, repair, and replacement of defective components or systems. The contractor is responsible for providing warranty coverage in a timely manner regardless of the level of support from the equipment manufacturer. Requests for warranty services must be responded to within 72 hours and repairs completed within 30 days. The contractor must also provide the customer with information on any additional or extended warranties that may be applicable.

## Production Warranty for PPA/Leases

The contractor will offer a production guarantee to the customer for the initial term of the agreement (at minimum). This will provide the customer with compensation if the system produces less than the guaranteed output as specified in the lease or PPA agreement. Guaranteed output may not allow cumulative degradation in electrical output of more than 1% per year from the original rated electrical output for the initial term of this agreement. Under no circumstance will customers be responsible for any labor and repair or replacement costs of defective components or systems over the initial term of the agreement. Should the customer sell the property at which this solar facility is located, the production guarantee is fully transferable to a new lessee, consistent with the terms of the lease or PPA agreement.

# Quality Assurance and Compliance



NYSERDA maintains the integrity of its program through an independent Standards and Quality Assurance team, which manages the Quality Assurance (QA) system for the program.

**The Quality Assurance Policies and Procedures Manuals provide details on the QA system and is available at [nyserdera.ny.gov/solar-contractor-resources](https://nyserdera.ny.gov/solar-contractor-resources).**

The QA program has several components, including a review of qualifications and credentials, paperwork audits, establishment of program standards, and comprehensive field and photo inspections. QA photo and field inspections include verification of the contracted scope of work, accuracy of the site analysis, comparison of installation to submitted design drawings, National Electric Code, International Building Codes with New York State Uniform Code Supplement compliance, and the overall delivered quality of the solar electric installation. The NYSERDA Standards and Quality Assurance team, or its representatives, may make a reasonable number of visits to the customer site before, during, and after installation of a solar electric system to assess overall compliance.

## Inspection of Completed Projects

NYSERDA selects specific completed projects for QA inspections following a rational sampling protocol. The protocol utilizes a strategic sampling of completed projects with rates primarily based on the contractor's and builder's current program status and recent photo and field inspection scores.

The purpose of the QA inspection is to provide NYSERDA with an opportunity to evaluate the accuracy of the site analysis and design paperwork and verify the system was installed according to all program requirements. The QA inspection also includes selected health, safety, and performance items, and specific compliance items per applicable code.

NYSERDA may select any completed project at any point in the future for a photo or field inspection based on customer complaints, warranty-related issues, or a review of the work done by the contractor or builder under status review or program disciplinary action. All contractors and builders are encouraged to perform in-house quality control of their projects.

# PARTICIPATION STATUS

## Provisional Status

Contractors and builders in provisional status meet entry level program requirements for credentials and experience but have not met the minimum QA requirements as described to move to full status.

Project applications submitted by contractors or builders in provisional status will receive both an initial review and technical review; and completed installations will be subject to increased QA oversight. The guidelines of the provisional status are as follows:

- Provisional contractors or builders will be listed on NYSERDA's website and may be denoted as such.
- Provisional contractors may not submit more than 15 project applications total, until three completed projects have received a passing QA inspection (photo or field).
- Following the completion of the third project and the related QA inspections, NYSERDA will conduct a formal review to evaluate a change in status. Evaluation for a change to full status will be based on the quality and consistency of all submitted work that is fully compliant and meets credentialing requirements.

## Full Status

Contractors and builders who have met all program requirements for credentialing, experience, and installation quality will be placed in full status. Existing contractors and builders who have previously demonstrated consistent quality through the program will be placed in full status. The guidelines of the full status are as follows:

- Full contractors and builders will be listed on NYSERDA's website and may be denoted as such.
- Full contractors and builders must meet program standards for timely responses to NYSERDA communications and QA field inspection corrective action requests.
- Full builders are required to have an appropriately credentialed individual on staff (the Builder Qualifications section). Failure to satisfy this requirement and present appropriate documentation will result in an automatic change to probation status.

## Probation Status

Probation status is reserved for contractors and builders that have failed to meet the requirements of the program. Probation is prescriptive in nature, in that NYSERDA defines specific results to be achieved in a designated timeframe. During probation, a contractor or builder can still submit project applications, but is restricted from signing a relationship agreement with another participating contractor or builder.

### **A contractor or builder may be placed in probation status for any of the following reasons:**

- Violation of program rules or ethical standards.
- Failure to consistently deliver completed projects that pass the QA field or photo inspection standard.
- Failure to take effective corrective actions on a critical or major deficiency or a repeated incidental or minor deficiency in work quality or performance.
- Corrective action requests that have not been responded to or remain unresolved for more than 30 days.
- A lapse in required credentials.

