California Energy Commission

RENEWABLE ENERGY PROGRAM

Summary of Activities

January 1, 2010 – March 31, 2010

ACCOMPLISHMENTS

Renewables Portfolio Standard Program

Under California's current Renewables Portfolio Standard (RPS) law, retail sellers are required to increase the renewable content of their electricity sales by at least 1 percent per year, with a goal of serving 20 percent of the state's retail electricity sales with renewables by 2010. In November 2008, Governor Schwarzenegger set into motion higher RPS goals by signing Executive Order S-14-08, which calls on California to raise its renewable energy targets to 33 percent by 2020 and expedite development of renewable energy sites. This more aggressive goal reinforces the importance of renewable energy as a component of the state's greenhouse gas reduction goals codified in Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006).

The Energy Commission and the California Public Utilities Commission (CPUC) jointly implement the RPS. The Energy Commission's roles are to certify renewable facilities as eligible for the RPS and to design and implement an accounting system to track and verify RPS compliance. The CPUC is responsible for developing the rules for RPS procurement and providing oversight of contract activities, and it administers incentive payments for the above-market costs of renewable energy.

On September 15, 2009, Governor Schwarzenegger signed Executive Order S-21-09, which directed the California Air Resources Board (ARB) to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. The Executive Order commits ARB staff to work with the CPUC, the Energy Commission, the California Independent System Operator, and others in developing the regulation.

In December 2009, the CPUC released a revised proposed decision authorizing the use of tradable renewable energy credits (TRECs) for compliance with the California RPS.[1] After considering stakeholder comments, the CPUC adopted a TRECs decision on March 11, 2010. The decision distinguishes between bundled transactions and TREC (or REC-only) transactions used for RPS compliance by defining a bundled transaction as one that serves California customer load, and classifies all other RPS-eligible transactions as REC-only. To implement the decision, the CPUC is holding a workshop on April 23, 2010, to explore whether transactions using firm transmission but not dynamic transfer should also be classified as bundled transactions. The CPUC is asking parties to submit pre-workshop comments by April 16.

[1]RECs are a certificate of proof that one unit of renewable energy has been generated. RECs are also the accounting tool used to prove that electricity sellers have complied with the RPS program.

Investor-Owned Utilities' Renewables Portfolio Standard Procurement

RPS Solicitations and Bilateral Negotiations

Since the RPS policy was established in 2002, the state's investor-owned utilities (IOUs) — Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric — have conducted a number of renewable energy solicitations. From these competitive solicitations (including an all-source solicitation), and also through bilateral negotiations, the IOUs have signed 206 contracts for 17,106 to 19,722 megawatts (MW) of new and existing renewable energy projects to date (range in capacity reflects build-out options). This includes 178 contracts representing 15,751 to 18,126 MW of new, repowered, or restarted renewable facilities. Of these, 54 contracts are with projects that are currently online for 2,481 MW of capacity (2,746 MW is the maximum capacity; some of these projects are only partially online). Online facilities account for 16 percent of the total minimum capacity for new, repowered, or restarted renewable facilities under contracts for the RPS program. (Source: Database of Investor-Owned Utilities' Contracts for Renewable Generation, Contracts Signed towards Meeting the California RPS Targets; updated April, 2010, http://www.energy.ca.gov/portfolio/contracts_database.html).

Investor-Owned Utilities' Feed-In Tariffs for Renewable Generation

The Legislature passed Assembly Bill 1969 in 2006, authorizing tariffs[2] and standard contracts for the purchase of eligible renewable generation from public water and wastewater agencies. The CPUC had originally expanded feed-in tariff eligibility to all RPS-eligible renewable resources in only PG&E and SCE territories. However, in Decision 07-07-027, the CPUC extended the tariffs to include renewable facilities other than the public water and wastewater facilities. With the passage of SB 380 in 2008, the Legislature consolidated these two tariffs into a single program that applies to renewable facilities with a capacity of not more than 1.5 MW and increased the statewide generating capacity limit from 250 MW to 500 MW. On September 18, 2008, in accordance with the changes mandated by SB 380, the CPUC approved an extension of feed-in tariffs in SDG&E territory to all renewable generators, bringing the scope of SDG&E's feed-in tariff in line with that of PG&E and SCE.[3] Participating utilities now include California's investor-owned and small and multijurisdictional utilities. As of the end of this quarter, the three large IOUs have entered into a total of 35 feed-in-tariff agreements representing 35 MW of capacity and 186 GWh of annual generation.

