

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of the California Energy Commission
for Approval of Electric Program Investment
Charge Proposed 2012 through 2014 Triennial
Investment Plan

And Related Matters.

Application 12-11-001
(Filed November 1, 2012)

Application 12-11-002
Application 12-11-003
Application 12-11-004

**2013 ANNUAL REPORT OF THE CALIFORNIA ENERGY COMMISSION
FOR THE ELECTRIC PROGRAM INVESTMENT CHARGE PROGRAM**

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Dated: February 28, 2014

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The California Energy Commission (CEC/Energy Commission) respectfully submits its *Electric Program Investment Charge 2013 Annual Report*, appended hereto as Attachment A. This annual report is submitted pursuant Decision 12-05-037, which states “The administrators of the Electric Program Investment Charge (EPIC) (the California Energy Commission, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company) shall file annual reports annually on February 28, 2013 through February 28, 2020 with the Director of the Commission’s Energy Division. Annual reports shall be served on all parties in the most recent EPIC proceeding, all parties to the most recent general rate case of each electricity utility named above, and each successful and unsuccessful applicant for an EPIC funding award during the previous calendar year.”¹

The annual report must detail the EPIC administrator’s program activities for the prior calendar year and provide information as specified in Decision 13-11-025, Ordering Paragraphs 14, 15, 18, 22, 23, and 27, and Attachments 5 and 6.

The appended report details the Energy Commission’s EPIC program activities for the 2013 calendar year and provides information as specified in Decision 13-11-025.

¹ CPUC Decision 12-05-037, Ordering Paragraph 16.

Respectfully submitted,

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ATTACHMENT A

**2013 ANNUAL REPORT OF THE CALIFORNIA ENERGY COMMISSION
FOR THE ELECTRIC PROGRAM INVESTMENT CHARGE PROGRAM**

California Energy Commission
STAFF REPORT

**ELECTRIC PROGRAM INVESTMENT
CHARGE 2013 ANNUAL REPORT**



CALIFORNIA
ENERGY COMMISSION

Edmund G. Brown Jr., Governor

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DISCLAIMER

Staff members of the California Energy Commission prepared this report. As such, it does not necessarily represent the views of the Energy Commission, its employees, or the State of California. The Energy Commission, the State of California, its employees, contractors and subcontractors make no warrant, express or implied, and assume no legal liability for the information in this report; nor does any party represent that the uses of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Energy Commission nor has the Commission passed upon the accuracy or adequacy of the information in this report.

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ABSTRACT

The California Energy Commission is the state's primary energy policy and planning agency. As part of its overall work, the Energy Commission administers several clean energy research and development programs that drive innovation and advance science and technology in the fields of energy efficiency, renewable energy and advanced clean generation, energy-related environmental protection, energy transmission and distribution, and transportation. The Energy Commission is one of the administrators of the Electric Program Investment Charge (EPIC), which funds innovation investments in clean energy technologies and approaches for the benefit of electricity ratepayers of California's three largest electric investor-owned utilities. EPIC funding is initially authorized in the areas of applied research and development, technology demonstration and deployment, and market facilitation.

This report outlines the progress and status of Energy Commission activities funded by EPIC from January 1, 2013, through December 31, 2013. It has been prepared in accordance with California Public Utilities Commission Decision 12-05-037, as modified, in Rulemaking 11-10-003, Decision 13-11-025 in Application 12-11-001, as consolidated; and California Public Resources Code Section 25711.5.

Keywords: California Energy Commission, Electric Program Investment Charge, energy research, innovation pipeline, RD&D, energy efficiency, advanced generation, renewable energy, demand response, energy storage, buildings, distributed generation, transmission, smart grid, transportation, environmental, climate change, smart infrastructure, ratepayer benefits, public interest program, electricity, energy policy, loading order, jobs, greenhouse gas, California Public Utilities Commission

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EXECUTIVE SUMMARY

One of the roles of the California Energy Commission is to administer several research and development programs with projects to spur innovation in energy efficiency, renewable energy and advanced clean generation, energy-related environmental protection, energy transmission and distribution, and transportation. The Energy Commission is one of four administrators of the Electric Program Investment Charge. The other administrators are the state's three largest investor-owned utilities: Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company. The California Public Utilities Commission established the Electric Program Investment Charge to fund investments to advance pre-commercial clean energy technologies and approaches for the benefit of electricity ratepayers of California's three largest electric investor-owned utilities. Electric Program Investment Charge funding is initially authorized in the areas of applied research and development, technology demonstration and deployment, and market facilitation. EPIC Market facilitation is defined as activities that will facilitate and accelerate regulatory assistance and streamlining, and workforce development to support clean energy technology deployment.

The mandatory, primary guiding principle for these investments is to demonstrate the potential to produce electricity ratepayer benefits, defined by the California Public Utilities Commission in Decision 12-05-037 as promoting greater reliability, lower costs, and increased safety. Additional complementary guiding principles include the following environmental and economic goals: provide societal benefits; reduce greenhouse gas emissions in the electricity sector at the lowest possible cost; support California's loading order to meet energy needs first with energy efficiency and demand response, second with renewable energy (both distributed generation and utility scale), and third with clean conventional electricity supply; support low-emission vehicles, transportation, and provide economic development; and use ratepayer funds efficiently. This report provides an overview of Energy Commission activities related to its administration of Electric Program Investment Charge funds in calendar year 2013.

Overview of Programs and Plan Highlights

The Electric Program Investment Charge will fund an energy-pipeline approach to creating new energy solutions, fostering regional innovation, and bringing clean energy ideas to the marketplace for the benefit of California's investor-owned utility ratepayers. The coordinated administration of these funds consolidates the research, development, and deployment initiatives of the Energy Commission and the three largest investor-owned utilities in California, avoiding duplication in spending, providing for public interest considerations, and helping attain state energy policy goals. Overviews of the Energy Commission's administrative activities, planned investment areas, and funding levels are provided in Chapters 1 and 2.

