Comments of Southern California Edison to the Solar Equipment Lists RFI, Docket Number 18-SOLAR-01

Additional submitted attachment is included below.

Southern California Edison (SCE) Feedback on Request for Information – CEC's Solar Equipment Lists

Question Prompt:

The California Energy Commission (CEC) seeks input and comments on how the CEC's Solar Equipment Lists are used by participants. The information will help the CEC determine whether to make any modifications. To facilitate information gathering and to better identify use cases, staff developed the questions below and seeks feedback from stakeholders by **April 14, 2023**.

Background

The CEC developed the Solar Equipment Lists under Senate Bill 1 (Murray, Chapter 132, Statutes of 2006) to establish criteria and standards for solar incentive programs under the California Solar Initiative, such as the New Solar Home Partnership Program (NSHP). The lists include photovoltaic modules, inverters, meters, and related solar energy equipment that meets national safety and performance standards. The lists are available online at https://solarequipment.energy.ca.gov/Home/Index.

These lists provide information and data that facilitates research, modeling, and utility grid connection services for consumers and state and local programs. Given the widespread use of the data, the CEC seeks input about how stakeholders utilize the Solar Equipment Lists and the type of value they provide.

Request for Information

Feedback is requested on the questions below. Stakeholders are not required to respond to every question in this request for information (RFI) but are encouraged to respond specifically to those questions closest in line with their knowledge and experience.

List of Questions (Due 4-14-23):

1. What entity, if any, do you represent or are you affiliated with?

   Response: Southern California Edison (SCE)

2. What is your/your organization's primary use of the Solar Equipment Lists?

Response: SCE uses the list to validate make/model numbers, ratings (including PTC[1] and Inverter Efficiencies), as well as their current UL1741 certifications for our Rule 21 interconnection programs. The list also provides an industry-wide point of reference which ensures consistency between both utility and those submitting interconnection applications such as applicants, contractors, and/or customers.

3. How often do you download or reference the Solar Equipment Lists from the Solar Equipment Lists website at https://solarequipment.energy.ca.gov/Home/Index?

   Response:

   a. Less than 1 time per month

   b. 1 to 3 times per month

   c. More than 3 times per month

   d. Other - please explain: The lists are integrated into PowerClerk, SCE's Net Energy Metering Online Interconnection Application System, and are also utilized by SCE's Generation Interconnection Processing Tool and accessed regularly for every interconnection application. Multiple divisions within SCE also access the list, including SCE's Distribution Generation Interconnection group. SCE updates the lists referenced by PowerClerk and the Grid Interconnection Processing Tool three times per month, within one business day following the CEC publishing updates.

4. Please provide information on how the Solar Equipment Lists assist you/your organization with everyday business needs:

   Response:

   i. How do they integrate with your operations?
       a. The lists are integrated into SCE's online application systems and internal processes and procedures.
   ii. How would you describe the value of the lists to your efforts?
       a. The lists add to the accuracy and efficiency of the applications. When the applicant provides information manually, there is a greater opportunity for the submitted information to be inaccurate. This leads to inefficiencies and delays in the overall application process. The list removes the need for SCE individually validate the equipment details.
   iii. If applicable, approximately how many interconnection applications/permits to operate do you process, on a monthly basis, using the data on the Solar Equipment Lists?

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[1] PVUSA (Photovoltaics for Utility Scale Applications) Test Conditions

a. Based on the last quarter (Q1 2023), SCE has received an average of 32,000 NEM applications per month, which all referenced the Solar Equipment list, whether it was by our systems integration or manual lookup.

5. Roughly how much time do you save on a weekly or monthly basis by using the data on the Solar Equipment Lists, as opposed to not having the lists as a reference?

> **Response:** The lists are critical to the renewable energy application process for both the applicants and the administrators. Without the availability of the lists, SCE's internal processes would be negatively impacted, un-streamlined and overall, more manual in nature.
>
> As a high-level example, SCE provides two situationally dependent extremes to give an *estimated* range when reviewing a project. On the low end, it could take 2 hours to review certification submitted by the customer given no issues with the submission. Subsequently, those certifications would need to be archived, stored, and added to a list to mirror the process the CEC currently uses. On the high end, it could take up to 12 hours to review certification. This is driven by cases where the manufacturer may need to be contacted if discrepancies or questions arise (e.g., if results need to be clarified) and to account for additional meetings/communication. Given these two situations and leveraging the response to question 4:
>
> $$2 \text{ hours} \times \frac{32,000 \; NEM \; Applications}{Month} = 64,000 \; \frac{Hours}{Month}$$
>
> $$12 \text{ hours} \times \frac{32,000 \; NEM \; Applications}{Month} = 384,000 \; \frac{Hours}{Month}$$
>
> $$\therefore \; \sim 64,000 - 384,000 \; \frac{Hours}{Month} \text{ saved}$$

6. Is there a format that would improve the effectiveness of the lists or ability to use them?

> **Response:** It may be beneficial to add an additional column to the list to indicate when the inverter was added to the list. There have been some occasions of timing issues where SCE received an application which listed an inverter that was not on the CEC list but was timely added to the list while the application was in review.

7. Can you substitute the data from the Solar Equipment Lists with another data source? How would your program(s) be impacted without this resource?

> **Response:** While possible, if this data source was not available, SCE would have to undergo significant work to develop, create, and maintain equivalent lists. Industry would also be significantly impacted as industry would then have to provide the information to SCE for SCE to then recreate/duplicate the equivalent CEC lists. Further,

individual utilities may need to create their own independent lists, thus increasing industry complexity, potential inconsistency, and inefficiency.

8. As an equipment manufacturer (if applicable), what are the benefits of having your equipment listed on the Solar Equipment Lists?

Response: Not applicable.

9. Please share any other feedback you would like us to consider.

Response: The lists are vital to creating a seamless process for the customer's interconnection application from the submittal to the Permission to Operate stages. It serves as a necessary standardized tool which is utilized in multiple areas across SCE as well as by our external stakeholders. In addition, the lists serve as consistent sources of data across the Joint IOUs (Investor-Owned Utilities) and are also referenced at forums and workshops with the CPUC (California Public Utilities Commission).