Southern California Edison's Renewables Standard Contracts Program

Through its Renewables Standard Contracts Program, SCE is offering to purchase energy and its associated green attributes from eligible renewable resource generating facilities with capacities not greater than 20 MW. This program is available until December 31, 2009, or until 250 MW in contracts have been executed, whichever occurs first. Two different standard contracts are offered depending on the generating facility's capacity: (1) greater than 1.5 MW but not greater than 5 MW, and (2) greater than 5 MW but not greater than 20 MW. Facilities with capacities that exceed 20 MW are not eligible for a renewables standard contract but may

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[2] A *renewable feed-in tariff* is a renewable energy procurement mechanism that requires an electric utility to purchase renewable energy at a fixed price using a standard contract.

[3] CPUC Decision 08-09-033, September 18, 2008, R.08-08-009.

submit a proposal in SCE's annual RPS solicitation. By the end of the quarter, SCE signed 18 standard contracts with a total capacity of 203 to 210 MW and deliveries of 494 to 572 GWh of generation annually.

Southern California Edison's Rooftop Solar Program

In March 2008, SCE launched an ambitious solar rooftop program that promises 250 MW of photovoltaic power installed on 65 million square feet of unused commercial building rooftop space in SCE's service territory. The project is forecast to cost $875 million and produce enough electricity for 162,000 homes.

SCE has entered into two contracts in this category for a total capacity of 3 MW and 5.3 GWh of annual generation. The first major solar installation in Fontana, California, began during the summer of 2008, and the facility started generating solar power that fall. Construction is underway on the utility's second installation in Chino, California. SCE's program goal is to add 50 MW of generating capacity in each of the next five years.

The rooftop solar program supports several of California's key environmental policies, especially the Million Solar Roofs program that provides incentives to encourage Californians to install solar projects by 2017. SCE's solar program also supports the state's Global Warming Solutions Act as well as furthering efforts to attain the goals of California's RPS.

RPS Activities through March 2010

- As of March 31, 2010, the Energy Commission has certified or pre-certified 828 facilities as eligible for the RPS, representing 31,157 MW of renewable capacity.[4] Of that generating capacity, 16,888 MW is proposed new capacity from 198 planned facilities that have been conditionally pre-certified; however not all are yet under contract. These numbers do not reflect activity in the application queue.
- Energy Commission staff is completing the draft *2006 Renewables Portfolio Standard Procurement Verification Report,* which analyzes renewable energy claims toward the RPS program. Previous years' reports compared procurement claims made by IOUs with generation data submitted to various programs by generating facilities. In addition to claims from the large IOUs, the *2006 Verification Report* will also include an analysis of RPS claims made by electric service providers and the small and multi-jurisdictional utilities between 2004 and 2006. The draft report, released on January 28, 2010, reflects oral and written comments that were submitted on the proposed data in the report, as presented during a staff workshop in March 2009 Comments on the draft report were received and are being considered for inclusion in the *Final 2006 RPS Procurement Verification Report*. As noted above, the California Public Utility Commission (CPUC) adopted a decision authorizing the use of TRECs for RPS compliance on March 11, 2010. Staff released a Notice soliciting additional comments from stakeholders on whether the CPUC's decision affects their previous comments on the Draft *2006 RPS Verification Report* or if they have any additional comments regarding the report in light of the CPUC decision. Six stakeholders responded to the request for comments by February 16th, 2010. Staff will now move forward

[4] RPS certified or pre-certified renewable facility capacities do not take into account multi-fuel status.

with finalizing the Draft *2006 RPS Verification Report*. The CPUC issued a stay on its TREC decision on May 12th, 2010.

RPS Contracts

RPS contract activities for the quarter are detailed in the table, *Renewable Portfolio Standard Contract Activity by Utility, January through March 2010*, located on the Energy Commission's website at www.energy.ca.gov/renewables/quarterly_updates/index.html.

Western Renewable Energy Generation Information System

The Energy Commission, in conjunction with the Western Governors' Association and renewable energy market stakeholders, designed an accounting system to verify that renewable energy output is counted only once for the purposes of California's Renewables Portfolio Standard and other regulatory or voluntary programs related to renewable energy throughout the west. With the subsequent addition of efforts by the Western Electricity Coordinating Council, these organizations implemented the Western Renewable Energy Generation Information System (WREGIS), a regional renewable energy certificate tracking and registry system, which provides WREGIS Certificates to support verification of compliance with regulatory and voluntary renewable energy programs in the Western Interconnect. The Energy Commission provided the startup funding for WREGIS and serves as the financial backstop for the program during operations.

