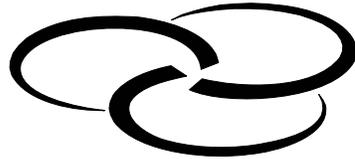


CALIFORNIA  
ENERGY  
COMMISSION

# RENEWABLE ENERGY PROGRAM

## 2005 ANNUAL REPORT TO THE LEGISLATURE



*RENEWABLE  
ENERGY  
PROGRAM*

# COMMITTEE REPORT

November 2005  
CEC-300-2005-020



Arnold Schwarzenegger, Governor

**CALIFORNIA ENERGY COMMISSION**

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512  
www.energy.ca.gov



November 1, 2005

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 2005 Annual Report Concerning the  
Renewable Energy Program

Honorable Members:

Public Resources Code section 25748 requires the California Energy Commission (Energy Commission) to submit an annual report to the Legislature on the Renewable Energy Program that includes descriptions of projects awarded funding in the prior year. In accordance with this requirement, the *2005 Annual Report to the Legislature (Annual Report)* and its associated *Appendix*, covering the period July 1, 2004, through June 30, 2005, are enclosed. The *Annual Report* includes information on the fiscal and functional aspects of the Renewable Energy Program: allocation of Renewable Resource Trust Fund dollars, information on cash flow, program activities and results, and projects and funding awards. The *Appendix* contains detailed project descriptions, statistics, and financial data.

As reflected in the report, the Energy Commission continues to make significant progress in implementing the various elements of its Renewable Energy Program. The program's market support accomplishments and funds disbursed have furthered California's progress toward a sustainable renewable energy industry with the long-term goal of a clean, diverse, and secure energy supply. Meeting California's increasing demand for electricity by broadening and diversifying its energy portfolio with renewable technologies is an essential move toward ensuring these energy goals.

Since the Renewable Energy Program's creation in 1998, the Energy Commission has disbursed a cumulative total of \$546 million. More than \$229 million is encumbered for projects in progress, with more than \$111 million in reserve to meet statutory requirements. The *Annual Report* covers the following significant activities and events.

## **Renewables Portfolio Standard (RPS)**

In September 2002, the Governor signed SB1078 (Sher), Chapter 516, Statutes of 2002, which established the state's comprehensive RPS and requires retail sellers of renewable energy to increase their procurement to 20 percent by 2017. California's current energy policy accelerates the RPS target to 20 percent renewables by 2010, hastening the goal by 7 years, and the Governor expanded the goal to achieve 33 percent by 2020.

The Energy Commission and the California Public Utilities Commission continue to work collaboratively to design and implement the RPS. The Energy Commission has adopted guidelines governing the RPS eligibility of in-state and out-of-state renewable energy facilities as well as the eligibility for supplemental energy payments (SEPs). SEPs may be paid to eligible facilities for the above-market costs of renewable energy procured to meet the RPS requirements. The Energy Commission has certified 427 facilities as eligible for the RPS, representing 6.4 gigawatts. Of that generating capacity, 517 megawatts (MW) is proposed new capacity from 13 planned facilities.

Along with developing the RPS rules, the Energy Commission is also designing a renewable energy tracking and verification system known as the Western Renewable Energy Generation Information System (WREGIS) to address long-term RPS tracking needs. The Energy Commission is working with the Western Governors' Association, state/provincial representatives, and renewable energy market participants to design and implement a system to verify that renewable energy output is counted only once.

Significant activities have included approval by the Western Electricity Coordinating Council Board of Directors that it will act as the institutional home of the WREGIS and will provide the necessary staff to develop and administer the program. Also the Request for Proposal for the WREGIS software and operations and maintenance has been released by the Department of General Services, and final proposals are due in February 2006. The Energy Commission estimates that the WREGIS will be operational in early 2007.

## **New Renewable Facilities Program**

The New Renewable Facilities Program element provides funding to encourage new renewable electricity generation projects most likely to become competitive with conventional technologies. Funds under this program have been awarded through three separate auctions. Once the auction-winning projects come online, they receive production incentives, based on the amount they bid, for their first five years of generation.

More than \$49 million has been disbursed to 45 projects from the New Renewable Facilities Program, with more than \$140 million encumbered for participating auction winners. Of the 69 active projects that won funding awards, 47 projects are online representing 488 MW of capacity. When completed, winning projects from the New Renewable Facilities Program auctions will bring 1,265 MW of renewables capacity to California's electricity grid. The Energy Commission anticipates many thousands more megawatts coming online over the next several years as the RPS program matures.

The New Renewable Facilities Program has evolved with the passage of SB 1078 and the advent of the RPS and will now award funding in the form of SEPs through competitive RPS solicitations rather than through auctions. New renewable facilities that meet specific eligibility requirements may receive SEPs that will be paid for each kilowatt-hour of eligible electricity they generate. As of June 30, 2005, the Energy Commission received no requests for SEPs.

### **Existing Renewable Facilities Program**

The Existing Renewable Facilities Program element provides funding in the form of production incentives to support existing renewable facilities while transitioning to a competitive market for their renewable energy products.

The Existing Renewable Facilities Program has helped 275 existing renewable facilities remain competitive or return to service with over \$209 million in funding, representing 4,400 MW of renewables capacity. As of June 30, 2005, 45 facilities had received incentive payments totaling \$49.9 million for 4,900 gigawatt-hours of generation. During the 2004/2005 fiscal year, a total of \$10.7 million was disbursed for 1,250 gigawatt-hours of generation.

### **Emerging Renewables Program**

The Emerging Renewables Program element provides rebates and production incentives to end-use consumers who purchase and install renewable energy technologies, primarily solar photovoltaic and small wind systems, for on-site generation.

The Emerging Renewables Program has provided funding for photovoltaic and wind energy systems installed on more than 13,800 homes and businesses that are providing nearly 56 MW of distributed capacity, with more than 31 MW in various stages of construction. The Emerging Renewables Program has provided rebates totaling \$210 million with an additional \$78 million encumbered for more than 5,000 additional systems. The Solar Schools Program, conducted under the Emerging Renewables Program, awarded all of its available funding of \$4.5 million to 31 public and charter

schools for the installation of photovoltaic systems. This represents a total of 732 kilowatts of generating capacity.

As of June 30, 2005, customers planning to install 5,000 additional systems held rebate reservations totaling approximately 24 MW of solar and wind capacity in various stages of completion, encumbering about \$79 million in rebate funds. Approximately \$82 million remains available for rebates in the main Emerging Renewables Program, with an additional estimated \$9.8 million remaining in the Pilot Performance-Based Incentive Program during this period. Of this amount, \$60 million was the result of an augmentation by AB 135 (Reyes), Chapter 867, Statutes of 2004, which authorized the use of these funds until December 31, 2008, subject to the repayment provisions of Public Resources Code section 25751(f).

### **Consumer Education Program**

The Consumer Education Program element increases public awareness of the benefits of renewable energy and options to adopt it and encourages purchases of renewable energy technologies through information dissemination and demonstration projects. These include information, products and processes that add consumer value to renewable energy by verifying and tracking energy generation, and verifying retail product claims.

Consumers statewide have received information about renewable energy and its benefits via public service announcements, events, radio and television, newspaper and magazine articles. The Consumer Education Program has provided funds totaling over \$5 million for 20 outreach and demonstration project grants, 2 consumer education contracts, and 1 currently active grant project.

### **Customer Credit Program**

Financial incentives through the Customer Credit Program element allowed renewable providers to supply electricity products to their customers at prices that were competitive with conventional electricity until early in 2003, when this program element was discontinued.

Among residential and small commercial customers who entered into direct access contracts with alternative providers, nearly 100 percent made renewable electricity purchases and were provided incentives through the Customer Credit Program. The program supported more than 200,000 customers purchasing renewable energy, with funds totaling more than \$65 million.

The Energy Commission's continuing advocacy for clean, sustainable energy has been demonstrated by its commitment to developing and implementing the Renewable Energy Program. This innovative program will continue to pursue investments in

November 1, 2005

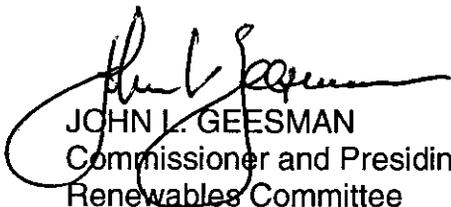
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renewable resources and technologies while fostering the growth of a competitive renewable energy industry in California.

The *2005 Annual Report to the Legislature and Appendix* can be accessed on the Energy Commission's Web site at [[www.energy.ca.gov](http://www.energy.ca.gov)]. A print copy is available by calling (916) 654-5200.

Should you have any questions or comments concerning this report, please contact Cecile Martin, Legislative Director for the Energy Commission, at (916) 654-4942.

Respectfully submitted,



JOHN L. GEESMAN  
Commissioner and Presiding Member  
Renewables Committee



JACKALYNE PFANNENSTIEL  
Vice Chair and Associate Member  
Renewables Committee

Enclosure

cc: California Legislative Analyst's Office

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# ABSTRACT

The *2005 Annual Report to the Legislature (Annual Report)* and *Appendix* respond to a legislative directive to report annually on the results of the Renewable Energy Program's (REP) activities and status of funding. The comprehensive *Annual Report* covers the period of July 1, 2004 through June 30, 2005, and includes information on the fiscal and functional aspects of the REP: allocation of Renewable Resource Trust Fund dollars, information on cash flow, program activities and results, and projects and funding awards. The *Appendix* contains detailed project descriptions, statistics, and financial data. Pursuant to legislation cited in the Introduction, the *Annual Report* consolidates the Energy Commission's reporting requirements on the REP. The new *Annual Report* replaces the following previously-mandated reports: the *Quarterly Report to the Legislature*, *Annual Project Activity Report to the Legislature*, *Annual Account Transfers and Repayments Report*, and *Renewable Energy Program Biennial Report*.

# KEY WORDS

Renewable Energy Program, Renewable Resource Trust Fund, Reliable Electric Service Investments Act, Investment Plan, Renewables Portfolio Standard, supplemental energy payments, market price referent, Western Renewable Energy Generation Information System, New Renewables Facilities Program, Existing Renewable Facilities Program, Emerging Renewables Program, Consumer Education Program, Customer Credit Program, renewable energy, solar thermal, photovoltaic, biomass, fuel cell, geothermal, wind energy, distributed generation

# INTRODUCTION

The California Energy Commission (Energy Commission) is pleased to submit its *2005 Annual Report to the Legislature (2005 Annual Report)*, covering the Renewable Energy Program (REP) over the period of July 1, 2004, through June 30, 2005. In accordance with Public Resources Code section 25748, the Energy Commission must submit a report to the Legislature on the REP on or before November 1, 2005, and annually thereafter.

Under Assembly Bill (AB) 2304 (Richman), Chapter 781, Statutes of 2004, the Energy Commission's reporting requirements were consolidated and codified in Public Resources Code section 25748. Consequently, the *2005 Annual Report* replaces the *Annual Project Activity Report to the Legislature*<sup>1</sup> required by Item 3360-001-0381 of the Supplemental Budget Report of the Budget Act of 1999; and the *Annual Account Transfers and Repayments Report*,<sup>2</sup> the *Quarterly Report to the Legislature*,<sup>3</sup> and the *Renewable Energy Program Biennial Report*<sup>4</sup> mandated by Senate Bill (SB)1038 (Sher), Chapter 515, Statutes of 2002, as amended by SB 183, Chapter 666, Statutes of 2003. Public Resources Code section 25748 requires the *2005 Annual Report* to include the following:

A description of the allocation of funds among existing, new, and emerging technologies, the allocation of funds among programs, including consumer-side incentives, and the need for the reallocation of money among those technologies.

The status of account transfers and repayments.

A description of the cumulative commitment of claims by account, the relative demand for funds by account, and a forecast of future awards.

An itemized list, including project descriptions, award amounts, and outcomes for projects awarded funding in the prior year.

The *2005 Annual Report* must also address the allocation of interest earned on the funds deposited into the Renewable Resource Trust Fund (RRTF) and the voluntary contributions made by utility customers.

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<sup>1</sup> The *Annual Project Activity Reports to the Legislature* are on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents/legislature.html](http://www.energy.ca.gov/renewables/documents/legislature.html)].

<sup>2</sup> The *Annual Account Transfers and Repayments Report* is appended to the *Quarterly Report to the Legislature, October 2003 through December 2003*, Energy Commission publication number P500-03-022V4, January 2004.

<sup>3</sup> *Quarterly Reports to the Legislature* are on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents/legislature.html](http://www.energy.ca.gov/renewables/documents/legislature.html)].

<sup>4</sup> Energy Commission publication number 500-04-030, May 2004.

In addition, the *2005 Annual Report* must include a discussion of the progress being made toward achieving Renewables Portfolio Standard (RPS) targets identified in Public Resources Code section 25740 for each of the elements of the REP. The RPS target of 17 percent renewable energy generation by 2006 in section 25740 has since been replaced by a more comprehensive standard which requires retail sellers to increase the amount of renewable energy in their portfolios by at least 1 percent per year, toward a target of 20 percent renewables by 2017. In 2003, the state's energy agencies began working to accelerate the timetable to 20 percent renewables by 2010, and the Governor expanded the goal to 33 percent by 2020 for both investor-owned and municipal utilities. Integral to the RPS, production incentives referred to as supplemental energy payments (SEPs) will cover the appropriate above-market cost of renewable resources selected by retail sellers to fulfill their RPS obligations. Lastly, the *2005 Annual Report* must identify the biomass fuels used by facilities receiving SEPs and their impacts on improving air quality.

Following a background summary of the REP, this report is divided into six sections and an Appendix to address the requirements of section 25748 as follows:

<b>Section I</b>	<b>Allocation of Funds</b>
<b>Section II</b>	<b>Program Descriptions and Results</b>
<b>Section III</b>	<b>Reallocation of Funds</b>
<b>Section IV</b>	<b>Account Transfers and Repayments</b>
<b>Section V</b>	<b>Interest Expenditures</b>
<b>Section VI</b>	<b>Contributions to the Renewable Resources Trust Fund</b>
<b>Appendix</b>	<b>Project Activity Report</b>

The *2005 Annual Report* discusses the mandated items for fiscal year 2004-2005, with reference to prior fiscal years for context and comparison as appropriate.