Status of Programs

During calendar year 2013, the Electric Program Investment Charge administrators and the California Public Utilities Commission worked together to prepare for the efficient, coordinated launch of the administrators' proposed investment plans. The Energy Commission's first Electric Program Investment Charge triennial investment plan was approved as modified by the California Public Utilities Commission in Decision 13-11-025 in November 2013. Coordination, as well as guidance from state policy makers in 2012 and 2013, allowed the Energy Commission to prepare for the administration of funds as approved by the California Public Utilities Commission and as authorized in Senate Bill 1018 (Committee on Budget and Fiscal Review, Chapter 39, Statutes of 2012), Assembly Bill 110 (Blumenfeld, Chapter 20, Statutes of 2013), and Senate Bill 96 (Chapter 356, Statutes of 2013). In December 2013, the Energy Commission released a schedule of funding opportunities for the first half of 2014 on its website at http://www.energy.ca.gov/research/upcoming_funding.html. This schedule has been updated to include planned funding opportunities for the full amount available to the Energy Commission for EPIC project awards. The Energy Commission will release requests for comments and competitive funding opportunities in 2014 and will continue program development and implementation work throughout 2014 and beyond.

CHAPTER 1:

Introduction and Overview: Launching a New Era of Energy Innovation in California

Economic vitality and social well-being depend upon affordable, safe, and reliable energy. In today's world, energy and the ways people use it are changing. For electricity systems in California to make the leap from the status quo to achieving climate and energy goals while improving system reliability, affordability, and public safety, accelerated energy innovation is needed. Rigorous, public, and objective research and development (R&D), deployment, and market facilitation investments can help move innovations through the pipeline from concept to market.

Through its transparent and public process for investment plan development and competitive selection process for project awards, the Energy Commission will administer Electric Program Investment Charge (EPIC) funds to support investments that advance the next generation of clean energy technologies, tools, and strategies. These investments will provide benefits to investor-owned utility (IOU) electricity ratepayers in the form of cleaner, safer, more affordable, and more reliable electricity generation. Projects funded through EPIC will also reduce greenhouse gas emissions and reduce other air pollutants, and provide other societal, environmental, and economic benefits. These investments will help California achieve its energy, environmental, and economic goals.

Background on EPIC

The Importance of Energy Innovation

Energy innovation has a history of success in California, especially through R&D funded by the Energy Commission. Investments through these and other research programs complement private corporate funding by providing guidance and signals relative to state policies, sharing results widely, and reducing the need for multiple innovators to “reinvent the wheel.” They reduce risk to investors, accelerate the path to market for emerging technologies, address barriers, and support projects through energy innovation pipeline phases with inadequate private sector investment.

The Creation of EPIC

The Public Goods Charge (PGC) which funded electricity research and renewable energy in California expired at the end of 2011.¹ Recognizing the importance and benefits of energy innovation and renewable energy programs that were supported by the PGC, Governor Jerry Brown requested in 2011 that the California Public Utilities Commission (CPUC) take action under its authority to institute a new program, similar in size, but revised to “take

¹ Public Utilities Code Section 399.8.

into account the constructive ideas for program reform identified during the legislative process as well as ways to create jobs swiftly through investment in energy savings retrofits.”²

Following a deliberative process, the CPUC adopted a decision authorizing collection of EPIC funds in December 2011 for renewables and research, development, and demonstration (RD&D) purposes (Decision 11-12-035, as modified). In May 2012, the CPUC adopted Decision 12-05-037, as modified, which provides the framework for CPUC oversight of the administration of EPIC. Investments funded by EPIC will be administered by the Energy Commission and the state’s three largest IOUs: Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E). In accordance with Decision 12-05-037, the administrators submitted their proposed first triennial investment plans for EPIC funds to the CPUC in November 2012.

The Energy Commission received authorization from the Legislature to spend a portion of the EPIC program funds in Senate Bill 1018 (Committee on Budget and Fiscal Review, Chapter 39, Statutes of 2012) and Assembly Bill 110 (Blumenthal, Chapter 20, Statutes of 2013), and received program direction in Senate Bill 96 (Committee on Budget and Fiscal Review, Chapter 356, Statutes of 2013).

The Energy Commission’s first triennial Investment Plan for EPIC funds was approved as modified by the CPUC through Decision 13-11-025 in November 2013. Decision 13-11-025 incorporates requirements specified in SB 96 for the portion of the EPIC program administered by the Energy Commission.

The Energy Commission posted a schedule of upcoming funding opportunities and opportunities for feedback on December 18, 2013. Throughout 2014, additional funding opportunities will be announced, and competitive solicitations will be released to advance energy innovation in California.

EPIC Program Components

Investment Areas

CPUC Decision 13-11-025 approved Energy Commission administration of EPIC funds collected in 2012-2014 in the following program areas:

- **Applied Research and Development** (\$158.7 million; three-year funding to the Energy Commission): This area is defined as activities supporting precommercial technologies and approaches that are designed to solve specific problems in the electricity sector, including activities that address environmental and public health impacts of electricity-

² September 23, 2011, Governor Jerry Brown letter to CPUC President Michael Peevey.

related activities, support building codes and appliance standards, and support clean transportation with a linkage to electricity sector ratepayer benefits.

- **Technology Demonstration and Deployment** (\$129.8 million; three-year funding to the Energy Commission and \$86.6 million of three-year funding to the three IOUs): This area is defined as the installation and operation of precommercial technologies or strategies at a sufficient scale to assess operational and performance characteristics, and financial risks. Twenty percent of the Energy Commission’s 2012-2014 investment plan funds in this category will be set aside for bioenergy projects or activities.
- **Market Facilitation** (\$43.3 million; three-year funding to the Energy Commission): This area is defined as a range of activities (including program tracking, market research, education and outreach, regulatory assistance and streamlining, and workforce development) to support clean energy technology and strategy deployment. CPUC Decision 12-05-037 further clarifies that this category should not necessarily be limited to renewables, but may include any other clean energy technologies and/or approaches.

The 2012-2014 investment period does not include EPIC funding for solar on new residential construction. As stated in Ordering Paragraph 5 of Decision 13-11-025, “Consideration of the funding source and amounts of Public Utilities Code § 2851(e)(3) funding for solar on new construction is transferred to Rulemaking 12-11-005 (Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues).”

Total EPIC funding for the Energy Commission activities is summarized in Chapter 2.

Guiding Principles

The mandatory guiding principle of EPIC is to invest in clean energy technologies and approaches that provide benefits to electricity ratepayers by promoting greater reliability, lower costs, and increased safety. In addition, complementary guiding principles include:

- Societal benefits.
- Greenhouse gas (GHG) emissions reduction and adaptation in the electricity sector at the lowest possible cost.
- The loading order.
- Low-emission vehicles/transportation.
- Economic development.
- Efficient use of ratepayer funds.

