



*RENEWABLE
ENERGY
PROGRAM*

**CALIFORNIA
ENERGY
COMMISSION**

RENEWABLE ENERGY PROGRAM

QUARTERLY REPORT TO THE
LEGISLATURE

July 2003 through September 2003

COMMITTEE REPORT

**OCTOBER 2003
P500-03-022V3**



Gray Davis, Governor

CALIFORNIA ENERGY COMMISSION1516 NINTH STREET
SACRAMENTO, CA 95814-5512

October 31, 2003

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 to the Legislature* Concerning the Renewable Energy Program

Honorable Members:

The California Energy Commission is pleased to submit its *Quarterly Report to the Legislature* for the third quarter of year 2003, covering the period July 1 through September 30, 2003. As required by the Public Utilities Code, Article 5, Section 445(g), the Energy Commission must submit quarterly reports on fiscal and functional aspects of the Renewable Energy Program.

As reflected in this report, the Energy Commission continues to make excellent progress in implementing the Renewable Energy Program and, in collaboration with the California Public Utilities Commission, in developing the implementation rules for California's Renewable Portfolio Standard.

Should you have any questions or comments concerning these reports, please contact Cecile Martin, Legislative Director, at 654-4942 or by e-mail at [cmartin@energy.state.ca.us].

Respectfully submitted,

JOHN L. GEESMAN
Commissioner and Presiding Member
Renewables Committee

JAMES D. BOYD
Commissioner and Associate Member
Renewables Committee

Enclosures

cc: California Legislative Analyst's Office

California Energy Commission's Quarterly Report Regarding the Renewable Energy Program (July 1 – September 30, 2003)

The California Energy Commission (Energy Commission) is pleased to submit its *Quarterly Report to the Legislature on the Renewable Energy Program*, covering the period July 1 through September 30, 2003. The Energy Commission is required to report to the Legislature quarterly on fiscal and functional aspects of the program.¹

This report describes the Energy Commission's implementation activities over the third quarterly reporting period of year 2003, including information regarding awards submitted to the State Controller for payment,² the cumulative commitment of claims by program, the demand for funds by program, and related matters.

Given that the Renewable Energy Program's funding mechanisms are ongoing, open solicitations, the amount of available funds is subject to change on a daily basis to meet the changing needs of program participants. Consequently, this report provides a snapshot of the status of the Renewable Energy Program and a forecast of future awards based upon market conditions and program trends at the time of this writing.

Below is background on the Renewable Energy Program, followed by summaries of its implementation activities, including the Renewable Portfolio Standard Program, and expenditures from the Renewable Resource Trust Fund. The remainder of this report discusses activities occurring in each program area during the third quarter of 2003, and summarizes the accomplishments of the Renewable Energy Program to date.

Background on the Renewable Energy Program

In 1996, the California Legislature created the Renewable Energy Program to foster the development of renewable electricity generation technologies and expand the renewable energy market in the state. To administer the program, the Legislature authorized the collection of ratepayer funds from 1998 through 2001. In 2001, the Legislature extended the Renewable Energy Program from 2002 through 2006.

This section summarizes the Renewable Energy Program from 1998 through 2006. For additional details about the Renewable Energy Program, the reader can refer to the Renewable Energy Program's most recent *Annual Project Activity Report to the Legislature*.³

Renewable Energy Program – 1998 through 2001

With the goal of maintaining the environmental, economic, and reliability benefits of renewable energy, Assembly Bill 1890 (Brulte, Chapter 854, Statutes of 1996) created the Renewable Energy Program, which became operational in 1998. AB 1890 directed California's large

investor-owned utilities (IOUs) to collect funds from their ratepayers to total \$540 million over the four-year period and transfer the funds to the Energy Commission for renewable resource development. Senate Bill 90 (SB 90, Sher, Chapter 905, Statutes of 1997) established the Renewable Resource Trust Fund and directed the Energy Commission to administer the funds through distinct program areas, each with funding mechanisms uniquely fashioned to move the renewable energy industry towards market competitiveness as follows:

- Production incentives for the existing renewable electricity generators on-line before 1996,
- Auction awards for new renewable electricity generators once they came on-line and produced electricity,
- Rebates for consumers who purchased and installed on-site generating systems utilizing renewable fuels,
- Credits for customers who purchased electricity generated with renewable energy, and
- Renewable energy consumer education.

In January 1998, the Energy Commission adopted overall funding directives, eligibility requirements, yearly allocations, and specific guidelines to assist participants in applying for funding. Renewable Resource Trust Fund monies not awarded between 1998 and 2001 remain available to distribute to program participants under the extended program.

In September 2000, the Legislature adopted Assembly Bill 995 (AB 995, Wright, Chapter 1051, Statutes of 2000) and Senate Bill 1194 (SB 1194, Sher, Chapter 1050, Statutes of 2000), which directed the IOUs to continue collecting \$135 million per year from their ratepayers for the Renewable Resources Trust Fund from 2002 through 2006. AB 995 and SB 1194 required the Energy Commission to recommend funding allocations and awards to the Legislature, which it provided in June 2001, in a report titled, *Investing in Renewable Electricity Generation in California (Investment Plan)*.⁴

Renewable Energy Program – 2002 through 2006

The Legislature incorporated the *Investment Plan* into Senate Bill 1038 (SB 1038, Sher, Chapter 515, Statutes of 2002), which Governor Davis signed on September 12, 2002, authorizing the Renewable Energy Program to administer the program beginning in 2003 through 2006. Although SB 1038 changed how funds are allocated, the program's basic structure and funding mechanisms were retained, with some modifications, as follows:

- The Existing Renewable Facilities Program offers financial incentives to support existing renewable facilities through a system of varying incentive amounts based on the market competitiveness of the eligible renewable technologies in the state.
- The New Renewables Program conducted auctions in 1998, 2000, and 2001 that awarded financial support to encourage new renewable electricity generation projects most likely to become competitive with conventional technologies. Once they come on-line, winning projects receive payments for their first five years of generation. The New Renewables Program will also provide funding to renewable generators for their above-market costs of

meeting the Renewables Portfolio Standard (RPS) requirements. (The RPS and its relationship to the Renewable Energy Program is discussed in detail later.)