- APX, Inc., the System Development & Technical Operations Contractor
    - APX continued to provide maintenance and support services for WREGIS and to make changes to the system that were requested by stakeholders and approved by the WREGIS Committee.
- WREGIS Administration
    - 328 companies registered to be Account Holders in WREGIS through March 2010.
    - 1,301 generators were registered in WREGIS through March 2010.
- The WREGIS Committee held monthly conference calls to discuss and review policy issues related to WREGIS, such as minor changes to system functionality and program documents.
- The WREGIS Stakeholder Advisory Committee, Policy Subcommittee, Change Control Subcommittee, and Operations Subcommittee also met monthly or semi-monthly to discuss issues that may be brought to the WREGIS Committee for review and approval. These supporting committees and subcommittees provide a greater opportunity for stakeholder input and collaboration than the WREGIS Committee meetings.
- Following are WREGIS expenditures this quarter (from the Consumer Education account unless noted otherwise):
    - APX, Inc. contract for $3,277,702 for the services of a System Development and Technical Operations (SD&TO) Contractor for WREGIS. The SD&TO Contractor modified an existing generation registry and tracking system to serve the needs of WREGIS and will continue to perform operations and maintenance for the system at least through the end of the Energy Commission/APX contract in October 2010. Expended $37,124

- Western Electricity Coordinating Council contract for $2,202,750 for the administration of WREGIS. The WREGIS Administration staff runs the day-to-day operations of WREGIS. No expenditures this quarter.

New Renewable Facilities Program

The intent of the New Renewable Facilities Program (NRFP) was to foster the development of new in-state renewable electricity generation facilities by providing financial support to renewable projects that became operational after September 26, 1996. The program was comprised of two elements: the original program under SB 90, and the program as evolved under SB 1038, SB 1078, and SB 107, which offered supplemental energy payments (SEPs) to qualifying facilities to cover the above-market costs of meeting the RPS. In October 2007, the enactment of SB 1036, effective January 1, 2008, eliminated funding for this program with the exception of projects that were still operational as of January 1, 2007. In accordance with the legislation's direction, the Energy Commission implemented the following:

- The Energy Commission terminated all pending awards made to projects under the New Renewable Resources Account of the Renewable Resource Trust Fund (RRTF) prior to January 1, 2002, unless the projects were online and operational by January 1, 2007.
- The Energy Commission's authority to award SEPs was eliminated as of January 1, 2008. Beginning in 2008, the CPUC has authority over the disposition of SEPs for above-market costs.

  As noted by the Senate Energy, Utilities and Communications Committee, SB 1036 eliminated the SEP program because the program was not achieving its purpose. As of January 1, 2008, no applications for SEPs had been approved.
- In March 2008, the Energy Commission refunded the New Renewable Resources Account's remaining unencumbered funds (totaling $461,681,784) to the electrical corporations whose ratepayers contributed funds to support the RRTF. These electrical corporations included Pacific Gas & Electric, San Diego Gas & Electric, Southern California Edison, and Bear Valley Electric Service (a division of Golden State Water Company).
- The enactment of SB 1036 removed the New Renewable Resources Account from the RRTF effective July 1, 2008.

Under the NRFP's original SB 90 funding, production incentives (cents per kWh payments for generated renewable energy) for proposed projects were allocated to the lowest bidders during three competitive solicitation processes. Production incentives were paid over a five-year period once a project began generating electricity. Although SB 1036 eliminated the New Renewable Resources Account effective July 1, 2008, active NRFP projects that were on-line before January 1, 2007 continued to receive payments for generation from encumbered RRTF funding award dollars.

- During this quarter, $26,546 in production incentives was paid to one facility for 1.9 gigawatt-hours of renewable generation.
- By the end of the quarter, $20,499.93 was encumbered for the one remaining active account

- The last active project account reached the end of their five-year payment period on December 30, 2009. The awardee had 90 days from this date to submit their final invoice before their award expired. The final invoice was paid during this quarter. Staff will disencumber remaining funds during the fourth quarter.

- Since the NRFP's inception in June 1998, forty-seven[5] projects have been able to come online and generate electricity, representing 488 megawatts of new renewable energy capacity. The NRFP has paid a total of approximately $76.7 million in production incentives to new renewable generating facilities for 8,731 gigawatt-hours of generation.

Emerging Renewables Program

Since 1998, the Emerging Renewables Program has provided nearly $406 million in rebates and production incentives to customers who have purchased and installed 28,517 renewable energy systems, representing 126 MW of capacity, to offset part or all of their electricity needs at their homes or businesses.

