

**California Energy Commission**  
**RENEWABLE ENERGY PROGRAM**  
**Summary of Activities**  
**July 1, 2006 – September 30, 2006**

**RENEWABLE ENERGY PROGRAM**

***The Renewable Energy Program's (REP) goal is to achieve a self-sustaining renewable energy supply for California.***

During this quarter, the Legislature enacted several bills impacting various elements of the Renewable Energy Program:

- Senate Bill (SB)1250 (Perata), Chapter 512, Statutes of 2006, authorized the Energy Commission to use ratepayer funds collected from January 1, 2007 through January 1, 2012 for the continued administration and support of the Renewable Energy Program.
- SB 107 (Simitian), Chapter 464, Statutes of 2006, codified the accelerated RPS target by requiring retail sellers of electricity to increase renewable energy purchases by at least 1 percent per year with a target of 20 percent of retail sales from renewables by 2010.
- SB 1 (Murray), Chapter 132, Statutes of 2006, statutorily authorized and established guidelines for the \$3.35 billion California Solar Initiative (CSI), a solar installation incentive program.
- AB 2189 (Blakeslee), Chapter 747, Statutes of 2006, modified RPS eligibility requirements

**Renewables Portfolio Standard Program**

***The Renewables Portfolio Standard program (RPS) sets goals that help inform the policies of the other programs in the REP.***

With the passage of SB 107, California's current legislative RPS goal is 20 percent of retail sales from renewables by 2010. The Governor has expanded the goal to achieving 33 percent renewables by 2020 for both investor-owned utilities and municipal utilities.

Renewable generators that win a contract through an investor-owned utility's competitive solicitation may be eligible for supplemental energy payments (SEPs) from the Energy Commission. Eligible new or repowered facilities priced above the market price referent (MPR) may apply for SEPs from the Energy Commission to pay the difference between the contract price and the MPR. The Energy Commission may set a cap on the amount of SEPs it issues.

- This quarter, Pacific Gas & Electric (PG&E) and San Diego Gas & Electric (SDG&E) continued to negotiate contracts with shortlisted bidders from their 2004 RPS competitive solicitations.
- SCE, SDG&E, and PG&E continued negotiations to execute contracts under their 2005 RPS solicitations.

The first contracts to date, as a result of the 2005 RPS solicitations, were executed by PG&E this quarter. PG&E filed an advice letter to the CPUC for two contracts from its 2005 RPS solicitation (Advice Letter 2863-E on July 25, 2006) that do not require supplemental energy payments.

- 69-120 MW new geothermal facility with a 20-year contract term. The developer is Davenport Power and the facility will be located in Oregon.
- 49 MW new geothermal facility with a 20-year contract term. The developer is Iceland America Energy LLC., and will be located in Imperial County.

## Western Renewable Energy Generation Information System (WREGIS)

The Energy Commission is working with the Western Governors' Association, state and provincial representatives, and renewable energy market participants to design and implement an accounting system to verify compliance with California's RPS by retail sellers. WREGIS, a regional renewable energy tracking and registry system, will provide WREGIS Certificates to support verification of compliance with regulatory and voluntary renewable energy programs in the Western Interconnect.

- The Public Cost Opening for the Software Development & Technical Operations Contractor RFP took place on July 11, 2006. Notification of Intent to Award to APX, Inc. occurred on July 17 and the protest period ended on July 21 with no protests received. The contract between the Energy Commission and APX, Inc. was approved at the August 30, 2006, Business Meeting. Contractor will modify an existing generation tracking system for the purposes of WREGIS.
- The Western Electricity Coordinating Council (WECC) Board of Directors approved the contract between the Energy Commission and WECC on July 27, 2006. The contract formalized the agreement establishing WECC as the administrative home for WREGIS. The Energy Commission approved this contract at the August 2, 2006, Business Meeting.
- The contract for the Independent Project Oversight Consultant (IPOC) was approved by the Energy Commission at the September 14, 2006, Business Meeting. The IPOC will identify, quantify, and recommend measures to reduce or eliminate potential risks to the WREGIS Project. This position is required by the Department of Finance for IT projects such as WREGIS.
- The contract for the WREGIS Quality Assurance and Configuration Management consultant (QA/CM) was approved by the Energy Commission at the September 27, 2006, Business Meeting. The QA/CM will ensure that the project's products and processes conform to their specified requirements and will also ensure that all work products received or generated by the project are adequately documented, stored, and managed.
- The hiring process for the WREGIS Administrator began in August 2006. Interviews for the WREGIS Administrator were held September 25-29 at the WECC headquarters in Salt Lake City, Utah. The WREGIS Administrator will conduct the day-to-day operations of WREGIS at WECC and is expected to be hired in October 2006.
- The WREGIS Committee held regularly scheduled conference calls to discuss policy issues related to WREGIS.
- The Energy Commission estimates that WREGIS will be operational in mid-2007.