**The probation period will not be less than 30 days. While in probation status, the contractor or builder:**

- Will remain on the NYSERDA website.
- May continue to submit new project applications, subject to restrictions based on the reason for the probation status.
- Will be subject to higher QA inspection levels as outlined in the program manual.
- Must remediate all issues related to probation, as directed by NYSERDA.
- Must submit, in writing, an agreed-upon action plan designed to ensure future violations are avoided.
- Must demonstrate successful results through a specified number of completed projects.

Upon satisfactory completion of the action plan and all remediation and review of probation period QA results, NYSERDA will determine whether to return the contractor or builder to full status, continue the probation period, or move to suspended or terminated status.

## **Suspended Status**

Contractors and builders who have failed to adequately respond to terms of the probation status action plan, or who have committed serious violations of program rules, will be placed in suspended status.

**A contractor or builder may be suspended if they:**

- Fail to adequately fulfill the terms of the probation action plan.
- Are placed on probation for a second time in 12 months.
- Are under investigation for or have been determined to have engaged in practices that have put the public or program at risk.
- Have one or more projects not completed by the deadline and no project extension is on file.
- Have outstanding and unresolved requests for return of incentive to NYSERDA due to failure to meet program requirements.
- Fail to provide backup documents when requested.
- Have submitted documentation with falsification of any required items, including but not limited to, permits, approvals, and customer signatures.
- Have a lapse in required credentials while on probation status.
- Fail to consistently deliver completed projects that pass the QA field or photo inspection standard.

**While in suspended status, the contractor or builder:**

- Will be removed from the NYSERDA website.
- Will not be allowed to submit new project applications to the program.
- Must complete any work that is in progress when the partner is placed in suspended status.
- May not represent themselves as a participating contractor or builder, except in the execution of remedial action.
- May be directed by NYSERDA to remediate issues related to the suspension.
- May be required to submit, in writing, an agreed-upon action plan designed to ensure future violations are avoided.

A contractor may not submit project applications using a builder in suspended status. Likewise, a builder may not submit project applications or install for a contractor in suspended status.

Suspended contractors and builders will either progress to probation or full status upon satisfactory completion of the specified remedial activities and resolution of issues related to the suspension or will be terminated from program participation. Nothing in this status relieves the contractor or builder of the responsibility to fulfill any outstanding obligations to the program or program customers as directed by NYSERDA.

**Terminated Status**

Contractors and builders who have failed to respond to prescriptive action plans and disciplinary measures, or who have committed serious violations of the program rules may be terminated.

**A contractor or builder may be terminated from the program if they:**

- Have had a suspended status for more than 30 days and have been unresponsive or failed to adequately fulfill the terms of their suspension action plan.
- Have had their credentials lapse while suspended.
- Submit falsified documents or unauthorized signatures to the program.
- Commit illegal actions while participating in the program.
- Are convicted or have a principal who is convicted of a criminal charge that casts the program in a negative light or calls their integrity or workmanship into question.
- Are in gross violation of program installation standards.
- Repeatedly invoice for uninstalled upgrades.
- Fail to meet the terms of the provisional period.

A contractor will not be allowed to submit project applications using a builder in terminated status. Likewise, a builder will not be allowed to submit project applications or install for a contractor in terminated status. Neither can represent themselves as a participating contractor or builder except in the execution of remedial action.

Contractors and builders in terminated status are prohibited from participation in this or other NYSERDA programs. Customers with incomplete projects will be notified of the termination and may be offered such remedies as NYSERDA deems appropriate. NYSERDA may notify the New York State Attorney General, the New York State Department of Labor, the Better Business Bureau, or others, of the decision to terminate the contractor or builder from the program. Further, the officers and owners of the terminated contractor or builder are prohibited from being or becoming officers or owners of any other program partner. Nothing in this process relieves the contractor or builder of the responsibility to fulfill any remaining obligation to the program or its customers.

## Inactive Status

Contractors and builders may be declared inactive if they have not had an approved project in the program over a 24-month period of time. They will be removed from the website, no longer receive email notifications, nor be eligible for incentives or financing options. Should they wish to participate in the future, they may reapply under the rules in place at that time.

## Status Review Process

NYSERDA continually reviews all contractor's and builder's performance in the program to determine if a change in status is necessary.

### **NYSERDA administers change in program status in the following ways:**

- Request a meeting with the contractor or builder.
- Issue a notice of program violation or compliance resulting in contractor or builder status change.
- Reserves the right to take immediate action on program violation when warranted.
- Contractor or builder has 5 business days to dispute the program violation notification.

# Addendum

*Applies to projects in Upstate, Con Ed and Long Island regions* Version 1.1



In response to the COVID-19 emergency and New York State on PAUSE Executive Order, NYSERDA is making the following changes to the NY-Sun Programs:

## COVID-19 Construction Activities Policy

Contractors must affirm and implement the [NYS Department of Health Interim Guidance for Construction Activities during the COVID-19 Public Health Emergency](#) for all work undertaken after the restrictions put in place by the NY on PAUSE Executive Order are lifted for the applicable region and sector. Failure to follow these requirements may result in program penalties, up to and including termination from the program.