- The Emerging Renewables Program grants capital cost rebates to assist customers who purchase and install renewable technologies for on-site generation. Increased sales encourage manufacturers and retailers to expand operations, which in turn should lower costs to consumers.
- Customer Credit incentives allow renewable providers to offer electricity products to their customers at prices competitive with conventional electricity products. In April 2003, the Energy Commission discontinued this program and reallocated the Customer Credit funding to the Consumer Education, Emerging Renewables, and the New Renewables Programs (10 percent, 45 percent, and 45 percent respectively).
- The Consumer Education Program, through grants and contracts, increases public awareness of renewable energy and its benefits, and encourages the support of renewable energy and purchases of renewable energy technologies through information dissemination and project demonstration.

In February 2003, the Energy Commission adopted new program guidelines for the Existing Renewable Facilities, Emerging Renewables, and Consumer Education Programs. The Energy Commission will update program guidelines for the New Renewables Program as the RPS rules develop.

SB 1038 required the Energy Commission to evaluate how to utilize the Customer Credit funds most effectively, in light of recent market changes, including whether the program should be continued. In April 2003, in response to this requirement, the Energy Commission adopted the *Customer Credit Renewable Resources Account: Report to the Governor and the Legislature⁵ (Customer Credit Report)*. In the *Customer Credit Report*, the Energy Commission discontinued the Customer Credit program, yet authorized payments to providers for eligible 2002 and early 2003 activity. To permit these payments, the Energy Commission adopted guidelines for the Customer Credit Program in May 2003.

The next section provides an overview of the RPS Program, including how the Energy Commission and the California Public Utilities Commission (CPUC) are working together to develop the implementation rules.

Renewables Portfolio Standard

In September 2002, the Governor signed Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002), creating California's RPS. SB 1078 requires retail sellers of electricity to increase their procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of their retail sales are procured from eligible renewable energy resources by 2017.

The New Renewables Program will provide supplemental energy payments (SEPs) to renewable electricity generators for the above-market costs of renewable energy. Without such payments, the utilities may not be obligated to purchase renewable power to fulfill their RPS obligations. Thus, the state's success in achieving the RPS target may depend to a large extent on the availability of the funds in the New Renewables Program. When the RPS rules are established and operational, RPS expenditures will be included in this report.

The state's three energy agencies — the Energy Commission, the Consumer Power and Conservation Financing Authority, and the Public Utilities Commission (CPUC) — joined efforts to develop a blueprint for accelerating the RPS goal by attaining the target of 20 percent renewables by 2010 in its *Energy Action Plan*, which was adopted in May 2003.⁶ The Energy Commission further underscores this goal in its *Committee Draft 2003 Integrated Energy Policy Report*⁷, which recommends that the state enact legislation to accelerate the renewable portfolio standard to 20 percent in 2010.

The next section of this report provides a detailed discussion of the Energy Commission's and the CPUC's roles and activities in the RPS.

Energy Commission RPS Roles

SB 1078 defined specific roles for the CPUC and the Energy Commission in implementing the RPS. In developing the RPS Program, the Energy Commission is responsible for the following:

1. Certifying facilities as “eligible renewable energy resources.”
2. Establishing criteria for “incremental” output from existing geothermal facilities. This determination distinguishes between generation from geothermal resources that can be counted towards the baseline amount of renewable resources and what can be procured to meet the annual targets.
3. Designing and implementing an accounting system to verify retail sellers' compliance with the RPS, and ensuring that generation is counted only once in this or any other state.
4. Allocating and awarding SEPs, as specified in SB 1038, to eligible renewable energy facilities to cover above-market costs of procuring renewable energy to meet RPS requirements.

The Energy Commission is developing rules to implement the RPS through a phased approach. Phase 1, which addressed eligibility issues for renewable generating facilities, was completed during the last quarter. The Energy Commission's decisions on these issues are detailed in its report, *Renewables Portfolio Standard: Decision on Phase I Implementation Issues*.⁸

Phase 2 concerns the rules for distributing SEPs and developing a tracking and accounting system. The Energy Commission is addressing these issues through policy decisions, which will then be implemented through guidelines or regulations, as appropriate.

This quarter, the Energy Commission focused its efforts on Phase 2 activities, particularly developing policy on allocating and awarding SEPs and developing a tracking and verification system. On July 14, the Renewables Committee held a hearing to solicit public input on the Preliminary Committee Draft report titled, *Renewables Portfolio Standard: Decision on Phase 2 Implementation Issues*,⁹ which was subsequently revised into a Final Committee Draft report.¹⁰ The Energy Commission was scheduled to consider adopting the draft decision at its September 17th Business Meeting. When that meeting was cancelled, however, the Renewables Committee decided to allow additional opportunity for public review and discussion of the draft report by holding a second Committee Hearing on September 29, 2003. The Energy Commission will consider adopting the report early next quarter.

