

**CALIFORNIA ENERGY COMMISSION**1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

October 15, 2000

Members of the Senate Energy, Utilities and Communications Committee  
Members of the Senate Budget and Fiscal Review Committee  
Members of the Senate Appropriations Committee  
Members of the Assembly Utilities and Commerce Committee  
Members of the Assembly Budget Committee  
Members of the Assembly Appropriations Committee  
California State Capitol Building  
Sacramento, California 95814

**RE: California Energy Commission's Quarterly Report Concerning the Renewable Energy Program**

Honorable Members:

Public Utilities Code (PUC), Article 5, Section 445(g), requires the California Energy Commission to submit quarterly reports on the Renewable Energy Program. Enclosed is the eleventh quarterly report for the Program, covering the period July 1 through September 30, 2000. As reflected in this report, the Energy Commission continues to make significant progress in implementing the Program.

Should you have any questions or comments concerning this report, please contact Tim Schmelzer, Assistant Director of the Office of Governmental Affairs, at 654-4942 or by e-mail at <[tschmelz@energy.state.ca.us](mailto:tschmelz@energy.state.ca.us)>.

Respectfully submitted,

MICHAL C. MOORE  
Commissioner and Presiding Member  
Electricity and Natural Gas Committee

ARTHUR H. ROSENFELD  
Commissioner and Associate Member  
Electricity and Natural Gas Committee

Enclosure

cc: California Legislative Analyst's Office

# California Energy Commission's Quarterly Report Regarding the Renewable Energy Program

(July 1 – September 30, 2000)

The California Energy Commission is pleased to submit its Quarterly Report on the Renewable Energy Program covering the period July 1 through September 30, 2000.<sup>1</sup> The report describes the Energy Commission's implementation activities, including information regarding awards submitted to the State Controller<sup>2</sup> for payment, the cumulative commitment of claims by account, the relative demand for funds by account, a forecast of future awards, and related matters.

## Background

Assembly Bill 1890 ([AB 1890] Chp. 854, Stats. 96) required California's three major investor-owned utilities to collect **\$540 million** from their ratepayers over a four-year period (1998-2002) to help support renewable electricity-generation technologies and develop a renewable market. As mandated by AB 1890, the Energy Commission submitted its ***Policy Report on AB 1890 Renewables Funding (Policy Report)*** to the Legislature in March 1997, with recommendations for allocating and distributing these funds. Senate Bill 90 ([SB 90] Chp. 905, Stats. 97) subsequently established a Renewable Resource Trust Fund, placed the \$540 million into the fund, and directed the Energy Commission on how to distribute the fund through four distinct accounts consistent with the ***Policy Report***. These accounts and the total funds allocated to each are as follows:

- Existing Renewable Resources Account (**\$243 million**)
- New Renewable Resources Account (**\$162 million**)
- Emerging Renewable Resources Account (**\$54 million**)
- Customer-Side Renewable Resources Purchases Account:
  - Customer Credit Subaccount (**\$75.6 million**)
  - Consumer Education Subaccount (**\$5.4 million**)

In January 1998, consistent with SB 90, the Energy Commission adopted overall funding guidelines, eligibility requirements, yearly allocations, and account-specific guidelines to assist participants in applying for funding from the various accounts within the Program.

## Renewable Energy Program Implementation

The mechanisms for distributing funds vary by account, as do the implementation activities for each account. Table I highlights the Energy Commission's implementation

<sup>1</sup> Public Utilities Code (PUC), Article 5, Section 445(g) requires the Energy Commission to report to the Legislature quarterly on fiscal and procedural aspects of the Program.

<sup>2</sup> As a procedural matter, the Energy Commission submits awards directly to the State Controller for payment, rather than through the Treasurer.

activities for the third quarter of 2000 and describes the expected funding and implementation activities for the fourth quarter of 2000.