Also, principles articulated in Public Utilities Code Sections 740.1 and 8360 (which govern utility expenditures in the areas of RD&D and smart grid) serve as guidance. Section 740.1³ states that, in evaluating RD&D projects, consideration will be given to:

- Projects that provide reasonable probability of ratepayer benefits.
- Minimizing projects with a low probability of success.
- Projects consistent with the utility corporation's resource plan.
- Projects that do not duplicate previous or current research by other electrical or gas corporations or research organizations.
- Projects that support one or more of the following objectives:
 - Environmental improvement.
 - Public and employee safety.
 - Conservation by efficient resource use or by reducing or shifting system load.
 - Development of new resources and processes, particularly renewables resources and processes that further supply technologies.
 - Improve operating efficiency and reliability or otherwise reduce operating costs.

Section 8360 outlines the requirements for the state's electrical transmission and distribution system to maintain safe, reliable, efficient, and secure electrical service to meet future growth and demand in achieving:⁴

- Increased use of cost-effective digital information and control technology to improve reliability, security, and efficiency of the electric grid.
- Dynamic optimization of grid operations and resources, including appropriate consideration for asset management and use of related grid operations and resources, with cost-effective full cyber-security.
- Deployment and integration of cost-effective distributed energy resources and generation, including renewable energy sources.
- Development and incorporation of cost-effective demand response, demand-side resources, and energy-efficient resources.
- Deployment of cost-effective smart technologies, including real-time, automated, and interactive technologies that improve the physical operation of appliances and consumer

³ Public Utilities Code Section 740.1: <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=puc&group=00001-01000&file=727-758>.

⁴ Public Utilities Code Section 8360: <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=puc&group=08001-09000&file=8360-8369>.

devices for metering, communications concerning grid operations and status, and distribution automation.

- Integration of cost-effective “smart” appliances and consumer devices.
- Deployment and integration of cost-effective advanced electricity storage and peak-shaving technologies, including plug-in electric and hybrid electric vehicles, and thermal-storage air conditioning.
- Outreach to consumers with timely information and control options.
- Development of standards for communication and interoperability of appliances and equipment connected to the electric grid, including the infrastructure serving the grid.
- Identification and lowering of unreasonable or unnecessary barriers to adoption of smart grid technologies, practices, and services.⁵

Connections to the Electricity Value Chain

EPIC investments will be mapped to the different elements of the electricity “value chain,” which consists of grid operations/market design, generation, transmission, distribution, and demand-side management. Similar to the guiding principles listed above, each funded project will be mapped clearly to the appropriate section of the value chain as stated in the Energy Commission’s first EPIC triennial investment plan.

EPIC Investment Strategy

California energy policy frames a vision for the state’s electricity future that includes a significant transition from fossil generation to renewable sources, highly efficient homes and businesses, and electrification of portions of the transportation system. The Energy Commission will administer EPIC funds to help bridge gaps along the energy innovation pipeline through competitive project selection processes.

Homes and businesses need high-quality and cost-effective efficiency products and services. Renewable generation and electric transportation must be seamlessly integrated into the electric grid at all levels of interconnection ranging from small-scale home applications to large central-station power plants. The Energy Commission’s *Integrated Energy Policy Report* and ongoing analysis at the California Independent System Operator, the CPUC, the United States Department of Energy, and the United States Environmental Protection Agency identified key challenges to achieving this clean energy vision for California’s IOU service territories. Described in Chapters 3-5 of the Energy Commission’s first EPIC triennial investment plan, each initiative addresses an important barrier and investment gap for clean energy.

⁵ A smart grid consists of interactive equipment and communication protocols allowing electricity system operators and customers to adjust energy consumption and energy generation in response to price signals or information about the status of the electricity system to help maintain affordability, safety, and reliability of the electricity system.

Implementing Diverse and Inclusive Energy Innovation in California

The Energy Commission is committed to ensuring that a diverse range of applicants have the opportunity to participate in EPIC projects, including small businesses, women, minorities, and disabled veterans.⁶ To this end, it plans to do the following throughout the implementation of its EPIC investment plan:

- Initiate an outreach plan to ensure that a diverse range of potential applicants know about and understand how to participate in EPIC program activities, especially solicitations for projects.
- Target particular geographic regions within the state for certain program activities (for example, job training or energy efficiency retrofits in economically depressed communities).
- Include initiatives addressing energy related challenges and opportunities in economically depressed communities. For example, the Energy Commission's 2012-2014 EPIC investment plan includes initiatives related to funding for bioenergy projects that demonstrate integration/reliability services, net local air quality benefits, and provide other ratepayer and environmental benefits in the Central Valley and other locations in the state, many of which include large numbers of low-income residents.
- Track, monitor, and report on the participation of women, minority, and disabled veteran-owned businesses using the same definitions used by the IOUs via CPUC General Order 156.⁷ This will allow an apples-to-apples comparison from all of the EPIC administrators when submitting annual reports to the CPUC.

The Energy Commission plans to engage a wide range of stakeholders and provide preparation and information to help achieve the foregoing points and ensure that a diverse range of businesses and organizations have the opportunity to participate in competitive solicitations. Outreach and engagement may include workshops and webinars, new online media resources to inform stakeholders about ways to prepare successful proposals, and other awareness strategies designed to meet the needs of potential applicants. Through these efforts, in combination with its other administrative standards and practices and in collaboration with other administrators and innovators, the Energy Commission will help ensure that California's clean energy future reflects its diversity.

⁶ Letter to CPUC President Peevey from California Energy Commission Chair Robert Weisenmiller, http://www.energy.ca.gov/research/epic/documents/2013-11-07_Letter_from_the_Chair_re_AB_340-Docket_12-EPIC-01.pdf.

⁷ General Order 156 seeks to increase the participation of women, minority and disabled veteran-owned business enterprises (WMDVBE) in utility procurement, and requires the IOUs to submit annual plans to the CPUC for increasing WMDVBE participation in procurement and to submit annual reports on the implementation of those plans. Decision 13-11-025, p. 108.

EPIC Program Regulatory Process

The CPUC has regulatory authority over the Energy Commission's administration of EPIC funds, including the approval of investment plans. In addition, the Legislature must grant the Energy Commission spending authority to disburse EPIC funds for project awards and use EPIC funds for administrative expenses.

The Energy Commission will provide annual reports to the CPUC in accordance with Decision 12-05-037, as modified, in Rulemaking 11-10-003 and Decision 13-11-025 in Application 12-11-001, as consolidated. These decisions specify the outline of this report, as well as specific reporting requirements for projects awarded EPIC funds, to ensure consistent reporting among all administrators. The Energy Commission will also provide EPIC annual reports to the Legislature as specified in California Public Resources Code Section 25711.5 and will make them publicly available on its website.