## Project Completion Deadline Extension

NYSERDA has extended all NY-Sun project completion deadlines by six (6) months for the Residential & Nonresidential and Commercial & Industrial programs, including the PSEG Long Island Residential Solar Plus Energy Storage Incentive. This includes all projects submitted prior to March 30, 2020 and will extend to projects submitted through the end of the effective date of the NY on PAUSE Executive Order and any subsequent amendments for the applicable region and sector. Where applicable, the NY-Sun incentive milestone requiring submission of proof of full interconnection payment to the utility is also extended. Notwithstanding the extension of the NY-Sun deadlines, projects must still meet the New York State Standard Interconnection Requirements (SIR) as temporarily adjusted by the April 6, 2020 [Order Suspending Certain Interconnection Payment Deadlines](#).

If a project extension confirmation email is required for documentation purposes, contractors can do so by using the “Request Extension” option in the Portal. This step is not required to receive the extension and no projects will be canceled during this period due to the previous deadlines displayed in the Portal.

# Two-Payment Option

The NY-Sun Residential & Nonresidential Program will allow projects in Approved status that were submitted no later than March 30, 2020 to request the project incentive in two installments. Contractors may choose to submit an invoice for 50% of the incentive value for each eligible project in the NYSERDA portal. This request must be made prior to the end of the effective date of the NY on PAUSE Executive Order and any subsequent amendments for the applicable region and sector. Contractors may alternatively elect to continue to receive project incentives in a single installment upon project completion, as described in the Program Manual. Project modification requests resulting in an incentive decrease below what was already paid out will be subject to reimbursement through a supplier debit.

## For Residential projects:

### **To receive the initial 50% incentive payment, the project invoice must include:**

- The initial incentive payment, 50% of the total approved incentive for the project, will be available for all projects in Approved status that were submitted no later than March 30, 2020. Projects receiving the PSEG Long Island Residential Solar Plus Energy Storage Incentive are not eligible for the two-payment option.

### **To receive the final 50% incentive payment, the project invoice must include:**

- Utility interconnection permission to operate (PTO) letter.

## For Nonresidential projects:

The initial incentive payment, equal to 50% of the total approved incentive for the project, will be paid upon invoice and approval of required documentation for projects where all approved system components were delivered to a customer's site no later than March 30, 2020 and all permits and approvals have been obtained.

### **To receive the initial 50% incentive payment, the project invoice must include:**

- Building permit
- Proof construction has commenced for nonresidential projects:
  - > Timestamped photo documentation that inverters and modules have been delivered to the project site; and
  - > Paid invoices for the project inverters and modules; or
  - > Other documentation deemed acceptable by NYSERDA.

### **To receive the final 50% incentive payment, the project invoice must include:**

- Utility interconnect permission to operate (PTO) letter; and
- Electrical inspection certificate.

***Contractors who elect to utilize the two-payment option are required to abide by the language below:***

Any (residential or nonresidential) Project that received an initial partial incentive payment as a result of NYSERDA's response to the NY on PAUSE Executive Order, is required to strictly comply with the terms and conditions of the Participation Agreement and the Program Rules. For the Project that fails to meet the project completion timeline as established by the Participation Agreement and the Program Rules (inclusive of the extension provided in this Addendum), NYSERDA reserves the right to withhold the balance of the incentive for that Project or any other project submitted by the Project Contractor, and the Project Contractor may be suspended or terminated from program participation. Upon determining that the Project has in fact failed to meet the project completion timeline, NYSERDA may exercise the authority under Section 18 of the State Finance Law, to invoice the Project Contractor, in addition to the amount paid in upfront incentive, the greater of: (a) interest on the amount due accruing from 5 days after the Invoice Date, computed at the underpayment rate charged by the Commissioner of Taxation and Finance pursuant to subsection (e) of section 1096 of the State Tax Law less four percentage points; or (b) a late payment charge of \$10.00 dollars. NYSERDA is also authorized to charge a collection fee, not to exceed 22% of the invoice amount, to cover the cost of processing, handling and collecting the invoice amount if not paid within 95 days of the invoice date. If the invoice is not paid by the established due date, NYSERDA is authorized to refer the account to a private collection agency or the New York State Attorney General for collection. Further, Section 171-f of the State Tax Law authorizes NYSERDA to certify past-due legally enforceable debt to the New York State Department of Taxation and Finance for collection by offset of tax overpayments or other payments due from the State. Section 19 of the State Finance law allows NYSERDA to charge a \$20.00 fee for dishonored checks.

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

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit [nyserda.ny.gov](http://nyserda.ny.gov) or follow us on Twitter, Facebook, YouTube, or Instagram.



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