The Energy Commission also made progress in developing the interim tracking system and the electronic tracking system. To accommodate RPS needs, the staff modified the annual reporting forms that electric service providers submit to the Energy Commission's Power Source Disclosure Program. The Energy Commission will use the modified forms for interim tracking to collect data from retail sellers of electricity and verify that they have met their RPS obligations.

The Energy Commission, together with the Western Governors' Association (WGA), began developing the Western Renewable Energy Generation Information System (WREGIS), a regional electronic tracking system. In September, the Energy Commission and WGA jointly released a Needs Assessment Survey to states and provinces in the Western Interconnect to assess stakeholders' needs concerning the WREGIS. A draft report will be released in October 2003, summarizing the survey results and the Energy Commission's recommendations on the design of WREGIS. The staff has constructed a roadmap detailing the necessary tasks to have WREGIS in place by January 2005, as well as the deadlines of each task to achieve that goal.

During the next quarter, the Energy Commission will draft guidelines to translate the Phase 1 and Phase 2 decision documents into specific procedures for implementing the RPS.

Energy Commission and California Public Utilities Commission Collaboration

Since December 2002, the CPUC has been addressing its responsibilities in implementing the RPS through its proceeding titled, *Order Instituting Rulemaking to Establish Policies and Cost Recovery Mechanisms for Generation Procurement and Renewable Resource Development*.¹¹ In consultation with the Energy Commission, the CPUC adopted rules in June 2003 concerning the following:

1. The process for determining market price referents for electricity from non-renewable sources. The IOUs will hold solicitations to purchase electricity from renewable generators; bids above the referents may be eligible for SEPs from the Energy Commission.
2. The process for the IOUs to follow in selecting the "least cost" bidders of renewable energy that "best fit" the IOU's resource needs. The IOUs will use the process to select winning bidders from their solicitations to procure renewable electricity.

3. Flexible rules for compliance with annual procurement targets. If an IOU fails to procure sufficient renewable energy, despite the flexibility of the rules, the CPUC will impose penalties.
4. A process for establishing the standard terms and conditions to be used by all IOUs in contracting for eligible renewable energy resources.

The Energy Commission staff continues to work in a close collaborative relationship with the CPUC. In September, the Energy Commission staff participated in two collaborative staff workshops to solicit public input on developing standard contract terms and conditions. Further progress is expected on this topic next quarter, when the Energy Commission and Collaborative staff will continue to work on the market price referent and establishing the baseline.

Renewable Energy Program Implementation

Table I shows the current annual allocation of funds to administer the Renewable Energy Program, which reflects the Energy Commission’s decision to discontinue the Customer Credit Account and reallocate these funds to the New Renewables, Emerging Renewables, and Consumer Education Programs.

**Table I - Renewable Resource Trust Fund
Renewable Energy Program Annual Allocations**

Program	Percent of Total	\$ Million/Year
Existing Renewable Facilities	20	\$27.0
New Renewables	56	\$75.6
Emerging Renewables	22	\$29.7
Consumer Education	2	\$2.7
TOTAL	100%	\$135.00

Table II highlights the key activities that occurred in each program during the third quarter of 2003, and lists the activities expected to occur during the fourth quarter. The staff’s estimates of expected activities and funding in the next quarter are based on program trends at the time of this writing, and actual project activities and funding may vary from the staff’s expectations.

Table III shows the Renewable Energy Program's cumulative funding and expenditures, including disbursements for this quarter.

**Table II - Renewable Energy Program
Third Quarter 2003 Program Implementation**

Implementation Activities and Funding Activities: July – September 2003	Expected Funding and Implementation Activities: October – December 2003
RPS Implementation	
<ul style="list-style-type: none"> • On July 14, the Committee held a hearing on the first draft Phase 2 report, which covers: <ul style="list-style-type: none"> • Distributing SEPs, • Certifying renewable electricity generation facilities, and • Developing the RPS accounting system. • A final Phase 2 report was developed in August and the Committee held a hearing on the final draft on September 29, 2003. • In September, the collaborative staff held two workshops on standard contract terms and conditions. • The staff is working with the WGA to develop a WREGIS. The staff constructed a roadmap of tasks and deadlines to achieve the goal of having WREGIS in place by January 2005. • A Needs Assessment Survey was sent to WREGIS stakeholders in September. 	<ul style="list-style-type: none"> • The Energy Commission expects to adopt its decision on Phase 2 issues in early October. • The staff will begin developing draft guidelines to implement the Phase 1 and Phase 2 decisions and make them available to the public in November. • The Energy Commission will release a draft report on the Needs Assessment for a WREGIS summarizing the Needs Assessment Survey results and making recommendations for the tracking system design. The staff, working together with WGA, will conduct workshops to receive input from stakeholders regarding the draft report. • The staff, WGA and other stakeholders will develop the Functional Requirements of WREGIS.
Existing Renewable Facilities Program	
<ul style="list-style-type: none"> • \$6.3 million in payments were made this quarter for May, June, and July 2003 generation. • Payments totaling \$179.7 million have been made to eligible existing facilities for generation from 1998 through July 2003. • A total of 378 facilities are registered as renewable suppliers, with 102 eligible for funding from the Existing Renewable Facilities Program (ERFP). • ERFP rollover funds total \$13.2 million. 	<ul style="list-style-type: none"> • An estimated \$6.9 million is expected to be paid during the fourth quarter of 2003.
New Renewables Program	
<ul style="list-style-type: none"> • Payments totaling over \$2.6 million were made this quarter. • To date, payments totaling \$28.4 million have been made to 36 on-line facilities for over 2,400 gigawatt-hours (GWh) of new renewable electricity generation. • Forty-two projects are currently on-line and producing electricity, representing 329 megawatts (MW) of new renewable capacity. • A 70 MW wind facility and a 2 MW Landfill Gas facility came on-line this quarter. 	<ul style="list-style-type: none"> • The construction of new projects will continue, as will payments to on-line facilities. • Funding Award Agreements with winning bidders in the second and third auctions will be finalized. • Work will continue with the utilities and the CPUC to implement SB 1078 and SB 1038. • The Committee will hold public workshops for stakeholders to discuss new proposed <i>Guidebook</i> rules.
Emerging Renewables Program	

