

New Solar Homes Partnership Application Process

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California Solar Initiative

CPUC's California
Solar Initiative
1,940 MW
\$2.16 B

**CEC's New Solar
Homes
Partnership**
360 MW
\$400 M

Publicly-Owned
Utility Solar
Programs
700 MW
\$784 M



NSHP Program Update

- Estimated available funding as of 4/4/13 is \$57.4M with about \$18.5M of funding requests currently under review
- New Guidebook 7 as of January 1, 2014
- New 2013 Title 24 Energy Efficiency Building Code in effect
- Register on the Go Solar or CECPV calculator server list for program updates



New Solar Homes Partnership Program Eligibility



Project Requirements

- Project located in one of four investor-owned electric service territories (PG&E, SCE, SDG&E, BVES)
- Solar energy system is at least 1 kW AC or larger and interconnected with the utility grid
- The electricity from the system will offset the end-use customer's electric load
- The system is composed of new, certified components from the Energy Commission's Lists of Eligible Equipment and is covered by a 10-year warranty



Project Requirements

- **New residential construction:**
 - A residential building is considered “new” if the entire building structure is subject to current Title 24 Standards
 - Solar permit should be pulled prior to the issuance of the certificate of occupancy, but no later than **60** days after
- Photovoltaic (PV) system and energy efficiency measures are third- party verified



Energy Efficiency Requirements

- **2013 Building Energy Efficiency Standards**
 - Code-Compliant: Meets the 2013 Standards before...
- **2008 and 2013 Building Energy Efficiency Standards**
 - Tier 1: minimum 15 percent beyond the Standards for combined space heating, cooling and water heating
 - Tier 2: minimum 30 percent beyond the Standards for combined space heating, cooling and water heating and 30 percent for space cooling
 - Non-Residential: Tier 1=10%, Tier 2=15%
 - Energy Star® Appliances



Retailers and Installers

- Contractors installing solar systems must have a California State A, B, C-10 or C-46 license. Solar systems may also be self-installed
- Retailers and installers may self-register with the Energy Commission via the Go Solar California website, <http://www.gosolarcalifornia.ca.gov/database/addcompany.php>



Qualified Project Types

Custom Homes

Large
Developments

Projects/Phases of 6 or
more homes
AND

Solar on at least 50% of
those homes

Small
Developments

Projects/Phases of less
than 6 homes
AND/OR

Solar on less than 50%
of homes.

Project Types Continued

Common Areas

Areas in the development that are reserved for the use of the residents.

Example: Recreation Center, Pool House, etc.

Affordable Housing

At least 20% of the project units must be reserved for extremely low, very low, lower, or moderate income households for a period of at least 10 years.



Incentive Structure

- One-time, upfront incentive based on the expected performance of the system (EPBI) and tied to the achieved energy efficiency level
- Incentives decline as megawatt targets are achieved:
<https://www.newsolarhomes.org/RebateLevels.aspx>
- The incentive amount is calculated using the CECPV Calculator
- Incentives limited to the first 7.5 kW AC for a residential unit AND
- Incentive Amount Cap
 - Affordable Housing Residential Unit Project: Limited to 75% of the Total System Cost
 - Market-Rate Housing Project: Limited to 50% of the Total System Cost