On December 31, 2006, the solar portion of the Emerging Renewables Program ended and was replaced on January 1, 2007, with the Energy Commission's New Solar Homes Partnership (NSHP) and the CPUC's California Solar Initiative. Fuel cells using renewable fuel and small wind turbines are still eligible for rebates under the Energy Commission's Emerging Renewables Program.

During this quarter, the Energy Commission paid $64,955 to 13 rebate applicants for completed projects located in investor-owned utility service areas. These completed projects represent 26 kW of generating capacity from photovoltaic and wind systems.[6] Customers planning to install additional systems held approved rebate reservations totaling 1.2 MW of solar and wind capacity, encumbering about $2.4 million.

One of the most common challenges to small wind installations is not cost, but rather inadequate or overly burdensome permitting processes. In response to these permitting issues, Governor Schwarzenegger signed Assembly Bill 45 (Blakeslee, Chapter 404, Statutes of 2009), which requires California counties to adopt ordinances by January 1, 2011, governing the installation of small wind turbines. AB 45 outlines basic criteria that wind ordinances would address. Specifically, this bill states that if a local agency has not already adopted an ordinance to regulate the installation of small wind energy systems in the jurisdiction outside of "urbanized areas," it must adopt an ordinance in order to ensure that local agencies are not applying overly restrictive or burdensome permitting requirements on small wind energy system installations. Counties do not have to follow the procedures in AB 45 if they already have an ordinance adopted.

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[5] The Wintec #2 wind project was split into two projects, but in order to maintain consistency with previous years, it will continue to be reported as one project.

[6] Due to the length of the Emerging Renewables Program's reservation period, the program is still paying rebates to solar system applicants who submitted their reservation requests before January 1, 2007.

AB 45 also requires the Energy Commission to report to the Legislature on or before January 1, 2016, on the status of small wind in California. In order to complete its report, the Energy Commission must collect annual data from each California County regarding small wind installations. The report must include the following: 1) number of ordinances adopted on or after January 1, 2011, by county; 2) number of applications received and approved during that period; 3) tower heights, system heights, parcel sizes, and generating capacities approved during that period; and 4) Energy Commission recommendations for continuation, modification, or termination of the requirements in AB 45.

New Solar Homes Partnership

The Energy Commission's NSHP, a $400 million program, offers incentives to encourage solar installations, with high levels of energy efficiency, in the residential new construction market for investor-owned electric utility service areas. The goal of the NSHP is to install 400 MW of capacity by 2016. The NSHP is a component of Senate Bill 1 (Murray, Chapter 132, Statutes of 2006), a $3.35 billion solar incentive program aiming to install 3,000 MW of capacity by 2016. Unlike the ERP, incentives under the NSHP are not capacity-based. Instead the actual incentive for a particular system and installation, which is paid up-front, is dependent on an Expected Performance-Based Incentive calculation of the system's performance compared to a reference system. Since mid-2008, program administration has been subsumed under the investor-owned utilities, with oversight from the Energy Commission. With coordinated IOU administration of both the NSHP and the IOU's new construction efficiency incentive programs, greater administrative efficiencies are being achieved, ultimately simplifying the application process for builders and retailers.

NSHP Program Activity (includes Energy Commission and IOU activities)

As of March 31, 2010, a total of 1,043 applications, representing 10,354 residential solar systems, were in various stages of applying to the program. Of those, 84 applications, representing 383 residential systems, were listed as "Pending." (Pending applications are defined as applications in the initial stages of applying to the program and additional information is required before formally submitting the complete application package.)

The remaining 959 applications consisted of the following:

Custom Homes:	739 applications for 739 systems
Lg. Developments (solar standard):	125 applications for 8,891 systems
Other Developments:	95 applications for 341 systems
TOTAL:	**959 applications for 9,971 systems**

NSHP Disbursements[7]

- January to March 2010: Incentives totaling $3.1 million were paid for 1.09 MW of solar capacity.
- Cumulative payments through March 31, 2010: Since the program's beginning in 2007, incentive payments total $17.5 million. This represents 2,383 residential solar installations for 6.22 MW of renewable electricity capacity.

Additional NSHP Activities

- The on-line application web tool continues to be refined, allowing greater ease of use and also providing more information on program statistics.
- In response to comments from stakeholders on how to improve NSHP program participation, revisions to the guidebook were adopted at the January 27,, 2010 Commission Business meeting, and subsequently posted on the GoSolarCalifornia website on February 26, 2010. Revised changes include:

  Market Rate Housing

  - Clarifies the eligibility of leased systems and systems providing electricity under power purchase agreements in the program.
  - Modifies the "Solar as an Option" program by allowing up to 50 percent of a project's residential dwelling units to reserve funding and extend the "solar as an option" reservation period to 36 months.
  - Clarifies that builders/developers may submit applications for phases of six or more residential dwelling units to qualify for the "solar as standard" reservation.

