| **DOCKETED** |
|-------------------|-------------------|
| **Docket Number:** | 16-NSHP-01 |
| **Project Title:** | Continuation of the New Solar Homes Partnership Program |
| **TN #:** | 225857 |
| **Document Title:** | New Solar Homes Partnership Program Quarterly Progress Report for January 1 - March 31, 2018 |
| **Description:** | NSHP 1st Quarter 2018 Progress Report |
| **Filer:** | Lucio Hernandez |
| **Organization:** | California Energy Commission |
| **Submitter Role:** | Commission Staff |
| **Submission Date:** | 11/8/2018 11:25:08 AM |
| **Docketed Date:** | 11/8/2018 |
California Energy Commission

Kevin Wong
Primary Author

Elizabeth Hutchison
Contributor

Sherrill Neidich
Program Supervisor

Armand Angulo
Office Manager
RENEWABLE ENERGY DIVISION

Natalie Lee
Deputy Director
RENEWABLE ENERGY DIVISION

Drew Bohan
Executive Director

DISCLAIMER

Staff members of the California Energy Commission prepared this report. As such, it does not necessarily represent the views of the Energy Commission, its employees, or the State of California. The Energy Commission, the State of California, its employees, contractors and subcontractors make no warrant, express or implied, and assume no legal liability for the information in this report; nor does any party represent that the uses of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Energy Commission nor has the Commission passed upon the accuracy or adequacy of the information in this report.
ABSTRACT

The New Solar Homes Partnership (NSHP) Program is integral to California’s continuing efforts to promote and develop clean, renewable electricity generation. This report provides a quarterly update on key NSHP Program statistics, including program status and activity for market-rate and affordable housing projects, and available funds for incentives. This report is produced in response to the June 9, 2016, California Public Utilities Commission (CPUC) Decision 16-06-006, “Decision Funding Authorizations and Related Measures for Continuation of the New Solar Homes Partnership Program.”

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

Please use the following citation for this report:

TABLE OF CONTENTS

Abstract ........................................................................................................................................................... i

Table of Contents ......................................................................................................................................... ii

List of Figures ............................................................................................................................................... ii

List of Tables ................................................................................................................................................. ii

CHAPTER 1: Introduction and Background ............................................................................................. 1

CHAPTER 2: 2018 1st Quarter Program Statistics ................................................................................... 3

Reservation Applications .......................................................................................................................... 3
Payment Claims .......................................................................................................................................... 4
Reservation Applications and Payment Claims Submitted and Approved ...................................... 4
Overall Progress Toward Meeting Program Goals .............................................................................. 5

CHAPTER 4: Budget Reporting .................................................................................................................. 6

CHAPTER 5: Conclusion and Outlook ..................................................................................................... 7

LIST OF FIGURES

Page

Figure 1: Progress Toward NSHP 360 MW Goal .................................................................................... 5

LIST OF TABLES

Page

Table 1: Reservation Applications Approved From January 2018 Through March 2018 ............... 3
Table 2: Payment Claims Approved From January 2018 Through March 2018 ............................... 4
Table 3: Number of Reservation Applications and Payment Claims Submitted By Applicants and Reviewed From January 2018 Through March 2018 ........................................................................ 4
Table 4: Current NSHP Funding ................................................................................................................. 6
Senate Bill 1 established the California Solar Initiative (CSI) with three goals: (1) installing solar energy systems with a generating capacity equivalent to 3,000 megawatts (MW), (2) establishing a self-sufficient solar industry within 10 years, and (3) placing solar energy systems on 50 percent of new California homes by 2020. The CSI is being implemented by the California Energy Commission (Energy Commission), the California Public Utilities Commission (CPUC), and the state’s local publicly-owned electric utilities in different programs that share common goals.