The Energy Commission will administer the EPIC program according to all applicable state laws and standards and will follow its *EPIC Investment Plan* approved as modified by Decision 13-11-025 to administer EPIC funds collected in 2012 through 2014. In addition, the Energy Commission will comply with other applicable guidance from the CPUC and the Legislature to ensure that innovations funded by EPIC provide IOU electricity ratepayer benefits and that EPIC investments are aligned with the electricity value chain.

Coordination

The Energy Commission is committed to ongoing collaboration with the IOU administrators of EPIC funds and with other energy innovation stakeholders during the investment plan development stage. During the preparation and refinement of competitive solicitations, the Energy Commission may hold public workshops or issue public requests for comment. In accordance with state laws and regulations, the Energy Commission strives to maintain a fair solicitation process and prevent conflicts of interest. To this end, entities that privately work with the Energy Commission to create a solicitation, sometimes even obtaining advance confidential draft versions or writing part of it, cannot also apply to receive funds under it.

EPIC Administrator Coordination

Coordination meetings were valuable in developing the first investment plans to identify each administrator's area of focus and synergistic opportunities for further collaboration. In 2013, the Energy Commission and the IOUs coordinated on a number of items related to EPIC administration, including:

- Conference calls to prepare for the January 2013 public workshop at the CPUC to discuss the EPIC investment plans proposed in Applications 12-11-001, 12-11-002, 12-11-003, and 12-11-004 by the Energy Commission, SDG&E, PG&E, and SCE, respectively.
- Coordination to prepare standard metrics for reporting benefits provided by EPIC investments. In the CPUC proceeding for Application 12-11-001, as consolidated, Energy Commission filings on February 11, 2013, and March 15, 2013, included a draft master list of EPIC metrics to draw from when preparing solicitation materials, assessing projects, and preparing annual reports. The draft master list of EPIC metrics was based on the metrics identified in the EPIC Phase 2 Decision (D.12-05-037) in Rulemaking 11-10-003, ordering paragraph 12, subparagraph (c). The CPUC adopted a master list of metrics in Decision 13-11-025 on November 14, 2013.
- Discussions to jointly prepare an annual report template for all administrators to follow. The Energy Commission included a draft annual report template in its CPUC filings in Application 12-11-001, as consolidated, on February 11, 2013, and March 15, 2013. The CPUC adopted an outline and project status report template for EPIC annual reports in Decision 13-11-025 on November 14, 2013.
- Planning for a public webinar on implementing the first triennial investment plans. The webinar was held on December 18, 2013. Each of the IOUs and the Energy Commission provided overviews of their respective EPIC 2012-2014 investment plans and answered questions from stakeholders and the public. More than 200 participants joined the webinar.
- Other conference calls to clarify and respond to questions among EPIC administrators, including questions related to the Energy Commission's New Solar Homes Partnership and other topics related to development of the first triennial EPIC investment plans.

As the EPIC administrators begin implementing their first triennial investment plans and developing their second triennial investment plans for the 2015-2017 funding cycle, ongoing collaboration will be a cornerstone of the program to ensure that innovations funded by EPIC return the highest benefit to the electricity ratepayers that fund the investments. The administrators have agreed to the following five principles of coordination:

- **Information Sharing and Coordinated Planning.** The administrators will work together to address common goals, consistent with the state's energy and environmental policies and the guiding principles for EPIC as stated in CPUC Decision 12-05-037. To this end, the administrators will share information regarding their investment plans, programs, and projects as much as practicable to maximize the efficient use of funds and facilitate dissemination of results for the benefit of electric utility ratepayers.
- **Leveraging Funding and Avoiding Duplication of Projects.** To the extent legally permissible, the administrators will work together to avoid unnecessary duplication of efforts, consistent with Public Utilities Code Section 740.1, and to leverage funds for the benefit of electric utility ratepayers.

- **Consistent Evaluation, Measurement, and Verification of RD&D Results.** The administrators will work together to establish consistent and common evaluation, measurement, and verification protocols for developing and reporting to the CPUC and stakeholders the performance and results of funded projects.
- **Coordinated Input and Advice From Stakeholders.** The administrators will continue working together to schedule, solicit, and respond to comments and advice from stakeholders on their respective proposed and ongoing plans and programs.
- **Intellectual Property.** The administrators will work together and use best efforts to agree on common approaches to intellectual property rights to ease dissemination and sharing of innovation results for the benefit of electric utility ratepayers.

Coordination With Other Energy Innovation Efforts

In 2013, the Energy Commission engaged in a number of coordination efforts with other state and federal entities involved in similar RD&D activities. These activities, which will help ensure that innovations funded by EPIC are optimally implemented to deliver maximum ratepayer benefits, included:

- The Energy Commission and the U.S. Department of Energy’s Advanced Research Projects Agency – Energy (ARPA-E) signed a memorandum of understanding⁸ in June 2013 that established a framework for collaboration between ARPA-E and the Energy Commission for state energy research, development, demonstration, and deployment programs and projects. Coordination meetings were held on December 10, 11, and 18 to ensure that Energy Commission and ARPA-E research objectives are aligned and avoid duplicative research.
- Energy Commission staff participated as a technical reviewer for several proposals submitted under the fourth California Solar Initiative RD&D solicitation, providing scores and constructive feedback in several evaluation categories. The solicitation focused on issues affecting grid integration of increasing solar photovoltaic penetrations in California’s electric IOU service territories and strategies for accelerating the interconnection and integration of photovoltaic deployment throughout the state. The California Solar Initiative’s RD&D program is administered by Itron, Inc., on behalf of the CPUC.
- The Energy Commission collaborated on developing the Vehicle-Grid Integration Roadmap, a deliverable under the *2013 ZEV Action Plan*, in coordination with the California Independent System Operator and the CPUC. The roadmap, the result of four stakeholder workshops held by the California Independent System Operator and the Energy Commission, outlines the paths and priorities for commercializing the use of

⁸ A memorandum of understanding is a written agreement in which each party will commit resources, to the extent available, and will be responsible for bearing its own costs. As such, a memorandum of understanding is not enforceable like service contracts or grants, where the parties to the agreement each have rights and obligations that can be enforced against their counter-parties.

electric vehicles to improve power grid reliability. As outlined in the roadmap, the Energy Commission will begin hosting a series of annual workshops to review progress on R&D projects relating to vehicle-grid integration, such as pilots with the U.S. Department of Defense and research under the EPIC program.

