

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND
COMPLIANCE DIVISION
Energy Branch

RESOLUTION E-3432
November 21, 1995

R E S O L U T I O N

RESOLUTION E-3432. SOUTHERN CALIFORNIA EDISON COMPANY.
CONTINUATION OF SOUTHERN CALIFORNIA EDISON COMPANY'S
OFF-GRID PHOTOVOLTAIC PILOT PROGRAM, WITH MODIFICATIONS.

SUMMARY

1. In July 1995, after one year of experience, Southern California Edison Company (Edison) reported on the status, success, and desired modification of its off-grid photovoltaic (PV) pilot program.
2. The Commission considered information provided by Edison, recommendations of the Commission Advisory and Compliance Division (CACD), and testimony of interested parties at its November 8, 1995 meeting.
3. This Resolution authorizes the continuation of Edison's off-grid PV pilot program, with modifications.

BACKGROUND

1. In November 1993, Edison requested Commission authorization to establish a 3-year pilot demonstration program to test the feasibility of offering PV service as an alternative energy source to customers in locations where a line extension is not economical.
2. In Resolution E-3367, the Commission authorized Edison's pilot program subject to conditions and reporting requirements that would enable it to strictly review, monitor, and assess the pilot. One such condition was for Edison to evaluate the program's success and report all of its findings to CACD after one year or when PV installations reached an aggregate capacity of 100 kilowatts (kW), whichever comes first.
3. Based on CACD's oversight of the program, its review of available information, and Edison's evaluation of the program's success after 100 kW or one year, whichever came first, CACD was to advise the Commission whether the program should be continued, altered, or terminated.

4. Edison reached the trigger point for review after one year. In July 1995, Edison submitted a report to CACD, discussing the pilot program results, lessons learned, findings, conclusions, evaluation, and recommendations including proposed program modifications.
5. Edison reported that it had received a total of thirty-seven applicants; six of the applicants opted for other alternatives, one decided against going forward, twenty-three were still active but with no action taken, six were in the bidding process phase, and one had signed a contract with Edison. The contract was for the installation of a 1 kW PV system.
6. CACD had concerns that the pilot program was not meeting the requirements of Public Utilities Code Section 2775.5. Specifically, CACD was concerned that the moderate program response has not accelerated the development and use of solar energy systems in the state of California, and that ratepayers' interest was questionable given the lack of program activity and possibility of non-recoverable costs.
7. In a draft resolution, CACD recommended that Edison's pilot program no longer be offered as a tariffed service to new customers, but that all outstanding applicants should be allowed to proceed under the existing experimental PV service schedule and under the terms of Resolution E-3367. In particular, CACD believed that the PV pilot program is better suited to be conducted by an unregulated subsidiary of Southern California Edison Corporation (SCE Corp).
8. Edison and other supporters of the pilot argued that it is too soon to make definitive statements regarding growth of the PV market as a result of its pilot program. They asserted that Edison's involvement in the off-grid PV market has resulted in tangible benefits to the industry, including more widespread acceptance of PV technology by lending institutions, progress towards standardization of system design, and identification of prospective customers who might not have been aware of PV technology's applicability to their needs. In addition, they believe that the program has contributed greatly to further the commercialization of renewable energy.
9. Edison clarified the rate impact of the program which it believed addressed CACD's ratepayers' interest and cross-subsidization concerns.
10. The Commission discussed the recommendations of the parties at its November 8, 1995 meeting and decided to continue the pilot program and address proposed program modifications in this Resolution.
11. Edison and a majority of the off-grid PV program's stakeholders recommended continuing the pilot program but with certain modifications. Specifically, they propose the following changes:

Customer Designated Contractors - Allow customers to designate contractors which would enable contractors to

bring their own customers to Edison for financing without going through competitive bidding.

Minimum PV Energy System Size - Remove the 1 kW minimum project size restriction.

Customer/Contractor Contact - Allow the customer to confer with the three least-cost qualifying bidders during the selection process.

Contract - Replace the existing standard contract that is in the tariffs with a framework of contract principles to allow for variation in details to match individual job sites.

NOTICE

1. The proposed modifications were presented and voted upon at a workshop held on April 25, 1995. This workshop had over 40 attendees, including representatives from the Division of Ratepayer Advocates (DRA), CEC, CACD, various trade associations as well as many PV contractors, suppliers, manufacturers, consultants and developers.

COMMENTS

1. DRA is the only party to provide written comments on the proposed modifications. All other parties discussed and voted on the proposed modifications at the April 25, 1995 workshop. The President of California Solar Energy Industry Association (CAL SEIA) commented on the proposed modification to lower the 1 kW floor in a statement given to the Commission at its November 8, 1995 meeting.

DISCUSSION

Allow Customers to Designate Contractors

1. This modification allows contractors to bring potential customers to Edison for inclusion in the program without going through competitive bidding provided the customer is informed of Edison's bidding process.

2. DRA agrees with this change and considers it preferable to the utility functioning as master contractor because it preserves direct relationships between contractors and customers which DRA believes more closely approximates a competitive, non-utility market. However, DRA believes that this change enables Edison to act more like a bank. It wishes to remind the Commission of its position that utilities should transition out of financing as banks and other financial institutions "step up to the plate", or if utility involvement deters banks or other third parties from offering off-grid financing.

3. The Commission believes that the proposed modification is an enhancement intended to encourage contractors to actively promote

Edison's program, without concern over the potential loss of a customer, thereby allowing exposure to customers who may not have otherwise been informed of Edison's PV financing option. The same standards should apply to these "contractor-kept" customers as currently apply to the "Edison-found" customers.