The NSHP program is the Energy Commission’s component of the CSI and is limited to new home construction located in IOU service territories. Launched in January 2007, the program provides financial incentives for homeowners, builders, and developers to include solar energy systems on new, energy-efficient homes. The NSHP goal under the CSI is 360 MW of installed solar capacity by the end of the program.

The NSHP program has multiple project types which are defined in the *NSHP Guidebook, Eleventh Edition*, and include:

- Solar as Standard - Defined as developments of six or more residential units with solar on 50 percent or more of dwelling units.
- Custom Homes – A project consisting of a single residence.
- Affordable Housing Projects - Projects that include affordable housing residential unit projects and affordable housing common area projects.
- Common areas Projects - Projects where the solar systems are installed on the nonresidential portions of market-rate residential developments.
- Virtual-Net-Metered Projects: These projects include affordable housing and market-rate housing projects.
- Solar Not as Standard - Defined as projects where solar will be installed on less than 50 percent of the residential units.
- Small developments - Defined as developments with less than six residential units.

---

1 *Virtual net energy metering* is a tariff arrangement that allows a property owner to allocate credits from a single solar energy system to multiple units, in which each has an electric meter.
Funding Deadlines

Senate Bill 83 established an encumbrance deadline of June 1, 2018, for the NSHP, and a payment deadline of December 31, 2021. In order to fulfill these requirements, the Energy Commission established a reservation submittal deadline of April 1, 2018, and payment claim submittal deadline of August 31, 2021, for the NSHP. Therefore, the first quarter of 2018, which is the period covered by this report, was the last quarter under which new reservation applications could be submitted for the NSHP.
CHAPTER 2: 
2018 1st Quarter Program Statistics

Reservation Applications

Participation in the NSHP program is a two-step process in which applicants 1) reserve funding for a project in advance and 2) 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 a payment claim package to the Energy Commission. A single reservation application may cover a single site or multiple sites depending on the project.

Reservation applications are approved based on the date they were submitted and funding is reserved for an 18- or 36-month reservation period, depending on the project type as described in the NSHP Guidebook, Eleventh Edition.

Table 1 shows the breakdown of reservation applications that were approved in the first quarter of 2018 (January 1-March 31).

<table>
<thead>
<tr>
<th>Project Type</th>
<th># of Systems</th>
<th>Encumbrances</th>
<th>Capacity (kW AC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar as Standard</td>
<td>15,817</td>
<td>$28,449,372</td>
<td>59,570.94</td>
</tr>
<tr>
<td>Affordable Housing</td>
<td>39</td>
<td>$2,940,865</td>
<td>2,069.68</td>
</tr>
<tr>
<td>Custom Homes</td>
<td>24</td>
<td>$101,998</td>
<td>231.18</td>
</tr>
<tr>
<td>Other</td>
<td>81</td>
<td>$492,263</td>
<td>794.16</td>
</tr>
<tr>
<td>Totals</td>
<td>15,961</td>
<td>$31,984,498</td>
<td>62,665.96</td>
</tr>
</tbody>
</table>

Source: California Energy Commission
Payment Claims

For a project to receive an incentive payment, the solar energy system must be completely installed, grid-connected, third-party verified, and the building must comply with the energy efficiency standards proposed in the applicant’s reservation. Table 2 displays the number of payment claims approved in the first quarter of 2018.

Table 2: Payment Claims Approved from January 2018 Through March 2018

<table>
<thead>
<tr>
<th>Project Type</th>
<th># of Systems</th>
<th>Incentive Amount</th>
<th>Capacity (kW AC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar as Standard</td>
<td>1,730</td>
<td>$2,988,544</td>
<td>4,542.77</td>
</tr>
<tr>
<td>Affordable Housing</td>
<td>6</td>
<td>$532,045</td>
<td>371.62</td>
</tr>
<tr>
<td>Custom Homes</td>
<td>17</td>
<td>$73,085</td>
<td>126.66</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>$43,458</td>
<td>81.05</td>
</tr>
<tr>
<td>Totals</td>
<td>1,776</td>
<td>$3,637,132</td>
<td>5,122.11</td>
</tr>
</tbody>
</table>

Source: California Energy Commission

Reservation Applications and Payment Claims Submitted and Approved

Table 3 shows the total number of reservation applications and payment claims submitted and reviewed during the first quarter of 2018.