Transparent and Public Process and Solicitation Activities

The Energy Commission is committed to a transparent and public process in all phases of EPIC administration, including investment plan development and approval, competitive solicitation processes, and project approval and management.

To help ensure a transparent and public process, the Energy Commission created a Web page (<http://energy.ca.gov/research/epic/>) that provides information about EPIC, including past workshops, public comments, upcoming events, how to sign up for the list serve, and documents associated with the program. The page will also serve as a resource for Energy Commission proceedings related to developing future triennial EPIC investment plans. Interested stakeholders will be able to navigate to Energy Commission EPIC policy documents, presentations, funding solicitations, annual EPIC reports, and other resources that will promote active participation in the program. The Energy Commission's first investment plan provided a sample template for Program Opportunity Notices to allow stakeholders to plan and prepare for EPIC solicitations. In the future, information about EPIC-funded projects will be available on the Energy Commission's website.

In addition, Energy Commission staff will hold public meetings for interested individuals or entities to provide input on the implementation of EPIC investment plans, identify synergies with other projects, solicit end-user⁹ needs and paths to market opportunities, and facilitate more effective sharing of program results. For example, in December 2013, the Energy Commission released a schedule of upcoming feedback opportunities including an opportunity to inform the development of a grant solicitation for apprenticeship programs that address workforce-related barriers to clean energy deployment in investor-owned utility service areas. Requests for comment and stakeholder meetings will not create a formal decision-making body and will not usurp or conflict with CPUC authority. They will, however, serve to provide transparency and accountability for investments, coordinate efforts to avoid duplication, explore opportunities to leverage funds, and ensure that projects are targeting ratepayer benefits. A schedule of upcoming feedback opportunities is available at http://www.energy.ca.gov/research/upcoming_funding.html.

Investment Plan Development

In August 2012, the Energy Commission held stakeholder workshops in Northern and Southern California to gain stakeholder input prior to the development of its first triennial investment plan. Along with the oral comments provided at the workshops, the Energy

⁹ An electricity end-user is the final entity to receive electricity for consumption.

Commission received more than 200 written comments. The input and comments were used to develop the proposed funding initiatives in a staff draft investment plan released to the public on September 21, 2012. On September 27, 2012, the Energy Commission conducted a public workshop to receive stakeholder comments on the staff draft investment plan. The comments provided at the public workshop, along with additional written comments submitted after the workshop, were used to further refine and prioritize the funding initiatives for the final proposed investment plan, published on October 23 and adopted by the Energy Commission on October 31, 2012.

On November 1, 2012, the Energy Commission filed an application with the CPUC to consider approval of the proposed first triennial investment plan. The CPUC consolidated the Energy Commission's application with the applications of the other three EPIC administrators into a combined proceeding (A.12-11-001, A.12-11-002, A.12-11-003, A.12-11-004, as consolidated). In 2012 and 2013, the Energy Commission activities in this proceeding included the following:

- December 17, 2012. The Energy Commission filed a reply to protests and responses to Application 12-11-001.
- January 17, 2013. The administrators held a workshop on their proposed EPIC investment plans for 2012-2014.
- January 25, 2013. On behalf of the EPIC administrators, the Energy Commission submitted a summary report to the CPUC on the January 17 workshop.
- February 4, 2013. The Energy Commission submitted clarifying responses to the CPUC on its *Electric Program Investment Charge Proposed 2012 Through 2014 Triennial Investment Plan*.
- February 11, 2013. The Energy Commission provided opening comments about the January 17, 2013, workshop and investment plan meetings and the administrators' responses to the administrative law judge's January 28, 2013, ruling.
- February 19, 2013. The Energy Commission provided reply comments to the CPUC.
- February 28, 2013. The Energy Commission submitted its *2012 Electric Program Investment Charge Annual Report* to the CPUC.
- March 12, 2013. The Energy Commission provided a response to SDG&E's first data request in the EPIC proceeding (A.12-11-001, et al., as consolidated), which was served on Energy Commission counsel by e-mail on February 26, 2013.
- March 15, 2013. The Energy Commission provided its opening brief on the administrators' applications for approval of the proposed EPIC 2012-2014 investment plans.
- March 22, 2013. The Energy Commission provided a reply brief on the administrators' applications for approval of the proposed EPIC 2012-2014 investment plans.

- June 13, 2013. The Energy Commission submitted opening comments on the proposed decision addressing the administrators' applications for approval of their EPIC program triennial investment plans for 2012 through 2014.
- June 18, 2013. The Energy Commission submitted reply comments on the proposed decision addressing the administrators' applications for approval of their EPIC program triennial investment plans for 2012 through 2014.
- November 4, 2013. The Energy Commission provided opening comments on the revised proposed decision addressing the administrators' applications for approval of their EPIC program triennial investment plans for 2012 through 2014.
- November 7, 2013. Energy Commission Chair Robert B. Weisenmiller submitted a letter to CPUC President Michael Peevey on the Energy Commission's commitment to increasing the participation of women, minorities, and disabled veterans under its implementation of the EPIC program.
- November 8, 2013. The Energy Commission provided reply comments on the revised proposed decision addressing the administrators' applications for approval of their EPIC program triennial investment plans for 2012 through 2014.

For 2014, the Energy Commission will follow a similar stakeholder process in developing the *Electric Program Investment Charge: Proposed 2015-2017 Triennial Investment Plan*.

Investment Plan Implementation

In implementing its first EPIC investment plan, the Energy Commission will issue solicitations to fund initiatives outlined in the plan. Funding opportunities will be posted on the Energy Commission's website, and the Energy Commission will notify interested parties of solicitations through available list servers.

Each solicitation will identify its purpose and objectives, the funding levels for project topics, project and applicant eligibility requirements, screening and/or scoring criteria, match funding requirements, grounds for rejection, intellectual property criteria, and the solicitation schedule. Each solicitation will also include terms and conditions, and standardized templates for preparing work statements and budgets.

Shortly after a solicitation is posted, Energy Commission staff will hold a publicly noticed workshop to review the solicitation's purpose, requirements, eligibility, and innovation topics with interested parties. The public workshop will provide an opportunity for potential applicants to ask questions about the solicitation and the application process. There will also be an opportunity for interested parties to submit written questions about the solicitation. Staff responses to questions will be posted on the Energy Commission's website to ensure that all potential applicants have access to the same information. Any revisions or clarifications made to the solicitation will also be posted on the Energy Commission's website.