**Table I  
Renewable Energy Program:  
Third Quarter 2000 Program Implementation**

| <b>Account, Program-Implementation and Funding Activities:<br/>July – September 2000</b>  | <b>Expected Funding and Implementation Activities:<br/>October – December 2000</b>   |
|---|--|
| <b>Existing Account</b>   |  |
| <ul style="list-style-type: none"> <li>• A total of 360 facilities are registered as renewable suppliers, and 259 facilities are eligible for funding.</li> <li>• Tier 1 (biomass, solar/thermal and waste tire) paid 0.0 – 0.88 cents/kWh on 949 million kWh for May, June and July.</li> <li>• Tier 2 (wind) paid from 0.0 – 0.38 cents/kWh on 1,217 million kWh for May, June and July.</li> <li>• Tier 3 (geothermal, digester and landfill gas, small hydro, and municipal solid waste) received no payments for May, June and July.</li> <li>• Payments totaling \$2,265,935 were made this quarter.</li> <li>• Rollover of \$42.7 million for Tiers 1, 2 and 3.</li> </ul> | <ul style="list-style-type: none"> <li>• Payments for August, September and October generation are scheduled for October 31, November 30, 2000, and January 2, 2001, respectively.</li> <li>• It is estimated that no payments will be made in the fourth quarter.</li> </ul>  |
| <b>New Account</b>  |  |
| <ul style="list-style-type: none"> <li>• Twelve projects are on-line and producing energy.</li> <li>• To date, payments totaling nearly \$3 million have been made to nine on-line facilities for 261 million kWh of new renewable energy generation.</li> <li>• Payments totaling \$844,958 were made this quarter.</li> </ul>   | <ul style="list-style-type: none"> <li>• Second auction for project funding will be held; bids are due by November 15, and winning projects are expected to be announced on December 4, 2000.</li> <li>• Construction of projects will continue, as will payments to registered on-line projects.</li> </ul>   |
| <b>Emerging Account</b>   |  |
| <ul style="list-style-type: none"> <li>• Funds encumbered for Buydown Program reservation requests currently total \$3.88 million.</li> <li>• Payments for installed systems total \$5 million as of September 30, 2000.</li> <li>• Received 85 new reservation requests this quarter.</li> </ul>   | <ul style="list-style-type: none"> <li>• Monitoring program jointly funded by Energy Commission and Department of Energy continues.</li> <li>• Additional new reservation requests are expected at an increasing rate, due in part to high electric rates experienced by SDG&amp;E customers</li> </ul>  |
| <b>Customer Side Account</b>  |  |
| <b>Customer Credit Subaccount</b>   |  |
| <ul style="list-style-type: none"> <li>• Thirty active marketers are registered as renewable providers, offering a total of 46 products containing renewable energy.</li> <li>• Three new providers registered this quarter.</li> <li>• To date, payments totaling \$39 million have been made to providers.</li> </ul>   | <ul style="list-style-type: none"> <li>• More payments will be made as providers continue to submit invoices for funding.</li> <li>• The market will continue to be dynamic, as renewable providers and products are added and dropped.</li> <li>• The lowered credit level of 1.0 cents/kWh remains effective through December 31, 2000.</li> </ul> |
| <b>Consumer Education Subaccount</b>  |  |
| <ul style="list-style-type: none"> <li>• Final report on emerging renewable energy technologies market research completed on June 30, 2000.</li> <li>• Participated in and provided funding for statewide Earth Day 2000 events.</li> <li>• Conducted a media campaign in Contra Costa County, Santa Barbara and San Diego.</li> </ul>  | <ul style="list-style-type: none"> <li>• Selection, approval and initiation of grant agreements for emerging renewable energy technologies activities.</li> <li>• Plan and conduct staff workshop to review activities, market research results, and collect stakeholder input on future priorities.</li> </ul>                                      |

## Renewable Resource Trust Fund Expenditures

Through September 30, 2000, the Renewable Resource Trust Fund *received* \$301.1 million for all of the accounts. As of the third quarter of 2000, the Energy Commission *awarded* \$181.0 million, reflecting payments (disbursements) from all of the accounts. Eligible applicants *reserved* \$74.7 million, reflecting fund reservations (encumbrances) from the New Account, the Emerging Account, and the Consumer Education Subaccount. Table II shows a financial summary of the Renewable Resource Trust Fund as of the third quarter 2000.