Implementation Activities and Funding Activities: July – September 2003	Expected Funding and Implementation Activities: October – December 2003
<ul style="list-style-type: none"> • To date, payments for over 6,200 installed systems total almost \$96.8 million, representing about 24 MW of distributed capacity. • Payments totaling nearly \$14.8 million were paid this quarter for 893 installed systems in IOU service areas, for about 3.6 MW of capacity. • Funds encumbered for installing over 2,800 systems in IOU service areas total \$48.0 million, representing about 12 MW of capacity. • Approximately \$87.9 million of allocated funds will be available for rebates through 2006. • Over 1,200 reservation requests were received this quarter for systems in IOU service areas, compared to 3,300 received the previous quarter. • Work continued on developing program improvements such as an on-line reservation request form and capabilities for sellers or purchasers to check on the status of their submittals electronically. • Additional public information was made available on the Energy Commission's website regarding systems installed through the rebate program. • The staff presented program information at three events in August on emerging renewable energy technology. 	<ul style="list-style-type: none"> • The Energy Commission will continue to process reservations and pay rebates for qualified system installations. If reservation requests continue at current rates, funding would be depleted in 2004 at current funding levels. • Lists of eligible technology equipment and availability of funds will continue to be updated on the ERP website. • The Energy Commission will continue to add features and information to our website to ease the application process and provide more information to participants. • Site-verification visits will begin for systems installed through the Emerging Renewables Program. • The Energy Commission will work with the California Power Authority to evaluate the structure and timing of a solar schools program pending confirmation of budget authority to offer an additional incentive for schools that install photovoltaic systems.
Customer Credit Program	
<ul style="list-style-type: none"> • The Energy Commission received monthly performance reports (MPRs) and amendments from all five active providers on activity in 2002 through early 2003. • On September 1st, each provider submitted independent audits of their annual reports. • The Energy Commission staff is reviewing the MPRs and the audits. • Payments totaling \$5.6 million were made this quarter. 	<ul style="list-style-type: none"> • The Energy Commission expects to make payments to the remaining providers totaling \$0.73 million in the fourth quarter. • The Customer Credit Program will be discontinued after payments are completed.

Implementation Activities and Funding Activities: July – September 2003	Expected Funding and Implementation Activities: October – December 2003
Consumer Education Program	
<ul style="list-style-type: none"> • Payments to contractors and grant recipients totaled \$182,000 this quarter. • To date, disbursements for consumer education activities total \$4.4 million. • In July and August, 90 students attended classes hosted by Real Goods Solar Living Institute in four California cities. Home Power Magazine advertised the classes in its July 2003 issue. • Educators for the Environment submitted its Teacher's Guide titled, <i>Energy for Keeps: Electricity from Renewable Energy (Grades 6 – 12)</i> and printed 5,000 copies. • The Solar Schoolhouse Phase II project received a \$50,000 grant from the U.S. DOE Million Solar Roof program in July, and conducted a four-day teacher training workshop in Santa Barbara. <i>Public Power</i> magazine featured the project in its July/August issue. • In August, the Energy Commission staff participated in three events, distributing informational materials on renewable energy technologies and available rebates to participants at the Southern California Renewable Energy Expo in Pomona and the Solar Sebastopol Fair in Sebastopol. The Energy Commission co-sponsored the third event, SolFest 2003, held in Hopland. The staff conducted two workshops on the Emerging Renewables Program and distributed informational materials. • In August, the Sunny and Friends project distributed its children's video series at a teacher workshop in Long Beach. • Global Possibilities produced a Tour Guide and conducted outreach for the Los Angeles Solar Home Tour, which will be held in October. • The American Wind Energy Association (AWEA) completed its handbook, <i>Permitting Small Wind Turbines: Lessons from California's Landmark Siting Standards</i>. • The Calenergy.org project promoted its website on TV and radio. • The Energy Commission extended the Energy Solutions' grant term until January 2004. 	<ul style="list-style-type: none"> • Global Possibilities will host the Solar Building Tour in Los Angeles on October 4, 2003. • The grant recipient, [www.Calenergy.org], is a sponsor of the American Solar Energy Society's (ASES) national solar home tour, to which it donated 250 copies of its video "<i>This Renewable House</i>." ASES will disseminate the videos to event organizers nationwide. • The Twin Pines Cooperative Foundation, whose grant term expires October 30, 2003, will submit its survey results and final report. • Educators for the Environment will disseminate its <i>Teacher's Guide</i>. This project term ends in November 2003. • The AWEA team will promote its <i>Permitting Small Wind Turbines: Lessons from California's Landmark Siting Standards</i> handbook at several events targeting permitting and local government officials. The term for this project ends in December 2003.

The remainder of this report provides the details of the Renewable Energy Program activities for this quarter and summarizes the program's progress thus far.

Renewable Resources Trust Fund

By the end of the third quarter of 2003, the Energy Commission had awarded a total of \$373.7 million, reflecting payments (disbursements). Eligible applicants had reserved over \$240.9 million, reflecting fund reservations (encumbrances). During the third quarter, disbursements to program participants totaled nearly \$29.5 million.