  Affordable Housing

  - Clarifies that affordable housing projects with occupancy permits less than two years old may apply for program funding.
  - Modifies the affordability restrictions for affordable housing projects from 45 years to 10 years.
  - Clarifies the use of virtual net metering on affordable housing projects for purposes of program funding.

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[7] PG&E and SDG&E issue incentive payments directly to NSHP applicants and are later reimbursed by the Energy Commission upon request. Applicants to the SCE-administered NSHP are paid through the Energy Commission. Note that the Energy Commission's reported quarterly disbursements may not include all of PG&E's and SDG&E's incentive payments for the reporting quarter. This is due to the time lag between those utilities issuing a payment, submitting a reimbursement request, and subsequently being reimbursed by the Energy Commission. The Energy Commission expects to make a reimbursement payment to PG&E and SDG&E of $839,006 for 0.25 MW in the next quarter for systems that were installed from January to March 2010. This expenditure will be captured in the April to June 2010 NSHP disbursements.

- Clarifies the time period for submitting finalized energy efficiency documents for affordable housing projects that have requested funding from the California Tax Credit Allocation Committee (TCAC). Such projects are given up to 60 days after the approval from TCAC to provide finalized energy efficiency documentation.

General program changes include: 1) allowing system sizes that are increased after initial NSHP reservation approval time to receive the same original incentive level at which the NSHP reservation was initially approved, 2) removing the system size justification requirement, 3) limiting incentives to the first 7.5 kW AC of a solar energy system installed for individual residential dwelling units, 4) updating the California Flexible Installation criteria tilt range to include flat installations and the energy efficiency Tier levels under the new *2008 Building Energy Efficiency Standards*, 6) eliminating the NSHP-1.6 application process, 7) replacing the annual retailer registration using the NSHP-4 retailer form with an on-line registration process, and 8) revising NSHP application forms.

Expenditures for the NSHP support contracts are reported under their funding source, the Consumer Education Program.

Existing Renewable Facilities Program

The Existing Renewable Facilities Program (ERFP) offers production incentives to biomass, solar thermal electric, and wind facilities that were operational as a renewable facility prior to September 25, 1996. Incentive payments are tied to market prices, with no payments made if the market price is above a predetermined target price. Beginning 2007, under the Senate Bill 1250 program structure, each facility must apply for funding annually. Funding eligibility decisions are made on a facility-by-facility basis.

The program is designed to fully fund incentive payments (assured payments) to facilities with fixed-price contracts below five cents per kWh first; then the balance of remaining funds is allocated to the rest of the facilities. These payments are calculated and possibly adjusted based on estimated funds remaining during the calendar year. Total ERFP payments are capped at $18 million per calendar year.

In 2010, the ERFP received and approved 35 applications for funding from 27 biomass facilities representing 680 MW and for eight solar thermal facilities representing 409 MW. Of these applications, eight facilities qualified to receive assured payments (seven biomass [153 MW] and one solar thermal [50 MW]).

In 2009, Short-Run Avoided Cost (SRAC) energy prices declined 50% as compared to the same period in 2008. This decline has continued in 2010 with energy prices 2% to 5% lower than 2009. With SRAC energy prices at this level, the ERFP would need over $30 million in 2010 to fund participating facilities in full. Staff estimates that the program will start reducing payments starting with the June 2010 payment period.

A biomass facility under an SRAC contract informed Staff that the facility might shut down commercial operations this year due to the low prices. In addition, another biomass facility temporarily shut down in January 2010 for other financial reasons. The facility plans to restart in June 2010. During this quarter, the following activities occurred:

- The Energy Commission made $3.5 million in payments to existing facilities for 985 gigawatt-hours generated during November and December of 2009 and January of 2010.
- Payments to 15 facilities were reduced by $1.3 million based on the amount of funds available in 2009. The total adjusted payout to these facilities was $$520,438.
    - Because of low short-run avoided cost (SRAC) prices during 2009, five facilities receiving variable market prices based on the SRAC formula received $2.5 million more compared to payments made during the same period in 2008. This resulted in the need to reduce payments to all but the eight facilities with assured payments.
- Since the program's inception in 1998, cumulative payments totaling $310 million have been made to existing facilities for 82,203, GWh of generation.
- ERFP rollover funds from 2009--those remaining after payments have been made and rolled over to the 2010 payment cycle as available funds--totaled $8.9 million.

Consumer Education Program

This program is designed 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.