**Table II**  
**Renewable Resource Trust Fund**  
**Current Funding & Expenditures Through the Quarter Ending September 30, 2000**  
**(\$ millions)**

|                  | Existing Account | New Account <sup>3</sup> | Emerging Account     | Customer-Side Account |                    | Program Total <sup>4</sup> |
|------------------|------------------|--------------------------|----------------------|-----------------------|--------------------|----------------------------|
|                  |                  |                          |                      | Customer Credit       | Consumer Education |                            |
| Available Funds  | 155.861          | 80.160                   | 30.113               | 31.980                | 3.011              | 301.135                    |
| Disbursements    | (132.733)        | (2.999)                  | (5.119)              | (39.190)              | (0.909)            | (180.950)                  |
| Current Balance  | 23.128           | 69.951 <sup>5</sup>      | 24.994               | 0.000 <sup>5</sup>    | 2.102              | 120.185                    |
| Encumbrances     | 0.000            | (69.951)                 | (3.882) <sup>6</sup> | 0.000                 | (0.891)            | (74.724)                   |
| Unexpended Funds | 23.128           | 0.000                    | 21.112               | 0.000                 | 1.211              | 45.461                     |

The three investor-owned utilities continue making deposits into the Fund with payments current to September 30, 2000. The Program design has a built-in, two-month processing period for payments to eligible energy in several accounts.

As Table II reflects, the State Controller made payments from the Existing Account for electricity produced through July 2000, from the Customer Credit Subaccount to providers of renewable energy, and from the Emerging Account to recipients of the Buydown Program. Payments were also made from the New Account to nine of the 12 projects that are now on-line and generating renewable energy, and from the Consumer Education Subaccount for activities of the *Renewable Energy Consumer Education (RECE) Marketing Plan*. The Energy Commission encumbered funds from the Emerging Account for systems participating in the Buydown Program, the Consumer Education Subaccount for continued *Marketing Plan* activities, and from the New Account for the 52 funded projects. Funding to these New Account projects will

<sup>3</sup> The Energy Commission conditionally allocated \$162 million at its June 5, 1998 auction for future incentive payments. Funds are encumbered for projects as they become available.

<sup>4</sup> Program totals include \$9,572 in voluntary contributions.

<sup>5</sup> This quarter, an additional \$1.82 million was transferred from the New Account to the Customer Credit Subaccount. The total transfer amount to date is \$7.21 million.

<sup>6</sup> Reservation requests granted (but not yet paid) since the March 20, 1998 start-up of the Buydown Program.

eventually total \$162 million; funds from the New Account will continue to be reserved for the 52 projects as funding becomes available.

### **Existing Account**

As expected, because of high short-run avoided cost (SRAC) prices during the third quarter of 2000, no incentive payments were made to Tier 3 facilities. Tier 3 facilities in Southern California Edison Company's territory and San Diego Gas and Electric Company's territory have not received any funding for over a year, and in Pacific Gas and Electric Company's territory, nine months have passed without funding to Tier 3 facilities. Unless there is a significant change in the current SRAC price trend, it is unlikely that any more payments will be made to Tier 3 facilities until the end of the program in December 2001.

Over the past eight months, the rollover has nearly tripled for the three tiers combined and is currently at \$42.7 million. The rollover is the amount of money that is available in the Existing Account but has not yet been paid out to facilities. Any funds that are not paid in one month are added to the following month's allocation and made available for that month's payment cycle.

SRAC prices are expected to stay above 4.0 cents per kilowatt-hour (cents/kWh) throughout the fourth quarter of 2000 and will likely remain at least 3.0 cents/kWh as long as gas prices are high. As a result of these high SRAC prices, no incentive payments will be made to any facilities in Tiers 1, 2, or 3 during the fourth quarter of 2000, and the rollover will increase to \$56.5 million.

Based on a very conservative analysis that assumes an average SRAC price of 3.21 cents/kWh for the year 2001, and estimated \$50.6 million will remain unused and available as rollover from the Existing Account.<sup>7</sup> Pursuant to Public Utilities Code section 383.5 (g), the Energy Commission intends to reallocate as much as \$40 million of this estimated rollover to the New Account for purposes of holding a second auction later this year to bring new electrical capacity on-line by the summer of 2001.

