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California Energy Commission

STAFF REPORT

New Solar Homes Partnership Program Quarterly Progress Report 2020 Fourth Quarter

Technology and Incentives Office Renewable Energy Division

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ABSTRACT

The New Solar Homes Partnership (NSHP) program contributes to California's continuing efforts to promote and develop clean, renewable electricity generation. This report provides an update on key NSHP program statistics for the fourth quarter of 2020. This report is produced in accordance with California Public Utilities Commission Decision 16-06-006, "Decision Funding Authorizations and Related Measures for Continuation of the New Solar Homes Partnership Program," dated June 9, 2016.

Keywords: New Solar Homes Partnership, NSHP, Commission, California Public Utilities Commission, CPUC, Decision 16-06-006, market-rate, affordable housing

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CHAPTER 1: Introduction and Background

The New Solar Homes Partnership (NSHP) program was created as part of a statewide solar program called the California Solar Initiative (CSI). Senate Bill 1 (Murray, Chapter 132, Statutes of 2006) established three goals for the CSI:

- 1. Install 3,000 megawatts (MW) of solar generating capacity
- 2. Establish a self-sufficient solar industry
- 3. Install solar energy on 50 percent of new California homes by 2020

To reach these goals, the CSI established the California Solar Initiative incentive program, the NSHP, and various publicly owned utility (POU) programs.

Launched in January 2007, the NSHP program is the California Energy Commission's (CEC) component of the CSI and is focused on new home construction in investor-owned utility (IOU) service territories. The program provides financial incentives for homeowners, builders, and developers to include solar energy systems on new, energy-efficient homes. The NSHP program goal under the CSI is to incentivize the installation of 360 MW solar capacity.

Participation in the NSHP program is a two-step process in which applicants reserve funding for a project prior to construction and receive an incentive payment upon completion of the project. Once the reservation application is approved, applicants have the reservation period to finish construction, install the solar energy system, interconnect with the utility grid, complete third-party field verifications, and submit an incentive payment claim package to the CEC.

A reservation application may cover a single site or multiple sites depending on the project. The NSHP program has multiple project types¹ defined in the *NSHP Guidebook, Eleventh Edition* including:

- Large development developments of six or more residential units with solar on 50 percent or more of dwelling units (also referred to by Solar as Standard).
- Custom homes a project consisting of a single residence.
- Affordable housing projects projects including affordable housing residential unit projects and affordable housing common area projects.
- Common area projects projects where the solar systems are installed on the nonresidential portions of market-rate residential developments.

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¹ The NSHP does not classify project types based upon single or multi-family construction. Either construction types may be used in Large Development, Affordable Housing, or other types as appropriate.

- Virtual net metered² projects projects including affordable housing and market-rate housing projects.
- Solar not as standard projects where solar is installed on less than 50 percent of the residential units.
- Small developments developments with fewer than six residential units.

Funding Deadlines

Senate Bill 83 (Committee on Budget and Fiscal Review, Chapter 24, Statutes of 2015) established an encumbrance deadline of June 1, 2018, for the NSHP program and a payment disbursement deadline of December 31, 2021. To fulfill these requirements, the CEC established a reservation application submittal deadline of April 1, 2018, and an incentive payment claim submittal deadline of August 31, 2021.

2 *Virtual net energy metering* is a tariff arrangement allowing the electricity produced by a single solar energy system to be credited to multiple units, in which each has an electric meter.

CHAPTER 2: 2020 Fourth Quarter Program Statistics

Reservations

After the April 1, 2018, NSHP program reservation application deadline, the CEC discontinued accepting reservation applications. This reservation application deadline was established to meet the June 1, 2018, encumbrance deadline, provided for in Senate Bill 83 (Committee on Budget and Fiscal Review, Chapter 24, Statutes of 2015). No additional reservations were accepted for new projects or adjustments to existing encumbrances after June 1, 2018. Table 1 displays the active reservations as of December 31, 2020.³

Table 1: Active Reservations as of December 31, 2020

Project Type	# of Systems	Encumbrance Value	Capacity (MW)
Large Development	26,243	\$45,677,002	95.04
Affordable Housing	249	\$11,289,303	7.52
Custom Homes	0	\$0	0.00
Other ⁴	8	\$1,017,058	1.22
Totals	26,500	\$57,983,363	103.78

Source: California Energy Commission

³ Since the program is not accepting new reservations, Table 1 displays active reservations as of December 31, 2020. Reservations listed in this table were granted prior to the June 1, 2018 encumbrance deadline.

⁴ Other consists of NSHP project types: Common Area, Virtual Net Metered, Solar Not as Standard, and Small Developments.

Incentive Payment Claims and Program Activity by Project Type

For a site to receive an incentive payment claim approval, the solar energy system must be installed, grid-connected, third-party verified, and the building must meet or exceed the energy efficiency standards proposed in the applicant's reservation. Table 2 displays the number of incentive payment claims approved in the fourth quarter of 2020.