## **Background of the Renewable Energy Program**

### ***Renewable Energy Program – 1998 through 2002***

In 1996, California legislation created the REP to develop a sustainable renewable energy industry in the state with the long-term goal of providing a clean, diverse, and secure energy supply. Authorized under AB 1890 (Brulte), Chapter 854, Statutes of 1996, and SB 90 (Sher), Chapter 905, Statutes of 1997, the program began formal operations in 1998. To administer the program, AB 1890 required the state's three major investor-owned utilities — Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas and Electric Company (SDG&E) — to collect \$540 million from their ratepayers from 1998 through 2001 and place these funds into the RRTF. The Energy Commission was directed to distribute the funds to support existing, new, and emerging renewable resources, and consequently adopted overall funding directives, eligibility requirements, yearly allocations, and specific guidelines to assist program participants in applying for funding.

AB 995 (Wright), Chapter 1051, Statutes of 2000, and SB 1194 (Sher), Chapter 1050, Statutes of 2000, extended the collection of funds initiated under AB 1890, and directed California's three major investor-owned utilities to continue collecting \$135 million through 2011 to support renewable energy. SB 1038 subsequently authorized the Energy Commission to use these funds for the continued administration and support of the REP from 2002 through 2006. The goal of SB 1038 is to establish a competitive, self-sustaining renewable energy supply for California while increasing the near-term quantity of renewable energy generated in-state.

In September 2002, the Governor signed SB 1078 (Sher), Chapter 516, Statutes of 2002, which established the state's comprehensive RPS and requires retail sellers to increase their procurement of renewable energy to 20 percent by 2017. California's current energy policy accelerates the RPS target to 20 percent renewables by 2010, hastening the goal by 7 years, and the Governor expanded the goal to achieve 33 percent by 2020.

### ***Renewable Energy Program – 2003 through 2006***

As outlined below, the REP retained its basic structure under SB 1038 when it recommenced in 2003.

- The Existing Renewable Facilities Program (ERFP) offers financial incentives to support existing renewable facilities with varying incentives based on the market competitiveness of California's existing renewable technologies.
- The New Renewable Facilities Program awards financial incentives to encourage new renewable electricity generation projects most likely to become competitive with conventional technologies. Once they come on-line, eligible projects receive payments for their first five years of generation. A new aspect of the New Renewable Facilities Program provides SEPs for up to 10 years to renewable generators for the above-market costs of meeting the RPS requirements.
- The Emerging Renewables Program provides rebates and production incentives to end-use consumers who purchase and install renewable energy technologies, primarily solar photovoltaic and small wind systems, for on-site generation.
- The Consumer Education Program awards grants and contracts to increase public awareness of renewable energy and its benefits, and encourage the support of renewable energy and purchases of renewable energy technologies. Consumer Education funds are also used for tracking and verifying renewable energy purchases under the RPS.
- The Customer Credit Program provided incentives to consumers who purchased renewable energy in the direct access market. This program allowed renewable energy providers to offer electricity products to their customers at prices competitive

with conventional electricity products. Pursuant to SB 1038, the Energy Commission prepared a report to the Governor and the Legislature recommending the Customer Credit Program be discontinued and that any funds allocated to this program element be reallocated to other REP elements. The Energy Commission subsequently reallocated Customer Credit funds to the Emerging Renewables Program and Consumer Education Program in May 2004, pursuant to Public Resources Code section 24748, subdivision (b). Final payments under the Customer Credit Program were made in December 2004, and thereafter the Energy Commission discontinued the Customer Credit Program.

In the May 2003 *Energy Action Plan*,<sup>5</sup> the state's three energy agencies — the Energy Commission, the Consumer Power and Conservation Financing Authority, and the California Public Utilities Commission (CPUC) — joined efforts to develop a blueprint for the accelerated RPS goal of 20 percent renewables by 2010. Later that year, the Energy Commission emphasized this goal by recommending that the state enact legislation to accelerate the RPS target to 20 percent by 2010 in its *Integrated Energy Policy Report* (IEPR).<sup>6</sup>

In September 2003, the Governor signed SB 704 (Florez), Chapter 480, Statutes of 2003, requiring the Energy Commission to allocate \$6 million from the RRTF for incentives to electricity-generating facilities that increased their utilization of qualified agricultural biomass for the 2003-2004 fiscal year. In February 2004, the Energy Commission implemented the Agricultural Biomass to Energy Program (AgBio Program) to meet this mandate and adopted guidelines to govern the program's administration.<sup>7</sup> Because the Energy Commission allocated funds for the AgBio Program from the Existing Renewable Facilities Program, the AgBio Program is discussed in that section of this report.

In October 2003, the Governor signed SB 183 and SB 67 (Bowen), Chapter 731, Statutes of 2003. Both statutes revised certain eligibility requirements for out-of-state renewable facilities participating in the RPS. These bills took effect in January 2004.

As required by SB 1038, the Energy Commission submitted its *Renewable Resources Development Report*<sup>8</sup> to the Legislature in November 2003. This report describes the renewable resource potential in California and the other states in the Western Electricity Coordinating Council (WECC), and discusses the cost trends of renewable energy technologies and installed capacity of renewable energy. In the report, the Energy Commission concluded that, with proposed renewable projects and the significant untapped renewable resources in California and the other WECC states, there is an ample supply of renewable energy resources available to meet the RPS and the accelerated RPS targets.

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<sup>5</sup> *Energy Action Plan* available on-line at [www.energy.ca.gov/energy\_action\_plan/index.html].

<sup>6</sup> Energy Commission publication number 100-03-019F, November 2003.

<sup>7</sup> Energy Commission publication number 500-03-102F, February 2004.

<sup>8</sup> Energy Commission publication number 500-03-080F, November 2003.

In January 2004, the Energy Commission released drafts of RPS Program eligibility guidelines in the form of guidebooks. The Energy Commission also updated the *New Renewable Facilities Program Guidebook*<sup>9</sup> and the *Overall Guidebook for the Renewable Energy Program*<sup>10</sup> to address aspects of the REP related to SB 1038 and SB 1078. The Energy Commission released draft guidebooks in March 2004 and adopted them in April 2004. After incorporating additional stakeholder input, revised Guidebooks were adopted in May 2004.

In 2004 the Energy Commission began work developing a pilot performance-based incentive program as part of the Emerging Renewables Program pursuant to Public Resources Code section 25744. Energy Commission workshops conducted in late 2004 solicited public comment on performance-based incentives and culminated in the adoption of *Decisions on Pilot Performance-Based Incentive Program*.<sup>11</sup> The Decisions Document outlined the conclusions and rationale for the design and implementation of the proposed Pilot Performance-Based Incentive Program. These guidelines governing this program are contained in the *Emerging Renewables Program Guidebook, Fifth Edition*.<sup>12</sup>

Beginning in January 2005, AB 135 (Reyes), Chapter 867, Statutes of 2004, authorized the use of an additional \$60 million of RRTF dollars for the Emerging Renewables Program, subject to the repayment provisions of Public Resources Code section 25751, subdivision (f). This additional funding assists in supporting the ongoing demand for rebates by qualified residential and commercial participants who install small-scale renewable energy systems.

The Energy Commission will soon be addressing another reporting requirement mandated by SB 1194 and AB 995, as codified in Public Utilities Code section 399.6. Public Utilities Code section 399.6 required the Energy Commission to recommend funding allocations and awards to the Legislature over the first five years of the collection period, January 2002 through December 2007, which it provided in an initial report titled *Investing in Renewable Electricity Generation in California (2001 Investment Plan)*.<sup>13</sup> Public Utilities Code section 399.6 further requires the Energy Commission to prepare a subsequent investment plan addressing funding allocations for the second five years of fund collection, January 2007 through December 2011. The second *Investment Plan* will respond to that requirement and is due to the legislature on or before March 31, 2006.

The next section discusses funding and expenditures from the RRTF for fiscal year 2004-2005 and provides a summary of the cumulative funding to date.

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<sup>9</sup> Energy Commission publication number 500-04-001F, May 2004.

<sup>10</sup> Energy Commission publication number 500-04-026, May 2004.

<sup>11</sup> Energy Commission publication number CEC-300-2005-002-CMF, January 2005.

<sup>12</sup> Energy Commission publication number CEC-300-2005-001-ED5F, July 2005.

<sup>13</sup> Energy Commission publication number P500-00-022, June 2001.



## SECTION I. ALLOCATION OF FUNDS

In striving to move the renewable energy industry toward market competitiveness, the REP has disbursed RRTF dollars to assist each market segment in a unique way.

- For the period of July 1, 2004 to June 30, 2005, approximately \$145.7 million was deposited into the RRTF and the Energy Commission disbursed over \$85 million to program participants.
- Since the REP's creation in 1998, the Energy Commission has disbursed a cumulative total of \$546 million. Over \$229 million is encumbered for projects in progress, with over \$111 million in reserve to meet statutory requirements.<sup>14</sup> Cumulative funds disbursed by program and market support accomplishments are summarized below:
  - The Existing Renewable Facilities Program has helped 275 existing renewable facilities remain competitive or return to service with over \$209 million in funding, representing 4,400 megawatts (MW) of renewables capacity.
  - Over \$49 million has been disbursed to 45 projects from the New Renewable Facilities Program, with more than \$140 million encumbered for participating auction winners. Of the 69 active projects that won funding awards, 47 projects are online representing 488 MW of capacity. When completed, winning projects from the New Renewable Facilities Program auctions will bring 1,265 MW of renewables capacity to California's electricity grid. The Energy Commission anticipates many thousands more MW coming on-line over the next several years as the RPS program matures.
  - Photovoltaic and wind energy systems installed on over 13,800 homes and businesses are providing nearly 56 MW of distributed capacity, with more than 31 MW in various stages of construction. The Emerging Renewables Program has provided rebates totaling \$210 million with an additional \$78 million encumbered for over 5,000 additional systems. The Solar Schools Program, conducted under the Emerging Renewables Program, awarded all of its available funding of \$4.5 million to 33 public and charter schools for the installation of photovoltaic systems. This represents a total of 732 kilowatts.
  - Among customers who entered into direct access contracts with alternative providers, nearly 100 percent made renewable electricity purchases and were provided customer credits. The Customer Credit Program supported over

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<sup>14</sup> Reserved funds are committed to meet legislative mandates, but not yet formally assigned to specific projects. Legislative mandates are as follows: Generation from existing renewable facilities, supplemental energy payments under Renewables Portfolio Standard, rebates for emerging renewable energy system installations, consumer education activities, and a renewable energy certificate tracking and registry system.

200,000 customer purchases of renewable electricity, with funds totaling over \$65 million.

- Consumers statewide have received information about renewable energy and its benefits via public service announcements, events, radio and television, newspaper and magazine articles. The Consumer Education Program has provided funds totaling over \$5 million for 20 outreach and demonstration project grants, 2 consumer education contracts, and 1 currently-active grant project.

With the passage of SB 1038 authorizing the continuation of the REP through 2006, the Legislature determined the allocation of the funds, as shown in Table 1. The REP retains the authority to reallocate the funds among its programs, as detailed in Section III of this report.

**Table 1 – Renewable Resource Trust Fund  
SB 1038 Renewable Energy Program Allocations (\$135M/Year)**

<b>Program</b>	<b>Percent of Total</b>	<b>\$ Million/Year</b>
<b>New Renewable Facilities</b>	51.5	\$69.525
<b>Existing Renewable Facilities</b>	20.0	\$27.000
<b>Emerging Renewables</b>	17.5	\$23.625
<b>Consumer Education</b>	1.0	\$1.350
<b>Customer Credit</b>	10.0	\$13.500
<b>TOTAL</b>	100%	\$135.000 <sup>15</sup>

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<sup>15</sup>Note that the total amount collected each year is adjusted annually at a rate equal to the lesser of the annual growth in electric commodity sales or inflation, as defined by the gross domestic product deflator.

## **SECTION II. PROGRAM DESCRIPTIONS AND RESULTS**

### **Renewables Portfolio Standard**

In September 2002, the Governor signed SB 1078 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.

In the *Energy Action Plan* adopted in May 2003, the Energy Commission, the Consumer Power and Conservation Financing Authority, and the CPUC encouraged accelerating the RPS goal by attaining the target of 20 percent renewables by 2010. The Energy Commission adopted this goal in its 2003 *Integrated Energy Policy Report*, which recommends that the state enact legislation to accelerate the RPS target to 20 percent by 2010 and the 2004 *Integrated Energy Policy Report* endorsed goals beyond 2010.

As directed by SB 1078 and SB 1038, the New Renewable Facilities Program will provide SEPs to renewable electricity generators for the above-market costs of renewable energy procured to meet the RPS. However, the statutes allow that if the payments are insufficient to cover the above-market costs of eligible renewable energy resources, an investor-owned utility could limit its annual procurement obligation to the quantity of eligible renewable energy that can be procured with available SEPs.

Additionally, the Energy Commission is charged with certifying facilities as eligible for the RPS or for the RPS and SEPs. The Energy Commission is also designing a renewable energy tracking and verification system, as required under SB 1078.

The next section of this report provides a discussion of the Energy Commission's and the CPUC's roles and activities in designing and implementing the RPS, and the investor-owned utility's progress to date procuring renewables. The Energy Commission and the CPUC continue to work collaboratively to implement the program.

