

CALIFORNIA ENERGY COMMISSION

OFFICE OF THE COMMISSIONERS

1516 NINTH STREET

SACRAMENTO, CA 95814-5512

July 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 tenth quarterly report for the Program, covering the period April 1 through June 30, 2000. As reflected by 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>.

Respectfully submitted,

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Commissioner and Presiding Member
Electricity and Natural Gas Committee

ARTHUR ROSENFELD
Commissioner and Associate Member
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Enclosure

cc: California Legislative Analyst's Office

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

(April 1 – June 30, 2000)

The California Energy Commission is pleased to submit its Quarterly Report on the Renewable Energy Program covering the period April 1 through June 30, 2000.¹ The report describes the Energy Commission's implementation activities, including information regarding awards submitted to the State Controller² 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 AB 1890 required, 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 Resources 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 the following:

- 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

¹ 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.

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

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

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

Account, Program-Implementation and Funding Activities: April – June 2000	Expected Funding and Implementation Activities: July – September 2000
Existing Resources Account	
<ul style="list-style-type: none"> • A total of 360 facilities are registered as renewable suppliers, and 259 facilities are eligible for funding. • Tier 1 (biomass, solar/thermal and waste tire) paid 0.08 – 0.7 cents/kWh on 695 million kWh for February, March and April. • Tier 2 (wind) paid from 0.0 – 0.2 cents/kWh on 682 million kWh for February, March and April. • Tier 3 (geothermal, digester and landfill gas, small hydro and municipal solid waste) received no payments for February, March and April. • Payments totaling \$3,928,128 were made this quarter. • Rollover of \$31.1 million for Tiers 1, 2 and 3. 	<ul style="list-style-type: none"> • Payments for May, June and July generation are scheduled for July 31, August 31 and October 2, respectively. • Estimated third quarter payments (May, June, July): \$2.5 million.
New Resources Account	
<ul style="list-style-type: none"> • Eleven projects are on-line and producing energy. • To date, payments totaling \$2.15 million have been made to seven on-line facilities for 188 million kWh of new renewable energy generation. • Payments totaling \$537,546 were made this quarter. 	<ul style="list-style-type: none"> • Payments to a 0.5 MW landfill gas project and a 49 MW geothermal project will begin. • Payments to two on-line projects will begin once unresolved issues are settled. • Construction of projects will continue, as will payments to registered on-line projects.
Emerging Resources Account	
<ul style="list-style-type: none"> • Funds encumbered for Buydown Program reservation requests currently total \$3.65 million. • Payments for installed systems total \$4.6 million as of June 30, 2000. • Received 42 new reservation requests this quarter. 	<ul style="list-style-type: none"> • Final market research reports on emerging technologies to be completed by July. • Additional new reservation requests are expected. • Monitoring program jointly funded by Energy Commission and the Department of Energy will continue.
Customer Resources Account	
Customer Credit Subaccount	
<ul style="list-style-type: none"> • Twenty-seven active marketers are registered as renewable providers, offering a total of 43 products containing renewable energy. • Three new providers registered this quarter. • To date, payments totaling \$33 million have been made to providers. 	<ul style="list-style-type: none"> • More payments will be made as providers continue to submit invoices for funding. • The market will continue to be dynamic, as renewable providers and products are added and dropped. • The lowered credit level of 1.0 cents/kWh is effective July 1 – December 31, 2000.
Consumer Education Subaccount	
<ul style="list-style-type: none"> • Final report on emerging renewable energy technologies market research completed on June 30, 2000. • Participated in and provided funding for statewide Earth Day 2000 events. • Conducted a media campaign in Contra Costa County, Santa Barbara and San Diego. 	<ul style="list-style-type: none"> • Selection, approval and initiation of grant agreements for emerging renewable energy technologies activities. • Plan and conduct staff workshop to review activities, market research results, and collect stakeholder input on future priorities.

Renewable Resources Trust Fund Expenditures

Through June 30, 2000, the Renewable Resources Trust Fund *received* \$273.8 million for all of the accounts. As of the second quarter of 2000, the Energy Commission *awarded* \$170.8 million, reflecting payments (disbursements) from all of the accounts. Eligible applicants *reserved* \$68.7 million, reflecting fund reservations (encumbrances) from the New Resources Account, the Emerging Resources Account, and the Consumer Education Subaccount. Table II shows a financial summary of the Renewable Resources Trust Fund as of the second quarter 2000.