4. The Commission acknowledges DRA's concern regarding the financial industry and recommends that Edison closely monitor the entry of the banking industry or other financial firms and report on such activity in its semi-annual workshops.

Remove 1 kW Minimum PV Energy System Size

5. This modification eliminates the current 1 kW minimum size for PV systems under the program. Edison and program participants believe that removing the 1 kW minimum size restriction will result in additional sales and will further accelerate the use of PVs.

6. DRA opposes permitting Edison to lease and finance systems less than one kW in size. It asserts that this market is highly competitive, with low profit margins and vigorous competition between contractors for the installation of small-size, low margin systems. DRA suggests that if the Commission elects to permit Edison to finance PV systems of less than 1 kW, it should permit it for contractor-found customers only, in order to best approximate the functioning of a competitive market free of utility intermediation, and to serve as a control function for comparison with the larger market of systems over 1 kW where Edison is also permitted to conduct solicitations for subcontractors.

7. CACD has concerns that eliminating the 1 kW floor would significantly change the original parameters of the pilot program upon which the Commission based its findings. In particular, CACD was concerned that the Commission could not make findings required by PU Code Section 2775.5 that the program, if modified to eliminate the 1 kW floor, would not restrict competition or growth within the solar electric industry or unfairly employ Edison with any financial marketing, or distributing, or generating advantage.

8. At the Commission's November 8, 1995 meeting, CAL SEIA commented that it believes that there is no fundamental difference, other than size, between 1 kW systems and smaller systems. It believes that lifting the 1 kW size restriction will allow smaller systems to meet the higher standards of Edison's program which will promote the development and use of higher quality PV systems.

9. The Commission has considered all of the comments and believes that consistent with PU Code Section 2775.5, the removal of the 1 kW minimum size will not restrict competition or growth in the solar energy industry because each installation will be competitively bid and performed by licensed non-utility contractors. The Commission believes that the proposed modification will accelerate the development and use of PVs by

providing more opportunities and options to smaller residential and commercial projects.

Allow Customer/Contractor Contact

10. As part of the competitive bidding process, the customer will be provided with the phone numbers of the three lowest qualifying bidders to confer with each of them and further evaluate their bids.

11. Edison and others program supporters have proposed this change because they believe that since PV systems are customer designed for each location, differences in systems, design and components used are as important as the overall price.

12. The Commission believes that this program modification will provide the customer with the ability to talk to each contractor, ask questions, and arrive at a more informed assessment of the capabilities of each system in relation to its cost.

Replace Standard Generic Contract with Contract Principles

13. This proposed modification would replace the existing standard contract that is in the tariffs with a framework of contract principles to allow for variation in details to match individual job sites. The proposed contract principles are:

- Contract term can not exceed 15 years.
- The design, procurement, installation, and maintenance of the PVs will be competitively bid and performed by independent contractors under the direction of Edison personnel.
- A customer will pay Edison a monthly service charge of 1.6% times the value of the Edison-financed PV facilities.
- The contract may be terminated by either party upon 30 days' notice.
- Upon termination of the contract, the customer may : (1) request that Edison remove the PV facility and pay Edison a removal charge or (2) opt to purchase the PV facility at the lesser of its fair market value as determined by Edison, or Edison's original cost less accumulated depreciation.

14. The Commission believes that the substitution of these contract principles for the standard contract will enable the variation in detail to match individual job sites and better suit the unique needs of off-grid PV customers.

15. These contract principles should note that competitive bidding may not occur when a customer designates a contractor.

FINDINGS

1. The proposed "customer designated contractors" modification is an enhancement intended to encourage contractors to actively promote Edison's program, without concern over the potential loss of a customer, thereby allowing exposure to customers who may not have otherwise been informed of Edison's PV financing option.

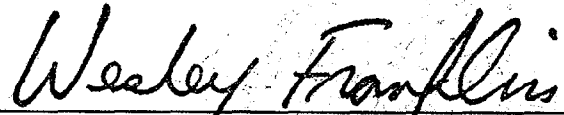
2. The same standards should apply to the "contractor-kept" customers as currently apply to the "Edison-found" customers.
3. Edison should closely monitor the entry of the banking industry or other financial firms and report on such activity in its semi-annual workshops.
4. The proposed modification to eliminate the current 1 kW minimum size for PV systems under the program is consistent with PU Code Section 2775.5, in that it will not restrict competition or growth in the solar energy industry because each installation will be competitively bid and performed by licensed non-utility contractors.
5. The proposed modification to eliminate the 1 kW minimum size for PV systems will accelerate the development and use of PVs by providing more opportunities and options to smaller residential and commercial projects.
6. The proposed modification to allow customer/contractor contacts will provide the customer with the ability to talk to each contractor, ask questions, and arrive at a more informed assessment of the capabilities of each system in relation to its cost.
7. The proposed modification to replace the existing standard contract in the tariffs with a framework of contract principles will enable the variation in detail to match individual job sites and better suit the unique needs of off-grid PV customers.
8. Edison should modify the proposed contract principles to note that competitive bidding may not occur when a customer designates a contractor.

November 21, 1995

THEREFORE, IT IS ORDERED that:

1. Southern California Edison Company shall be allowed to continue to offer its off-grid photovoltaic pilot program as a tariffed service, with its proposed modifications.
2. Southern California Edison Company shall file an advice letter within twenty days, revising the associated tariff sheets to reflect the adopted modifications including the revision to its proposed contract principles.
3. This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on November 21, 1995. The following Commissioners approved it:



WESLEY FRANKLIN
Executive Director

DANIEL Wm. FESSLER
President
P. GREGORY CONLON
JESSIE J. KNIGHT, JR.
HENRY M. DUQUE
JOSIAH L. NEEPER
Commissioners