### ***Energy Commission's Renewables Portfolio Standard Roles***

The Energy Commission implements the RPS through guidelines that were originally adopted in spring 2004, with revisions adopted in August 2004. The three Guidebooks are described as follows:

- The *Renewables Portfolio Standard Eligibility Guidebook*<sup>16</sup> (*Renewables Portfolio Standard Eligibility Guidebook*) describes the requirements and process for certifying eligible renewable energy resources for California's RPS and SEPs. The *Renewables Portfolio Standard Guidebook* also describes how the Energy Commission will track and verify compliance with the RPS using an interim generation tracking process.
- The *Overall Program Guidebook for the Renewable Energy Program*<sup>17</sup> describes how the REP is administered and includes information on requirements that apply to all REP elements, including the RPS. The *Overall Program Guidebook* provides general information on the process of creating, appealing, and implementing the RPS guidelines.
- The *New Renewable Facilities Program Guidebook*<sup>18</sup> describes the requirements applicants must satisfy to receive SEPs.

While the Guidebooks reflect current program requirements, the Energy Commission recognizes that it will need to periodically revise them to reflect market and regulatory developments and to incorporate the lessons learned from experience implementing the RPS.

On June 17, 2005, the Energy Commission released a contractor report titled, *Preliminary Stakeholder Evaluation of the California Renewables Standard*.<sup>19</sup> The report presents California's RPS in comparison with other states, stakeholder comments solicited through interviews, the recent utility solicitations, options and issues concerning deliverability requirements, and recommendations. The report provides useful recommendations for making corrections to the RPS program and is being integrated into the *Integrated Energy Policy Report*.

The Energy Commission has certified 427 facilities as eligible for the RPS, representing 6.4 gigawatts. Of that generating capacity, 517 MW is proposed new capacity from 13 planned facilities.

### ***California Public Utilities Commission's Renewables Portfolio Standard Implementation***

In July 2004, the CPUC adopted criteria for investor-owned utilities to select the least-cost, best-fit renewable resources from the investor-owned utilities' solicitations. Adoption of the rules for implementing SB 1078 opened the door for the investor-owned utilities to conduct their first formal RPS solicitation.<sup>20</sup> Previously, the utilities conducted

<sup>16</sup> Energy Commission publication number 500-04-002F, May 2004.

<sup>17</sup> Energy Commission publication number 500-04-026F, May 2004.

<sup>18</sup> Energy Commission publication number 500-04-001F, May 2004.

<sup>19</sup> Energy Commission publication number CEC-300-2005-011, June 2005.

<sup>20</sup> CPUC, D 04-07-029 in R.04-04-026, July 8, 2004.

solicitations to procure RPS eligible energy under “interim” authority that the CPUC put in place while the RPS implementation rules were being developed.

The CPUC approved the utilities’ RPS procurement plans and their 2004 Request for Offers, and directed SDG&E and PG&E to conduct the first formal RPS solicitations. The CPUC excused SCE from conducting a renewables solicitation in 2004 partly because of SCE’s progress toward meeting the 20 percent renewable energy target.

In February 2005, the CPUC calculated the first market price referent which was used for PG&E’s and SCE’s 2004 solicitation. The market price referent represents the cost of long-term contracts for natural gas-based electricity that is comparable in delivery terms to a renewable long-term product. Contracts priced at or below the market price referent are considered *per se* reasonable; contracts above the market price referent may be eligible for the difference between the market price referent and the contract price.

The CPUC initiated their second phase of RPS implementation in September 2004 to address outstanding issues such as the development of implementation rules for Electric Service Providers and Community Choice Aggregators and the refinement of RPS rules already in place. The CPUC also requested comments on the participation of distributed generation in the RPS.

In the spring of 2005, the investor-owned utilities submitted their draft RPS procurement plans and draft 2005 Request for Offers, which the CPUC approved in July 2005. The investor-owned utilities have since released their 2005 renewable solicitations and expect to have contracts signed by the end of 2005 or early 2006.

### ***Investor-Owned Utilities’ Renewables Portfolio Standard Procurement***

In August 2003, SCE issued a solicitation for renewable energy under the interim procurement authority it was granted prior to the completion of RPS implementation rules. Although bids were due in September 2003, SCE’s negotiations with short-listed bidders were not completed until March 2005. SCE submitted an advice letter to the CPUC requesting approval for six contracts totaling 142 MW of renewable energy capacity (643 gigawatt hours [GWh] annually), with potential to expand to 428 MW (2,127 GWh annually). The contracts were for energy from biomass, geothermal, and wind facilities.<sup>21</sup> The CPUC approved these 15- and 20-year contracts,<sup>22</sup> but deliveries will not begin in 2005 because project construction will not be completed until 2006-2008.<sup>23</sup> SCE also sought CPUC approval for four bilateral contracts executed with wind

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<sup>21</sup> Southern California Edison, March 25, 2005, “Advice 1876-E-A to Public Utilities Commission of the State of California Energy Division, Supplement to Submission of Contracts for Procurement from Renewable Resources Pursuant to California Renewables Portfolio Standard Program.”

<sup>22</sup> CPUC, Energy Division, Resolution E-3934, June 30, 2005.

<sup>23</sup> Actual on-line dates range from Dec 31, 2006 to March 31, 2008. SCE, March 8, 2005, Advice Letter 1876-E to the Public Utilities Commission of the State of California, Energy Division.

facilities that are being repowered, anticipated to result in future deliveries of approximately 25 GWh annually.

SDG&E and PG&E opened RPS solicitations in July 2004 with bids due in August. PG&E and SDG&E evaluated the bids using the least-cost, best-fit process to select their initial “short list” of preferred bidders. When the utilities notified the CPUC that they had selected their short lists (in September 2004 and December 2004 for PG&E and SDG&E, respectively), it triggered the CPUC to release the market price referent.

In April 2005, PG&E received approval from the CPUC for three wind contracts totaling 142-158 MW from its 2004 solicitation,<sup>24</sup> and has requested approval of a fourth contract with a new wind facility with 52.5 MW capacity and expansion potential to 75 MW. As of June 30, 2005, PG&E executed contracts from its 2004 RPS solicitation totaling 194.5-233 MW of wind priced below the market price referent and ineligible for SEPs from the Energy Commission.

Contract negotiations have taken longer than the utilities anticipated. In their Request for Offers, the utilities’ estimated the amount of time needed between the release of their solicitations and the filing of their contract advice letters with the CPUC as follows: four months for SCE, five months for PG&E, and nine months for SDG&E. In practice, however, it took SCE 20 months and PG&E nine months to file their advice letters, and SDG&E is currently three months behind schedule.

The delays are largely related to negotiations over contract terms and conditions. Other sources of delay include the selection process for the short list of least-cost, best-fit bidders, especially in relation to estimating transmission costs and uncertainty regarding potential federal or state regulatory changes. Details of RPS contracts executed in fiscal year 04-05 are included in the *2005 Annual Report, Appendix A*, located on the Energy Commission’s website at [[www.energy.ca.gov/renewables/documents](http://www.energy.ca.gov/renewables/documents)].

## **New Renewable Facilities Program**

The New Renewable Facilities Program provides production incentives to new renewable generating facilities in accordance with the guidelines from the initial program under SB 90. These incentives are paid in addition to what the facility is paid for its electricity.

The New Renewable Facilities Program originally awarded funding through competitive auctions in which facilities bid for the amount of incentive they wished to receive, up to a maximum of 1.5 cents per kilowatt-hour (cents/kWh). The Energy Commission held three such auctions between March 1998 and June 2001, awarding approximately \$242 million to 81 facilities that represented about 1,300 MW of capacity.

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<sup>24</sup> CPUC, Energy Division, Resolution E-3994, July 21, 2005.

To receive funding from the Energy Commission, facilities must meet a series of milestones and begin commercial operation. Once on-line, the facilities receive incentive payments for a maximum of five years. Twelve of the 81 facilities were unable to meet their milestones, subsequently canceling their funding awards for a variety of reasons that included public opposition or inability to secure a fuel supply or power purchase contract.

Table 2 summarizes the remaining 69 participating facilities by technology.

**Table 2 – New Renewable Facilities Program  
Summary of Auction Winning Facilities**

<b>Technology</b>	<b># of Projects</b>	<b>Capacity (MW)</b>	<b>Average Incentive (¢/kWh)</b>	<b>Conditional Award*</b>
Biomass	2	11.3	1.35	\$3,787,902.00
Digester Gas	1	2.05	1.39	\$1,148,209.50
Geothermal	4	156.9	1.28	\$80,331,617.60
Landfill Gas	17	49.344	1.11	\$20,410,021.53
Small Hydro	5	33.24	1.19	\$4,366,785.00
Waste Tire	1	30	0.72	\$7,232,413.43
Wind	39	982.67	0.74	\$99,761,185.88
<b>Total</b>	<b>69</b>	<b>1,265.504</b>	<b>0.86</b>	<b>\$217,038,134.94</b>

\*The conditional funding awards for winning bidders in the second and third auctions include potential bonuses for early on-line dates and do not reflect potential penalties for later on-line dates. The encumbered balance for these winners will be adjusted downwards once the projects come on-line.

## Projects Status

Of the 69 active facilities shown in Table 2, 47 are on-line and producing electricity. Table 3 shows these 47 facilities by technology.

**Table 3 – Summary of On-Line Projects  
(June 1999 to June 30, 2005)**

Technology	MW On-Line	# of Projects
Biomass	11.30	2
Digester Gas	2.05	1
Geothermal	59.00	2
Landfill Gas	36.37	14
Small Hydro	31.25	3
Waste Tire	0	0
Wind	348.12	25
<b>Total</b>	<b>488.09</b>	<b>47</b>

A summary of payments made by technology, through June 30, 2005, is shown in Table 4.

**Table 4 – Summary of Payments through June 30, 2005**

Technology	MW	MW On-line	Total Payments	Total Funds Encumbered	Percent of Encumbered Funds Paid
Biomass	11	11	\$1,635,305	\$3,787,902.00	43%
Digester Gas	2	2	0	\$1,148,209.50	0%
Geothermal	157	59	\$22,332,700	\$80,331,617.60	28%
Landfill Gas	55	36	\$10,694,688	\$20,410,021.53	52%
Small Hydro	33	31	\$1,511,241	\$4,366,785.00	35%
Waste Tire	30	0	0	\$7,232,413.43	0%
Wind	973	348	\$13,770,247	\$99,761,185.88	14%
<b>Total</b>	<b>1,261</b>	<b>488</b>	<b>\$49,944,181</b>	<b>\$217,038,134.94</b>	<b>23%</b>

As of June 30, 2005, 45 facilities had received incentive payments totaling \$49.9 million for 4,900 GWh of generation. During the 2004/2005 fiscal year, a total of \$10.7 million was disbursed for 1,250 GWh of generation. A detailed list of payments and generation for all projects receiving funding during fiscal year 2004/2005 is referenced in the *2005 Annual Report, Appendix B*, on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents](http://www.energy.ca.gov/renewables/documents)].

Other decisions affecting projects participating in the SB 90-implemented New Renewable Facilities Program include the following:

- During the 2004/2005 fiscal year, the Energy Commission approved a 16-megawatt expansion to the High Winds Phase II wind project and a change of ownership for the Wintec Energy #2 wind project. The High Winds Phase II expansion was formally approved by the Energy Commission late in the fiscal year.
- The law originally required winning facilities to be on-line by January 1, 2002, to be able to receive five full years of incentive payments. However, the law was changed in September 2000 to allow facilities to come on-line as late as January 1, 2007, and still receive five years of incentive payments. This allowance is contingent on the Energy Commission making a formal finding that the delayed on-line date resulted from "circumstances beyond the developer's control."

For winners in the June 2001 auction, the Energy Commission determined that the timing of the auction in itself constituted "circumstances beyond the project developer's control" for purposes of extending the funding awards. The awards of those facilities were therefore automatically extended to July 1, 2003, but are still subject to the penalties already imposed as a condition of that auction.

Facilities from the June 2001 auction that were not on-line by July 1, 2003 can only receive a maximum of 50 percent of their original awards, and also face further award reductions or termination.

### ***Supplemental Energy Payments***

With the passage of SB 1038 and SB 1078, the Energy Commission will award production incentives from the New Renewable Facilities Program through competitive RPS solicitations rather than through auctions. New renewable facilities that meet specific eligibility requirements may receive SEPs that will be paid for each kilowatt-hour of eligible electricity they generate. The New Renewable Facilities Program was allocated 51.5 percent of the program funds, about \$69.5 million per year, for SEPs funds.

When the REP was established in 1998, a "new" facility was defined as beginning operation after September 26, 1996. Under the California RPS program, "new" is now defined as beginning operation on or after January 1, 2002. To be eligible for SEPs, a

facility must begin commercial operations or be repowered on or after January 1, 2002, or such later date as determined by the Energy Commission. Also a facility must not be owned by an investor-owned utility or a local publicly-owned electric utility, and the electricity it generates must not be sold under certain long-term contracts with an in-state investor-owned utility, used on-site, or sold in a manner that avoids competitive transition charge payments. The facility must meet fuel and technology-specific criteria and agree to participate in the Energy Commission's tracking system in order to become certified with the Energy Commission as eligible for the RPS and SEPs. As of June 30, 2005, no requests for SEPs had been received by the Energy Commission.

### ***New Renewable Facilities Program Funding Status***

Table 5 summarizes RRTF transactions for the New Renewable Facilities Program through June 30, 2005.

**Table 5 - New Renewable Facilities Program  
Cumulative Funding and Expenditures as of June 30, 2005**

<b>New Renewable Facilities Program (\$ Millions)</b>	
<b>Collected Funds</b>	
SB 90	162.000
SB 1038	246.574
Bear Valley Electric	0.137
<b>Intrafund Reallocations</b>	
From Existing Renewable Facilities for 2nd auction (Oct. 2000)	40.000
\$40M for 2nd auction reduced to \$33.8M; \$6.2M difference to Emerging Renewables (Sept. 2001)	-6.200
<b>Total Collected and Reallocated</b>	<b>442.511</b>
<b>Disbursements</b>	-49.944
<b>Encumbrances</b>	-140.068
<b>Intrafund Transfer*</b>	
Temporary transfer to Emerging Renewables**	-60.000
<b>BALANCE</b>	<b>192.499</b>

\*Public Resources Code section 25751(f) authorizes the Energy Commission to transfer funds among program accounts in the Renewable Resource Trust Fund for cash flow purposes, provided that the balance due each program account is restored and the transfers do not adversely affect any of the programs.