Each proposal submitted in response to an EPIC solicitation will be screened and scored according to criteria in the solicitation. After the scoring is complete, a Notice of Proposed Awards will be released by the Energy Commission identifying proposed funding recipients. For each recipient, a grant agreement or contract will be developed and approved by the Energy Commission at a publicly noticed business meeting. For recipients not awarded funding, there will be an opportunity to receive a debriefing as described in the solicitation.

Once agreements are approved, Energy Commission staff will manage the agreement in a transparent manner. Project fact sheets, final reports, and other documents related to, or supported by, EPIC funds will be publicly accessible on the Energy Commission's website to maximize transparency and increase value for the program and its projects. In addition, summaries will be provided for all active projects and projects completed during the past year.

CHAPTER 2:

Budget

Authorized Budget

The California Public Utilities Commission (CPUC) approved a final Electric Program Investment Charge (EPIC) budget for the first triennial investment cycle (2012-2014) in Decision 13-11-025. **Table 1** shows the Energy Commission's total EPIC funding allocation of \$368.7 million for funds collected in 2012-2014. The amount includes \$331.8 million in project funds to be awarded under the three program areas, as well as \$36.9 million for program administration. Decision 12-05-037, as modified, caps program administrative costs for each EPIC administrator at 10 percent. The Energy Commission administrative costs for EPIC include all administrative and EPIC program oversight work performed by Energy Commission staff for the EPIC program including the following tasks:

- Execute EPIC research, development and demonstration, and market facilitation program including planning, contracting and grant award activities as defined in the approved EPIC First Triennial Investment Plan.
- Conduct workshops, meetings, and web conferences on the current state of the energy market, policy impacts, and opportunities for renewable energy and other energy emerging technologies to assist in the development of competitive solicitations and to assist in preparing future investment plans' initiatives.
- Research available energy technologies and identify the most promising emerging technological solutions. Scope solicitations to reach performance targets and to attract proposals that provide most promise in delivering energy technologies that are cleaner, safer, more reliable and affordable.
- Manage contract and grant agreements to achieve technological goals for the EPIC-funded grants, contracts, awards, and production incentives.
- Develop, coordinate and publish required annual reports and documents to the CPUC and the Legislature.
- Research, coordinate and submit to CPUC Second Triennial Investment Plan.
- Participate in CPUC EPIC related proceedings and workshops.

Table 1: CPUC-Approved Energy Commission EPIC Funding 2012-2014

Funding Element/Program Area	Total (in millions)
Applied Research and Development	\$158.7
Technology Demonstration and Deployment	\$129.8
Market Facilitation	\$43.3
Sub Total	\$331.8
Program Administration	\$36.9
Grand Total	\$368.7

Source: California Energy Commission

The Energy Commission must also obtain spending authority to disburse these funds from the Legislature each fiscal year. In fiscal years 2012-2013 and 2013-2014, the Energy Commission received a total state spending authority of \$10.18 million for program administration and \$159.3 million for project awards.¹⁰ The Energy Commission requested an additional \$12.959 million for program administration and \$172.5 million for project awards in the Governor’s Budget for fiscal year 2014-2015.¹¹ This would make the total state authorized budget for project awards through fiscal year 2014-2015 consistent with the CPUC’s approved budget of \$331.8 million for project awards. The Energy Commission intends to commit this full amount in project solicitations by the end of December 2014.

The following section describes the Energy Commission’s plan for upcoming competitive solicitations, subject to spending authority approval from the Legislature.

Funding Commitments and Encumbrances

This section provides definitions for “commitments” and “encumbrances,” provides information on planned upcoming funding opportunities, and reports expenditures for 2013 program administration.

CPUC Definitions of Commitments and Encumbrances

To clarify the difference between commitments and encumbrances for the EPIC program, the CPUC adopted the following definitions in Decision 13-11-025:

“Committed funds’ are funds identified during the planning of a solicitation for a specific project that will be needed to fund a contract or grant for that project at the conclusion of a planned or released solicitation.

¹⁰ These amounts do not reflect funding for the New Solar Homes Partnership.

¹¹ The Fiscal Year 2014-2015 Governor’s Budget was announced on January 10, 2014.

...‘Encumbered funds’ are monies that are specified within contracts and grants signed during a previous triennial investment plan cycle and associated with specific activities under the contract or grant. All activities carried out under a contract or grant during a specific triennial investment plan cycle need not be completed and funds need not be spent during that particular program cycle if the activities undertaken pursuant to the contract or grant are expected to be completed. Only funds that are committed or encumbered during the prior program cycle are eligible for being rolled into the following program cycle.”¹²

Planned Upcoming Funding Opportunities

In December 2013, the Energy Commission released a tentative solicitation schedule for the EPIC-funded investments it plans to offer in the first half of 2014. Table 2 shows an updated tentative schedule of planned solicitations for the full amount approved by the CPUC. This table is also available at <http://www.energy.ca.gov/research/epic/>

¹² CPUC Final Decision 13-11-025, Ordering paragraphs 44 and 45, p. 143.

Table 2: Schedule of Planned Solicitations for Energy Commission EPIC Funding Awards

Program Area/ Strategic Objective	Upcoming Funding Opportunities	Funding Amount
<i>Opportunities Beginning March 2014</i>		
Applied Research and Development (S7)	Developing Technology Improvements for a Flexible and Responsive Electricity Grid	\$5 million
Technology Demonstration and Deployment (S14)	Demonstrating Secure, Reliable Microgrids and Grid-Linked Electric Vehicles to Build Resilient, Low-Carbon Facilities and Communities	\$26.5 million
Applied Research and Development (S8)	Advancing Grid-Level Energy Storage Innovation to Achieve Policy Goals, Lower Costs, and Spur Investment	\$6 million
Applied Research and Development (S1)	Developing a Portfolio of Advanced Efficiency Solutions: Technologies and Approaches for More Affordable and Comfortable Buildings	\$25 million
Applied Research and Development (S3)	Advancing Cleaner, Less Costly, More Reliable Distributed Generation to Enable Customer Solutions and Zero-Net Energy Communities	\$19.5 million
Applied Research and Development (S4)	Creating a Reliable and Predictable Renewable Energy Future: Advancing Utility Scale Renewable Technologies	\$9.5 million
Market Facilitation (S17)	Human Power: Investing in the Future of California's Clean Energy Workforce	\$4.5 million
Applied Research and Development (S5)	Building a Renewable Energy Future That Protects Human and Environmental Health	\$11 million
Technology Demonstration and Deployment (S13)	Demonstrating Bioenergy Solutions That Support California's Industries, the Environment, and the Grid	\$27 million
Technology Demonstration and Deployment (S12)	Bringing Solutions to Scale: Proving New Efficiency and Demand Response Technologies Work for California's Industrial, Water, and Agriculture Sectors	\$27.3 million
Applied Research and Development (S11) and Technology Demonstration and Deployment (S15)	Federal Cost Share Note: Up to 10 percent of the funding allocated for Applied Research and Development and Technology Demonstration and Deployment strategic objectives can be applied to providing cost share for these types of competitive federal awards.	TBD