Incentive Levels



***RESIDENTIAL UNITS ONLY**

****AFFORDABLE HOUSING: COMMON AREAS, TAX EXEMPT VS. NON-TAX EXEMPT**



New Solar Homes Partnership Process



Before Applying to NSHP

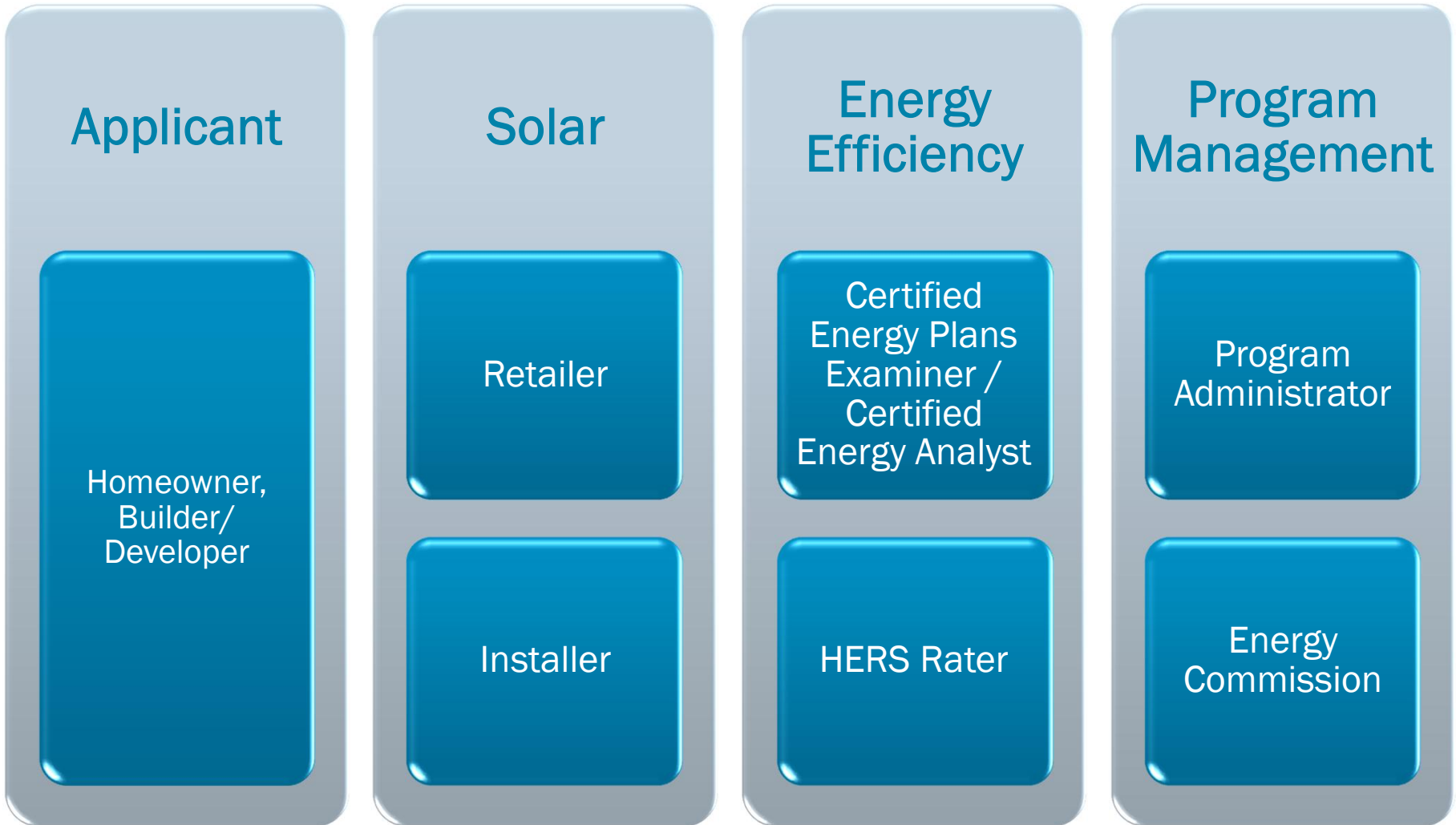
- Read the NSHP Guidebook
- Consider what stage of construction your project is in:
 - Can project be designed to meet the minimum energy efficiency requirement?
 - Eligible for incentives with California Advanced Homes Program?
 - Can everything in your project be verified by a HERS rater?



Complete NSHP Reservation Application and Payment Claim...

- Meet all NSHP program requirements and administrative expectations
 - Have consistent names, site addresses, and equipment on all supporting documentation
 - Have all of the required signatures on the documents
- Use the newest versions of documents and calculation tools supplied and/or authorized by the California Energy Commission
- Include all required supporting documentation with the reservation application or payment claim package

Involved Parties



The Basic Process



Reservation

- Applicant submits reservation application package
- Program administrator reviews and approves. Incentive is reserved for applicant



Installation and Verification

- Applicant installs PV system and energy efficiency measures.
- HERS rater verifies and tests measures installed.
- Building department finalizes solar permit.
- Applicant applies for interconnection



