



CALIFORNIA
ENERGY
COMMISSION

RENEWABLE ENERGY PROGRAM

QUARTERLY REPORT TO THE
LEGISLATURE

October 2000 through December 2000

COMMITTEE REPORT

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Gray Davis, Governor

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

(October 1 – December 31, 2000)

The California Energy Commission is pleased to submit its Quarterly Report on the Renewable Energy Program covering the period October 1 through December 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 the development of 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:

- 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 activities for the fourth quarter of 2000 and describes the expected funding and implementation activities for the first quarter of 2001.

¹ Public Utilities Code (PUC), Article 5, Section 445(g) requires the Commission to report to the Legislature quarterly on fiscal and programmatic 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.

Table I
Renewable Energy Program:
Fourth Quarter 2000 Program Implementation

Account, Program-Implementation and Funding Activities: October – December 2000	Expected Funding and Implementation Activities: January – March 2001
Existing Account	
<ul style="list-style-type: none"> • A total of 370 facilities registered as renewable suppliers, and 264 facilities are eligible for funding. • Tier 1 (biomass, solar/thermal, and waste tire) received no payments for August, September and October. • Tier 2 (wind) received no payments for August, September and October. • Tier 3 (geothermal, digester and landfill gas, small hydro, and municipal solid waste) received no payments for August, September and October. • No payments were made this quarter. • Rollover of \$56.5 million for Tiers 1, 2 and 3. 	<ul style="list-style-type: none"> • Payments for November 2000, December 2000, and January 2001 generation are scheduled for January 31, February 28 and April 2, 2001, respectively. • It is estimated that no payments will be made in the first quarter of 2001.
New Account	
<ul style="list-style-type: none"> • Thirteen projects are on-line and producing energy. • To date, payments totaling \$4.47 million have been made to nine on-line facilities for 385 million kWh of new renewable energy generation. • Payments totaling \$1.67 million were made this quarter. • A second auction for new renewable projects was held November 15 and conditionally awarded \$40 million to 17 winning bidders. These projects total 471 MW of capacity with an average incentive request of 0.6 cents/kWh. 	<ul style="list-style-type: none"> • Construction of projects will continue, as will payments to on-line projects.
Emerging Account	
<ul style="list-style-type: none"> • Funds encumbered for Buydown Program reservation requests currently total \$3.0 million. • Payments for installed systems total \$5.7 million as of December 28, 2000. • Received 135 new reservation requests this quarter. 	<ul style="list-style-type: none"> • Monitoring program jointly funded by Energy Commission and Department of Energy continues. • Additional new reservation requests are expected at an increasing rate, due in part to high electric rates experienced by SDG&E customers and anticipated rate increases for SCE and PG&E customers.
Customer Side Account	
Customer Credit Subaccount	
<ul style="list-style-type: none"> • Twenty-nine active marketers are registered as renewable providers, offering a total of 46 products containing renewable energy. • One provider registered a new product this quarter and another provider exited the market. • To date, payments totaling \$45.5 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 credit level of 1.0 cents/kWh remains effective through June 30, 2001.
Consumer Education Subaccount	
<ul style="list-style-type: none"> • Final REMB invoices received and approved. • Finalized seven grant agreements for emerging renewable energy market consumer education activities. • Initiation of grant solicitation for renewable energy consumer outreach. • Initiation of contract solicitation for renewable energy consumer awareness campaign. 	<ul style="list-style-type: none"> • Finalize updated Renewable Energy Consumer Education (RECE) Marketing Plan. • Release \$2.5 million Request for Proposals to develop and conduct a Renewable Energy Public Awareness Campaign.

Renewable Resources Trust Fund Expenditures

Through December 31, 2000, the Renewable Resource Trust Fund *received* \$000.0 million for all of the accounts. As of the fourth quarter of 2000, the Energy Commission awarded \$000.0 million, reflecting payments (disbursements) from all of the accounts. Eligible applicants *reserved* \$00.0 million, reflecting fund reservations (encumbrances) from the New Account, the Emerging Account, and the Customer Education Subaccount. Table II shows a financial summary of the Renewable Resources Trust Fund as of the fourth quarter of 2000.

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

	Existing Account	New Account ³	Emerging Account	Customer-Side Account		Program Total ⁴
				Customer Credit	Consumer Education	
Available Funds	000.000	00.000	00.000	00.000	0.000	000.000
Disbursements	(000.000)	(0.000)	(0.000)	(00.000)	(0.000)	(000.000)
Current Balance	0.000	00.000	00.000	0.000 ⁵	0.000	00.000
Encumbrances	0.000	(00.000)	(0.000) ⁶	0.000	(0.000)	(00.000)
Unexpended Funds	0.000	0.000	0.000	0.000	0.000	00.000

The three investor-owned utilities continue making deposits into the Fund with payments current to December 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 Account for electricity produced through October 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 eventually total \$162 million; funds from the New Account will continue to be reserved for the 52 projects as funding becomes available.

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 \$9,572 in voluntary contributions.

⁵ This quarter, and 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.

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

Existing Account

As expected, because of high short-run avoided cost (SRAC) prices during the fourth quarter of 2000, no incentive payments were made to Tier 3 facilities. Tier 3 facilities have not received any funding for over a year. 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.

The rollover amount has increased by approximately \$14 million since last quarter, and currently stands at over \$56 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 5.0 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. The SRAC prices for December 2000 range from 15 to 16.5 cents/kWh, well above the highs in November 2000 of 7 to 7.5 cents/kWh. 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 first quarter of 2001, and the rollover will increase to \$69.4 million.

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 funding a second auction held in December 2000, 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.