The participating utilities fulfilled their requirements to collect \$540.0 million for the program under SB 90. Of those funds, \$15 million were transferred from the state's General Fund to the Emerging Renewables Program for rebates pursuant to Assembly Bill 29X, bringing the total funds collected to \$555.0 million. However, SB 19X subsequently directed the Energy Commission to transfer the unused funds designated for rebates to customers of Publicly Owned Electric Utility (POEU) service areas to the General Fund to help reduce the state's budget deficit. These unused funds, which totaled about \$6.3 million, reduced the balance of total funds for the initial program to \$548.7 million.

From January 2002 through September 2003, the participating utilities collected \$234.9 million from their ratepayers under SB 1038. The Budget Act of 2002 directed the Energy Commission to loan \$150.0 million to the General Fund and \$8.9 million to the California Consumer Power and Conservation Financing Authority. According to the Budget Act, the loan to the General Fund is not intended to adversely affect the Renewable Energy Program, and the California Consumer Power and Conservation Financing Authority was required to repay \$1 million by June 30, 2003, with the remainder to be repaid by June 30, 2004. To date, the Energy Commission has not received a repayment, and these fund transfers and loans continue to reduce the amount of funds available to administer the Renewable Energy Program.

Table III provides a financial summary of the Renewable Resource Trust Fund as of the third quarter of 2003, reflecting cumulative fund disbursements and encumbrances since the beginning of the program in 1998, including funds disbursed and encumbered during this quarter, as well as showing funds loaned and transferred from the fund, as discussed above.

The Renewable Energy Program administers the Renewable Resources Trust Fund via ongoing solicitation and functions in response to fluctuations in market prices and other uncertainties. Fund amounts shown in Table III change daily as funds are encumbered and paid to program participants.

The Energy Commission encumbered funds this quarter as follows:

- The Existing Renewable Facilities Program for payments to eligible existing facilities and for reallocated monies for the New Renewables Program's winning projects from the third auction.

- The New Renewables Program for on-line projects with funding award agreements from the first, second, and third auctions. Committed funds are reserved for SEPs, which will begin when the RPS implementation rules and the New Renewables Program guidelines are finalized.
- The Emerging Renewables Program for reservations for rebates for eligible systems.
- The Customer Credit Program for payments for generation in 2002 and early 2003.
- The Consumer Education Program for grant and contract activities.

**Table III - Renewable Resource Trust Fund (\$ Millions)
Funding and Expenditures as of September 30, 2003**

	Existing Renewable Facilities	New Renewables	Emerging Renewables	Customer Credit	Consumer Education	Total
Collected Funds (SB 90)	243.000	162.000	69.000 ¹²	75.600	5.400	555.000 ¹³
Collected Funds (SB 1038)	46.988	120.995	41.115	23.494	2.349	234.941
Total Disbursements	-179.620	-28.420	-96.778	-64.461	-4.422	-373.701
Intra-fund Reallocations¹⁴	-68.000	44.372	54.772	-33.494	2.349	0.000
General Fund Transfer			-6.308 ¹⁵			-6.308
Subtotal	42.368	298.947	61.801	1.139	5.676	409.931
Encumbrances	-23.256 ¹⁶	-167.380 ¹⁷	-48.026 ¹⁸	-1.139	-1.141 ¹⁹	-240.942
Committed Funds²⁰	19.112	131.567	13.775	0.000	4.536	168.991
Loans						-158.900 ²¹
Committed Funds Minus Loans						10.090
3rd Quarter '03 Disbursements	-6.206	-2.692	-14.777	-5.604	-0.182	-29.461

The next sections of this report discuss the noteworthy activities that occurred in each program during the third quarter of 2003.

Existing Renewable Facilities Program

Among the 378 facilities that are registered as renewable suppliers, 102 facilities are eligible for funding from the ERFP. During the third quarter of 2003, \$6.3 million was disbursed to these facilities, with the entirety paid to biomass and solar thermal facilities for 1,168 GWh of generation. To date, payments total \$179.7 million to all participating existing facilities.

From 1998 through 2000, the Energy Commission made payments totaling \$633,788 to Enron Wind LLC. However, during the second quarter of 2003, the bankruptcy court approved a settlement agreement between the Energy Commission and Enron Wind LLC for repayment of this amount due to Enron's misrepresentation of the ownership status of some of its facilities. Enron Wind LLC is scheduled to repay these funds over a two-year period. Enron Wind LLC made its first quarterly repayment during the third quarter of 2003.

The ERFP rollover amount currently stands at \$13.2 million.²² The Energy Commission determined that it will reallocate the funds remaining from the initial Existing Account under SB 90 to the New Renewables Program to cover the costs of its second and third auctions. The amount of funds that will eventually be needed for New Renewables Program projects is unknown, and the staff continues to evaluate the amount (auction winners could drop out, qualify for additional incentives, or have their funding awards reduced or cancelled). When identified, the staff will recommend reallocating those funds accordingly.²³

New Renewables Program

Although the Energy Commission has not updated the guidelines for the New Renewables Program to reflect the changes in the program under the new legislation, new projects continue to be developed and come on-line in accordance with the guidelines from the initial program.

Among the successful bidders in the three New Renewables Program auctions held in 1998, 2000, and 2001, 71 projects continue to hold funding awards, with 42 projects on-line and contributing 329 MW of new renewable generating capacity to California's electricity supply.