WREGIS disbursements are reported under its funding source, the Consumer Education Program.

## New Renewable Facilities Program (NRFP)

The NRFP fosters the development of new in-state renewable electricity generation facilities by providing financial support. The program consists of two components:

1. Production incentives (cents per kWh payments for renewable energy generated) for proposed projects were allocated to the lowest bidders during three competitive solicitation processes, per SB 90. Production incentives are paid over a five-year period once a project begins electricity production.
  - Incentive payments totaling approximately \$2.58 million were made during this quarter.
  - Approximately \$114 million is encumbered for participating auction winners.
  - Forty-seven<sup>1</sup> projects are currently online and producing electricity, representing 488 megawatts of new renewable energy capacity.

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<sup>1</sup> The Wintec #2 wind project was split into two projects during this quarter, but in order to maintain consistency with previous years, it will continue to be reported as one project.

- Since its inception in June 1998, the NRFP has paid a total of over \$65 million in production incentives to 47 new renewable generating facilities for 6,960 gigawatt-hours of generation.
  - Several projects funded by the NRFP reached the end of their five-year periods this quarter, and the project accounts were closed:
    - Green Power Partners, REN-98-055, ID 50011
    - MM Woodville, REN-98-033, ID 50044
    - Sierra Pacific-Sonora, REN-01-056, ID 50056
    - Diamond Valley Lake, Small Conduit Hydroelectric, REN-01-068, ID 50068
2. Production incentives, referred to as SEPs, are provided to cover above-market costs of meeting the RPS, subject to certain cost constraints. If an eligible facility secures a power purchase agreement with a retail seller through a competitive solicitation, it may apply for SEPs.
- The Energy Commission received a SEP application for a geothermal project at Newbury Volcano facility under contract with PG&E. The application included a request for confidentiality. Once the request for confidentiality is approved or denied by the Energy Commission, staff must determine if the application is complete. If the application is complete, the Renewables Committee will consider the application and may issue a funding confirmation letter for part or all of the funding requested. A SEP application received in the previous quarter from Esmeralda-Truckhaven Geothermal remains incomplete because SDG&E has not submitted required data on bids received in its 2004 RPS solicitation.

## Emerging Renewables Program (ERP)

The ERP provides consumers of electricity in investor-owned utility service territories with a rebate incentive to offset the cost of purchasing and installing new renewable energy systems at their homes and businesses. Eligible technologies are solar photovoltaic, small wind, fuel cells using renewable fuels, and solar thermal electric. Incentive payments are based on the rated electrical capacity of the system.

- The ERP has experienced historical volume spikes when rebate levels drop, and in anticipation of the July 1, 2006, drop in the rebate level, approximately 3,200 reservations were received in June 2006. Because of the increased volume in applications for June 2006 and the anticipated volume for the remainder of 2006, the ERP needed additional funds to avoid a major market disruption. Consequently, at its August 2, 2006, Business Meeting, the Energy Commission approved reallocating \$45,058,246 to the ERP from a number of REP funding sources as indicated below. The reallocation of these funds allows the ERP to continue making reservations and payments for the purchase and installation of renewable energy systems, and to avoid major market and funding disruptions through the remainder of the 2006 calendar year.