Table II
Renewable Resources Trust Fund
Current Funding and Expenditures for the Quarter Ending June 30, 2000
(\$ millions)

	Existing Resources Account	New Resources Account ³	Emerging Resources Account	Customer Resources Account		Program Total ⁴
				Customer Credit	Consumer Education	
Available Funds	144.638	71.400	27.375	27.600	2.738	273.761
Disbursements	(130.467)	(2.155)	(4.598)	(32.990)	(0.610)	(170.820)
Current Balance	14.170	63.856 ⁵	22.777	0.000 ⁵	2.128	102.941
Encumbrances	0.000	(63.856)	(3.649) ⁶	0.000	(1.190)	(68.695)
Unexpended Funds	14.170	0.000	19.128	0.000	0.938	34.246

The three investor-owned utilities continue deposits into the Fund with payments current to June 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 Resources Account for electricity produced through April 2000, from the Customer Credit Subaccount to providers of renewable energy, and paid claims to systems through the Buydown Program in the Emerging Resources Account. Payments were also made from the New Resources Account to nine of the 11 projects that are now on-line and generating renewable energy, and from the Consumer Education Subaccount for implementation activities of the *Renewable Energy Consumer Education (RECE) Marketing Plan*. The Energy Commission encumbered funds from the Emerging Resources Account for systems participating in the Buydown Program, the Consumer

³ 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.

⁴ Program totals include \$9,527 in voluntary contributions.

⁵ This quarter, an additional \$3.95 million was transferred from the New Resources Account to the Customer Credit Subaccount. The total transfer amount to date is \$5.39 million.

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

Education Subaccount for continued *Marketing Plan* activities, and from the New Resources Account for its 52 continuing projects. Funding to these projects will eventually total \$162 million; funds from the New Resources Account will continue to be reserved as they become available.

Existing Resources Account

As expected, because of high short-run avoided cost (SRAC) prices during the second quarter of 2000, no incentive payments were made to Tier 3 facilities. Also affected by the high SRAC prices were Tier 2 facilities, which did not receive any payments for the April 2000 payment cycle, and Tier 1 facilities, which only received a total of \$285,000 for the same cycle. Over the past 10 months, Tier 3 facilities in Southern California Edison Company's territory have not received any funding. Tier 3 facilities in San Diego Gas and Electric's territory have not received funding in nine months, and six months have passed with no payments made to Tier 3 facilities in Pacific Gas and Electric's territory.

Over the past five months, the rollover has nearly doubled for the three tiers combined, and is currently at \$31.1 million. The rollover is the amount of money that is available, 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.

The SRAC is expected to stay above 3.0 cents per kilowatt-hour (cents/kWh) throughout the third quarter of 2000 and is likely to remain above this level as long as gas prices are high. The SRAC is used to determine incentive payments for the August and September 2000 payment cycles will be above 4.0 cents/kWh; therefore, no payments will be made to participating facilities in any tiers for those months.

New Resources Account

To date, 47 of the 52 projects participating in the New Resources Account program have completed Milestone 2, which requires filing for all relevant project permits. Twenty projects have also obtained all of their project permits; two of those have begun construction, and seven more are scheduled to begin construction in fall 2000. Four projects are technically on-line, but they have not yet submitted payment invoices to the Energy Commission. These four projects include one 49.9 megawatt (MW) geothermal facility, two landfill gas facilities totaling 2.16 MW, and one 2 MW wind facility. The remaining seven projects — six landfill gas facilities totaling nearly 23 MW of capacity and one 16.5 MW wind project — are on-line and receiving payments from the State Controller. Since coming on-line in 1999, these projects have received \$2,154,502 in payments for 188 million kWh of new renewable generation.

Riverside County Waste Management Department requested and the Energy Commission granted cancellation of the funding award for their 0.6 MW Double Butte landfill gas project. The Energy Commission will return the project's conditional funding award of \$344,026 to the Renewable Resources Trust Fund for reallocation.

In June, there were new developments with the two geothermal projects located in the Medicine Lake area. These projects have been controversial because of their proximity to a Native American cultural site. The CalPine Corporation's Fourmile Hill project was issued a positive Record of Decision by the U.S. Forest Service and Bureau of Land Management, which allows the project to continue with development, although project opponents plan to appeal the decision. The CalEnergy Corporation's Telephone Flat project, on the other hand, was issued a negative Record of Decision, which CalEnergy plans to appeal. The Energy Commission will monitor the progress of the two appeals.