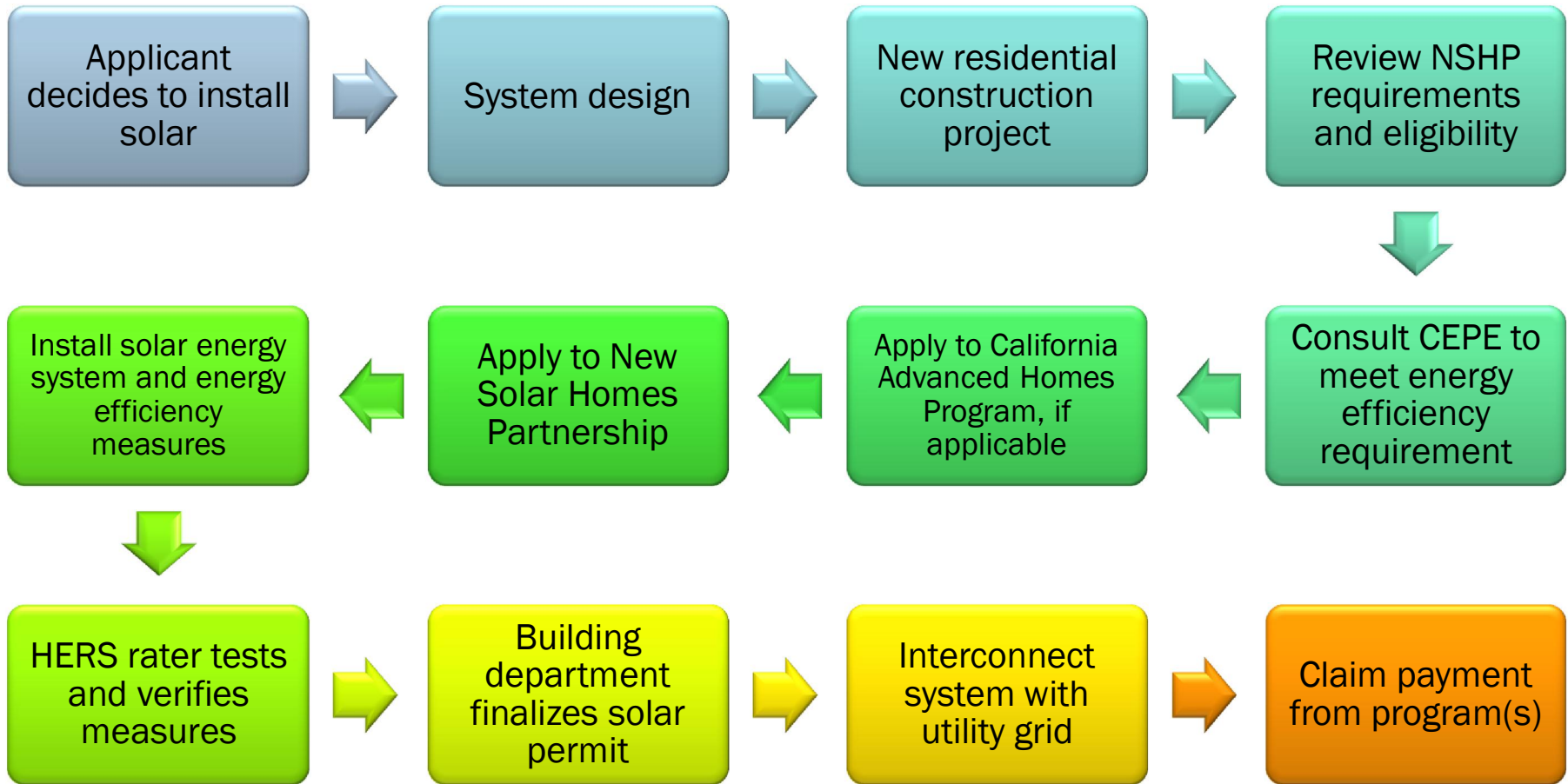
Payment Claim

- Applicant submits payment claim package to incentive program(s).
- Program administrator reviews and approves. Incentive is paid.