Funding Source	Funding Amount
SB 90 Funds	\$15,123,000
Existing Renewable Facilities Program (Tier 2)	\$23,600,000
RRTF Interest Earnings	\$6,000,000
Customer Credit Account	\$315,829
Voluntary Contributions	\$19,417
<b>TOTAL</b>	<b>\$45,058,246</b>

- During this quarter, payments totaling \$16.8 million were made for 1,200 installed systems, representing over 6.0 MW of capacity.
- Approximately 1,380 reservation requests were received during this quarter, representing about 7.0 MW of capacity.

- Payments to date total \$303 million for 20,600 systems, representing approximately 87 MW of distributed generation capacity.
- Funds encumbered for 5,600 systems total \$93.7 million, representing 33.8 MW of capacity. Because the ERP can encumber funds that will be collected through 2006, and \$60 million from 2007 through 2011 (authorized by Assembly Bill 135 [Reyes], Chapter 867, Statutes of 2004), a total of \$11.5 million remains available for rebates through 2006.
- Updated public information concerning the ERP continued to be made available on the Energy Commission's website.

- **Pilot Performance-Based Incentive Program (PBI)**

This pilot program began in January 2005 as a possible long-term option for building the PV market in California. With a budget of \$10 million, the program offers a rebate level of \$0.50 per kWh based on the energy production of the installed solar PV system. The initial reservation period is one year to install the PV system. Quarterly performance payments are made over a three-year period.

- Seven systems representing 312 kW of capacity are installed and receiving quarterly payments.
- As of September 30, 2006, funds encumbered for 31 approved applications represent \$7.1 million and 2.3 MW of additional potential capacity.

- **Affordable Housing Program**

Solar PV systems installed on affordable housing projects and meeting defined criteria are offered rebates 25 percent higher than the standard ERP rebate, not to exceed 75 percent of the system cost.

- During this quarter, payments of \$230,600 were made to 8 affordable housing projects.
- \$3.9 million remains reserved for 207 projects pending completion.
- The Affordable Housing Program represents 496 kW of installed renewable electrical capacity for 198 systems as of September 30, 2006.

- **Solar Schools Program**

In May 2004, the Solar Schools Program offered \$4.5 million in incentives to eligible public and charter schools for the installation of PV systems. Thirty schools were selected to receive the higher rebate – participants receive double the current ERP rebate – and awardees claim their rebate when their PV system is fully installed and operational. By June 30, 2004, the Solar Schools Program closed after all funds were awarded. The program is 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).

- During this quarter, the program paid \$197,731.20 to one school resulting in 29.9 kW of installed solar capacity.
- As of September 30, 2006, 22 schools have completed their PV projects with an additional 8 schools scheduled for completion.
- Payments at the end of the quarter total \$3.85 million for approximately 471 kW of solar capacity.

- **California Solar Initiative (CSI) / New Solar Homes Partnership (NSHP)**

The CSI is a \$3.35 billion solar incentive program to be administered by the CPUC, Energy Commission, and publicly-owned utilities from 2007 through 2016. The CPUC is responsible for providing incentives to the nonresidential and existing residential markets, and the Energy Commission's NSHP Program will offer incentives to encourage solar installations in the residential new construction market within the investor-owned electric utility service areas. The CSI will replace the solar components of both the Energy Commission's ERP and the CPUC's Self-Generation Incentive Program.

- A NSHP Advisory Committee meeting was held on July 20, 2006, at the Energy Commission. The focus of the meeting was to receive comments from builders and the solar industry on the design of the NSHP.
- On August 7, 2006, a \$4.5 million Request for Proposals (#400-06-401) was issued to provide marketing and outreach activities for the NSHP. On August 18, 2006 a pre-bid conference was held. A total of 21 proposals were submitted by the due date of September 27, 2006.
- A \$105,000 Request for Offers was released on August 16, 2006, to eligible CMAS contractors to provide overall technical expertise prior to and during the start-up of the NSHP Public Awareness Campaign, to be conducted as a result of the Agreement let under Request for Proposals #400-06-401. The CMAS contractor would begin implementation of the Public Awareness Campaign, including coordinating with Energy Commission staff and other consultants, on achieving long-term campaign objectives; establishing partnerships and working with those partners to leverage additional marketing, advertising, and educational efforts with various groups. Contractor Ann Staines was selected and the contract was approved at the September 27, 2006, Energy Commission Business Meeting.
  - Expenditures for the NSHP support contracts are reported under their funding source, the Consumer Education Program.
- An Affordable Housing Advisory Committee meeting was held on September 22, 2006, at the Energy Commission to receive comments from the affordable housing industry on the design of the affordable housing component of the NSHP.

