

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND
COMPLIANCE DIVISION
Energy Branch

RESOLUTION E-3438
March 13, 1996

R E S O L U T I O N

RESOLUTION E-3438. SOUTHERN CALIFORNIA EDISON COMPANY'S
REQUEST TO ESTABLISH A FIVE-YEAR ON-GRID PHOTOVOLTAIC
PILOT PROGRAM.

BY ADVICE LETTER 1112-E, FILED ON JULY 10, 1995.

SUMMARY

1. In Advice Letter 1112-E, Edison requests Commission authorization to establish a five year pilot program to offer photovoltaic (PV) service to residential and commercial customers who are connected on-grid to Edison's electrical system. Edison proposed that the maximum capacity under the pilot would be capped at 20 megawatts (MW).
2. Protests were received from the Division of Ratepayer Advocates (DRA) and Utility Consumers' Action Network (UCAN). Letters in support were received from California Solar Energy Industries Association (CAL SEIA) and the California Energy Commission (CEC).
3. This Resolution authorizes Edison to establish an on-grid PV pilot program with the maximum capacity of installed PV systems under the pilot capped at 5 MWs, and with the trial period ending January 1, 1998.
4. A 5 MW on-grid PV pilot of an approximate two-year duration, in conjunction with federal and state financing assistance and the advent of net metering as described in Public Utilities (PU) Code Section 2827, will significantly promote the commercialization of PVs as a renewable resource in California.
5. If Edison wishes to convert the pilot into a fully implemented utility energy services program, it should file an application requesting Commission approval.

BACKGROUND

1. In November 1993, Edison requested Commission authorization to establish a 3-year pilot program to test the feasibility of offering PV service as an alternative energy source to customers in off-grid locations where a line extension is not economical. The off-grid pilot was limited to an aggregate PV capacity of 1 MW for all customers.

2. By Resolution E-3367, the Commission authorized Edison's PV off-grid pilot program subject to conditions and reporting requirements. The Commission found, in accordance with Section 2775.5 of the PU Code, that the program offered a financing option that provided an opportunity to stimulate the PV market, promote competition, and accelerate the development and use of PVs. The Commission also found that the program would not restrict competition or growth within the solar electric industry or unfairly employ Edison with any financial marketing, distributing, or generating advantage, and was in the ratepayers' interest. The program became effective in May 1994.

3. After one year of experience, Edison reported on the status, success, and desired modification of its off-grid pilot program. The Commission reviewed the program results and authorized its continuation, with Edison's proposed modifications, in Resolution E-3432.

4. By Advice Letter 1112-E, filed on July 10, 1995, Edison requests Commission authorization to establish a five-year pilot program to offer PV service to residential and commercial customers who are connected on-grid to Edison's electrical system. Edison requests that the maximum capacity of installed PV systems under the program be capped at 20 MWs.

NOTICE

1. Advice Letter 1112-E was served on other utilities, government agencies, and to all interested parties who requested such notification, in accordance with the requirements of General Order 96-A.

PROTESTS

1. The Commission Advisory and Compliance Division (CACD) received timely protests to Edison's proposed on-grid PV pilot program from UCAN and DRA. CAL SEIA and the CEC filed comments in support of the program.

2. UCAN asserts that the program is not consistent with the utility's current authorizations for ratepayer funds, nor is it consistent with PU Code 2775.5.

3. DRA believes that the program (1) may have cost impacts to non-participating ratepayers, (2) is anticompetitive and thus violates PU Code Section 2775.5, (3) sets a precedent for utility involvement in competing markets which is better resolved in the Electric Restructuring Order Instituting Investigation (OII), (4) is too large for a pilot, (5) does not include incentives related to transmission and distribution values, and (6) is a regulatory burden to monitor for anticompetitive market effects and ratepayer cross subsidies. DRA also believes that since PV will compete with utility service, if the Commission approves the pilot program, it should state that its approval does not convey immunity to anti-trust action under the doctrine of state action.

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4. In response to the protests of DRA and UCAN, Edison proposes to reduce the maximum MWs associated with the on-grid program from 20 MWs to 5 MWs, and to eliminate the need to file all contracts between Edison and program participants with the Commission. Edison believes that these two changes will address concerns regarding the large pilot size, potential costs to non-participating ratepayers due to size, and increased regulatory burdens. In its response, Edison also explained why it felt that other issues raised by UCAN and DRA did not preclude the Commission from authorizing the on-grid pilot program.

5. As the organizer of the California Photovoltaics for Utilities (PV4U) Working Group Collaborative and as a co-sponsor of the formulation of the collaborative elements of an on-grid PV tariff that would benefit both the PV industry and Californians served by utility-sponsored on-grid programs, the CEC submitted comments in support of Edison's proposed on-grid program. It believes that the major issues and possible solutions regarding Edison's on-grid program have been raised and discussed through the collaborative process, and that Edison's proposed pilot program has addressed stakeholder concerns.

6. CAL SEIA stated that responses from a poll of its membership revealed unanimous support of Edison's proposed on-grid pilot program.