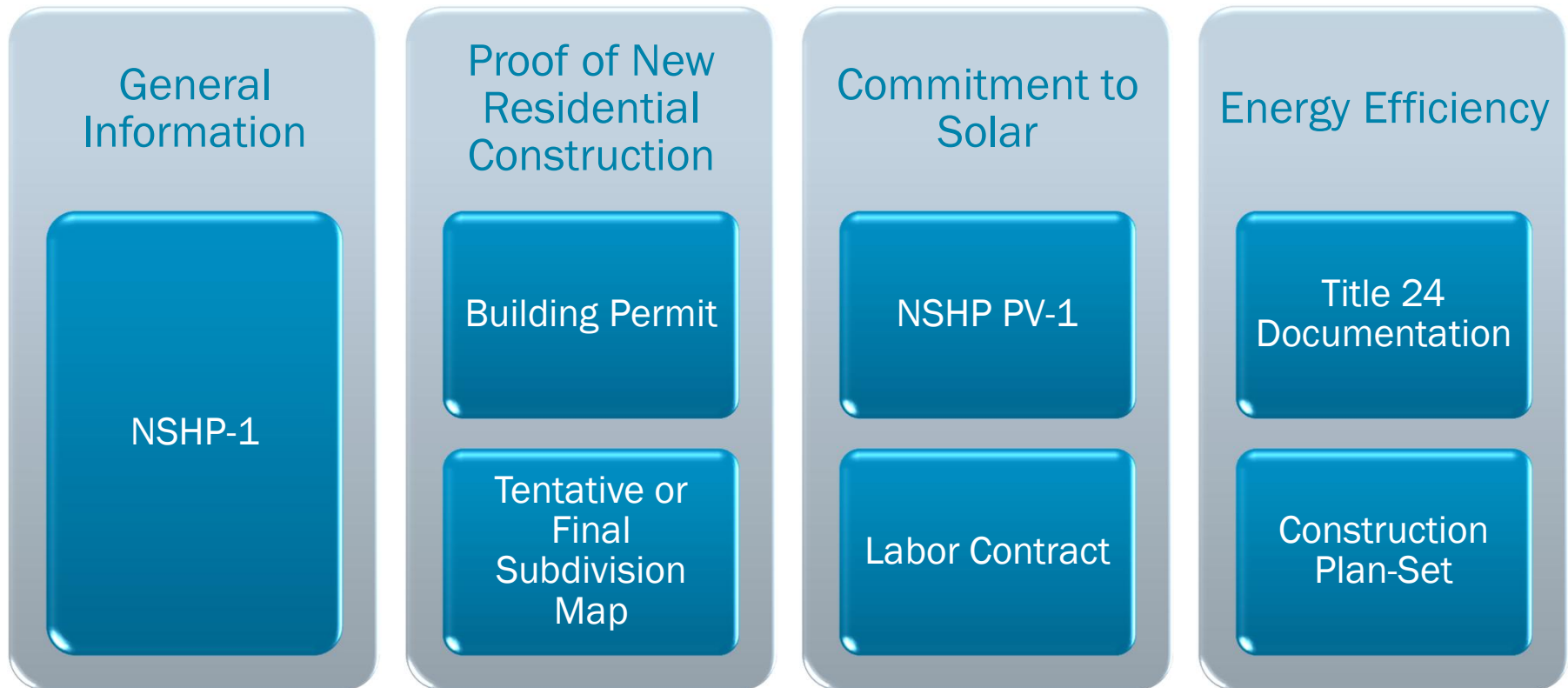
The Detailed Process





Reservation Application Overview

Reservation Application Overview



Additional Information for Certain Project Types

- Regulatory Agreement (Affordable Housing)
- System Size Justification



Reservation Application Form (NSHP-1)

What It Is:

- Provides general information on the project (applicant, location, housing type, utility, HERS rater, payee)
- Designation of an authorized representative
 - Signs the NSHP Payment Claim Form (NSHP-2)

Who Provides It: Applicant



New Residential Construction Building Permit OR Final Subdivision Map

What It Is:

- Document from the city or county stating that a new home is being constructed on the site where the solar energy system is being installed
- A document that illustrates where all of the homes participating in the NSHP are located. The document should be recorded with the city or county

Who Provides It: Applicant



Certificate of Compliance Form (NSHP PV-1)

What It Is:

- It documents the system specifications and provides an estimated incentive amount
- Each NSHP PV-1 comes with two digital files, .her and .emf. The .her file must be submitted in addition to the NSHP PV-1
- No signature required

Who Provides It: Solar Retailer/Installer



Installation Contract

What It Is:

- The installation contract specifies the work the solar installer will be performing on the project
- Indicates the specific system components to be installed on the project
- Identifies estimated NSHP incentive amount
- Self-installs?