<i>Opportunities Beginning July 2014</i>		
Market Facilitation (S18)	Guiding Future Energy Needs, Plans, and Programs Through Commercial End-Use Surveys, Phase I	\$1 million
Market Facilitation (S18)	Developing Technology, Environmental, and Market Roadmaps and Analysis to Guide our Progress	\$2 million
Applied Research and Development (S9)	Driving the Integration of Electric Vehicles to Maximize Benefits to the Grid	\$4 million
Applied Research and Development (S2)	Advancing Solutions That Allow Customers to Better Manage Their Energy Demand	\$21.4 million
Applied Research and Development (S10)	Leveraging Innovation Clusters to Accelerate Deployment of Early Stage Technologies	\$27 million
Applied Research and Development (S6)	Developing the Smart Grid of 2020: Clean, Safe, and Highly Intelligent	\$8 million
Market Facilitation (S16)	Establish Strategies for Enhanced Local Regulatory Assistance and Permit Streamlining That Will Accelerate Deployment of Clean Energy Infrastructure	\$23.3 million
Technology Demonstration and Deployment (S12/S14)	Reducing Costs for Communities and Businesses Through Integrated Demand Side Management and Zero-Net Energy Demonstrations	\$28 million
Market Facilitation (S18)	Guiding Future Energy Needs, Plans, and Programs Through Commercial End-Use Surveys, Phase II	\$7 million
Applied Research and Development (S1)	Developing a Portfolio of Advanced Efficiency Solutions: Technologies and Approaches for More Affordable and Comfortable Buildings, Phase II	\$18.3 million
Applied Research and Development (S5)	Building a Renewable Energy Future That Protects Human and Environmental Health: Phase II	\$7 million
Market Facilitation (S18)	Connecting Clean Tech Entrepreneurs, Investors, and Others: Creating the Networks Needed to Bring Energy Innovations to Market	\$0.8 million
Technology Demonstration and Deployment (S13)	Demonstrating Clean Energy Solutions That Support California's Industries, the Environment, and the Grid	\$18 million
Market Facilitation (S18)	Measuring Innovation Progress to Guide Future Investment	\$4.7 million

Source: California Energy Commission

2013 Administrative Expenditures

In calendar year 2013, the Energy Commission spent \$1,510,711 for EPIC program administration. This calendar year was a period of preparation to begin ramping up to full-

scale implementation of the EPIC program under SB 96, which was enacted in September 2013, and CPUC Decision 13-11-025, issued in November 2013, approving the first triennial investment plans proposed by the EPIC program administrators. The Energy Commission did not have any expenditures for program area project awards during 2013.

The CPUC emphasized the need to minimize administrative costs in Decision 12-05-037 and suggested that “if administrative costs can be less than the cost cap, we expect the administrators to put those extra funds to good use for program purposes.”

Funding Shifts

In accordance with Decision 13-11-025, funds shifted between funding categories or program areas are limited to 5 percent. However, there is no limit on the number of shifts being made within a funding category or program area.

The Energy Commission has no plans to shift funds between funding categories or program areas at this time.

Uncommitted/Unencumbered Funds

Based on the definitions provided above, “uncommitted” and “unencumbered” funds are funds that are not identified in solicitation plans or encumbered into project awards. Additionally, these funds are considered “unspent.”

As stated in Decision 13-11-025, “Given the shortened timeframe of the initial investment plan cycle, and for the purposes of the initial investment plan cycle only (2012-2014), the uncommitted and unencumbered funds that would, under normal circumstances be returned to ratepayers if legally permitted to do so, must be rolled over as if those funds were encumbered or committed. At the conclusion of the second investment plan cycle, if any funds approved for the first investment plan cycle are uncommitted or unencumbered, they must be credited against the approved budget for the third investment plan cycle.”¹³

At the end of each investment plan cycle, any unspent funds will be rolled over into the subsequent investment plan cycle as required. In addition, EPIC administrators must explain in their triennial investment plans what caused any unspent funds in the prior investment plan cycle, and how the unspent funds would affect the program area(s) and projects.¹⁴ Additionally, the investment plan cycle budget for 2017-2020 will be reduced by the amount of unspent funds from the 2012-2014 and 2015-2017 investment plans, to offset future program funding requirements.¹⁵ In addition, the budget adopted for a subsequent

13 CPUC Decision 13-11-025, Ordering Paragraph 39, p. 142.

14 CPUC Decision 13-11-025, Ordering Paragraph 41.

15 CPUC Decision 13-11-025, Ordering Paragraph 38 and 39.

investment plan cycle must be reduced by the amount of interest accrued in the previous investment plan cycle.¹⁶ At the end of the third investment plan cycle, any unspent funds and accumulated interest should be returned to the ratepayers, if there is a legal means to do so.¹⁷

Regarding the means for returning accumulated interest to the ratepayers, Decision 13-11-025 states: "Because the CEC cannot administratively return accumulated interest, the CEC must report the accumulated interest in arrears from the previous investment plan cycle, and the IOUs must reduce the amounts transferred to the CEC during the next triennial investment cycle by the reported accumulated interest amount and return an amount equal to the accumulated interest to ratepayers."¹⁸

Decision 12-05-037, as modified, states: "(I)f administrative costs can be less than the cost cap, we expect the administrators to put those extra funds to good use for program purposes."¹⁹

The Energy Commission does not anticipate any project award funds will be left uncommitted at the end of the first triennial investment plan cycle. Per the requirement to report accumulated interest in arrears at the end of each triennial investment cycle, the Energy Commission will include the amount of accumulated interest from the first triennial investment cycle in the *2014 EPIC Annual Report*, which is due to the CPUC on February 28, 2015.