DISCUSSION

1. Before granting Edison authorization for any proposed solar energy program, the Commission must make findings and determinations pursuant to PU Code Section 2775.5. Specifically, this code section provides that the Commission:

- o Shall not allow the costs and expenses of implementing a proposed program of solar energy development to be passed through to the ratepayers of an electrical or gas corporation without findings and a determination that it is in the ratepayers' interest to do so.
- o Shall deny authorization if it finds that the proposed program will restrict competition, or restrict growth in the solar energy industry, or unfairly employ any financial, marketing, distributing, or generating advantage which the corporation may exercise as a result of its authority to operate as a public utility.
- o Before granting authorization, shall find that the proposed program will accelerate the development and use of solar energy systems in the state of California for the duration of the program.
- o Shall suspend or terminate any authorization granted whenever it finds and determines that the program of solar energy development no longer qualifies for authorization under the above criteria.

2. The Commission modified and conditioned Edison's off-grid pilot program before it made findings, determinations, and granted its authorization pursuant to PU Code 2775.5.

3. Edison's proposed on-grid pilot program is structured much like its authorized off-grid pilot program. Like the off-grid program, the on-grid program (1) is designed to accelerate the deployment of PV systems, and to encourage growth and promote competition within the PV industry, (2) includes a requirement that Edison inform its potential customers of the existence of other PV service providers, (3) provides that all projects will be procured, installed and maintained through a competitive bidding process, except for qualifying projects with customer-designated contractors, (4) enables the customer to choose among three lowest qualifying bids (5) requires a 15 year contract with the customer, with an early buyout provision, which includes a monthly charge of 1.6% of the installed system cost, and (6) has a separate tracking account to track all costs and revenues associated with the program to ensure that the full cost of the installed PV systems will be paid by participating customers, other outside sources, or shareholders.

4. The proposed on-grid program differs from the authorized off-grid program in that it (1) offers PV service to customers connected to Edison's electrical system (2) is capped at 20 MWs instead of 1 MW, (3) provides customers with an environmental energy ("green" pricing) option, (4) is subject to annual instead of semi-annual workshops and review by CACD, (5) has a five-year rather than a 3-year trial period, (6) has federal and state supplemental funding available which will be applied to reduce customers' costs of PV systems, and (7) does not include a provision for the filing of an Application before full implementation. Also, residential customers under Edison's proposed on-grid pilot will be eligible to take advantage of net metering as a result of the enactment of recent legislation.

5. Of these differences, the magnitude and duration of the proposed on-grid program raise the most concern. We believe that the proposed program is too large and too long for an experimental program. A program of that extent would also raise questions and concerns pointed out by DRA regarding a utility's role in the coming competitive electricity generation market.

6. Furthermore, although Edison's on-grid program is designed to promote a renewable energy resource and to accelerate the commercialization of PV systems, which the Commission fully supports, the Legislature's introduction of net energy metering for PV customers (PU Code Section 2827) will also encourage private investment in PV systems and should provide ample opportunity to test the feasibility of grid-connected PV systems.

7. We will reduce the maximum size of Edison's proposed on-grid pilot program from 20 MWs to 5 MWs, and conclude the pilot by January 1, 1998. These changes will alleviate some of the concerns raised by DRA, and will enable Edison's on-grid program

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to be more similarly patterned after the Commission authorized off-grid pilot program.

8. The issues and concerns over the effects on competition and growth within the solar energy industry were addressed by the Commission in Resolution E-3367 authorizing Edison's off-grid pilot program. We do not need to re-examine those issues in this Resolution. As with the off-grid pilot program, Edison's on-grid pilot program, as modified, will not restrict competition or growth in the solar energy industry or unfairly employ Edison with any advantage, and will accelerate the development and use of solar energy systems in the state of California for the duration of the pilot program.

9. A separate tracking account shall be maintained so that none of the costs of the on-grid program are passed through to ratepayers. Therefore, a finding and determination that the on-grid pilot program is in the ratepayers' interest is not necessary according to PU Code Section 2775.5 (a). This addresses UCAN and DRA's concerns over ratepayer impact.

10. Other issues raised in the protests need not be specifically addressed due to the pilot nature of the on-grid program.

11. Before a customer chooses to participate in Edison's on-grid pilot program, Edison should notify the customer that the Commission may assess a Competition Transition Charge (CTC) designed to recover retail transition costs incurred as a result of the shift to a more competitive market structure.

12. We have some concerns over the "green pricing" aspect of the on-grid pilot program. Without having all of the details, we do not pass explicit approval of this application of the "green pricing" concept but rather recognize it as a pilot test only.

13. Even though Edison's PV pilot programs are experimental, we are troubled about reviewing utility requests for new competitive energy services through the advice letter process in a serial fashion. Edison should not file any further advice letters requesting pilot programs for competitive new services.

14. In the event Edison decides to implement fully the on-grid PV program, it should file an application requesting Commission approval. Edison's application should include, but not be limited to, a document explaining the extent that Edison achieved the pilot test objectives, the basis for its decision to continue the service, detailed results showing all types of data collected during the pilot period (e.g. number and locations of customers, size of installations), survey information on customer satisfaction and interest, and details of the costs and revenues associated with the program.