It is important to emphasize that none of the projects participating in the New Resources Account will receive any funds from the Energy Commission until they begin generating electricity for sale. The Energy Commission will examine options for reallocating any funds made available by project cancellations if and when they occur.

Emerging Resources Account

The Buydown Program has received 725 reservation requests since it began on March 20, 1998, including 42 new requests during the second quarter of 2000. Currently, approximately \$3.65 million is encumbered for projects with reservation requests, and the State Controller has paid a total of \$4.6 million to completed projects. The total amount of encumbered funds does not include most of the new reservation requests received during the second quarter of 2000, which are still in various stages of the Buydown Program review process and have not yet received final approval for funding.

Other Emerging Resources Account activities during the second quarter of 2000 include those carried out by technical support contractor Regional Economic Research, Inc. (RER). In the first quarter of 2000, RER separated their market research report on emerging renewable energy technologies into two reports — one focusing on demand analysis, the other on supply analysis. Final versions of these reports are scheduled for completion by the beginning of July.

A monitoring program of photovoltaic and small wind systems, jointly funded by the Energy Commission and the Department of Energy (DOE), continues to progress. Funding from the Energy Commission for this program is provided through RER. In the second quarter of 2000, the DOE and the Energy Commission approved a one-year, no-cost time extension to gather sufficient performance data on the selected sites.

Customer Credit Subaccount

The market remained active in the second quarter of 2000. One participating provider registered an additional renewable energy product, and another provider with two renewable energy products dropped out. The Energy Commission registered three new providers with the Customer Credit Subaccount. Each of the new providers registered one renewable energy product with the Energy Commission. To date, there are 27 providers with 43 registered renewable energy products participating in the Customer Credit Subaccount program.

In June, the Energy Commission reduced the credit level from 1.25 cents/kWh to 1.0 cents/kWh. This reduction in the credit level, which is effective on July 1 and continues through December 31, 2000, was necessary because of increasing demand on the subaccount and the limited availability of funds. Since there is a lag time between when customer credit is passed on to customers and when providers invoice the Commission, the 1.0 cents/kWh credit level will not be reflected in payments from the subaccount until September 2000.

As of June 30, 2000, distributions from the Customer Credit Subaccount totaled approximately \$33 million. Expenditures from the subaccount are expected to exceed available funds next quarter, despite the reduction in the credit level. Depending on the timing of when funds are deposited into the subaccount, it is likely that an additional transfer of funds from the New Resources Account will be necessary in the next quarter. Any transferred funds will be repaid later in the Program.

Consumer Education Subaccount

During the second quarter of 2000, market research was conducted to better understand consumers' perceptions of emerging renewable energy technologies. Mail and Internet surveys released in April and May received a total of 850 responses. This research provides the Energy Commission with current market information as well as a better understanding of consumer awareness and perceptions of emerging renewable energy technologies. The results of the surveys will assist the Energy Commission in developing effective consumer education efforts for the emerging renewable energy market.

On May 5, 2000 the Energy Commission released a Program Opportunity Notice for consumer education activities for the emerging renewable energy market. A total of \$375,000 in grant funding is available to support consumer education about emerging renewable technologies, which include photovoltaic systems, solar electric systems, small wind turbine systems, and fuel cells that convert renewable fuels into electricity. Funding awards will vary from \$10,000 to \$75,000 each, with the applicant providing 25 percent matching funding. Proposals were due on July 7, 2000.

The Energy Commission and the Renewable Energy Marketing Board (REMB) took an active role in the largest Earth Day 2000 events in both Northern and Southern California. Included at these events was a "Green Power Zone," where green power generators, retailers, and marketers exhibited their technologies, products, and unique displays.

Next quarter, the REMB will provide the Energy Commission with a final report on the 15-month consumer education campaign to promote renewable energy. The report will include an evaluation of the activities conducted as well as recommendations to the Energy Commission on future actions. The REMB's findings, along with market research on emerging renewable technologies, will be presented at a stakeholder

workshop in August 2000. Workshop participants will have the opportunity to provide input to the Energy Commission for future consumer education activities.

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 third quarter of 2000.