The reallocation of these funds will take place after the second auction is held and the Energy Commission determines the amount of funding needed to fully fund winning bids in this second auction. This may not be known for six to 10 months after the auction is held, because winners in the auction may drop out, qualify for additional incentives, or have their funding awards under the auction reduced or canceled. In addition, funds may revert back to the New Account after the second auction is held as a result of canceled or reduced funding awards under the first auction.

It should be noted that the Energy Commission's decision to reallocate funds varies from the recommendations included in its biennial report on the Renewable Energy

<sup>7</sup> A more realistic average SRAC price for the year 2001 is 4.87 cents/kWh, as projected by the Energy Commission's Electricity Analysis Office. Based on an average SRAC price of 4.87 cents/kWh, the Energy Commission estimates \$99.5 million will remain unused and available as rollover from the Existing Account.

Program, which was prepared and submitted to the Legislature in May 2000 pursuant to Public Utilities Code section 383.5 (g).

At the time the biennial report was prepared the Energy Commission did not foresee a need to reallocate funds among the Trust Fund accounts and consequently did not include any recommendations on reallocating funds. However, California's extremely high energy prices in the summer of 2000 have both increased the need for new electrical capacity and the availability of rollover funds in the Existing Account.

### **New Account**

Nine projects that are participating in the New Account are now on-line and contributing nearly 90 MW of new renewable energy capacity to California's energy supply. To date, these projects — seven landfill gas facilities totaling over 23 MW of capacity, one 49 MW geothermal project, and one 16.5 MW wind project — have received a total of \$2,999,461 in payments from the State Controller for approximately 261 million kWh of new renewable generation. Three additional projects are technically on-line, but have not yet submitted payment invoices to the Energy Commission. These three projects include a 10 MW geothermal plant, a 1.6 MW landfill gas facility, and a 2 MW wind facility. The remaining 40 participating projects are in various stages of development.

In an effort to bring new electrical capacity on-line by the summer of 2001, the Energy Commission is holding a second New Account auction, which will be funded in whole or in part by unused rollover funds from the Existing Account. This second auction and the use of up to \$40 million of Existing Account rollover funds was approved by the Energy Commission on October 11, 2000. The first auction, which awarded \$162 million to new renewable energy projects, was held in June 1998 and resulted in approximately 500 MW of in-state renewable energy capacity scheduled to be on-line by January 1, 2002.

The guidelines for the second auction are similar to those of the first auction, although the amount of available funds (\$40 million) is less. The solicitation document for the second auction (Notice of Auction #500-00-503) was publicly released on October 12, 2000. Bids for funding awards are due to the Energy Commission by November 15, 2000, and winning projects are expected to be announced on December 4, 2000. Projects participating in this auction are expected to come on-line by July 2001; projects that come on-line by June 1, 2001 will receive up to a 10 percent bonus on top of their original bid. The accelerated schedule for this auction was designed to help ease the energy shortage that California is likely to face in the summer of 2001.

### **Emerging Account**

The Buydown Program has received 811 reservation requests since it began on March 20, 1998, including 85 new requests during the third quarter of 2000. Currently, \$3.88 million is encumbered for projects with reservation requests, and the State Controller has paid approximately \$5 million to completed projects. The total amount of encumbered funds does not include most of the new reservation requests received

during the third quarter of 2000, which are still in various stages of the Buydown Program review process and have not yet received final approval for funding.

Reservation requests are expected to continue to increase in future months as a result of high rates in the San Diego Gas & Electric Company (SDG&E) service territory. In the third quarter of 2000, reservation requests from this territory increased significantly. From July 1 to September 30, 2000, the Energy Commission received 40 reservation requests from residents and businesses in the SDG&E territory. In comparison, since the Buydown Program began in March 1998 until June 30, 2000, the Energy Commission has only received a total of 37 reservation requests from the SDG&E service area.