\*\*Beginning in January 2005, AB 135 authorized the use of an additional \$60 million of Renewable Resource Trust Fund funds to be collected from 2007 through 2011, and subject to the repayment requirements of Public Resources Code section 25751(f).

## Existing Renewable Facilities Program

The Existing Renewable Facilities Program was initially allocated \$243 million for funding renewable energy facilities in California that began operating before September 26, 1996. At that time, funding in the program was divided into three tiers, intended to reflect the various degrees of competitiveness of the various renewable energy technologies.

With the passage of SB 1038 in 2002, the Energy Commission made modifications to the program affecting eligibility, funding levels, target prices, and caps. The funding for the Existing Renewable Facilities Program was reduced from 45 percent (\$243 million) of the overall REP funds to 20 percent (about \$135 million) for 2002 through 2006.

The current program is divided into two tiers according to technology, with Tier 1 receiving the larger proportion of funding. Tier 1 includes biomass and solar thermal facilities, and Tier 2 consists of wind facilities. Tier 3 technologies, along with one technology formerly from Tier 1 (waste tire), have not been eligible for funding from the Existing Renewable Facilities Program since January 1, 2002. Tier 3 technologies included geothermal, small hydro, digester gas, landfill gas, and municipal solid waste. Table 6 lists the initial funding allocations by tier. Unlike the declining funding allocation for 1998 through 2001, the funding allocation for 2002 through 2006 remains constant.

**Table 6**  
**Original Funding Allocations (\$ millions) by Year\***

	1998	1999	2000	2001	2002	2003	2004	2005	2006	Overall
<b>Tier 1**</b>	\$43.20	\$36.45	\$31.05	\$24.30	\$20.25	\$20.25	\$20.25	\$20.25	\$20.25	\$236.25
<b>Tier 2</b>	\$21.60	\$18.90	\$16.20	\$13.50	\$6.75	\$6.75	\$6.75	\$6.75	\$6.75	\$103.95
<b>Tier 3***</b>	\$12.15	\$10.80	\$8.10	\$6.75	N/A	N/A	N/A	N/A	N/A	\$37.80
<b>All</b>	<b>\$76.95</b>	<b>\$66.15</b>	<b>\$55.35</b>	<b>\$44.55</b>	<b>\$27.00</b>	<b>\$27.00</b>	<b>\$27.00</b>	<b>\$27.00</b>	<b>\$27.00</b>	<b>\$378.00</b>

\*Collection of funds from 2002 - 2006 is adjusted annually; consequently, the amounts available for Tiers 1 and 2 in 2006 are estimates.

\*\*Waste Tire not eligible for funding from 2002 – 2006.

\*\*\*Tier 3 technologies are not eligible for funding from 2002 – 2006.

To be eligible for Existing Renewable Facilities Program funds, a facility must be physically located within California and registered with the Energy Commission as a renewable supplier. Once registered, facilities submit monthly invoices and are paid a cents-per-kilowatt-hour (cents/kWh) incentive for their eligible renewable generation. Payments are based on the lowest of three possible calculations:

- The difference between the “target price” and the market price for energy (the market price may be different for different facilities),
- Available funds divided by total generation submitted (modified to account for differences in market prices), or
- A predetermined cents/kWh cap.

Although SB 1038 did not become effective until January 2003, it allowed retroactive payments for 2002 generation. Of note is the 2002 target price for Tier 1, which is higher than in subsequent years (5.5 cents/kWh vs. 5.37 cents/kWh). The Energy Commission had initially recommended the higher target price to the Legislature, but due to changes in the energy market, it was later determined that the lower target price for Tier 1 was more appropriate. During the 12-month interim, however, most of the facilities had operated on the assumption that the higher target price would prevail. To lessen the burden on these facilities, the Energy Commission conceded to make its 2002 retroactive payments based on the higher target price.

When the Existing Renewable Facilities Program was extended in 2003, the target prices for 2002 to 2006 were increased over those for 1998 through 2001. When the Energy Commission initially adopted the Existing Renewable Facilities Program guidelines, it was determined that the target price and cap would not be adjusted for inflation. However, the Energy Commission decided to periodically review the market price and cap and make adjustments to account for inflation, if appropriate. Table 7 shows target prices and caps for the Existing Renewable Facilities Program to date.

**Table 7 - Target Prices and Caps (cents per kWh)**

		1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Tier 1</b>	Target Price	5.0	4.5	4.0/5.0*	5.0*	5.5	5.37	5.37	5.37	5.37
	Cap	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<b>Tier 2</b>	Target Price	3.5	3.5	3.5	3.5	3.8	3.8	3.8	3.8	3.8
	Cap	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<b>Tier 3</b>	Target Price	3.0	3.0	3.0	3.0	N/A	N/A	N/A	N/A	N/A
	Cap	1.0	1.0	1.0	1.0	N/A	N/A	N/A	N/A	N/A

\*In October 2000, the Energy Commission approved an increase in the target price for Tier 1 facilities from 4.0 to 5.0 cents per kWh, starting with November 2000 generation. This change was made to ensure that biomass facilities stay on-line through at least the end of 2001 and encourage several other facilities that were off-line at the time to re-start before summer 2001.

Shortly after the program's January 1998 implementation, 162 renewable generating facilities registered with the Energy Commission as existing renewable suppliers. By December 31, 2001, the number of registered renewable suppliers totaled 378. Of these, the Existing Renewable Facilities Program provided funding support for 273 suppliers, representing 4,400 MW of capacity.

To continue receiving funding, all facilities that were eligible to receive funds from 2002 through 2006 were required to re-register in 2003. As of June 30, 2005, there were 102 suppliers registered and eligible for funding. Because Tier 3 facilities are no longer eligible, the number of suppliers is considerably lower than at the end of 2001. Additionally, approximately half of the Tier 2 facilities are under contracts with energy prices above the Tier 2 target price until the middle of 2006. Approximately 40 to 50 suppliers are under such contracts, and thus have not yet re-registered with the Energy Commission.

### ***Program Activities and Status***

The 103 Existing Renewable Facilities Program facilities currently eligible for funding represent over 2,021 MW of capacity. Figure 1 illustrates the breakdown of all currently eligible capacity by technology.

The Energy Commission distributed the first payments in March 1998. From the beginning of the program through June 30, 2005, the Energy Commission has made payments totaling over \$209.9 million for more than 62,240 GWh of generation from the Existing Renewable Facilities Program. Payments for fiscal year 2004-2005 totaled \$18.3 million on 3,815 GWh of generation submitted.

**Figure 1  
ERFP Capacity (MW)**

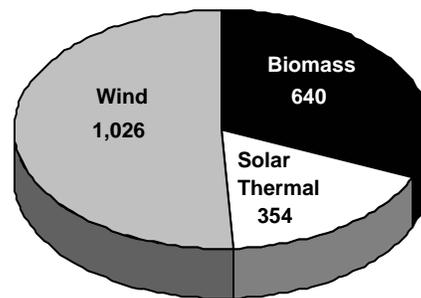
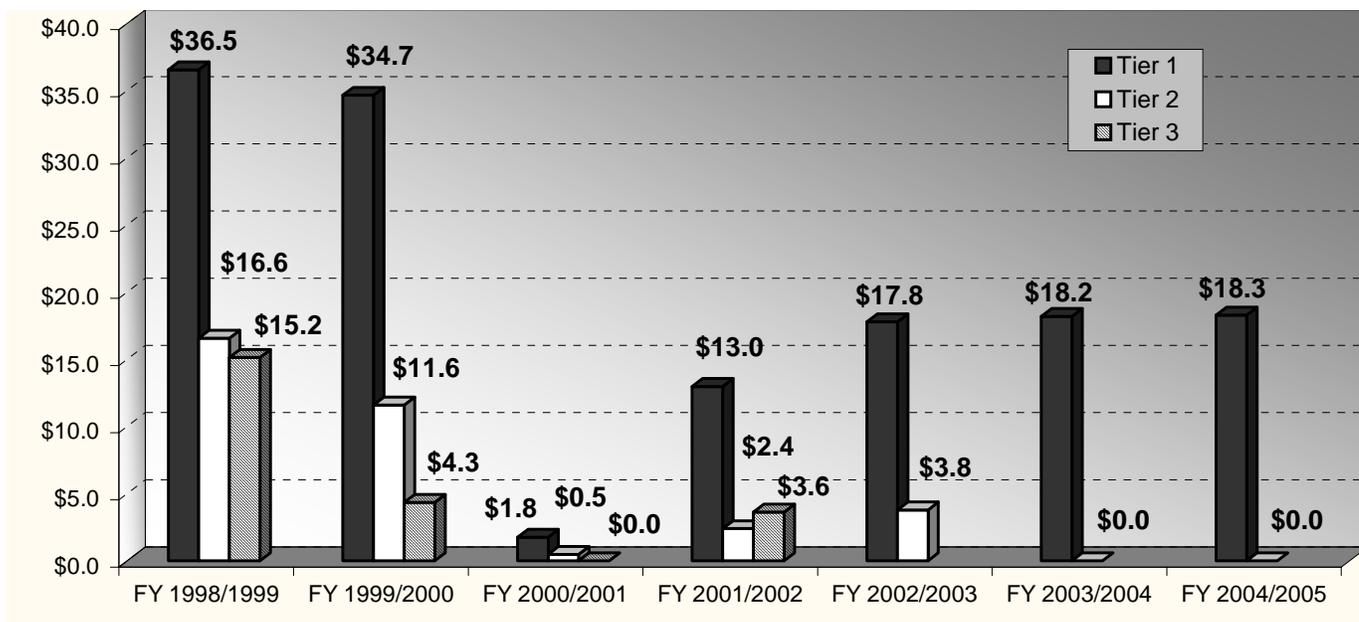


Figure 2 illustrates the breakdown of payments from Tiers 1, 2, and 3 for the last seven fiscal years. Of special note is the fact that Tier 2 facilities (wind) have been competitive during the past two fiscal years, so they have not required incentives from the Existing Renewable Facilities Program.

**Figure 2 - Payments from ERF  
July 1, 1998 to June 30, 2005  
(\$ millions)**



The *2005 Annual Report, Appendix C*, located on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents](http://www.energy.ca.gov/renewables/documents)], provides a project-by-project breakdown of payment and generation for the 2004/2005 fiscal year.

### ***Agriculture-to-Biomass Program***

In September 2003, the Governor signed SB 704, which was designed to improve the air quality in California's agricultural areas by reducing the open-field burning of agricultural fuels. SB 704 required the Energy Commission to allocate \$6.0 million from the RRTF for incentives to electricity-generating facilities that increased their utilization of qualified agricultural biomass for the 2003-2004 fiscal year. The AgBio Program, although not technically a part of the REP, is discussed in this section because the funding for this program was reallocated from the Existing Renewable Facilities Program.

Funded for one year, the AgBio Program provided financial incentives to biomass facilities that purchased and converted these fuels for electricity generation from July 1, 2003, through June 30, 2004. Incentives were paid at a rate of \$10 per green ton of eligible biomass fuel. Nine participants registered their facilities with the Energy Commission for funding. Fiscal year 2004-2005 expenditures totaled \$1.4 million and total payments from the AgBio Program exhausted the \$6.0 million allocation. With final payments made in August 2004, the program is now concluded. Table 8 provides a

summary of qualified agricultural biomass purchased and incentive payments disbursed.

**Table 8 - Agricultural Biomass-to-Energy Program  
Tons of Qualified Agricultural Purchases (QAB) and Incentive Payments  
July 2003 to June 2004**

<b>Facility Name</b>	<b>QAB Purchases Submitted (Tons)</b>	<b>QAB Purchases that Received Funding* (Tons)</b>	<b>Incentive Payments</b>
Tracy Biomass Plant dba Tracy Operators	119,391.00	68,259.81	\$682,598.07
Wheelabrator Shasta Energy Co Inc	165,418.29	88,993.24	\$889,932.37
Pacific-Ultrapower Chinese Station	65,005.47	48,250.48	\$482,504.84
Pacific Oroville Power, Inc.	76,542.12	40,463.88	\$404,638.77
AES Delano, Inc	239,809.88	157,373.34	\$1,573,733.42
AES Mendota, LP	47,994.63	47,994.63	\$479,946.30
Sierra Power Corporation	68,782.58	44,678.95	\$446,789.54
Rio Bravo Fresno	99,226.18	72,939.80	\$729,397.97
Dinuba Energy	46,156.31	31,045.87	\$310,458.72
<b>Total</b>	<b>928,326.46</b>	<b>600,000.00</b>	<b>\$6,000,000.00</b>

\*Payments were only made for Qualified Agricultural Purchases made through the middle of February 2004 due to a maximum of \$6,000,000 in funding.

## Existing Renewable Facilities Program Funding Status

RRTF transactions for the Existing Renewable Facilities Program through June 30, 2005, are summarized in Table 9.

**Table 9 - Existing Renewable Facilities Program  
Cumulative Funding and Expenditures as of June 30, 2005**

<b>Existing Renewable Facilities Program (\$ Millions)</b>	
<b>Collected Funds</b>	
SB 90	243.000
SB 1038	95.757
Bear Valley Electric	0.133
<b>Intrafund Reallocations</b>	
To New Renewable Facilities for 2nd auction (Oct. 2000)	-40.000
To Emerging Renewables pursuant to Assembly Bill 29X (April 2001)*	-15.000
To Emerging Renewables to respond to growth in demand for rebates (Sept. 2002)	-13.000
To Emerging Renewables to respond to growth in demand for rebates (May 2004)	-15.000
<b>Total Collected and Reallocated</b>	<b>255.890</b>
<b>Disbursements**</b>	<b>-215.366</b>
<b>BALANCE</b>	<b>40.524</b>

\*ABX1 29 (Kehoe), Chapter 8, Statutes of 2001.

\*\*Disbursements include \$6 million for the Agricultural Biomass-to-Energy Program.