During the third quarter of 2003, two projects came on-line: a 70.2 MW wind project from the second auction, and a 2.3 MW landfill gas project from the second auction. Under the rules of the second auction, these projects will have their funding awards reduced by 50 percent based on their on-line dates. During the fourth quarter of 2003, the Energy Commission expects the second half of this wind project to come on-line for an additional 91 MW, bringing this project's total capacity to 162 MW. A 21 MW small hydroelectric plant that participated in the third auction is also expected to come on-line during the next quarter.

Currently, 36 of the 42 on-line projects have received payments from the Energy Commission. To date, these projects have received a total of \$28.4 million in payments from the New Renewables Program, including nearly \$2.7 million paid this quarter. Table IV summarizes these on-line projects, which have generated approximately 2,400 gigawatt-hours (GWh) of new renewable electricity.

**Table IV - New Renewables Program
Summary of On-Line Projects (June 1999 to September 2003)**

Technology	MW On-Line	# of Projects
Biomass	11.30	2
Digester Gas	2.05	1
Geothermal	59.00	2
Landfill Gas	37.19	14
Small Hydro	11.25	2
Waste Tire	0	0
Wind	208.1	21
Total	328.89	42

Six facilities totaling 80.29 MW of capacity are delivering power to the grid, although they have not yet received incentive payments. These facilities include the recently on-line 70.2 MW wind facility, a 2.05 MW digester gas facility, and four landfill gas facilities with capacities of 1.25 MW, 2 MW, 2.29 MW, and 2.5 MW respectively. The Energy Commission has not made payments to these six facilities for various reasons, including the following:

- Failure to submit invoices,
- Failure to provide adequate proof of generation, or
- Failure to provide adequate proof of being on-line.

The Energy Commission may cancel funding awards for four wind projects totaling 113 MW from the first auction: three owned by Enron Wind Development Corporation and one owned by Painted Hills Wind Developers (an Enron affiliate). The funding awards for these four wind projects total \$17.8 million. The project developers face award cancellations for failing to submit required information and maintain appropriate contact with the Energy Commission. In March 2002, the Energy Commission informed the project developers of its intent to cancel their funding awards, and the project developers then submitted a joint Petition for Reconsideration to the Energy Commission. However, any decision to cancel these awards is complicated by Enron's bankruptcy status. The Energy Commission's legal counsel is consulting with bankruptcy law experts in this matter, and the Committee hopes to make a decision on the petition during the fourth quarter of 2003.

Emerging Renewables Program

Consumers continued to show interest in rebates from the Emerging Renewables Program (ERP) in the third quarter of 2003. During that time, nearly 900 on-site systems representing almost four MW of capacity were installed, over 300 systems and 1.5 MW more than the previous quarter. During this quarter, the number of reservation requests returned to recent averages as the rebate amount declined by five percent from the previous quarter.

During the third quarter of 2003, payments totaling over \$14.7 million were made for 893 system installations, bringing total disbursements to date to over \$96.7 million. More than 6,200 emerging renewable systems have been installed since the beginning of the program, representing approximately 24 MW of distributed renewable electricity capacity. Customers installing 2,800 systems hold confirmed rebate reservations for about 12 MW of solar and wind capacity in various stages of completion, encumbering \$48.0 million.

Approximately \$87.9 million in total funding remains available for rebates through 2006. Unless funds are added or other measures are taken, funding will be depleted in 2004 at the current rate of processing 500 to 600 rebate applications per month.

Along with rebates, the state tax credit is another stimulus for consumers considering a solar or wind system. Designed to encourage the installation of systems up to 200 kW, Senate Bill 17XX (SB 17XX, Brulte, Chapter 12, Statutes of 2001-02) authorized the 15 percent credit for tax years 2001 through 2003, with a 7.5 percent credit for tax years 2004 and 2005. A worksheet for consumers to apply for the tax credit using a "self-certifying" process is available on the Energy Commission's website at:

www.consumerenergycenter.org/renewable/tax_credit.html

With assistance from the Renewable Energy Program's technical support contractor, KEMA-Xenergy, Inc., the staff continues to update the list of eligible renewable technology equipment and make it available to consumers on-line and via mail. In the coming quarter, the staff expects the KEMA-Xenergy team to begin conducting site visits to verify that systems installed through the ERP comply with the program requirements. The KEMA-Xenergy team will also finalize work to enhance the ERP website, making the application process easier and providing more information to participants on the status of their reservations. The Energy Commission will continue to update fund availability on the program's website at:

www.energy.ca.gov/renewables/emerging_renewables/funding.html

Customer Credit Program

In April 2003, the Energy Commission reported to the Governor and the Legislature, as directed by SB 1038, on the Customer Credit Account. In its *Customer Credit Renewable Resources Account* report, the Energy Commission discontinued the Customer Credit Account and

determined that providers would be paid for customer credits for eligible 2002 and early 2003 activity.

The staff received final Monthly Performance Reports (MPRs), along with amendments, from the remaining providers during the third quarter. According to the Customer Credit guidelines, if available funds become depleted, they will be distributed in a proportional manner based on the last MPR submissions. Because a finite amount of funds remains for Customer Credit payments, the Energy Commission postponed payments until each provider submitted an independent audit of its Annual Report.

In September, all five providers submitted their audits and the Energy Commission made payments totaling \$5.6 million, bringing total payments to date to \$64.5 million. Assuming the remaining providers meet all of their requirements, the Energy Commission expects to make the remainder of eligible payments in the fourth quarter, after which it will discontinue the Customer Credit Program.

