

CALIFORNIA
ENERGY
COMMISSION

RENEWABLE ENERGY PROGRAM

QUARTERLY REPORT TO THE LEGISLATURE

January 2000 through March 2000

COMMITTEE REPORT

APRIL 2000
P500-00-007VI



Gray Davis, Governor

CALIFORNIA ENERGY COMMISSION

OFFICE OF THE COMMISSIONERS

1516 NINTH STREET

SACRAMENTO, CA 95814-5512

April 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 ninth quarterly report for the Program, covering the period January 1 through March 31, 2000. As reflected by this report, the Energy Commission continues to make significant progress in implementing the Renewable Energy Program.

Should you have any questions or comments concerning this report, please contact Tim Schmelzer, Energy Commission Assistant Director of Governmental Affairs, at 654-4942.

Respectfully submitted,

MICHAL C. MOORE
Commissioner and Presiding Member
Renewables Committee

WILLIAM J. KEESE
Chairman and Associate Member
Renewables Committee

Enclosure

cc: California Legislative Analyst's Office

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

(January 1 – March 31, 2000)

The California Energy Commission is pleased to submit its Quarterly Report on the Renewable Energy Program covering the period January 1 through March 31, 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:

- 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 Renewable Energy 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. This procedure significantly streamlines the award-payment process for all participants.

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

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

Account, Program-Implementation and Funding Activities: January – March 2000	Expected Funding and Implementation Activities: April – June 2000
Existing Resources Account	
<ul style="list-style-type: none"> • A total of 354 facilities are registered as renewable suppliers and 249 facilities are eligible for funding. • Tier 1 (biomass, solar/thermal and waste tire) paid 0.49 – 1.38 cents/kWh on 721 million kWh for November 1999, December 1999 and January 2000. • Tier 2 (wind) paid from 0.0 – 0.39 cents/kWh on 340 million kWh for November 1999, December 1999 and January 2000. • Tier 3 (geothermal, digester and landfill gas, small hydro, and municipal solid waste) received no payments for November 1999, December 1999 and January 2000. • Payments totaling \$7,267,492 made this quarter. • Rollover of \$21.2 million for Tiers 1, 2 and 3. 	<ul style="list-style-type: none"> • Payments for February, March and April 2000 generation are scheduled for May 1, May 31, and June 30, 2000, respectively. • Estimated second quarter 2000 payments (February, March, April): \$3.1 million.
New Resources Account	
<ul style="list-style-type: none"> • Nine projects are on-line and producing energy. • To date, payments totaling \$1.62 million have been made to seven on-line facilities for 139 million kWh of new renewable energy generation. • Payments totaling \$544,004 were made this quarter. • The Energy Commission reallocated \$4.4 million to Cabazon Wind Partners, LLC. 	<ul style="list-style-type: none"> • Payments are expected to begin to an on-line wind project in the Palm Springs area and a landfill gas project in Sunnyvale. • Construction of projects will continue, as will payments to on-line projects.
Emerging Resources Account	
<ul style="list-style-type: none"> • Funds encumbered for Buydown Program reservation requests currently total \$3.67 million. • Payments for installed systems total \$4.36 million as of March 31, 2000. • Received 61 new reservation requests this quarter. 	<ul style="list-style-type: none"> • Draft market research reports on emerging technologies to be completed in April. • Additional new reservation requests are expected. • Monitoring program jointly funded by Energy Commission and Dept. of Energy will continue.
Customer Resources Account	
Customer Credit Subaccount	
<ul style="list-style-type: none"> • Twenty-five active marketers are registered as renewable providers, offering a total of 40 products containing renewable energy. • Four new providers registered this quarter. • To date, payments totaling \$25.61 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. • In April, the Energy Commission will re-evaluate the lowered credit level, currently at 1.25 cents/kWh.
Consumer Education Subaccount	
<ul style="list-style-type: none"> • Market research on emerging renewable energy technologies continues. • Planning for Earth Day 2000 and spring outreach campaign continues. 	<ul style="list-style-type: none"> • Grant solicitation for emerging renewable energy technologies to be released. • The Energy Commission will conduct a spring media outreach campaign and take part in Earth Day 2000 activities.