Table 2: Incentive Payment Claims Approved October 1, 2020 to December 31, 2020

Project Type	# of Systems	Amount of Funds Paid	Capacity (MW)
Large Development	1,331	\$1,259,929	4.00
Affordable Housing	14	\$809,891	0.63
Custom Homes	1	\$4,665	0.005
Other ⁶	0	\$0	0.00
Totals	1,346	\$2,074,485	4.63

Source: California Energy Commission

Incentive Payment Claims Received and Approved

Table 3 shows the total number of incentive payment claims received and approved in the fourth quarter of 2020.

Table 3: Incentive Payment Claims Received and Approved October 1, 2020 to December 31, 2020

	Received	Approved ⁷
Incentive Payment Claims ⁸	1,487	1,346

Source: California Energy Commission

Incentive Payment Claim Processing Time

The NSHP team receives, documents, processes, and approves the incentive payment claim for transmittal to CEC Accounting Office for processing with an average processing time of 3-6 weeks. The CEC Accounting Office requires an additional 6-8 week processing time forpreparation and transmittal to the State Controller's Office. The State Controller's Office then processes for disbursement of incentive money within an average timeline of 2-4 weeks.

⁵ Custom home installation capacity from October 1, 2020 to December 31, 2020 was 4.19 KW

⁶ Other consists of NSHP project types: Common Area, Virtual Net Metered, Solar Not as Standard, and Small Developments.

⁷ The volume of incentive payment claims approved may exceed the volume received due to unapproved incentive payment claims carrying over from the previous quarter.

⁸ Each incentive payment claim represents one site or system.

Overall Progress Toward Meeting Program Goals

A goal of the NSHP program is to install 360 MW of solar energy capacity on new housing by December 31, 2021. As of December 31, 2020, the NSHP program has supported the installation of 217.53 MW and has 103.78 MW of reserved capacity. Therefore, the NSHP program is on track to install 321.31 MW of solar PV by 2021. Figure 1 represents this data.

Due to applicant selected changes in final building construction, not all reserved projects will meet NSHP program requirements. Projects or sites unable to meet NSHP program requirements are disapproved. Sites disapproved, withdrawn, or expired are removed from program metrics and do not count towards the program goal tracker.

350 300 System Capacity (MW) 250 200 321.31 150 MW 217.53 100 MW 103.78 50 MW 0 **Combined Capacity** Installed Reserved

Figure 1: Progress Toward NSHP Program Goals as of December 31, 2020

Source: California Energy Commission

CHAPTER 3: Funding Reporting

Established in 2007, the NSHP program was allocated \$400 million from the Public Goods Charge (PGC) account. The PGC account is funded from fees collected from IOU ratepayers plus funding from the Renewable Resource Trust Fund (RRTF). To address a projected shortfall in program funding, the California Public Utilities Commission's Decision 16-06-006 provided for funds up to \$111.78 million. This funding was collected from IOU ratepayers. The expenditure of this IOU funding was restricted by a requirement that PGC funding must first be exhausted prior to the expenditure of any of this IOU based funding.⁹

The accounting of RRTF/PGC and IOU funding through the fourth quarter of 2020 is represented in Table 4 below.

Table 4: NSHP Program Funding Encumbered and Paid

Funding Source	Initial Allocation	Encumbered ¹⁰	Paid
RRTF/ PGC Funds (Millions)	\$288.22	\$57.99	\$230.23
IOU Funds (Millions)	\$111.78	\$8.27	\$0
Total (Millions)	\$400.00	\$66.26	\$230.23

Source: California Energy Commission

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⁹ Previously reserved and encumbered but undisbursed RRTF funding may become available due to changes in projects. Funding initially reserved for projects are reassessed during the payment claim. Final project incentives are based upon installed and third-party verified construction. Decreases in project incentives from the reserved amounts create additional funding availability.

¹⁰ The encumbrance balances allocated to the funding source RRTF/PGC and IOU are based on the incentive paid and the funding reserved as of December 31, 2020.

CHAPTER 4: Conclusion and Outlook

During the fourth quarter of 2020, CEC staff approved 1,346 incentive payment claims representing \$2.07 million in incentives and 4.63 MW of solar capacity.

The NSHP incentive applicant base consists of a diverse group of affordable housing applicants, custom homeowners, builders, and major program stakeholders. To continue maintaining a positive business relationship, CEC staff continuously provide support and assistance in navigating the NSHP application process. These efforts help demonstrate and support the CEC staff's commitment to exceptional service.

In this time of uncertainty brought forth by COVID-19, the CEC staff have continued efforts to support the programs applicants. Efforts such as, further digitizing the application process and additional outreach exhibit the CEC staff's continual commitment to advancing renewable energy. To support program applicants, the CEC passed a resolution in December 2020 to assist applicants with reservation expiration dates from October 1, 2019, through December 31, 2020, by extending the project expiration date to March 31, 2021. For more information on the resolution, visit the NSHP web page at https://www.energy.ca.gov/nshp and click on the "Limited Program Time Extension" tab.