As shown in Table V, the Energy Commission reallocated the annual funds collected for the Customer Credit Program under SB 1038 to the New Renewables, Emerging Renewables and Consumer Education programs. The Energy Commission will use the customer credit funds reallocated to the Consumer Education Program to support and accelerate the design and development of the accounting and verification system for the RPS.

Table V - Fund Reallocations from Customer Credit Account

Receiving Program	\$ Millions/Year	% of Total Customer Credit Funds
Emerging Renewables Program	\$6.075	45
New Renewables Program	\$6.075	45
Consumer Education Program	\$1.350	10
TOTAL	\$13.500	100%

Consumer Education Program

During the third quarter of 2003, payments to grant recipients and contractors totaled about \$182,000, bringing Consumer Education Program funds dispersed to date to \$4.4 million.

For the fourth year, the Energy Commission staff participated at the eighth annual SolFest event, Renewable Energy & Sustainable Living Festival, in Hopland, California, on August 23 and 24, 2003. The Energy Commission co-sponsored the event, which included an advertisement in the SolFest event guide, a link on the SolFest website, booth space for the staff to talk with attendees and distribute materials, banner placement, co-hosting the renewable energy workshop area, and two hour-long workshops to educate attendees about the Emerging

Renewables Program. In addition, the staff participated at the Renewable Energy Expo in Pomona and the Solar Fair in Sebastopol, both also held in August.

The Energy Commission's support of these events generated a significant number of requests for information about renewable energy, the state's new RPS, and the Emerging Renewables Program. The Energy Commission responded by providing about 10,000 fact sheets and materials to consumers and organizations and educational groups promoting renewable energy.

Next quarter, the Energy Commission will co-sponsor the International Executive Conference on Expanding the Market for Concentrating Solar Power, to be held in Palm Springs in October.

The majority of the grant projects funded by the Consumer Education Program will conclude by the end of next quarter. Below are the details on the grant and contract activities during this reporting period.

Grant Projects

The following are the significant grant project activities conducted during the third quarter of 2003:

- Real Goods Solar Living Institute's grant project is complete. From March through August 2003, the Institute conducted 19 classes in the following cities, with several locations hosting more than one class:
 - Hopland
 - San Francisco
 - San Jose
 - Lodi
 - Sacramento
 - San Bernardino
 - Oxnard
 - Santa Monica
 - Los Angeles
 - Anaheim
 - San Diego

More than half of the 413 students were licensed contractors or electrical installers. This grant project totaled \$85,156 from the Consumer Education Program with the grant recipient providing a 76 percent match share.

- Educators for the Environment completed its Teacher's Guide and printed 5,000 copies for distribution to California county libraries and school districts, and at the annual meeting of the California Science Teachers Association in October in Long Beach. A PDF version will be offered on-line at no cost to several energy/educational directories and websites, and the Energy Commission will post it on *Energy Quest* its website for children and teachers.
- Twin Pines Cooperative Foundation is analyzing the results of a recently conducted survey, which will be included in its final report due next quarter.

- Energy Solutions worked on its two case study projects and the design of the RE-New Construction Tool Kit. The Energy Solutions staff assisted and monitored the Request for Proposal (RFP) solicitation process for one of the two case studies.
- Global Possibilities conducted media and public outreach for the Los Angeles Solar Home Tour, to be held in October, and produced a Tour Guide for participants. This year, the tour will be expanded to include government buildings.
- The American Wind Energy Association (AWEA) finalized its handbook, *Permitting Small Wind Turbines: Learning from the California Experience*. During the fourth quarter, the AWEA staff will promote the handbook at several meetings and conferences targeting local government officials. Copies of the handbook will be available from AWEA and the Energy Commission, and both agencies will post the handbook on-line.
- The www.Calenergy.org project was completed during this quarter. A ten-second spot promoting the website completed its five-week run on a local Sacramento TV station. The 15- and 30- second versions of its public service announcement (PSA) were redistributed to 15 TV stations and 67 radio stations. The enhanced website features an on-line contractor database to assist consumers in selecting experienced renewable energy system installers. Other features include information on solar and wind installations, energy efficiency, insurance and financing; a glossary of renewable energy terms; and an interactive renewable energy format for children.
- The Spanish versions of five 30-second videos in the “Sunny and Friends” project have been completed. The series of ten 30-second videos on five various renewable technologies is now available to teachers in English and Spanish. Copies of the video series were distributed at a National Energy Education Development teacher workshop in Long Beach in August, when a survey measuring the effectiveness of the video series was conducted. Several PBS stations and websites have expressed their intention to air the series.
- The “Solar Schoolhouse” – Phase II solar energy educational project continues to enhance its website. The Solar Schoolhouse staff provided instruction on wiring solar modules, motors, LEDs, etc. for a solar-powered mural project in Emeryville, and assisted the San Ramon Valley High School’s environmental science class in building a solar fountain at its campus. Fourteen California educators participated in the Solar Schoolhouse Summer Institute 2003, a four-day teacher-training workshop in Santa Barbara. Schools will be able to utilize the Real-Time data-posting device soon, and can now customize an on-line solar energy poster at no charge. In July, the U.S. DOE Million Solar Roof (MSR) program awarded a \$50,000 grant to the “Solar Schoolhouse” project for its proposal to facilitate photovoltaic (PV) installations in schools. Public Power magazine featured the project in its July/August issue. New partnerships with the Redwood Alliance and the counties of Anaheim and Marin grew from the Solar Schoolhouse staff’s participation in the MSR Peer-to Peer workshop held in Portland, Oregon in September.