Who Provides It: Solar Retailer/Installer



Energy Efficiency Documentation – Title 24 Report (CF-1R/PERF-1)

What It Is:

- A document that shows the energy efficiency measures being installed on the project. CF-1R is for residential projects. PERF-1 is for non-residential projects. Input file must also be submitted

Who Provides It: This depends on the project's energy efficiency level and the applicable Building Standards.

Reminder: A Certified Energy Plans Examiner/Certified Energy Analyst must be certified for the appropriate residential type and Building Standards that the home is constructed under



Energy Efficiency Documentation – Construction Plan-Set

What It Is

- A compilation of the plans that shows what will be installed on the home.
 - Architectural, Electrical, Mechanical, and Plumbing
 - A window and door schedule that shows sizes and includes ALL skylights (if not shown on the floor plan)
 - Elevation, wall, roof, floor construction assemblies
 - Floor finish schedule (if CF-1R shows High Mass Design)
 - A site plan with a North arrow

Who Provides It: Applicant



Regulatory Agreement

What It Is:

- A document generally between a developer and either the city/county, TCAC or other funding sources that requires the developer to restrict a certain number of units in the project for affordable housing

Who Provides It: Applicant

Reminder: Affordable Housing Projects Only



System Size Justification

What It Is:

- Documentation showing that the solar energy system is sized such that its expected performance is no greater than 100 percent of the building's on-site estimated annual electricity consumption
- Acceptable documents are the estimated annual electricity consumption of the residential unit based on a detailed energy use calculation, or a letter detailing expected energy consumption

Who Provides It: Certified Energy Plans Examiner (CEPE), Certified Energy Analyst (CEA), architect, engineer, C-10 licensed electrical contractor.

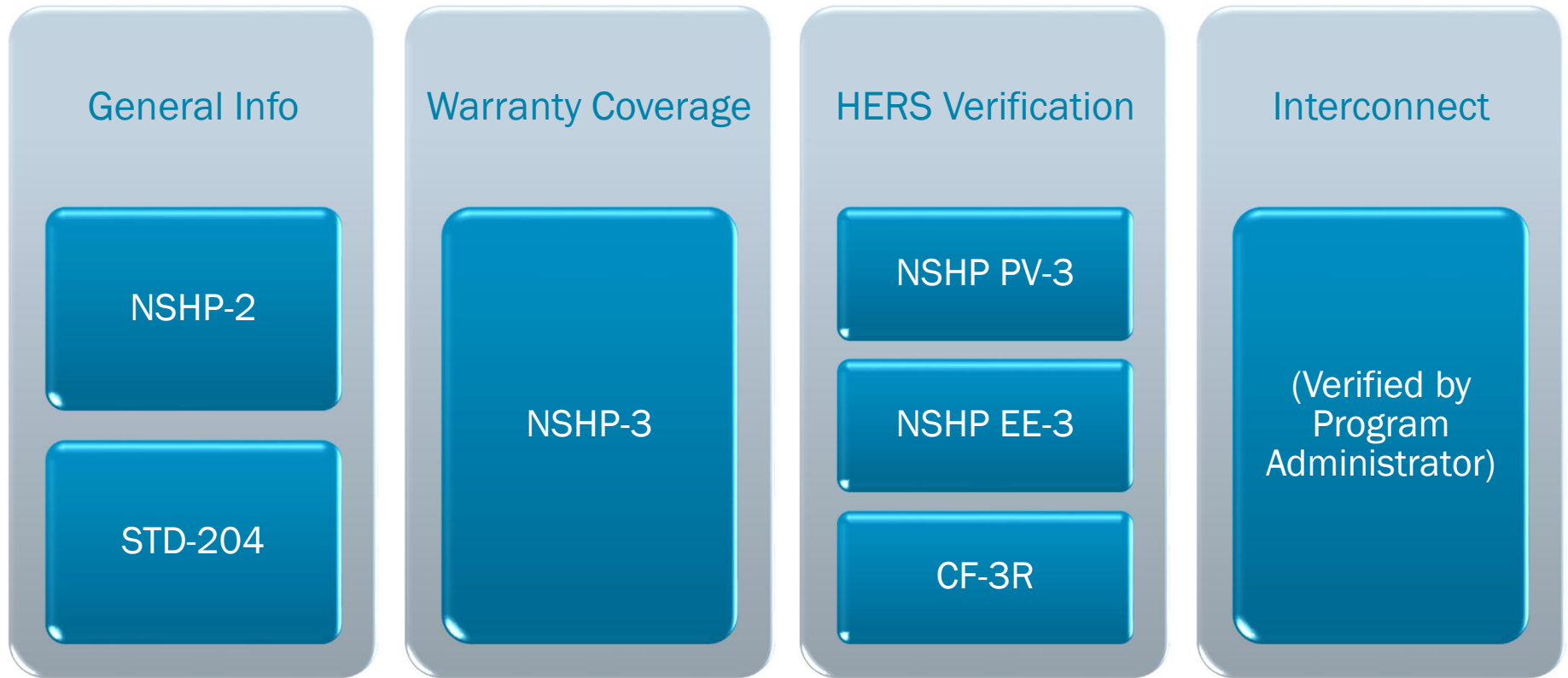
When to Provide: For Common Area systems greater than 7.5kW and if requested by Program Administrator