New Solar Homes Partnership

Contract support activities

ProProse contract for $105,000 assisted the NSHP campaign by securing varying levels of partnerships. These included builders' participation in the program, financial institutions offering energy efficiency and solar-friendly loans or programs, realtors and appraisers, utilities, and other entities to help leverage the NSHP's outreach and public awareness campaign dollars. A contract amendment adding $145,000 was approved in 2008 for a total of $250,000 to continue efforts of partnership development for purposes of leveraging dollars for the NSHP Public Awareness Campaign. This amendment also extended the term of the contract through December 31, 2009, to coordinate with the Edelman contract noted below.

The following contractor activities occurred prior to the contract's end date but were invoiced this quarter:

- Finalized the 2009 Green Home Makeover sweepstakes including:
    - Finalized sweepstakes partnership with SMUD.
    - Coordinated with Clear Channel on the selection of the Grand Prize sweepstakes winner.
    - Delivered all signed prize partnership agreements and gift certificates to Clear Channel.
    - Coordinated timing on sweepstakes news release with Clear Channel.
    - Updated sweepstakes partners on website visits and the number of consumers who "opted-in" to receive more information about their products.
    - Finalized the Contract Final Report following feedback from the Energy Commission.

- Created and presented a PowerPoint version of Final Contract Report for contract summary presentation.
- Continued to attend and moderate the NSHP collaborative meetings that reviewed stakeholders' feedback about the NSHP program and marketing efforts.

At the conclusion of the contract, more than $1.9 million in total partnership contributions had been received for the 2008 and 2009 Go Solar California sweepstakes. The partnership contributions included:

- Clear Channel: $1,581,662 (over $400,000 more than promised)
- SMUD: $106,000
- Green Home Make-Over: Partner contributions of $81,972
- Ed Begley Jr., spokesperson: Value of $100,000
- SunPower video elements: Estimated cost savings of $40,000
- California Association of Realtors: No value assigned

In 2008, nearly 17,000 Californians were educated and informed about energy efficiency and solar energy by watching the Go Solar California sweepstakes video, taking the solar information quiz, and entering the sweepstakes. Thirty-four percent of these entries also selected to receive additional marketing information about solar or energy-efficient features via the sweepstakes partners. Approximately 75,000 consumers visited the Go Solar California website each month through the duration of the sweepstakes held August through September 2008.

In 2009, the sweepstakes doubled the amount of entries with over 31,000 received and 53 percent of all entries requesting more information about energy efficiency and solar products. Approximately 130,000 consumers visited the Go Solar California website each month through the duration of the sweepstakes held April through October 2009.

Expended $30,683

Edelman's three-year contract for $4.3 million, ending December 31, 2009, provided an array of marketing and media planning services. These included market research to analyze and identify California home buyers who are most likely to seek higher levels of energy efficiency and solar photovoltaic systems when purchasing new homes; determining the most effective messaging, logo design, and branding; creative development (advertisements and print collateral); and ad placement.

The following contractor activities occurred prior to the contract's end date but were invoiced this quarter:

- Continued marketing outreach and event promotion of the NSHP by:
  - Coordinating artwork and printing of the Go Solar California reusable bag.
  - Coordinating and finalizing remaining advertising buy.
  - Developing and mailing a follow-up of the marketing benefits to all NSHP builders.
  - Compiling a Solar Energy Month media list, updated media pitches with news surrounding incentives programs and pitched media.

- Coordinating builder marketing support for two Trilogy communities, Woodside Nipoma and Comstock Homes events, and conducted media pitching around Trilogy Superiology event in the Central Coast.
- Coordinating the Comstock Homes builder and consumer events.
  - Providing media materials and media outreach support for builder event.
  - Coordinating radio advertising availability, placement, and ad copy for consumer event.
  - Coordinating live remote from KIIS-FM for consumer event.
- Coordinating with Clear Channel to secure and vet 2009 Go Solar Sweepstakes winner.