Other Emerging Account activities during the third quarter of 2000 include those carried out by the technical support contractor Regional Economic Research, Inc. (RER). In July 2000, a proposed final report on the second phase of the verification program was completed. Through the verification program RER had previously found that some of the participating systems were not performing up to expected standards. These systems were reviewed, and a summary of the results was included in the proposed final report.

In September 2000, RER completed its final market research report on emerging technologies. The report concluded, among other things, that most California residents are not informed of the benefits and options of emerging technologies. Of those residents who are aware, 71 percent stated that they would consider installing an emerging renewable technology source at their home sometime in the future.

A monitoring program of photovoltaic and small wind generating systems, jointly funded by the Energy Commission and the Department of Energy (DOE), continues to progress. By October, at least six months of data will have been gathered on the 15 original customer installations. Phase 2 of the monitoring program, which is scheduled to begin in October 2000, involves moving data-collecting equipment to 10 new customer sites.

### **Customer Credit Subaccount**

The Energy Commission registered three new providers with the Customer Credit Subaccount in the third quarter of 2000. Each of the new providers registered one renewable energy product with the Energy Commission. Providers previously participating in the subaccount remained active; one provider registered an additional renewable energy product. One provider with four products was acquired by another company, which chose to re-register the provider under a different name, and re-register three of the provider's four products. To date, there are 30 providers with 46 registered renewable energy products participating in the Customer Credit Subaccount.

A reduction in the credit level from 1.25 to 1.0 cents/kWh took effect on July 1, 2000. As anticipated, the reduced credit level has already lowered total disbursements from the Customer Credit Subaccount. In September 2000, for the first time this year,

payments to providers did not exceed the monthly allocation to the subaccount. To date, payments totaling approximately \$39 million have been made to registered renewable providers.

Despite the reduction in payments from the subaccount, it is likely that an additional transfer of funds will occur in the fourth quarter of 2000. Depending on the timing of when funds are deposited into the subaccount, a transfer of funds from the New Account may be necessary. Any transferred funds will be repaid later in the Program.

On July 14, 2000, the Energy Commission held a public workshop to receive comments on various issues concerning the implementation of the Customer Credit Subaccount. The topics included 1) the types of energy transactions that are allowable for customer credits and 2) the timeline for reporting energy purchases to the Energy Commission. The Energy Commission is currently considering the technical changes proposed by staff at the workshop.

### **Consumer Education Subaccount**

During the third quarter of 2000, market research and analysis were completed to better understand consumers' perceptions of emerging renewable energy technologies. This research provides the Energy Commission with current market information and a better understanding of consumer awareness and perceptions of emerging renewable energy technologies. The research results will provide the foundation for choosing strategies to pursue for the emerging technologies market.

Twenty applications for the Emerging Renewable Energy Technologies Program Opportunity Notice were received on July 7, 2000, requesting funding totaling nearly \$1.2 million. The 14 applications that received a passing score were ranked from highest to lowest. On August 23, 2000, the Energy Commission awarded grants totaling \$375,000 to the seven highest-scoring applications. The grant projects include an educational media outreach program, and a photovoltaic educational and outreach project.

The Renewable Energy Marketing Board (REMB) completed their 15-month consumer education campaign to promote renewable energy. The REMB submitted a final report on the campaign that includes an evaluation of the activities conducted, as well as recommendations to the Energy Commission on future actions.

On August 17, 2000, staff conducted a public workshop to provide stakeholders the opportunity to review and comment on the activities of the Consumer Education Subaccount. At the workshop, the REMB presented a summary and evaluation of their activities along with their recommendation for the remaining Consumer Education Subaccount funds. Technical support contractor Regional Economic Research, Inc. presented their final report on Market Research and Analysis for Emerging Renewable Technologies. Additionally, workshop participants had the opportunity to provide input to the Energy Commission for future consumer education activities.

The Energy Commission co-sponsored and participated in Solfest 2000, which was held on August 26-27, 2000 in Hopland, California. Solfest 2000 was an educational and entertainment event that promotes renewable energy and sustainable living through workshops, tours and inspirational speakers.

In summary, the Energy Commission continues to make excellent progress in implementing the Renewable Energy Program. We expect program disbursements of the Renewable Resources Trust Fund to increase in the fourth quarter of 2000.