### **Existing Renewable Facilities Program (ERFP)**

This program provides production incentives of up to 1.5 cents per kilowatt-hour to biomass, solar thermal, and wind facilities. Incentive payments are tied to market prices, with no payments made if the market price is above a predetermined target price.

- Payments for July 2006 generation, which would have normally been made during this quarter, were delayed slightly and will therefore show as expenditures during the 4<sup>th</sup> quarter of 2006.
- During this period, about \$6.7 million in payments were made for 705 GWhs of generation for July through September 2006.
- To date, payments totaling \$236.8 million have been made to existing facilities for generation from January 1998 through September 2006.
- ERFP rollover funds — those remaining after payments have been made and rolled over to the next payment cycle as available funds — total \$12.3 million.
- 378 facilities are registered as renewable suppliers, with 102 eligible for funding from the ERFP.

### **Consumer Education Program**

This program awards grants and contracts to increase public awareness of renewable energy and its benefits, and to help build a consumer market for renewable energy and small-scale emerging renewable technologies. Consumer Education funds are also used for tracking and verifying renewable energy purchases under the RPS (WREGIS).

- A grant agreement for \$50,000 was developed with the Rarus Institute for the Solar Decathlon 2005 project. The Solar Decathlon was a competition among 18 colleges and universities from around the globe, featuring team-designed and built solar homes, and held on the National Mall in Washington, D.C. in October 2005. The Rarus Institute was tasked with developing the educational element of the project – a video and book. The Solar Decathlon 2005 DVD was shown at the American Solar Energy Society (ASES) Solar 2006 conference held in Denver on July 7-13, 2006. On September 25, final deliverables of the Solar Decathlon 2005 book were submitted. In addition, a revised copy of DVDs was submitted which included bonus features such as a 10-minute segment of Kids Environmental Action Network (KEAN) interviewing college students involved with the decathlon. A

copy of the DVD was also sent to KCET (L.A. based PBS station). No payments were made to the Rarus Institute this quarter.

- The Clean Energy States Alliance (CESA) membership renewal contract for \$240,000 (3 years, \$80,000 per year) was approved at the August 2, 2006 Business Meeting. CESA is a multi-state collaboration of public clean energy funds and state agencies working to develop and promote clean energy technologies and expand the market for these technologies.
- Committed \$2,500 to renew annual membership with the Rarus Institute's California Solar Center, an internet resource designed to be a source of information on solar energy activity in California.
- Consumer Education Program payments to the KEMA technical support contractor during this quarter consisted of the following:
  - Activities related to development of the NSHP
    - o Economic analysis work on incentives, technical analysis of PV, preparation and presentation of PV for June 12 meeting: Expended \$20,363.04.
  - \$26,476.14 for WREGIS-related activities
    - o WREGIS Development Support: Expended \$8,476.14.
    - o WREGIS System and Program Development – Assistance with the selection of the System Development and Technical Operations contractor and development of other Requests for offers to hire other project consultants: Expended \$18,000.
- WREGIS expenditures this quarter:
  - Enterprise Networking Solutions contract for \$193,200 for the services of a Senior Project Manager consultant for the WREGIS project: Expended \$51,261.25.
  - Visionary Integration Professionals contract for \$198,000 for the services of a Program Development Project Manager consultant for WREGIS: Expended \$38,640.
- New Solar Homes Partnership contract expenditures this quarter:
  - None.
- Consumer Education disbursements since the beginning of the program total over \$5.59 million.