Table 3: Reservation Applications and Payment Claims Submitted and Processed January 2018 Through March 2018

<table>
<thead>
<tr>
<th></th>
<th>Applications Submitted</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation Applications</td>
<td>690</td>
<td>300</td>
</tr>
<tr>
<td>Payment Claims</td>
<td>1,807</td>
<td>1,776</td>
</tr>
</tbody>
</table>

Source: California Energy Commission
Overall Progress Toward Meeting Program Goals

The overall NSHP Program goal is to install 360 MW of solar energy capacity on new residential housing by the end of the program. As of March 31, 2018, the NSHP has supported the installation of approximately 115 MW.

As shown in Figure 1, the NSHP has 421 MW of reserved, installed and under review reservations, approximately 297 MW reserved, approximately 9 MW under review reservations, and approximately 115 MW of installed systems.

Figure 1: Progress Toward NSHP MW Goal (All Years)

The chart is based off a total MW value of 421 MW.

Source: California Energy Commission
CHAPTER 4:  
Budget Reporting  

During the first quarter of 2018, all Renewable Resource Trust Fund (RRTF) monies, also referred to as Public Goods Charge (PGC) funding, was accounted for, having either been used for payment claims or encumbered in approved reservations. Pursuant to California Public Utilities Commission Decision 16-06-006, up to $111.78 million in funding was made available for the NSHP from the Investor Owned Utilities, referred to here as IOU funding.

The table below provides the balance of each fund at the end of the reporting period.

<table>
<thead>
<tr>
<th>Fund Type</th>
<th>Available Funding</th>
<th>Reserved</th>
<th>Under Review</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRTF/PGC Monies (Millions)</td>
<td>$282</td>
<td>$282</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IOU Monies (Millions)</td>
<td>$111.78</td>
<td>$24.32</td>
<td>$87.46</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: California Energy Commission

California Public Utilities Commission Decision 16-06-006 requires that all RRTF/PGC funds be expended before any IOU funds are used for NSHP payments. Although projects may initially be encumbered with IOU funding, all RRTF/PGC funds will be paid prior to the use of IOU funds for payment claims. Since some projects are not completed, or are completed for less than the reserved amount, and some reservations expire, the encumbrances may be reduced. Following the June 1, 2018, encumbrance deadline, no additional encumbrances or increases to encumbrances will be made.
CHAPTER 5:  
Conclusion and Outlook

During the first quarter of 2018, the NSHP prepared for the June 1, 2018 encumbrance deadline as set forth in Senate Bill 83 (2015), and the related application submission deadline of April 1, 2018. Projects submitted by the April 1, 2018, deadline are guaranteed review before the June 1, 2018 encumbrance deadline, but staff will continue to review applications submitted after the April 1, 2018 deadline, if time allows.

The first quarter of 2018, saw a significant increase in the volume of reservation applications submitted. Staff prioritized the review of reservation applications to ensure that all submitted projects were reviewed before the June 1, 2018, encumbrance deadline. In the first quarter of 2018, 300 reservation applications were reviewed representing 15,961 systems and nearly 63 MW of solar capacity.

Staff also experienced an increase in the number of payment claims submitted during this time period. Based on the increases in volumes of reservation applications over the last few quarters, staff anticipate that payment claim submittal rates will continue to increase. Program participants have also indicated that due to a focus on reservation applications in the first quarter, payment claim workload has been deferred and claim submittal volumes will increase in the second quarter of 2018.

Based on all reservation applications under review, approved, completed, and paid projects, the NSHP program has the potential to support the installation of 421 MW of solar capacity in California.