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 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

Ten projects that are participating in the New Account are now on-line and contributing approximately 100 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,

two geothermal projects totaling 60 MW of capacity, and one 16.5 MW wind project — have received a total of \$4,466,614 in payments from the State Controller for approximately 385 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 two projects include a 1.6 MW landfill gas facility, a 2.8 MW landfill gas facility, and a 2 MW wind facility. The remaining 39 participating projects are in various stages of development.

Winning bidders in the second auction for project funding from the New Account were announced on December 8, 2000. Seventeen new projects totaling 471 MW in capacity were awarded 840 million in conditional funding from the New Account. All of the available funds were allocated to the winning projects at an average incentive of 0.6 cents/kWh. The projects include landfill gas, small hydro, biomass, and wind technologies. Most of the projects are scheduled to be constructed and on-line by the end of 2001 (several expected to be on-line by the summer of 2001). These projects will deliver an estimated 7 billion kWhs of renewable energy over five years, enough to power about 200,000 homes

The primary goal of this auction was to help ease California's current energy shortage, which is likely to worsen by the summer 2001. 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 December 31, 2001.

Emerging Account

The Buydown Program has received 946 reservation requests since it began on March 20, 1998, including 135 new requests during the fourth quarter of 2000. Currently, \$3.0 million is encumbered for projects with reservation requests, and the State Controller has paid approximately \$5.7 million to completed projects. The total amount of encumbered funds does not include about 36 reservation requests received during the fourth quarter of 2000, which are still in various stages of the review process and have not yet received approval for funding.

Reservation requests are expected to continue to increase in future months as a result of high rates in the SDG&E service territory and anticipated rate increases for customers of PG&E and SCE.

Staff participated in several high-profile dedication ceremonies during December, including one in Fountain Valley in which 3 large PV systems totaling 340 kW were dedicated, and one in Berkeley where a 97kW system was dedicated.

Other Emerging Account activities during the fourth quarter of 2000 include those carried out by technical support contractor Regional Economic Research, Inc. (RER).

- A monitoring program of photovoltaic and small wind generating systems, jointly funded by the Energy Commission and the Department of Energy (DOE), is ongoing. A draft report on Phase 1 was received in November and a copy was forwarded to DOE for their review. Phase 2 of the monitoring program, which began in October 2000, involves moving data-collecting equipment to 10 additional customer sites.

- Work authorizations were initiated with RER and ENDECOS involving additional troubleshooting of under-performing systems, development of a technical manual for PV systems, additional training sessions for building officials and quality control assistance for retailers/installers.
- A work authorization was also prepared with Renewable Energy Development Institute (REDI), to research and evaluate various loan program options.

Customer Credit Subaccount

In the fourth quarter of 2000, the Energy Commission registered one additional product for a provider that had previously registered as a renewable provider, but another provider with one product exited the market. To date, there are 29 providers with 46 registered renewable energy products participating in the Customer Credit Subaccount.

At its regularly scheduled Business Meeting on December 20, 2000, the Energy Commission approved substantive changes to the Customer Credit Subaccount. One item that the Commission adopted was a continuation of the credit level at 1.0 cent per kilowatt-hour for the six-month period from January 1, 2001 through June 30, 2001. The 1.0 cent per kilowatt hour credit level has been in place since July 2000, and the Energy Commission decided it was important to continue this credit level to help maintain the market for renewable energy. The Energy Commission also approved other technical changes to the implementation of the Subaccount including, 1) allowing the wholesale trading of renewable tickets separately from commodity energy, and 2) modifying the timeline for reporting energy purchases to the Energy Commission.

Total disbursements from the Customer Credit Subaccount this quarter continue to exceed allocations to the Subaccount, but the disbursements are lower than they were during the first two quarters of the year when the credit level was set at 1.25 cents per kilowatt-hour. To date, payments totaling approximately \$45.5 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 first quarter of 2001. Depending on the timing of when funds are deposited into the Subaccount, a transfer of funds from the Existing Account may be necessary.

Consumer Education Subaccount

During the fourth quarter of 2000, staff finalized seven grant agreements for consumer education and outreach activities for the emerging renewable energy market. Highlights of these grant projects completed during this period include:

- A 16-page insert "*The Road to Renewable Energy*" in the Chico News and Review
- Publicity, registration and tour book for the October 14, 2000 Solar Home Tour
- Solar energy profile in the November/December 2000 *Currents* newsletter
- SunPower posters were developed and distributed to 1,100 California Post Offices
- Economic analysis conducted for installing PV systems on five food cooperatives

Work has begun on updating the *Renewable Energy Consumer Education Marketing Plan* that was adopted by the Energy Commission in February 1999. The plan is being updated to incorporate experience that has been gained since implementing the plan as

well as to adjust for subsequent changes in the renewable energy market. The updated plan will be completed next quarter. The revised plan will optimize flexibility and responsiveness to opportunities and changes in the renewable energy market.

Staff has developed a Program Opportunity Notice (PON) for consumer education outreach activities for the renewable energy market. Funding of \$620,000 will be made available for projects that provide information to consumers about renewable energy and its environmental benefits and the opportunity to purchase green power. The grant solicitation should be released in mid-January 2001.

Staff are also preparing a \$2.5 million Request for Proposals (RFP) for a Renewable Energy Public Awareness Campaign. The goals of the campaign are to increase consumer awareness and purchases of renewable energy. To meet these goals, the project will identify California consumers most likely to choose renewable energy and will develop the most effective campaign messages and strategies to reach them. The scheduled release date for this RFP is February 1, 2001.

In summary, the Energy Commission continues to make excellent progress in implementing the Renewable Energy Program. We expect program disbursements of the Renewable Resource Trust Fund to increase in the first quarter of 2001.