## Emerging Renewables Program

The Emerging Renewables Program provides incentives in the form of rebates to customers who install eligible renewable energy systems to offset part or all of their electricity needs at their homes or businesses. The program was initially allocated \$54 million for incentive payments from 1998 through 2001. In 2002, under SB 1038, over \$118 million was allocated for rebates from 2003 through 2006. Beginning in January 2005, AB 135<sup>25</sup> authorized the use of an additional \$60 million of RRTF dollars to be collected from 2007 through 2011, and subject to the repayment requirements of Public Resources Code section 25751(f).

Monies are transmitted to the Energy Commission's RRTF on a quarterly basis, yet the demand for rebates can outpace the collection of funds. To respond to rebate requests and maintain momentum in the Emerging Renewables Program, funds may be

<sup>25</sup> As codified in Public Resources Code section 25744, subdivision (c).

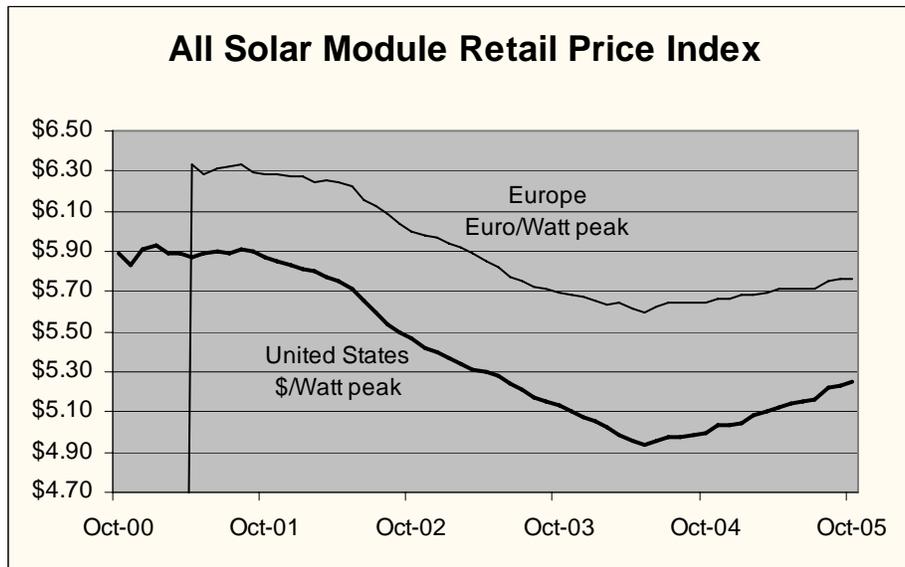
borrowed from future quarters as needed, provided the total program allocation is not exceeded. Rebate funds are available on a first-come, first-served basis until the total funding is exhausted. Any funds from cancelled or expired rebate reservations are made available to new participants. The rebate incentive levels, based on a system's generating capacity and measured in watts, have varied over the duration of the program. They have traditionally declined by 20 cents per watt on July 1 and January 1 of each year, however the Energy Commission may decide to change the rebate amounts or schedule. In June 2005, the Energy Commission decided not to reduce but maintain the rebate level for each eligible technology beginning July 2005.

To be eligible to receive rebates from the Emerging Renewables Program, a number of basic criteria must be met. The generating system must be new, utilize an eligible technology type and major system components (photovoltaic modules, inverters, and wind turbines) approved by the Energy Commission, and be installed with a five-year warranty. In addition, the generating system must be installed on a site that is served by an eligible electric utility, and must primarily offset the electricity demands of its installation site. The eligible technology types are currently limited to solar photovoltaic systems, solar thermal electric systems, fuel cell technologies that utilize renewable fuels, and small wind turbines up to 50 kilowatts in size.

The goal of the Emerging Renewables Program is to stimulate the market for distributed renewable energy until incentives are no longer needed to sustain the market for these technologies. A major barrier to consumer adoption is price, although rebates reduce the initial net purchase cost of the systems, thereby stimulating sales. The dramatic growth in demand in recent years has encouraged manufacturers to expand their production volume, which in turn improved the distribution network and increased the number of qualified installers. Because the market's expansion improves economies of scale, the Energy Commission anticipates lower system costs over the long term.

It is important to note that photovoltaic module prices have increased through much of 2004/2005, as shown in Figure 3, due to a number of market conditions. In particular, the heavy demand from Europe (especially Germany) and Japan have resulted in product shortages and higher prices.

**Figure 3. Solar Module Retail Prices<sup>26</sup>**  
 (Survey Retail Prices Exclude Sales Taxes)



### ***Program Activities and Status***

In 2002, SB 1038 provided new funding allocations to the Emerging Renewables Program of 17.5 percent of the program funds, while AB 58 (Keeley), Chapter 836, Statutes of 2002, section 1 as codified in Public Resources Code section 25401.6, authorized the Energy Commission to establish rebates of up to 75 percent of total installed costs for systems installed on affordable housing projects.

In June 2004, the Energy Commission adopted the *Emerging Renewables Program Guidebook (Guidebook), Third Edition*.<sup>27</sup> As detailed in the *Guidebook*, significant program changes included the following:

- Rebate level is lowered for all technologies by \$.20/watt (e.g., change from \$3.20/watt to \$3.00/watt for solar photovoltaic).
- Customers of Bear Valley Electric become eligible to participate.
- Participants of “Rebuild a Greener San Diego” are not eligible under the Emerging Renewables Program.
- Standard reservation period is changed from nine months to six months (for retrofits).
- Eighteen-month reservations are allowed for all new construction projects.

<sup>26</sup> Source: Solarbuzz Inc., from Internet web site:[<http://www.solarbuzz.com>], August 17, 2005.

<sup>27</sup> Energy Commission publication number 500-003-001F2, July 1, 2004.

- Customers must now authorize their utility company to provide information to verify interconnection to the utility grid.

During January 2005, the Energy Commission further revised and adopted the *Guidebook (Fourth Edition)*<sup>28</sup> incorporating the following program changes:

- Rebate level is lowered for all technologies by \$.20/watt (e.g., change from \$3.00/watt to \$2.80/watt for solar photovoltaic).
- Pilot Performance-Based Incentive Program is offered, providing quarterly performance payments of \$.50 per kilowatt-hour for three years to solar photovoltaic participants (\$10 million is the maximum budget for the incentive program). The program offers incentive payments to program participants based on the actual electricity generated by their photovoltaic systems.
- Manufacturers of inverters are required to conduct additional testing by a qualified Nationally Recognized Test Laboratory to verify equipment ratings, beginning April 1, 2005.
- Time Extensions are eliminated. One-time, three-month extensions are given upon request to applicants submitting reservation requests after January 19, 2005.

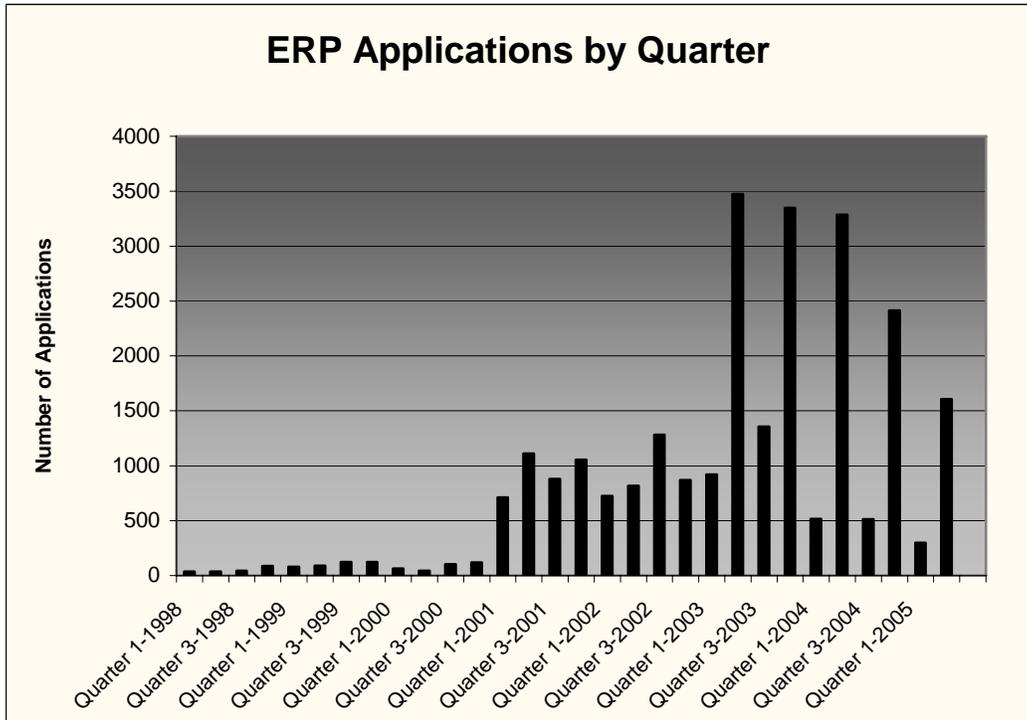
Program activity has leveled off compared with significant increases in activity from 2000-2003. During the period of July 2003 to June 2004, a total of 8,505 applications were received, requesting approximately 41 MW of generating capacity. By comparison, for the period July 2004 to June 2005, a total of 4,818 applications were received, requesting approximately 26 MW of generating capacity. Under the new Performance-Based Incentive Program, only two applications were submitted and approved during this period.

Reservation activity since the beginning of the Emerging Renewables Program through June 2005 is noted in Figure 4.

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<sup>28</sup> Energy Commission publication number 300-2005-001-ED4F, January 2005.

**Figure 4 - Reservation Activity by Quarter  
January 1998 through June 2005**

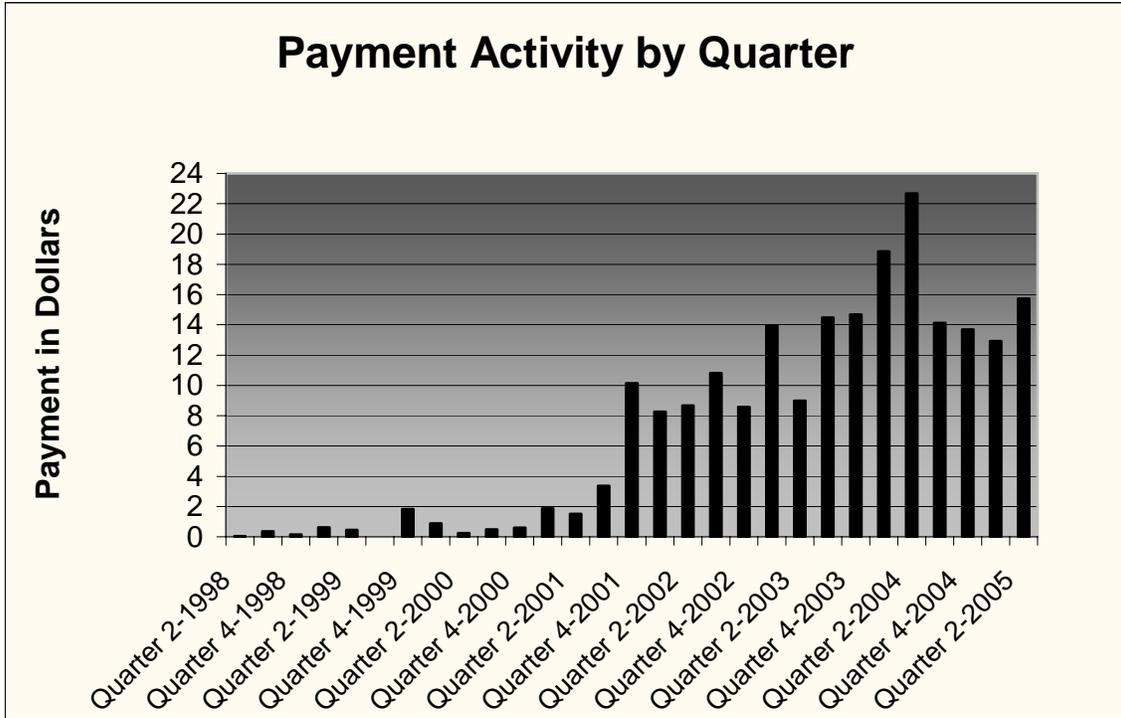


**Note:** The second quarter of 2004 includes Solar Schools Program participants. The Solar School Program applications totaled approximately 60 and approved applicants receive twice the rebate level available at the time.

During fiscal year 2004-2005, the Energy Commission paid about \$55.9 million to rebate applicants for over 4,100 completed projects located in investor-owned utility service areas. These projects represent nearly 17,000 kW of capacity from photovoltaic and wind systems. Since the Emerging Renewables Program’s beginning in 1998 through June 2005, more than 13,800 emerging renewable systems have been installed with support from the program, representing approximately 55.8 MW of distributed renewable electricity capacity, bringing total disbursements to about \$210 million.

As of June 30, 2005, customers planning to install 5,000 additional systems held rebate reservations totaling approximately 24 MW of solar and wind capacity in various stages of completion, encumbering about \$79 million in rebate funds. Approximately \$82 million remains available for rebates in the main Emerging Renewables Program, with an additional estimated \$9.8 million remaining in the Pilot Performance-Based Incentive Program during this period. Figure 5 shows payment activity since the program’s inception through June 2005.

**Figure 5 –Payment Activity by Quarter  
February 1998 through June 2005  
(\$Millions)**



Several past RRTF reallocations (see Table 10) have served to supplement Emerging Renewables Program rebate dollars, including the Energy Commission’s reallocation of \$10 million in earned interest from the RRTF and 90 percent of the SB 1038 funds collected for the Customer Credit Program (totaling about \$60 million collected over five years).

Staff continues to update the list of approved major system components and make it available to consumers online and via regular mail with assistance from the REP's technical support contractor, KEMA-XENERGY, Inc. The KEMA-XENERGY team also has conducted site visits to verify that systems installed using rebate funds comply with the program’s requirements. This verification report includes sections on:

- Investigating that the correct rebate amount was paid
- Verification of system operation and performance
- Survey of customer installation experience and satisfaction

The report is currently undergoing final review at the Energy Commission.