- Coordinated and completed Go Solar California website redesign project by:
  - Initial planning meeting to determine content/design priorities.
  - Discussing website content checklist revisions, timeline, content.
  - Drafting creative brief and information design.
  - Coordinating feedback from the California Public Utilities Commission.
  - Developing the graphics and testing the final website before launch.
- Continued and finalized NSHP marketing materials and collateral including:
  - Updating the NSHP community insert for the consumer brochure.
  - Reviewing final edits to the Builder Outreach Kit and conducting outreach to builders for case study information.
- Continued development of market research activities including reviewing and finalizing the 2009 post-advertising survey questionnaire and compared to 2008 survey results.
- Continued and finalized the development and promotion of the affordable housing component of the NSHP including:
  - Planned for and participated on the NSHP affordable housing working group call.
  - Distributed Affordable Home Developer tri-folds and additional Tool Kits to NSHP Working Group members for promotion at upcoming events.
  - Promoted NSHP Working Group members' solar/NSHP trainings on the Housing California website.
- Continued and finalized the development and promotion of the NSHP to local governments and municipalities including:
  - Finalizing and distributing the Municipal/Local Government Outreach Kit.
  - Pitching municipal tool kit to government-related publications.
  - Submitting memo detailing interim results of partnership outreach.
  - Drafting, completing, and delivering a final report.
  - Drafting and finalizing the 2009 Campaign Summary Report.
  - Began drafting and finalizing the campaign summary presentation for final meeting.
  - Coordinating final account wrap-up activities including final files, billing, and delivery of materials.
  - Attending biweekly status meetings with the NSHP team.

As the contract concluded on December 31, 2009, Edelman worked with stakeholders to drive outreach to the campaign's key audiences throughout the state to promote new energy efficient and solar homes. The culmination of this effort has resulted in:

- Three annual market research reports assessing consumers' awareness of and attitudes towards solar energy and energy efficient homes in California.
- Over 185 million media impressions delivered in California through radio and online advertising outlets from 2007-2009.
- Five audience-specific brochures about the NSHP for consumers, builders, affordable home developers, realtors, and municipalities. Over 30,000 are currently in circulation, and all are available for download at GoSolarCalifornia.org.
- Three audience-specific tool kits for builders, affordable home developers, and municipalities providing a step-by-step guide about the NSHP applications process and, for municipalities, how to integrate energy efficient and solar-friendly building incentives. All are available for download at GoSolarCalifornia.org.
- One tool kit specifically designed for NSHP builders, providing a suite of advertising templates to support advertising efforts, available for download at GoSolarCalifornia.org.
- 5,000 solar key chains distributed at consumer and builder events throughout California.
- 2,500 USB drives pre-loaded with the Builder Outreach Kit, distributed at builder trade events throughout the state and mailed to 450 industry decision-makers.
- 3,000 reusable bags imprinted with the Go Solar California logo distributed at consumer and builder trade events throughout the state.
- 25 hosted and attended consumer and builder trade events, reaching a combined audience of over 1 million people.
- 77 print and broadcast placements in California newspapers, trade publications, television and radio broadcast, online publications and blogs, generating 2.6 million impressions and a $1.3 million ad equivalency.
- Established an online presence on YouTube (800 billion users), Flickr (2.8 trillion uploads per year), and Our Green Community/SMUD (no longer live, data no longer available).
- Established 23 relationships with California home builders and supported 15 NSHP community events throughout the state.
- Partnered with state Investor Owned Utilities and local municipal districts for 10 consumer and builder trade events.
- 15 municipal districts were reached with NSHP incentives and energy efficient and solar building ideas.
- 41 environmental organizations engaged in the NSHP, with seven providing an online presence for the NSHP through newsletter articles and web banners.
- Reached over 125 affordable housing organizations and partners through Housing California.

Expended $1,326,949

Near-Term Consumer Education Marketing and Outreach Development

Since the marketing and outreach contracts of Edelman and ProProse have concluded, and in an effort to carry on the momentum developed, Energy Commission Consumer Education Program staff is developing a plan and follow-on actions. Staff interviewed and met with a

variety of stakeholders representing several key target audiences including developers, builders, solar installers, appraisers, realtors, and others. These efforts were specifically designed to obtain feedback on the effectiveness of the "Go Solar California" campaign to date and identify areas of future focus. Key discussion topics included assessing target audience needs, obtaining recommendations on how best to market and educate target audiences, and identifying barriers to solar home construction and purchases.

Based on the feedback received, several common themes emerged:

- The need to further leverage data to quantify and promote the financial benefits and added value of a new solar home.
- The need to better educate developers and builders on the incentives available for the construction of new solar homes.
- The need for more public exposure of the NSHP and PV through strategically planned presentations and workshops at industry events or public forums, placement of articles in targeted trade journals and magazines, and the implementation of continuing education classes to serve several professions (appraisers, realtors, lenders, etc.).
- The need to be strategic and efficient with marketing and outreach dollars to maximize results.
- The need to educate local government about the benefits of solar in meeting state political, economic, and environmental goals and encourage the adoption of local mechanisms incentivizing new solar home developments.

No expenditures for this effort.