Payment Claim Overview



Payment Claim Overview



Additional Information for Certain Projects

- Lease Agreements or Power Purchase Agreements
- Building Permit Sign-Off





Payment Claim Form (NSHP-2)

What It Is:

- A document that confirms the incentive amount for the site
- Requests data on various components of the NSHP process
- Allows the payment to be reassigned
- Original, wet signatures required on form

Who Provides It: Applicant



Payee Data Record (STD-204)

What It Is:

- A standardized State document that must be completed by any entity that will be receiving funds from the State
- If requested by the Program Administrator, applicant may also need to submit a W-9 Form

Who Provides It: Applicant or Payee



Ten Year Warranty Form (NSHP-3)

What It Is:

- This document indicates what is being covered by the ten-year warranty
- Manufacturer's warranties for modules and inverters also required if only system installation is covered by 10-year warranty

Who Provides It: Solar Retailer/Installer



Lease Agreement/PPA

What It Is:

- Agreements for systems that are not purchased
- An agreement made with end-use customer (i.e. builder or homebuyer)
- Requirements
 - Term > 10 Years
 - Identify NSHP incentive amount and benefit.
 - Options at end of lease term
 - Repayment

Who Provides It: Solar Retailer/Installer



HERS Verification Forms (CF-3R, NSHP EE-3, NSHP PV-3)

What It Is:

- Forms verifying that the newly constructed home contains all of the energy efficiency features listed during the plan-check
- Forms verifying that the solar energy system was installed according to the design and shading criteria entered into the PV Calculator
- Acceptance Tests verify measures from a PERF-1 and require applicants to directly submit to NSHP.

Who Provides It: Verified in the HERS Registry by the Program Administrator in most cases.



Interconnection Letter

What It Is:

- A letter from the utility providing authorization for the solar energy system to be interconnected to the utility grid
- VNEM allocations should match the NSHP-1

Who Provides It: Verified in the utility interconnection database by the Program Administrator



Final Building Permit Signoff

What It Is:

- Documentation provided by the building department that verifies the **building** meets the required California Building Code
 - Inspection Record with signatures, Certificate of Occupancy

Who Provides It: Applicant

Required for all projects?



Final System Cost Documentation

What It Is:

- Documentation that clearly identifies the final amount paid or legally incurred by the **system owner** for the purchase and installation of the solar energy system.
 - **NO** financing fees, origination fees, processing fees, administrative fees, etc.