## **Solar Schools Program**

In May 2004, the Energy Commission adopted specific funding and eligibility requirements for the Solar Schools element of the Emerging Renewables Program. The \$4.5 million in incentives for the program, funded equally by the Energy Commission's Emerging Renewables Program (\$2.25 million) and the California Attorney General's Alternative Energy Retrofit Account (\$2.25 million), provided rebates for the installation of solar photovoltaic systems for public and charter schools that met certain eligibility requirements. By June 30, 2004, the Solar Schools Program had awarded all funding and was closed. The Energy Commission does not expect any future funding for the Solar Schools Program.

As of June 30, 2005, the program has paid \$254,752 to 2 schools; over \$4.245 million in incentives remain reserved for 31 schools to install their own photovoltaic systems. The Solar Schools Program represents a total of 732 kW of renewable electricity capacity.

## Emerging Renewables Program Funding Status

Table 10 summarizes RRTF transactions for the Emerging Renewables Program through June 30, 2005.

**Table 10 - Emerging Renewables Program  
Cumulative Funding and Expenditures as of June 30, 2005**

<b>Emerging Renewables Program (\$ Millions)</b>	
<b>Collected Funds</b>	
SB 90	54.000
SB 1038	126.878
Bear Valley Electric	0.051
<b>General Fund Transfers</b>	
From General Fund to provide additional rebate funds pursuant to AB 29X (April 2001)	15.000
To General Fund pursuant to Senate Bill 19X - These were unused monies designated for rebates to customers of publicly-owned electric utilities (4th Qtr 2002)*	-6.308
<b>Intrafund Reallocations</b>	
From Existing Renewable Facilities to supplement rebate funds pursuant to AB 29X (April 2001)	15.000
From New Renewable Facilities - \$40M for 2nd auction reduced to \$33.8M; \$6.2M difference to Emerging (Sept. 2001)	6.200
From Customer Credit Program for additional rebate funds (Sept. 2001)	10.000
From Existing Renewable Facilities for added rebate dollars (Sept. 2002)	13.000
From RRTF Interest (April 2004)	10.000
From Existing Renewable Facilities (May 2004)	15.000
<b>Total Collected, Transferred and Reallocated</b>	<b>258.820</b>
<b>Disbursements</b>	<b>-210.714</b>
<b>Encumbrances**</b>	<b>-80.895</b>
<b>Intrafund Transfer***</b>	
Temporary transfer from New Renewable Facilities to Emerging Renewables****	60.000
<b>BALANCE</b>	<b>27.212</b>

\*SBX1 19 (Chesbro), Chapter 3, Statutes of 2003.

\*\*Encumbrances include \$2.25 million match funding for Solar Schools Program.

\*\*\*Pursuant to Public Resources Code section 25748(f), the Energy Commission is authorized to transfer funds within the areas of the Renewable Resource Trust Fund for cashflow purposes, provided that the balance due each program is restored and that the transfers do not adversely affect any of the programs.

\*\*\*\*Beginning in January 2005, AB 135 authorized the use of an additional \$60 million of RRTF funds to be collected from 2007 through 2011, and subject to the repayment requirements of Public Resources Code section 25751(f).

For an itemized list of project descriptions, amount of funding reserved and paid, and energy capacity of all projects awarded rebates during fiscal year 2004-2005, refer to the *2005 Annual Report, Appendix D*, on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents](http://www.energy.ca.gov/renewables/documents)].

## Consumer Education Program

Under SB 1038, the Consumer Education Program was allocated 1 percent of the RRTF, or approximately \$1.35 million per year, to support renewable energy consumer education activities. The Energy Commission subsequently approved reallocating 10 percent of Customer Credit Program funds, or \$1.35 million annually, to the Consumer Education Program after the Customer Credit Program was discontinued in April 2003. These reallocated dollars are earmarked for funding RPS tracking and verification activities.

The four primary goals of the Consumer Education Program are to:

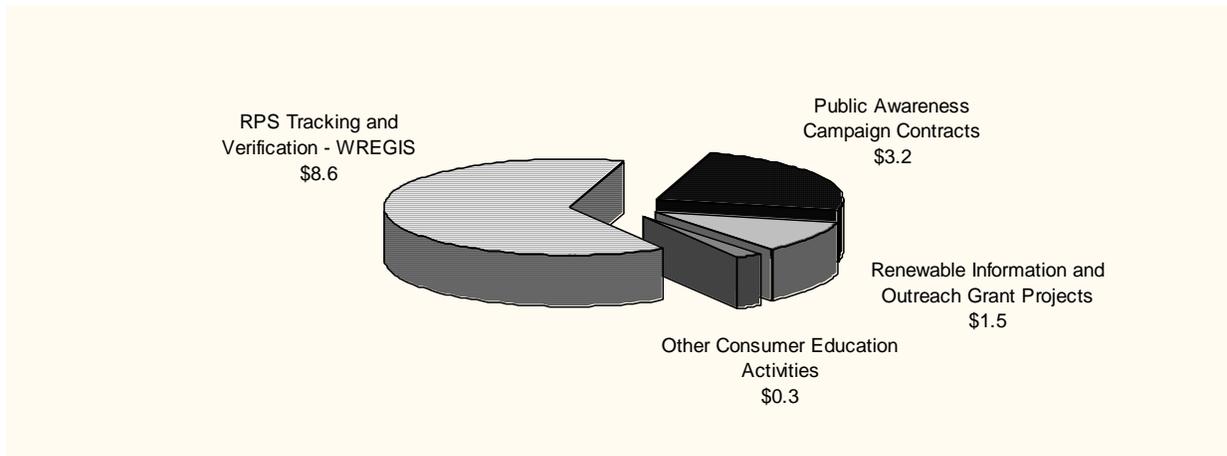
1. Develop information, products and processes that promote the renewable energy market in general, including those that add consumer value to renewable energy by verifying and tracking energy generation and verifying retail product claims;<sup>29</sup>
2. Raise consumer awareness of renewable electricity generation and its benefits;
3. Increase the purchases of small-scale emerging renewable systems installed on customer premises; and
4. Leverage strategic alliances and partnerships with organizations connected to renewable energy in California.

Since 1999, the Consumer Education Program has expended or encumbered about \$13.5 million to support 2 public awareness campaigns funded through contracts; 21 grant projects awarded for renewable energy information and outreach activities; the development of an electronic tracking system, called the Western Renewable Energy Generation Information System (WREGIS), to address long-term RPS tracking needs; and other Consumer Education activities promoting renewable energy. Figure 6 shows how Consumer Education Program funds have been allocated among activities.

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<sup>29</sup> Energy Commission publication number P500-04-003F, May 2004. The May 2004 edition of the *Consumer Education Program Guidebook* added this goal to the Consumer Education Program.

**Figure 6 – Consumer Education Program  
Expenditures, Encumbrances, and Committed Funds (\$ million)  
as of June 30, 2005**



***Program Activities and Status***

During fiscal year 2004-2005, Consumer Education activities included the following:

- \$3.9 million committed for a WREGIS Development and Technical Operations contractor.
- \$2.4 million committed in a contract with the WECC to establish and operate WREGIS for four years.
- \$979,276 committed to ongoing WREGIS activities.
- \$70,293 expended in a contract with KEMA-XENERGY for assistance with WREGIS development.
- \$1 million encumbered in a contract with KEMA, Inc. for WREGIS technical support.
- \$249,250 encumbered in a contract with Knowledge Structures, Inc. to support WREGIS activities.
- \$50,000 grant awarded to Rachus Institute to highlight the Solar Decathlon 2005 competition.
- \$49,932 invoiced to complete a prior fiscal year grant project with Energy Solutions.
- \$5,000 to sponsor the Solar Power 2004 Conference.
- \$2,500 to renew annual membership with the California Solar Center.
- Maintained the Renewable Energy Alliance, a voluntary partnership program designed to facilitate sharing resources among the Energy Commission and Alliance members.
- Updated renewable energy marketing materials for distribution at workshops, conferences, and tradeshows.

These activities are discussed in greater detail below.

## Renewables Portfolio Standard Tracking and Verification – WREGIS

The Energy Commission, together with the Western Governors' Association, are developing WREGIS, a regional renewable energy registry and tracking system to address long-term RPS tracking needs. WREGIS is being established to meet the legislative mandate of SB 1078, which requires the Energy Commission to design and implement a system to verify that renewable energy output is counted only once.

WREGIS consists of two components: a renewable energy tracking and registry system and its technical infrastructure, and an institutional home and staff to develop and administer the WREGIS Program.

A WREGIS kick-off meeting was held in January 2004, during which two committees were established to work on the design of the WREGIS as follows:

- The Operational Rules Committee was responsible for drafting the functional requirements of WREGIS, and
- The Institutional Committee was responsible for discussing issues such as the institutional home of WREGIS, the governance structure, estimates of costs, and recommendations regarding the structure of fees.

From the end of January 2004 through July 2004, both committees met regularly via conference call. On July 15, 2004, the Operational Rules Committee released its report, *Interim Operating Rules: Functional Requirements*.<sup>30</sup> On July 16, 2004, the Institutional Committee released its first set of recommendations in its *Phase I Report*,<sup>31</sup> which determined that the WECC was the best fit for housing WREGIS.

On July 29, 2004, the WECC Board of Directors approved the Institutional Committee's recommendation and adopted a resolution that the WECC would act as the institutional home for WREGIS. The WREGIS Administrator will be housed at the WECC and will be overseen by its Executive Officer. One of WECC's responsibilities will be to provide the necessary staff to develop and administer the WREGIS Program. In addition, once elected, the governance committee of the WREGIS (the WREGIS Committee) will be a Board Committee of the WECC. In March 2004, staff began work on the contract with the WECC to define its roles and responsibilities associated with hosting the WREGIS Administrator.

The Institutional Committee finalized a second report on October 29, 2004. The *Phase II Report*<sup>32</sup> provided recommendations for the governance structure for the WREGIS Committee, estimated the costs associated with WREGIS, and recommended a fee structure. The governance structure was adopted as part of the WREGIS Charter, which

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<sup>30</sup> *Interim Operating Rules: Functional Requirements* available at: <http://www.westgov.org/wieb/wregis/reports/InOpRulesfnl7-15-04.pdf>.

<sup>31</sup> *Phase I Report* available at: <http://www.westgov.org/wieb/wregis/reports/Phase1revdrft7-16-04.pdf>.

<sup>32</sup> *Phase II Report* available at: <http://www.westgov.org/wieb/wregis/reports/ICPhase2fnl11-3-04.pdf>.

was approved by the WECC Board of Directors in December 2004. Included in the charter was the establishment of the Interim WREGIS Committee.

The role of the Interim WREGIS Committee is to convene the Stakeholder Advisory Committee and conduct elections for the permanent WREGIS Committee that will govern WREGIS. The Stakeholder Advisory Committee was convened in August 2005 with elections for the WREGIS Committee planned for November 2005.

With assistance from its technical support contractor, Knowledge Structures, Inc., the Energy Commission completed a feasibility study on WREGIS and delivered a Feasibility Study Report to the Department of Finance in October 2004. Also in October 2004, the Energy Commission delivered an Information Technology Procurement Plan to the Department of General Services. These reports, which are required of state agencies that procure Information Technology software, were approved by the respective control agencies in March 2005.

Further, Knowledge Structures, Inc. and the Energy Commission have developed a Request for Proposal for a WREGIS System Development and Technical Operations contractor. Approximately \$3.9 million dollars from Consumer Education has been committed for this effort. The Energy Commission delivered a draft of the Request for Proposal to the Department of General Services on July 29, 2005, who released the final solicitation document in September 2005. The Consumer Education Program provided partial funding of \$249,250 for Knowledge Structures, Inc.'s assistance in developing the proposal.

The WECC will not incur any costs for housing WREGIS. The Energy Commission will cover costs for the WREGIS Administrator and other WECC costs related to housing WREGIS, which will be funded by the Consumer Education Program. Once it becomes operational, costs of housing WREGIS at the WECC are estimated to be \$2.4 million for three years. The Institutional Committee's Phase II Report makes recommendations for WREGIS fees and a fee structure, which will be decided by the WREGIS Committee. The WREGIS is eventually expected to be self-funded.

In addition, WREGIS development has been procured through several other contracts. In July 2004, the Energy Commission approved a 12-month \$80,000 reimbursement contract with the Western Governors' Association to fund preliminary WREGIS development activities; further assistance was provided through the REP's technical support contract with KEMA-XENERGY that ended in June 2005; and approximately \$1 million is committed in the REP's present technical support contract with KEMA. In summary, fiscal year 2004/2005 WREGIS expenditures totaled \$70,293 for KEMA-XENERGY assistance and \$60,063 for Knowledge Structures, Inc.

Other ongoing WREGIS activities, with a committed budget of \$979,276, include funding future WREGIS staff through leveraged procurement agreements of \$350,000. The Energy Commission estimates that WREGIS will be operational in early 2007.

Table 11 shows Consumer Education Program funding and expenditures for WREGIS as of June 30, 2005.

**Table 11 - Renewables Portfolio Standard  
Tracking and Verification – WREGIS  
Cumulative Funding and Expenditures from  
Consumer Education Program Dollars  
as of June 30, 2005**

<b>Description</b>	<b>Funding (\$ millions)</b>	<b>Expenditures as of 6/30/2005</b>
System Development and Technical Operations Contractor	\$3.9	
Establish and operate WREGIS at the WECC for three years.	\$2.4	
Knowledge Structures, Inc. technical support	\$.25	\$122,938
KEMA-XENERGY technical support	\$.07	\$ 70,293
KEMA technical support	\$1.0	
Ongoing WREGIS activities including funding future WREGIS staff through leveraged procurement agreements of \$350,000	\$1.0	
<b>TOTAL</b>	<b>\$8.6</b>	<b>\$193,231</b>

### **Public Awareness Campaigns**

There were no public awareness campaign activities for fiscal year 2004-2005. All prior activities in this category were concluded by 2003.

Table 12 lists the cumulative Public Awareness Campaign expenditures and encumbrances through June 30, 2005.