Renewable Resources Trust Fund Expenditures

Through March 31, 2000, the Renewable Resources Trust Fund *received* \$246.4 million for all of the accounts. As of the first quarter of 2000, the Energy Commission *awarded* \$158.7 million, reflecting payments (disbursements) from all of the accounts. Eligible applicants *reserved* \$65.2 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 first quarter 2000.

Table II
Renewable Resources Trust Fund
Current Funding and Expenditures for the Quarter Ending March 31, 2000
(\$ millions)

	Existing Resources Account	New Resources Account ³	Emerging Resources Account	Customer Resources Account		Program Total ⁴
				Customer Credit	Consumer Education	
Available Funds	131.524	63.585	24.638	24.165	2.464	246.384
Disbursements	(126.539)	(1.617)	(4.359)	(25.606)	(0.531)	(158.652)
Current Balance	4.985	60.528 ⁵	20.279	0.000 ⁵	1.933	87.733
Encumbrances	0.000	(60.528)	(3.666) ⁶	0.000	(0.969)	(65.163)
Unexpended Funds	4.985	0.000	16.613	0.000	0.964	22.570

The three investor-owned utilities continue deposits into the Fund with payments current to March 31, 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 January 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 seven of the nine 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 \$8,450 in voluntary contributions.

⁵ A total of \$1.44 million has been transferred from the New Account to the Customer Credit Subaccount.

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 53 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

At its March 15, 2000 Business Meeting, the Energy Commission approved changes to Existing Resources Account program guidelines that will allow certain participating facilities the option of having their incentive payments based on the California Power Exchange (CalPX) day-ahead market-clearing price instead of utilities' monthly average short-run avoided costs (SRAC).⁷ Only facilities no longer in a utility contract or those that have exercised their one-time election to be paid CalPX-based prices from their utility as permitted by AB 1890 will be eligible to switch to CalPX-based prices. The *Guidebook for the Renewable Energy Program, Volume 1 – Existing Renewable Resources Account* states that incentive payments for all participating facilities will eventually be based on CalPX prices when the California Public Utilities Commission (CPUC) determines that the market is working properly. The CPUC decision is currently expected in December 2000.

Because of the high SRAC during the first quarter of 2000, no incentive payments were made to Tier 3 facilities, with the exception of \$602 in adjustments for payments made in the previous quarter. Also, because of the extremely high SRAC used to determine incentive payments for the January 2000 payment cycle, no payments were made to Tier 2 facilities for that month. The SRAC will remain above 3.0 cents per kilowatt-hour (cents/kWh) throughout the second quarter of 2000. As a result, Tier 3 facilities will receive no incentive payments through the June 2000 payment cycle.

New Resources Account

To date, 46 of the 53 projects participating in the New Resources Account program have completed Milestone 2, which requires filing for all relevant project permits. Nineteen projects have also obtained all of their project permits; three of those have begun construction, seven are scheduled to begin construction in fall 2000, and two are technically on-line, but have not yet submitted the appropriate documentation to the Energy Commission to begin receiving payments. 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 \$1,616,956 in payments for 139 million kWh of new renewable generation.

At its March 22, 2000 Business Meeting, the Energy Commission decided to reallocate \$4.4 million in New Resources Account funds that became available with the cancellation of a 7.8 MW biomass project and a 0.9 MW landfill gas project. These projects requested cancellation of their funding awards due to overwhelming difficulties in developing the projects. In accordance with New Resources Account program

⁷ The value of the market-clearing price used in calculating payments has been the weighted seasonal average SRAC specific to each of the three major investor-owned utilities.

guidelines, the \$4.4 million was reallocated to Cabazon Wind Partners, LLC, the single winning bidder in the auction whose award was reduced by approximately 73 percent to fit within the \$162 million allocation for the auction. The Energy Commission allocated the available \$4.4 million to Cabazon at the incentive rate bid by the cancelled projects, 1.25 cents/kWh rather than at Cabazon's original bid of 1.49 cents/kWh. In doing so, the Energy Commission ensured that the reallocated funds would result in the same amount of renewable generation as planned by the two cancelled projects.