KEMA Contract #400-07-030

This three-year $3,681,000 contract, executed on July 11, 2008, provides technical assistance to the Renewable Energy Program, including Consumer Education-related activities. Currently, there is no work being conducted under this contract in support of Consumer Education; consequently, there are no expenditures to report for this quarter.

Information, Integration, Innovation & Associates Inc. CMAS #3-08-70-25094

This two-year contract for $75,000, executed on October 8, 2009, will provide maintenance and support services for the NSHP program web tool. NSHP staff continues to work with the programmer, I Cubed, on improving the NSHP online application web tool. I Cubed is completing work to streamline web tool processes and develop new enhancements in response to stakeholder feedback. The requirements for these enhancements have been created and a testing plan is being implemented.

Expended: $38,750

Clean Energy States Alliance

The Energy Commission renewed its membership in the Clean Energy States Alliance (CESA) with a one-year agreement beginning December 1, 2009 through November 30, 2010. CESA is a unique multistate collaboration of public clean energy funds and state agencies who have banded together to promote clean energy technologies in their states and, collectively, across the country. Twenty-three state clean energy programs are now members of CESA, with more states joining each year, and CESA is the only organization that represents their collective voice and interests in the United States.

CESA serves as a technical consultant to the state clean energy funds, developing effective strategies for improving the performance of state programs; working on joint state initiatives to accelerate the expansion of renewable energy markets on state, regional, and national levels; providing up-to-date information on clean energy issues and programs; and serving as a clearinghouse on fund opportunities and challenges.

Expended $82,943

ADDITIONAL RENEWABLE ENERGY PROGRAM ACTIVITIES

Guidelines for California's Solar Electric Incentive Programs

Senate Bill 1 (Murray, Chapter 132, Statutes of 2006), an extensive and multi-faceted legislation, enacts Governor Schwarzenegger's Million Solar Roofs Initiative and is built upon the CPUC's California Solar Initiative, the Energy Commission's NSHP, and the publicly owned utilities' existing solar energy incentive programs. With an emphasis on energy efficiency and high performance installations, this $3.35 billion comprehensive statewide solar effort aims to install 3,000 MW of capacity by 2016. The CPUC's portion, the California Solar Initiative, provides incentives to existing and new nonresidential customers and to existing residential customers. The Energy Commission's NSHP offers incentives to encourage solar installations, with high levels of energy efficiency, in the residential new construction market. Publicly-owned utilities administer solar incentive programs for their individual service areas.

Among other directives, SB 1 requires the Energy Commission, in consultation with the CPUC, local publicly-owned electric utilities, and interested members of the public, to establish eligibility criteria for solar energy systems; conditions for incentives; and rating standards for equipment, components, and systems for electric ratepayer-funded solar energy incentive programs in California by January 1, 2008.

SB 1 required the Energy Commission to adopt eligibility guidelines for solar energy systems receiving ratepayer-funded incentives and identified the following conditions:

- High quality solar energy systems with maximum system performance to promote the highest energy production per ratepayer dollar.
- Optimal system performance during periods of peak demand.
- Appropriate energy efficiency improvements in the new and existing home or commercial structure where the solar energy system is installed.

The *Guidelines for California's Solar Electric Incentive Programs* can be found on the Energy Commission's website at www.energy.ca.gov/2008publications/CEC-300-2008-007/CEC-300-2008-007-CMF.PDF.

Other SB 1 requirements to be completed by the Energy Commission include:

- Conduct annual random audits of solar energy systems to evaluate operational performance.
- Education and outreach by providing assistance to builders and contractors and publishing educational materials for consumers.
- Evaluate costs and benefits of solar energy systems.
- Conduct a study to determine whether solar should be required on new residential and new nonresidential buildings.
- Develop a solar offset program that would allow a developer or seller of production homes to forgo the "solar as an option" offer requirement by installing solar energy systems generating specified amounts of electricity on other projects including low income housing, multifamily, commercial, industrial, and institutional developments.

  Update –Staff have been meeting to discuss the rulemaking process and to flush out any concerns that may be raised during this rulemaking. A docket number has been created (09-SOPR-1) and a webpage has been developed that will be used to display major materials of the proceeding. The webpage is located at www.energy.ca.gov/2009-SOPR-1/. A draft staff paper has been developed for this rulemaking and a workshop is scheduled in May 2010.
- Publicly owned utilities are required to report on the progress of their solar incentive program to the Energy Commission on a yearly basis. Reporting data must be submitted to the Energy Commission by June 1 of each year (for the previous year). Data for calendar year 2008 has been received from the publicly owned electric utilities and this data has been posted since summer 2009 on the Energy Commission's website at www.energy.ca.gov/sb1/pou_reports/index.html.