Public Awareness Campaign

In the third quarter, the Energy Commission's renewable energy public awareness campaign contractor, ICF Consulting, distributed 350 media kits to newspapers throughout California. An Energy Commission staff member participated in a radio interview with a southern California station, which aired several times in July and August. The ICF Consulting staff placed an article in two California newspapers in Campbell and Fillmore and a PSA in a Victorville newspaper.

The ICF Consulting team continued its evaluation of the public awareness campaign. A survey is being conducted to assess the impact of the campaign and ICF Consulting's final report will include a comprehensive analysis of all campaign activities. With its final report, due next quarter, the ICF Consulting staff will provide a portable document format (PDF) file of all campaign collateral materials produced.

In July, the ICF Consulting team completed its transition of all Renewable Energy Alliance (REA) activities to the Energy Commission, including managing the monthly e-newsletter and responding to member inquiries. Eighty-five new members and member organizations have joined the Alliance, bringing the total to 247 members. The Energy Commission's support of events, combined with the heightened interest in the Emerging Renewables rebate and the RPS developments, likely triggered the 50 percent growth in membership this quarter.

Summary

Through its administration of the Renewable Energy Program, the Energy Commission continues to achieve its goals for the renewables industry and Californians. Since the Renewable Energy Program began operating, the Energy Commission has accomplished the following:

- Brought over 329 MW of new renewables capacity on-line, with the potential for new projects to eventually total 1,200 MW of new renewable capacity for California's electric grid. We expect many thousands of MWs to come on-line over the next several years as the RPS program matures.
- Helped 275 existing facilities remain operative for 4,400 MW of renewables capacity.
- Supported over 200,000 customer purchases of electricity generated by renewable energy before the demise of direct access contracting options for electricity consumers.
- Provided rebates to more than 6,200 customers for installing on-site renewable technology systems, representing over 24 MW of solar and wind capacity, with an additional 2,800 systems for 12 MW currently in various stages of development.
- Assisted Californians in making educated energy decisions by providing information to consumers and Renewable Energy Alliance members statewide about renewable energy and the state's incentive programs, and about how to support renewables in today's marketplace.

The Energy Commission has leveraged more than 25 percent in seed money and in-kind contributions to foster renewable energy consumer education efforts statewide.

The Energy Commission continues its collaboration with the utilities and the CPUC in developing the rules for implementing the RPS, and a system to track progress and verify compliance. This work will position California for maintaining and expanding its leadership in renewable energy development.

Endnotes

¹ Public Utilities Code (PUC), Article 5, Section 445(g).

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

³ Publication Number P500-02-068, December 2002.

⁴ Publication Number P500-00-022, June 2001.

⁵ Publication Number 500-03-008F, April 2003.

⁶ *Energy Action Plan* available on-line at: www.energy.ca.gov/2003_energy_action_plan/index.html

⁷ Energy Commission Publication #100-03-019D, September 2003.

⁸ Energy Commission Publication number 500-03-023F, June 2003.

⁹ Energy Commission Publication number 500-03-049D, June 2003.

¹⁰ Energy Commission Publication number 500-03-049FD, August 2003.

¹¹ CPUC Rulemaking 01-10-24.

¹² This amount includes \$15 million transferred from the General Fund pursuant to AB 29X.

¹³ This total does not include \$266,000 collected from ratepayers of the Bear Valley Electric Company or \$14,403 in voluntary contributions.

¹⁴ The Energy Commission has reallocated \$40 million from the Existing Renewable Facilities Program to the New Renewables Program for the second auction. However, \$6.2 million of these funds were redirected to the Emerging Renewables Program, thereby reducing the reallocation from the Existing Renewable Facilities Program to the New Renewables Program to \$33.8 million Pursuant to AB 29X, the Energy Commission reallocated \$15 million from the Existing Renewable Facilities Program to the Emerging Renewables Program in 2001. The Energy Commission reallocated \$10 million in unused funds from the Customer Credit Account to the Emerging Renewables Program in September 2001 and reallocated \$13 million from the Existing Renewable Facilities Program to the Emerging Renewables Program in September 2002. In April 2003, the Energy Commission approved reallocating Customer Credit funds collected under SB 1038 as follows: ten percent to the Consumer Education Program (specifically for the RPS tracking and verification program), 45 percent to New Renewables Program, and 45 percent to Emerging Renewables Program.

¹⁵ Unused POEU funds were returned to the General Fund pursuant to SB 19X.

¹⁶ Encumbered for retroactive payments to eligible ERFPP participants, and for potential reallocation to the New Renewables Program as winning projects from the third auction come on-line and become eligible for funding.

¹⁷ The Energy Commission conditionally awarded \$162 million at its June 1998 auction, \$40 million at its December 2000 auction, and up to \$40 million at its August 2001 auction. As funds become available, they are encumbered for new projects.

¹⁸ Encumbered for rebate reservation requests approved but not yet paid.

¹⁹ Encumbered for grant projects and contract tasks.

²⁰ Committed funds are not yet formally assigned to specific projects, but represent monies reserved to meet statutory requirements.

²¹ \$150 million was loaned to the state's General Fund and \$8.9 million was loaned to the California Consumer Power and Conservation Financing Authority pursuant to the Budget Act of 2002 (Items 3360-011-0382 and 3360-012-0382 respectively).

²² The rollover consists of the funds remaining in the ERFPP after payments have been made to facilities in a given monthly payment cycle. Any funds not paid in one month are rolled over and added to the following month's allocation, becoming available for that month's payments.

²³ After determining the amount of funds needed for reallocation to the New Renewables Program, any remaining funds shall be available for the ERFPP under SB 1038.