Emerging Resources Account

The Buydown Program has received 683 reservation requests since it began on March 20, 1998, including 61 new requests during the first quarter of 2000. Currently, approximately \$3.67 million is encumbered for projects with reservation requests, and the State Controller has paid a total of \$4.36 million to completed projects. The total amount of encumbered funds does not include most of the new reservation requests received during the first 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 first quarter of 2000 include those carried out by technical support contractor Regional Economic Research, Inc. (RER). RER separated their market research report on emerging renewable energy technologies into two reports – one focusing on demand analysis, the other on supply analysis. The demand analysis report, which is scheduled for completion by April 10, 2000, includes the results of the residential and small commercial customer surveys completed in June through August 1999. The supply analysis report, due later in April, will include results of a survey of manufacturers and retailers of emerging technologies, and recommendations for the Buydown Program.

A monitoring program of photovoltaic and small wind systems, jointly funded by the Energy Commission and the Department of Energy, is now in high gear. Phase I of the program began this quarter, with monitoring equipment installed at the 15 selected sites, gathering data on system performance. Funding from the Energy Commission for this program is provided through RER.

Additional site verification activities by RER will commence during the second quarter of 2000. Verification activities performed in early 1999 found some systems operating below their rated capacities. RER will work with retailers of these systems to diagnose, repair and/or recommend remedies for the systems.

Customer Credit Subaccount

The Energy Commission registered four new providers with the Customer Credit Subaccount during the first quarter of 2000, which increases the total of registered renewable providers to 25. Each of the four new providers registered one renewable energy product with the Energy Commission. With the inclusion of the four new products, the 25 participating providers have registered a total of 40 renewable energy products.

As of March 31, 2000, distributions from the Customer Credit Subaccount total approximately \$25.6 million. In the first quarter of 2000, providers received payments totaling \$6.9 million, a decrease of more than \$1 million from payments made during the previous quarter. One factor behind the smaller disbursements was a change in the invoice schedule, which limited the number of invoices that providers could submit each month. The primary factor, however, was the reduction of the customer credit level from 1.5 cents/kWh to 1.25 cents/kWh, which went into effect December 1, 1999. In April, the Energy Commission will review the current credit level and consider whether it should be changed.

In March 2000, the Energy Commission proposed draft requirements for registered renewable providers and wholesalers to annually report and verify their electricity purchases and sales for the calendar year. The guidebook for the Customer Credit Subaccount requires an independent audit of these annual reports by a Certified Public Accountant (CPA). However, because a true audit could place an undue burden on program participants, the Energy Commission proposed to reduce the verification standards used by a CPA to "agreed-upon procedures."

The program's reporting and verification requirements are intended to ensure the accuracy of marketing claims made to consumers and to prevent the misuse of public funds. In addition to enhancing the accountability of participants, the Energy Commission will use this information for program analysis purposes.

Consumer Education Subaccount

In partnership with the Renewable Energy Marketing Board (REMB), the Energy Commission continues to implement the green energy portion of the *Renewable Energy Consumer Education (RECE) Marketing Plan*. During the first quarter of 2000, REMB and Consumer Education staff planned outreach and media activities around the Earth Day 2000 theme, "New Energy for a New Era."

Earth Day 2000 (Saturday, April 22) provides a unique opportunity for the Energy Commission to reach thousands of Californians with the green power message. The Energy Commission and REMB will take an active role in the largest Earth Day 2000 events in both Northern and Southern California. Each of these events will have a "Green Power Zone" where green power generators, retailers and marketers will showcase their technologies and unique displays.

Preceding Earth Day 2000, the Energy Commission will conduct a media tour in the top five media markets in California, including Contra Costa County and San Diego. Celebrities and elected officials will host these events, which will occur at local landmarks and feature visual displays of renewable technologies. Following the Earth Day 2000 events, a 30-second cable television spot is planned for media markets in Contra Costa County, the northern San Diego area, and the Santa Barbara area. The ads will reach thousands of Californians with the green power message over the four-week period that they will run. To evaluate the effectiveness of these ads, the Energy Commission will conduct pre- and post-public opinion polls in the Santa Barbara area.

Staff is conducting market research to better understand consumers' perceptions of emerging renewable technologies. Both mail and Internet surveys will provide data to assist staff in successfully implementing an effective consumer education campaign for emerging renewable technologies. Staff is also developing a grant solicitation for new consumer education activities promoting emerging renewable technologies.

At its February 9, 2000 Business Meeting, the Energy Commission adopted the *Guidebook for the Renewable Energy Program, Volume 5 – Consumer Education Subaccount*. The *Guidebook* addresses the eligibility requirements and funding processes for the Consumer Education Subaccount.

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 second quarter of 2000.