**Table 12 – Public Awareness Campaigns  
Expenditures and Encumbrances**

<b>Recipient</b>	<b>Project Description</b>	<b>Funding</b>
<b>Fiscal Years 2003-2005</b>		
	No activity	
<b>Fiscal Years 2001-2003</b>		
ICF Consulting	Contractor identified consumers, through focus groups and surveys, most likely to choose renewable energy; developed advertising messages and strategies to reach those consumers; implemented an advertising campaign based on these messages and strategies.	\$2,094,690
<b>Fiscal Year 1999-2000</b>		
Renewable Energy Marketing Board	Contractor developed television advertisement to educate consumers about the environmental effects of conventional electricity generation, and consumers' option to switch to a "green" electricity provider. In conjunction with the television ad, a series of mail pieces were developed and distributed providing contact information for California electric service providers marketing green power.	\$1,114,430
<b>TOTAL</b>		<b>\$3,209,247</b>

### **Renewable Energy Information and Outreach Grant Projects**

- In September 2004, Energy Solutions closed their \$100,000 grant agreement. A deliverable from this grant, the "Photovoltaics in New Construction" toolkit, was posted on the Energy Commission's website. The toolkit helps individuals and companies decide if a photovoltaic system makes sense for their new construction or renovation project, provides the use of a financial cost-benefit analysis including incentives for solar electricity, links to web resources that are particularly useful to new construction, and educates regarding solar electric systems. Staff also received 5,000 brochures describing the toolkit for distribution at solar events in the future.
- In June 2005, the Energy Commission approved a \$50,000 Solar Decathlon grant project awarded to the Rarus Institute. The Solar Decathlon is a competition among colleges and universities from around the globe featuring team-designed and built solar homes, with the designs displayed on the National Mall in Washington, DC. The Rarus Institute will develop the educational element of the project—a video and a book—documenting California Polytechnic State University, San Luis Obispo's (Cal Poly SLO) energy efficient solar-powered home project for the competition.

The Renewable Energy Information and Grant Project Expenditures and Encumbrances through June 2005 are shown Table 13.

**Table 13 – Renewable Energy Information and Outreach Grant Project Expenditures and Encumbrances**

<b>Grant Recipient</b>	<b>Project Description</b>	<b>Funding Award</b>	<b>Match Fund Contribution</b>
<b>Fiscal Year 2004-2005</b>			
Rahus Institute	Solar Decathlon	\$50,000	\$40,000 (80%)
<b>Fiscal Year 2003-2004</b>			
	Managed grants from prior fiscal year; no new grants awarded.		
<b>Fiscal Year 2002-2003</b>			
<a href="#">Scott Alan Cronk</a>	Sonny & Friends. Produced and distributed children's renewable energy educational video series for TV, the Internet and schools; available in English and Spanish.	\$71,937	\$95,400 (133%)
<a href="#">The Rahus Institute</a>	Solar Schoolhouse. Facilitated installation of photovoltaic systems at schools and provided hands-on curriculum through teacher training workshops.	\$99,500	\$143,070 (144%)
<a href="#">American Wind Energy Association</a>	Small Wind Turbine Siting. Developed, produced, and distributed a small wind siting handbook that focused on educating county officials to help overcome siting barriers.	\$49,696	\$172,000 (346%)
<a href="#">Energy Solutions</a>	ReNew Construction. Provided information to developers, architects and engineers in the project planning or design stage. Developed a "Renewable Energy New Construction Tool Kit", two case studies, technical assistance to design projects, brochure and outreach campaign.	\$100,000	\$128,026 (128%)
<a href="#">Real Goods Solar Living Institute</a>	Solar Living Institute Installer Training Program. Educated solar electricians targeting affordable housing. Held classes in many California locations.	\$85,167	\$57,775 (68%)
<a href="#">Twin Pines Cooperative Foundation</a>	Reducing Energy Costs Roof By Roof: photovoltaic for the Non-profit and Cooperative Affordable Housing Industry. Produced a workshop and solar tours for nonprofit housing industry professionals. Developed a booklet on how to successfully include renewable technology in development and redevelopment projects.	\$14,803	\$8,010 (54%)

<b>Grant Recipient</b>	<b>Project Description</b>	<b>Funding Award</b>	<b>Match Fund Contribution</b>
Global Possibilities	Solar Home Tour 2002. Hosted the Los Angeles Solar Home Tour for consumers, architects, designers, environmental organizations, builders, contractors and developers.	\$14,802	\$15,690 (106%)
Scott Alan Cronk	CalEnergy.org. Renewable energy website enhancement. Developed new information and related tools. Modified contractor database, enhanced photo gallery, and improved navigation and graphics.	\$50,823	\$57,920 (114%)
<b>Fiscal Year 2001-2002</b>			
Scott Alan Cronk	This Renewable House. Filmed program for TV, public service announcements, home video version, website content, and presentations.	\$176,156	\$478,465 (272%)
The Rarus Institute	The Solar Series education and energy for schools. Energy curriculum for K-12, facilitate installation of photovoltaic on schools, student fundraising, books, CD, videos, lesson plans, lab equipment, and teacher training seminars.	\$112,140	\$52,500 (47%)
American Wind Energy Association	Targeted Small Wind Turbine Marketing. Direct mail marketing program and three case studies of successful small wind turbine installations in 7 target areas.	\$96,205	\$24,200 (25%)
Educators For The Environment	A <i>Teacher's Guide</i> and classroom activities. Grades 6-12: produced and disseminated bookmarks; survey of students, families and administrators; website page and flyers.	\$82,076	\$50,081 (61%)
Local Government Commission	<i>Stimulating the Implementation of Renewable Energy Technologies</i> by California local governments. Facilitated installation on local government facilities; developed expertise for purchasing, permitting, installing, and inspecting photovoltaic systems.	\$153,423	\$99,283 (65%)
<b>Fiscal Year 2000-2001</b>			
Chico Community Publishing Inc.	Educational media outreach program.	\$69,178	\$32,518 (47%)
Evergreen Energy LLC	Developed & produced Small Wind Consumer's Guide.	\$24,650	\$6,500 (26%)
Northern CA Solar Energy Association	Solar Home Tour in Northern California.	\$11,300	\$9,800 (87%)
Pathfinder Communications	Articles, website content, and handouts addressing local governments, urban e-commerce participants, and rural self-reliance early adopters.	\$75,000	\$182,000 (243%)

<b>Grant Recipient</b>	<b>Project Description</b>	<b>Funding Award</b>	<b>Match Fund Contribution</b>
San Diego State University Foundation	San Diego Region Photovoltaic Education and Outreach Project. Virtual PV clearinghouse & targeted outreach campaign.	\$74,980	\$33,214 (44%)
The Rarus Institute	Renewables Grass Roots Campaign. Posters, flyers, demo kit, interactive display, photovoltaic display, media articles, website.	\$71,965	\$170,400 (237%)
Twin Pines Cooperative Foundation	PV and/or Wind for Co-ops. Installation, education and demonstration program.	\$68,995	\$60,000 (87%)
<b>TOTAL</b>		<b>\$1,537,814</b>	<b>\$1,876,892 (122%)</b>

### Other Consumer Education Activities

During the 2004-2005 fiscal year, the Consumer Education Program conducted the following additional activities:

- Consumer Education renewed its annual membership with the California Solar Center for \$2,500. The California Solar Center, solely an internet resource, is designed to be a source of information on solar energy activity in California. It provides timely and accurate information to help develop the market for solar energy technology and efficient design practices in California and to assist consumers, businesses, and policy makers move toward a clean energy future without compromising the environment or the economy.
- In an effort to promote the growth of the photovoltaic market in the state, the Energy Commission cosponsored the Solar Power 2004 Conference in San Francisco for \$5,000 in October 2004. The conference provided a venue for the Energy Commission to demonstrate the success of its solar technology strategies to advance photovoltaic in California to as many as 15,000 participants. Joining solar technology stakeholders, Energy Commission staff participated in discussions about solar policy, technology, business and finance. The conference targeted solar and utility industry leaders, energy and environmental policymakers, large commercial customers, builders, facility managers, architects, financiers, dealers, manufacturers, and distributors and the public.
- Staff maintained the Renewable Energy Alliance, a voluntary partnership program designed to facilitate sharing resources among the Energy Commission and alliance members in promoting better understanding and awareness of renewable energy. As of this period, the Renewable Energy Alliance has 254 individual members and 183 member organizations.

- Renewable energy marketing materials were distributed at the Energy Commission Energy Efficiency Workshop attended by schools, utilities and 35 local governments. Also in October, materials were made available to the attendees at the Solar Power 2004 Expo & Conference in San Francisco and to participants of the Solar Home Tour held all over Northern and Southern California.
- Various marketing materials to optimize consumer awareness about the benefits of renewable energy technologies were developed and updated by the Consumer Education Program. Consumer outreach materials, which can be found on the Energy Commission's website or by calling the Energy Commission Call Center, include fact sheets, consumer guides, and marketing materials, including many that grant recipients have developed.

For detailed information about Consumer Education activities conducted from July 2004 through June 2005, please see the *2005 Annual Report, Appendix E*, located on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents](http://www.energy.ca.gov/renewables/documents)].

### ***Consumer Education Program Funding Status***

Consumer Education Program funding and disbursements through June 30, 2005 are summarized in Table 14.

**Table 14 - Consumer Education Program  
Cumulative Funding and Expenditures as of June 30, 2005**

<b>Consumer Education Program (\$ Millions)</b>	
<b>Collected Funds</b>	
SB 90	5.400
SB 1038	9.576
Bear Valley Electric	0.004
<b>Total Collected and Reallocated</b>	<b>14.980</b>
<b>Disbursements</b>	<b>-5.068</b>
<b>Encumbrances</b>	<b>-8.533</b>
<b>BALANCE</b>	<b>1.379</b>

## Customer Credit Program

From 1998 through 2003, the Energy Commission utilized the \$75.6 million initially allocated to the Customer Credit Program to foster market demand for renewable electricity. The funds were distributed via a “credit” to registered renewable providers who delivered eligible renewable energy to qualifying customers. The customer credit, a cents-per-kWh discount for eligible renewable electricity purchases, allowed providers to offer their products to customers at prices that were competitive with conventional electricity. Providers passed the credit along to their customers.

Since the electricity crisis in 2000 and 2001, changes in California’s electricity market structure affected the Customer Credit Program. In 2001, the CPUC suspended customers’ option for direct access contracting. Furthermore, the advent of the RPS in California suggested that a very different market would soon be in place for electricity consumers and providers. Although customer choice is no longer an option, the RPS will provide an alternative for supporting renewable energy generation that does not require customers to enter into direct access contracts.

As directed by SB 1038, on April 2, 2003, the Energy Commission produced the *Customer Credit Report*<sup>33</sup> for the Governor and the Legislature on how to utilize the customer credit funds most effectively. In the report, the Energy Commission recommended that the Customer Credit Program be discontinued. The report also included recommendations for reallocation of funds, as well as retroactive payments to eligible customers for the period January 1, 2002, through April 2, 2003.

In April 2004, the Energy Commission reallocated a portion of the Customer Credit Program funds to the Emerging Renewables Program and Consumer Education Program (45 percent and 10 percent, respectively) consistent with its recommendations in the Customer Credit Report and pursuant to Public Resources Code section 25748, subdivision(b). The Energy Commission subsequently reallocated the remaining 45 percent to the Emerging Renewables Program in May 2004. A final payment of \$3,983 in December 2004 concluded Customer Credit activities and the Energy Commission discontinued the program. Cumulative payments made under the Customer Credit Program totaled about \$65 million.

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<sup>33</sup> Energy Commission publication number 500-03-008F, April 2003.

**Customer Credit Program Funding Status**

Table 15 summarizes RRTF transactions for the Customer Credit Program through June 30, 2005.

**Table 15 - Customer Credit Program  
Cumulative Funding and Expenditures as of June 30, 2005**

<b>Customer Credit Program (\$ Millions)</b>	
<b>Collected Funds</b>	
SB 90	75.600
SB 1038	0.000
Bear Valley Electric	0.039
<b>Intrafund Reallocations</b>	
To ERP for additional rebate funds (Sept. 2001)	-10.000
<b>Total Collected and Reallocated</b>	<b>65.639</b>
<b>Disbursements</b>	<b>-65.323</b>
<b>Encumbrances</b>	<b>0.000</b>
<b>BALANCE</b>	<b>0.316</b>



## SECTION III. REALLOCATION OF FUNDS

The Energy Commission is authorized to reallocate funds in the RRTF among programs in a manner consistent with Public Resources Code section 25748(b), which states that,

"Money may be reallocated without further legislative action among existing, new, and emerging technologies and consumer-side programs in a manner consistent with the report [*Investing in Renewable Electricity Generation in California (Investment Plan)*] and with the latest [*Quarterly Report, April through June 2004*] report provided to the Legislature..."

According to section 25748(b), reallocations may not reduce the allocation for the New Renewable Facilities Program nor increase the allocation established for the Existing Renewable Facilities Program.

The next section summarizes the reallocations made during the first four years of the REP's operation.

### ***1998 through 2002***

The REP did not reallocate any SB 90 funds in the RRTF from the time it began operating in 1998 through 2000, as reported in the Energy Commission's first *Renewable Energy Program Biennial Report* of 2000.

In its *2002 Biennial Report*,<sup>34</sup> the Energy Commission noted that high electricity prices in 2000 and 2001 sharply limited payments from the Existing Renewable Facilities Program, which triggered several reallocations among programs during that time, as discussed below.

As intended by the Legislature, the Energy Commission responded to the energy crisis and its effects on the renewable energy industry by reallocating program funds from undersubscribed programs to those that needed increased funding. In an effort to bring new electrical capacity on-line in 2001, the Energy Commission shifted funds from the Existing Renewable Facilities Program to the New Renewable Facilities Program. In October 2000, the Energy Commission reallocated up to \$40 million to the New Renewable Facilities Program for a second auction, and additionally authorized up to \$40 million in the second quarter of 2001 for a third auction. The reallocation of the latter \$40 million did not occur because the additional funding proved unnecessary due to project cancellations, the forfeit of potential bonuses for early on-line dates, and penalties incurred for later on-line dates.