Who Provides It: **Solar Retailer/Installer**



NSHP Resources

Go Solar California Website

- <http://www.gosolarcalifornia.ca.gov/index.php>

NSHP Online Application Tool

- <https://www.newsolarhomes.org>

NSHP Forms and Documents

- <http://www.gosolarcalifornia.ca.gov/documents/nshp.php>
- <http://www.energy.ca.gov/title24/>



Contact Information

40

NSHP Program Administrators

- <http://www.gosolarcalifornia.ca.gov/contacts/consumers.php>

PG&E Application Management

- www.pge.com/nshp
- solar@pge.com 1-877-743-0113

Questions?





Appendix: NSHP Guidebook Changes



Program Changes – Market Rate Housing

Old (6 th Edition)	New (7 th Edition)
Solar as an Option	Replaced with Large Developments
Solar as Standard	Replaced with Large Developments
Build out schedule	Replaced with reservation decrease schedule
Progress report	Replaced with reservation decrease schedule



Program Changes – Energy Efficiency

Old (6 th Edition)	New (7 th Edition)
2005 and 2008 Building Energy Efficiency Standards	2013 Building Energy Efficiency Standards
Tier I and Tier II	Code compliant, Tier I and Tier II
Plan Check waived for projects participating in their utility’s energy efficiency new construction program.	Plan Check also waived for: <ul style="list-style-type: none">•Code-Compliant projects•Tier I and Tier II projects that comply with 2013 Standards and provide 2013 compliance documentation signed by a CEA certified for the 2013 Standards.



Program Changes – General

	Old (6 th Edition)	New (7 th Edition)
Solar Permit Date	May be issued up to 180 days after issue date of certificate of occupancy	Reduces the amount of time to 60 days
Equipment installation before reservation	No more than 24 months before	No more than 6 months before
Lease/PPAs	If it stated a rebate amount less than requested, only that amount could be paid unless an amendment was submitted	Allows NSHP incentive when claiming payment to exceed the NSHP amount identified in the lease/PPA by up to 10% without an amendment





Program Changes – General

	Old (6 th Edition)	New (7 th Edition)
Incentive Rates	Tier I, Tier II, and Affordable housing	Added Code-Compliant.
Incentive decline process	Decline will occur when cumulative MW capacity reaching “plan check ready” equals the MW reserved for that level’s target	Decline will occur when the cumulative MW capacity of reservations submitted equals MW target for that level
Energy Commission’s Database of Solar Contractors, Installers and Sellers	All companies that sell and/or install solar system equipment must be registered	Removed



Program Changes - General

Old (6 th Edition)	New (7 th Edition)
Final Subdivision Map Required	Tentative subdivision map acceptable
All projects must submit an equipment purchase agreement	Self-installs must provide an equipment purchase agreement
Reservation period for VNEM projects depended on the housing type	Reservation period for all virtual net metered projects is 36 months
Revised incentive amount calculated at the time the revised calculator was submitted to PA	Calculate revised incentive amount upon submittal of the complete NSHP-2 and complete documentation supporting the changes to project
For projects with multiple sites/systems, funding is tied to each site	Funding is tied to the project, not to the sites.



Program Changes – General

Old (6 th Edition)	New (7 th Edition)
No correction period allow for reservations	Complete reservation applications and payment claim packages found to contain minor errors or discrepancies will be provided with 10 business days to provide clarifications
Complete payment claim package must be submitted on or prior to reservation expiration date.	Complete NSHP-2 must be submitted on or prior to reservation expiration date.
No partial payment option	Partial Payment Allowed
Can not add additional sites to an existing reservation	Applicants may add solar system sites to a project with a valid, unexpired reservation.
Signature required on CF-1R-PV/NSHP PV-1	Removes signature requirement





Program Changes – New Form Names

Form Name	Old (6 th Edition)	New (7 th Edition)
NSHP Certificate of Field Verification/Additional Energy Features Checklist	CF-4R-EE	NSHP EE-3
Certificate of Installation	CF-6R	CF-2R
Certificate of Field Verification and Diagnostic Testing	CF-4R	CF-3R
CECPV Calculator Output form	CF-1R-PV	NSHP PV-1
Installation Certificate Form/PV Installation Form	CF-6R-PV	NSHP PV-2
PV Field Verification and Diagnostic Testing Form	CF-4R-PV	NSHP PV-3