FINDINGS

1. Edison filed Advice Letter 1112-E on July 10, 1995 requesting Commission authorization to establish a five-year pilot program to offer PV service to residential and commercial

customers who are connected on-grid to Edison's electrical system. Edison proposed that the maximum capacity under the pilot would be capped at 20 MWS .

2. DRA and UCAN protested Edison's request.
3. Edison's proposed on-grid pilot program is structured much like its Commission authorized off-grid pilot program but with some differences.
4. Of the differences, the magnitude and duration of the proposed on-grid program raise the most concern.
5. Edison's proposed on-grid program is too large and too long for an experimental program.
6. A program of that extent would also raise questions and concerns pointed out by DRA regarding a utility's role in the competitive electricity generation market opening in 1998.
7. In addition to the Commission's support of the intent of Edison's on-grid program, which is to promote a renewable energy resource and to accelerate the commercialization of PV systems, the Legislature's introduction of net energy metering for PV customers (PU Code Section 2827) will also encourage private investment in PV systems and should provide ample opportunity to test the feasibility of grid-connected PV systems.
8. We will reduce the maximum size of Edison's proposed on-grid pilot program from 20 MWS to 5 MWS, and conclude the pilot by January 1, 1998.
9. These changes will alleviate some of DRA's concerns, and will enable Edison's on-grid pilot program to be more similarly patterned after the Commission authorized off-grid pilot program.
10. Since issues and concerns over the effects on competition and growth within the solar energy industry were addressed by the Commission in Resolution E-3367 authorizing Edison's off-grid program, we do not need to re-examine those issues in this Resolution.
11. As with the off-grid pilot program, Edison's on-grid pilot program, as modified, will not restrict competition or growth in the solar energy industry or unfairly employ Edison with any advantage, and will accelerate the development and use of solar energy systems in the state of California for the duration of the program.
12. A separate tracking account shall be maintained so that none of the costs of the on-grid program are passed through to ratepayers. Therefore, a finding and determination that the on-grid pilot program is in the ratepayers' interest is not necessary according to PU Code Section 2775.5 (a).
13. This Resolution addresses some of the protestant's issues and concerns; all other issues raised need not be specifically addressed due to the pilot nature of the on-grid program.

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14. The protests of DRA and UCAN should be denied.

15. Before a customer chooses to participate in Edison's on-grid pilot program, Edison should notify the customer that the Commission may assess a CTC designed to recover retail transition costs incurred as a result of the shift to a more competitive market structure.

16. We have some concerns over the "green pricing" aspect of the on-grid pilot program. Without having all of the details, we do not pass explicit approval of this application of the "green pricing" concept but rather recognize it as a pilot test only.

17. Even though the on-grid and off-grid programs are experimental, we are troubled about reviewing utility requests for new competitive energy services through the advice letter process in a serial fashion.

18. Edison should not file any further advice letters requesting pilot programs for competitive new services.

19. In the event Edison decides to implement fully the on-grid PV program, it should file an application requesting Commission approval.

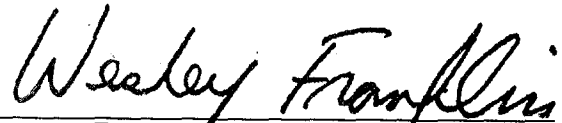
20. Edison's application should include, but not be limited to, a document explaining the extent that Edison achieved the pilot test objectives, the basis for its decision to continue the service, detailed results showing all types of data collected during the pilot period (e.g. number and locations of customers, size of installations), survey information on customer satisfaction and interest, and details of the costs and revenues associated with the program.

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THEREFORE, IT IS ORDERED that:

1. Advice Letter 1112-E is authorized subject to the following modifications:
 - a. The pilot program will be closed to new customers on January 1, 1998.
 - b. The capacity of installed photovoltaic systems under the pilot program will be capped at 5 megawatts.
2. If Southern California Edison Company accepts these modifications, it shall file a supplemental advice letter within twenty days revising the associated tariff sheets to reflect the changes.
3. Southern California Edison Company shall not pass through to its ratepayers any costs or expenses associated with the on-grid photovoltaic pilot program.
4. Before allowing a customer to participate in its on-grid program, Southern California Edison Company shall notify the customer that the Commission may assess a Competition Transition Charge designed to recover retail transition costs incurred as a result of the shift to a more competitive market structure.
5. Southern California Edison Company shall file an application requesting Commission approval before fully implementing the on-grid photovoltaic pilot program.
6. Southern California Edison Company shall not file any further advice letters requesting pilot programs for competitive new services.
7. All protests to Advice Letter 1112-E are denied.
8. This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on March 13, 1996. The following Commissioners approved it:



WESLEY M. FRANKLIN
Executive Director

DANIEL Wm. FESSLER
President
P. GREGORY CONLON
JESSIE J. KNIGHT, Jr.
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