Of the \$40 million that was reallocated to the New Renewable Facilities Program to fund the second auction, \$6.2 million was not needed for that purpose and was subsequently

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<sup>34</sup> Energy Commission publication number P500-02-010, May 2002.

redirected to the Emerging Renewables Program, which was experiencing a rise in demand for rebate funds as a result of high electricity prices and consumer interest in energy independence.

During the First Extraordinary Session in April 2001, AB 29X (Kehoe), Chapter 8, Statutes of 2001, ordered that \$30 million be reallocated to the Emerging Renewables Program – \$15 million to come from the RRTF (the Energy Commission decided to reallocate these monies from the Existing Renewable Facilities Program), and \$15 million from the state's General Fund. The \$30 million was reallocated to the Emerging Renewables Program for additional rebate funds, with a portion set aside for customers of Publicly-Owned Electric Utilities. SB 19X (Chesbro), Chapter 3, Statutes of 2003, subsequently directed that the unused monies (about \$6.3 million) designated for rebates to Publicly-Owned Electric Utilities' customers be transferred back to the General Fund to help reduce the state's budget deficit.

In September 2001, the Energy Commission also reallocated \$10 million of unused Customer Credit Program funds to the Emerging Renewables Program to further supplement the availability of rebate funds.

The next section discusses fund reallocations from January 2002 through June 30, 2005.

### ***2002 through June 30, 2005***

In September 2002, the Energy Commission reallocated \$13 million from the Existing Renewable Facilities Program to the Emerging Renewables Program to respond to the continuing growth in demand for system rebates.

The Budget Act of 2003, Chapter 157, Section 2.0, Statutes of 2003, directed that the Energy Commission reallocate \$6.0 million from the RRTF for the Agricultural Biomass-to-Energy Program, to be administered under the provisions of SB 704. To accomplish this objective, the Energy Commission reallocated \$6.0 million from the Existing Renewable Facilities Program to the AgBio Program to be paid on a \$10 per green ton basis. Nine participants registered their facilities with the Energy Commission for funding and final payments exhausting the \$6.0 million were made in August 2004.

In April 2003, the Energy Commission recommended in its Customer Credit Report to the Governor and the legislature that the Customer Credit Program be discontinued and the funds collected for that program under SB 1038 be reallocated as follows:

- 10 percent to the Consumer Education Program (specifically for the RPS tracking and verification program),
- 45 percent to New Renewable Facilities Program, and
- 45 percent to Emerging Renewables Program.

In May 2004, the Energy Commission reallocated the Customer Credit Program funds to the Emerging Renewables Program and Consumer Education Programs consistent with its Customer Credit Report and pursuant to Public Resources Code section 25748(b). Subsequently, due to the continuing high demand for rebate funds, the Energy Commission decided to reallocate the remaining 45 percent of Customer Credit funds planned for the New Renewable Facilities Program to the Emerging Renewables Program.

In April 2004, the Energy Commission also approved the reallocation of \$10 million from accrued interest on the RRTF to the Emerging Renewables Program, and \$15 million from the Existing Renewable Facilities Program to the Emerging Renewables Program. During fiscal year 2004-2005, the Energy Commission did not approve any new reallocations of RRTF dollars.

Table 16 shows the current allocations of the RRTF, as of June 30, 2005, factoring in the Customer Credit reallocations.

**Table 16 – Renewable Resource Trust Fund  
Renewable Energy Program Allocations (as of June 30, 2005)**

<b>Program</b>	<b>Percent of Total</b>	<b>\$ Million/Year*</b>
<b>New Renewable Facilities</b>	51.5	\$69.525
<b>Existing Renewable Facilities**</b>	20.0	\$27.000
<b>Emerging Renewables</b>	26.5	\$35.775
<b>Consumer Education</b>	2.0	\$2.700
<b>TOTAL</b>	100%	\$135.000

\*Funds per year are based on \$135 million collected annually under SB 1038, beginning in 2002. Collected funds are adjusted for inflation or load growth, whichever is less.

\*\*AgBio Program funds are included in this category.

Table 17 provides a financial summary of the RRTF through June 30, 2005, reflecting cumulative funds collected, disbursed, reallocated, and encumbered since the beginning of the REP in 1998, and funds loaned and transferred from and within the fund.

**Table 17 - Renewable Resource Trust Fund  
Cumulative Funding and Expenditures as of June 30, 2005  
(\$ Millions)<sup>35</sup>**

	New Renewable Facilities Program <sup>1</sup>	Existing Renewable Facilities Program <sup>2</sup>	Emerging Renewables Program <sup>3</sup>	Customer Credit Program	Consumer Education	PROGRAM TOTAL
Collected Funds <sup>4</sup>	\$408.711	\$338.890	\$180.928	\$75.639	\$14.980	\$1,019.148
Disbursements	-49.944	-215.366	-210.714	-65.323	-5.068	-546.415
<b>Intrafund Reallocations<sup>5</sup></b>	<b>33.800</b>	<b>-83.000</b>	<b>77.892</b>	<b>-10.000</b>	<b>0.000</b>	<b>18.692</b>
Encumbrances	-140.068	0.000	-80.895	0.000	-8.533	-229.495
Intrafund Transfer <sup>6</sup>	-60.000		60.000			0.000
Program Balance	192.499	40.524	27.212	0.316	1.379	261.930
Loan Balance <sup>7</sup>						-150.000
RRTF Balance						\$111.930

<sup>1</sup>New Renewable Facilities Program encumbrances include \$16.240 million in projects awarded funding under the second and third auctions that do not yet have Funding Award Agreements.

<sup>2</sup>Existing Renewable Facilities Program disbursements include \$6 Million for the Agricultural Biomass-to-Energy Program.

<sup>3</sup>Emerging Renewables encumbrances include \$2.25 Million match funding for Solar Schools Program.

<sup>4</sup>Collected funds do not include \$18,632 in voluntary contributions.

<sup>5</sup>Intrafund Reallocations include \$10 Million transfer from Renewable Resource Trust Fund interest to Emerging Renewables Program and \$8.692 Million transfer from state General Fund to Emerging Renewables Program.

<sup>6</sup>Pursuant to Public Resources Code section 25751(f), the Energy Commission is authorized to transfer funds among program accounts in the Renewable Resource Trust Fund for cash flow purposes, provided that the balance due each program account is restored and the transfers do not adversely affect any of the programs. Beginning in January 2005, AB 135 authorized the use of an additional \$60 million of Renewable Resource Trust Fund dollars to be collected from 2007 through 2011, and subject to the repayment requirements of Public Resources Code section 25751(f).

<sup>7</sup>\$150 Million and \$8.9 Million were loaned to the General Fund and the California Consumer Power and Conservation Financing Authority respectively, pursuant to 2002 Budget Act. The California Financing Authority's loan has been repaid.

**Note:** Program and Renewable Resource Trust Fund Balances are committed funds not yet formally assigned to specific projects, but represent monies reserved to meet statutory requirements: Generation from existing renewable facilities, supplemental energy payments under the Renewables Portfolio Standard, rebates for emerging renewable energy system installations, consumer education activities, and a renewable energy certificate tracking and registry system (WREGIS).

<sup>35</sup> This table contains data from the Energy Commission's Accounting Office. Accounting data may differ from Renewable Energy Program staff data reported in the table because funds may be returned, credited, or repaid that are not tracked in real time by Renewable Energy Program staff.

The flexibility to reallocate funds has served the Energy Commission well, maximizing the benefits of program funds and avoiding inefficiencies. During the electricity crisis of 2000 and 2001, for example, the Energy Commission reallocated funds from the Existing Renewable Facilities Program, which had not made any payments during several payment cycles due to prevailing high electricity prices, to the New Renewable Facilities Program. These funds encouraged the development of new renewable capacity for California's electricity supply, and provided some measure of certainty for developers and investors during this highly volatile period for the electricity market.

During the early years of the REP, the Emerging Renewables Program activity showed steady but slow growth. Since the electricity crisis, however, consumer demand has soared for solar and wind energy system rebates. The Energy Commission responded by reallocating funds from underutilized programs to the Emerging Renewables Program to supplement funds available for rebates. When the direct access market declined at the close of 2000 and the CPUC suspended the ability of consumers to enter into direct access contracts in 2001, the Energy Commission determined the most effective use of the Customer Credit Program funds and reallocated them accordingly.

If necessary, the Energy Commission intends to continue exercising its authority to reallocate funds in response to market changes; this flexibility is particularly valuable as the REP is poised to launch RPS SEPs later this year.

The resources necessary to administer the RPS are currently unknown because so many uncertainties surround the implementation of this new electricity paradigm. Funds from the New Renewable Facilities Program that will be offered in the form of SEPs under the RPS could be exhausted, or, conversely, the market may be able to cover those costs.

Another potential need for reallocation exists with the Emerging Renewables Program. Current funding allocations through 2006 are likely to be exhausted before the end of 2005 if additional funding or other measures are not implemented.

If the Energy Commission decides to further reallocate RRTF monies, it will continue to do so with public input and to report on the reallocations to the Legislature.



## **SECTION IV: ACCOUNT TRANSFERS AND REPAYMENTS**

The Energy Commission prepared this section in accordance with Public Resources Code section 25751(f), which provides authorization to the Energy Commission to transfer funds among program accounts of the RRTF (i.e., the New Renewable Facilities Program, Existing Renewable Facilities Program, Emerging Renewables Program, Customer Credit Program, and the Consumer Education Program) for cash flow purposes, provided that the balance due each program account is restored and that the transfers do not adversely affect any of the programs.

The Account Transfers and Repayments section on the REP covers fiscal year 2004-2005 and responds to the directive in Public Resources Code section 25748(a) which states that the Energy Commission shall report to the Legislature on "...The status of account transfers and repayments."

By June 30, 2005, the RRTF transfer balance was \$60,000,000. Beginning in January 2005, AB 135 authorized the use of an additional \$60 million of RRTF funds to be collected from 2007 through 2011, and subject to the repayment requirements of Public Resources Code section 25751(f). These dollars were temporarily transferred from the New Renewable Facilities Program to the Emerging Renewables Program; the New Renewable Facilities Program was the source of the fund transfer because disbursements from New Renewable Facilities Program dollars for SEPs have not yet occurred.

The dollar amount needing to be transferred among program accounts on a quarterly basis fluctuates according to funds collected, disbursed, reallocated, and encumbered, and funds loaned and transferred from and within the RRTF.

Transfers and repayments of funds between programs could occur in the upcoming year; the Energy Commission will discuss any such transfers in its *2006 Annual Report*.



## SECTION V. INTEREST EXPENDITURES

Public Resources Code section 25748 requires the Energy Commission to address the allocation of funds from interest on the RRTF. As noted in the *Overall Program Guidebook* for the REP, Senate Bill 1038 allows interest earned on the RRTF to be used to augment funds for a particular program at the Energy Commission's discretion. For example, such interest may be used to administer the REP to the extent appropriated by the Legislature and authorized by the Department of Finance.

As of June 30, 2005, a total of \$40.9 million in interest had accrued on the RRTF, cumulative expenditures and encumbrances totaled \$19,609,125, and reallocations totaled \$10 million. In fiscal year 2002/2003, earned interest totaling \$5,300,135 was transferred to the General Fund.<sup>36</sup>

In past years, interest funds, like voluntary contributions, were not allocated among the various program elements under the REP. In April 2004, however, the Energy Commission approved the reallocation of \$10 million in interest funds to the Emerging Renewables Program in response to the progressively higher demand for rebate funds.

Generally, expenditures from the interest accrued on the RRTF are directed to three specific areas, which are described below; dollars include both expenditures and encumbrances for fiscal year 2004-2005:

- **Support Services (\$2,319,622)** – Refers to wages and benefits paid to Energy Commission staff working in the REP; operating expenses in the form of general office supplies, printing, communications, postage, travel, training, facilities operations, data processing, equipment, and indirect charges.
- **Contractual (\$897,000)** – Represents contracts that were expended or encumbered from the RRTF. This expenditure includes contracts for technical services support and student assistance, and a contract with the Department of Finance for auditing services.
- **Pro Rata (\$747,643)** – A direct assessment against the RRTF that is applied by the Department of Finance. This assessment is for the cost recovery of expenses incurred by control agencies in the administration of the RRTF. For example, Pro Rata includes the cost of processing claim schedules, journal entries, reports, and payroll for the State Controller, and the work of the Department of Finance budget analyst.

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<sup>36</sup> Budget Act of 2002, Chapter 379, Statutes of 2002.



## **SECTION VI. CONTRIBUTIONS TO THE RENEWABLE RESOURCE TRUST FUND**

SB 1038 directs electrical corporations to allow their customers to make voluntary contributions in support of renewable resource technologies. These contributions are deposited into the RRTF, and under Public Resources Code section 25748(a), the Energy Commission must address their allocation within the context of the REP. As of June 30, 2005, voluntary contributions totaled \$18,632.

Southern California Water Company (doing business as Bear Valley Electric Service), an investor-owned utility, also has made contributions totaling \$364,000 to the Renewable Resources Trust Fund. These funds have been allocated to the program accounts according to the percentage allocations stipulated in SB 90, SB 1038, and the reallocations consistent with the Energy Commission's recommendations in its Customer Credit Report pursuant to Public Resources Code section 25748, subdivision(b).



## ACRONYMS

CPUC	California Public Utilities Commission
ERFP	Existing Renewable Facilities Program
GWh	gigawatt hours
kWh	kilowatt hours
MW	megawatts
PG&E	Pacific Gas and Electric Company
PV	photovoltaic
REP	Renewable Energy Program
RPS	Renewables Portfolio Standard
RRTF	Renewable Resource Trust Fund
SCE	Southern California Edison Company
SDG&E	San Diego Gas and Electric Company
SEPs	supplemental energy payments
WECC	Western Electricity Coordinating Council
WREGIS	Western Renewable Energy Generation Information System