CALIFORNIA ENERGY COMMISSION
2013 ACCOMPLISHMENTS

Reducing energy use through efficiency

■ Adopted the California Clean Energy Jobs Act Program Implementation Guidelines for the $2.5 billion program that awards grants to public schools. California schools can now receive funding for energy efficiency and clean energy projects, from funding made possible by Proposition 39, approved by voters in November 2012.

■ Validated and published more than 33,000 new certified appliance listings as a part of a program to ensure that all regulated appliances sold in California meet state and federal energy and water efficiency standards. The Energy Commission's energy efficiency regulations for appliances reduce statewide electricity demand by an estimated 23,000 gigawatt hours (GWh) annually and save California consumers money through reduced energy bills.

■ Approved the Voluntary California Quality Specification for light-emitting diode (LED) replacement lamps to accelerate the availability of high-quality LED lamps that meet customer expectations for durability and light quality. LED lamps can now achieve comparable brightness and color quality to incandescent lamps, with instant-on and dimming capability, while using a fraction of the power.

■ Partnered with the Contractors State Licensing Board (CSLB) to improve compliance and enforcement of building permit requirements. Developed education materials that enable CSLB investigators to determine if contractors are following California's Building Energy Efficiency Standards.

■ Relaunched *The Blueprint*, a newsletter aimed at providing California's more than 500 building departments with information on California's Building Energy Efficiency Standards.

■ Awarded nearly $18 million in energy efficiency and clean energy project loans through the Energy Conservation Assistance Account (ECAA). These projects will annually save recipients $1.66 million, 11.4 million kilowatt hours (kWh), and 162,600 therms, and reduce carbon dioxide emissions by more than 4,884 tons over the life of the projects. Projects funded by ECAA since its inception have cut energy costs by $30.3 million a year and usage by more than 300 million kWh of electricity and roughly 160 million therms of natural gas annually, enough energy to power 36,200 homes. Reduction in greenhouse gas emissions from the program averages more than 104,433 tons of carbon dioxide annually.

Advancing energy science and technology development

■ Launched the Electric Program Investment Charge (EPIC) program to continue energy research and development projects related to California's electricity and natural gas needs. This new program will fill critical funding gaps in the energy innovation pipeline and provide Californians with safer, cleaner, more reliable, and less costly electricity.

■ Awarded $58 million to 55 new research and development projects designed to improve California's energy systems. Funds were provided to small businesses, nonprofit organizations, individuals, and academic institutions to conduct research that explores the feasibility of innovative energy concepts, practices and technologies that have the potential to reduce ratepayer costs and environmental impacts of energy production, distribution and consumption.

■ Reduced costs to ratepayers through advancements in energy science and technologies resulting in more than $10 billion in potential net savings for California ratepayers between 2005 and 2025.

■ Signed a historic memorandum of understanding in June 2013 with the U.S. Department of Energy's Advanced Research Projects Agency – Energy (ARPA-E). This is the first agreement ARPA-E has signed with a state agency and it establishes a framework for collaboration on federal and state energy research and development initiatives.

Awarding more than $100 million for advanced transportation projects

■ Awarded $108.8 million for 83 new projects, including one for 1,951 new Level 2 electrical vehicle chargers and 39 Level 3 fast electric vehicle charging stations, which will enable California to have the largest vehicle charging network in the country. The Energy Commission also leveraged private industry and additional public-sector match funding contributions, bringing the total match funding to date to nearly $740 million and in the past year. Since the inception of the Alternative and Renewable Fuels and Vehicle Transportation Program, the Energy Commission has invested $407.6 million in 255 alternative fuel, vehicle, and infrastructure projects that are expected to create about 5,400 short- and long-term jobs, including training programs for technicians and mechanics to maintain and operate next-generation vehicle and alternative fuels technologies.

Providing invaluable information and data analysis for California's clean energy future

■ Provided detailed, objective forecasts of California's future demand for electricity, natural gas, and transportation fuels. For more than 35 years, the Energy Commission continues to provide accurate and timely energy demand forecasts to policy makers and stakeholders annually.

■ Developed the Tracking Progress interface to provide the public with comprehensive data and information about a variety of energy programs and California's progress toward meeting its renewable energy goals (see http://www.energy.ca.gov/renewables/tracking_progress/index.html).

■ Launched *The Spark*, a quarterly electronic newsletter that highlights Energy Commission activities and cutting-edge policies.

Transforming the state's renewable energy infrastructure

■ Adopted new regulations specific to California's publicly owned utilities to ensure progress on the 33 percent renewable energy target by 2020.

■ Certified 83 renewable facilities as eligible for the state's Renewables Portfolio Standard, totaling more than 2,200 megawatts (MW) of new eligible renewable capacity.

■ Provided up to $7 million in Local Government Renewable Energy Planning grants to qualified counties in the San Joaquin Valley and desert regions to revise rules and policies to streamline the permitting process for solar energy projects.

■ Oversaw construction of three solar thermal projects totaling 870 MW and a 624 MW natural gas plant.

Optimizing performance planning and collaborations

■ Worked as part of a multiagency group – composed of agency leads and staff from the Energy Commission, California Public Utilities Commission, and California Independent System Operator – and developed and presented a preliminary regional reliability plan to make up for electricity generation lost by the permanent closure of Southern California Edison's (SCE) San Onofre Nuclear Generating Station (SONGS) in June. The plan is designed to help ensure electricity supply remains reliable for the 1.4 million households served by SCE, San Diego Gas & Electric, and the City of Riverside by proposing to meet 50 percent of demand using preferred resources (energy efficiency, demand response, renewable energy) and using conventional resources to meet the remaining 50 percent.

■ Launched online systems to increase public participation in power plant proceedings and speed the filing and retrieval of official documents. The "e-commenting" and "e-filing" tools make it easier for the public to participate in power plant licensing, compliance, and complaint proceedings before the Energy Commission. The tools also ease the administrative burden for parties involved in power plant cases by reducing the time, money, and printing required to file and serve documents.