16 CPUC Decision 13-11-025, Ordering Paragraph 42.

17 CPUC Decision 13-11-025, Ordering Paragraph 43.

18 CPUC Decision 13-11-025, p. 105.

19 CPUC Decision 12-05-037, p. 66.

CHAPTER 3: Projects

In calendar year 2013, the Energy Commission did not make any project awards with EPIC funds. As discussed in the previous chapter, a schedule of planned competitive solicitations for Energy Commission EPIC fund awards was published. The schedule includes upcoming feedback opportunities. Notices for the availability of each funding opportunity will be widely distributed and posted on the Energy Commission's Web page. The Energy Commission will encumber these funds into projects and will report on a range of characteristics as required.

In future EPIC Annual Reports, the Energy Commission will provide the following information for each project awarded EPIC funds. The information will be provided in electronic format (example attached) using the template provided in Attachment 6 of CPUC Decision 13-11-025:

- a. Investment Program Period
- b. Program Administrator
- c. Project Name
- d. Project Type
- e. A brief description of the project
- f. Date of the award
- g. Was this project awarded in the immediately prior calendar year?
- h. Assignment to Value Chain
- i. Encumbered Funding Amount (\$)
- j. Committed Funding Amount (\$)
- k. Funds Expended to date: Contract/Grant Amount (\$)
- l. Funds Expended to date: In house expenditures (\$)
- m. Funds Expended to date: Total Spent to date (\$)
- n. Administrative and overhead costs to be incurred for each project
- o. Leveraged Funds
- p. Partners
- q. Match Funding
- r. Match Funding Split
- s. Funding Mechanism
- t. Intellectual Property
- u. Identification of the method used to grant awards.
- v. If competitively selected, provide the number of bidders passing the initial pass/fail screening for project
- w. If competitively selected, provide the name of selected bidder.
- x. If competitively selected, provide the rank of the selected bidder in the selection process.

- y. If competitively selected, explain why the bidder was not the highest scoring bidder, explain why a lower scoring bidder was selected.
- z. If interagency or sole source agreement, specify date of notification to the Joint Legislative Budget Committee (JLBC) was notified and date of JLBC authorization.
 - aa. Does the recipient for this award identify as a California-based entity, small business, or businesses owned by women, minorities, or disabled veterans?
 - ab. How the project leads to technological advancement or breakthroughs to overcome barriers to achieving the state's statutory energy goals.
 - ac. Applicable metrics.
 - ad. Update.

CHAPTER 4:

Conclusion

Key Results for the Year

The EPIC creation and implementation process included a number of significant milestones in 2013:

- In FY 12/13, the Legislature authorized the Energy Commission to spend funds to prepare to administer its portion of EPIC funds.
- The Energy Commission filed its first *EPIC Annual Report* to the California Public Utilities Commission (CPUC) as required in February 2013.
- In FY 13/14, the Legislature authorized the Energy Commission to expend funds to administer its portion of EPIC funds and award up to \$159.3 million by June 30, 2015, consistent with SB 96.
- In coordination with the IOU administrators and the CPUC, the Energy Commission participated in public workshops on EPIC in January and December.
- The Energy Commission participated in the CPUC EPIC proceeding to consider the proposed triennial investment plans submitted by the EPIC program administrators, Application 12-11-001, et al., as consolidated into a single public proceeding.
- In September, the Governor signed SB 96, adding Sections 25711.5 and 25711.7 to the Public Resources Code related to the Energy Commission's administration of EPIC funds.
- In November, through Decision 13-11-025, the CPUC adopted the Energy Commission's first *EPIC Triennial Investment Plan*, as modified.
- In December, the Energy Commission made publicly available a schedule of competitive solicitations planned for the first half of 2014. This schedule has been updated to include all solicitations planned for the Energy Commission's first triennial investment plan.

Next Steps for EPIC Investment Plan

The Energy Commission's next steps for the continuation of EPIC administration include the following:

- The Energy Commission will develop the intellectual property terms and conditions as specified in SB 96 and CPUC Decision 13-11-025.
- The Energy Commission will release competitive solicitations and requests for comment according to the schedule available on the Energy Commission's EPIC Web page (<http://www.energy.ca.gov/research/epic/>) and provide updates to the schedule as needed.

- Consistent with its investment plan, the Energy Commission will release a notice of proposed awards for each competitive solicitation and approve each award at a business meeting.
- CPUC Decision 12-05-037, as modified, schedules a meeting with stakeholders in March 2014 to discuss a draft second *EPIC Triennial Investment Plan*. The decision states that the March 2014 workshop will include a “review and evaluation of previous annual reports and accomplishments.”
- The Energy Commission will hold at least one additional public meeting with stakeholders in 2014, consistent with ordering paragraph 15 in CPUC Decision 12-05-037, as modified.

Issues

As stated in Attachment 5, page 2 of CPUC Decision 13-11-025, the Energy Commission’s annual EPIC report will include a discussion of issues “that may have major impact on progress in projects, if any.” The Energy Commission has no issues to report at this time.

APPENDIX A: TABLE OF ENERGY COMMISSION EPIC REQUIREMENTS TO REPORT FOR 2013

The Energy Commission is committed to full compliance with all guidance and requirements pertaining to its management of EPIC funds for the advancement of energy innovation. The following table lists Energy Commission responsibilities and requirements for its administration of EPIC in calendar year 2013. These requirements include those specified by the California Public Utilities Commission (CPUC) and by the legislature in Senate Bill 96.

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
<p>Project Reporting Requirements in SB 96 (Chapter 356, Statutes of 2013) and D.13-11-025, attachment 6: A brief description of each project awarded or completed in the previous year, as well as an update for each project underway. <u>Among other items</u>, this includes:</p> <ol style="list-style-type: none"> 1. The name of the recipient, project title, and date and amount awarded. 2. Comply with SB 96 (PRC §25711.5)(e)(1)-(6), provided later in the table. 	<p>No project received an EPIC funding award, no EPIC project was underway, and no EPIC project was completed in calendar year 2013. The Energy Commission will comply in 2014 and beyond.</p>	<p>12/31/2013</p>
<p>CPUC project reporting requirements: Identify ratepayer benefits, any leveraged or matched funds, any intellectual property, and other information as specified in Attachment 6 of the CPUC final decision (D. 13-11-025), for each project. Specific formatting requirement for Project Status Reports: "The information below must be reported electronically in spreadsheet format. Information for each project must be listed on separate rows in the columns specified" in Attachment 6.</p>	<p>No project received an EPIC funding award, no EPIC project was underway, and no EPIC project was completed in calendar year 2013. The Energy Commission will comply in 2014 and beyond.</p>	<p>12/31/2013</p>
<p>CPUC project metric reporting requirements: The EPIC administrators "may choose metrics on a project-by-project basis from those included as Attachment 4 or additional metrics where appropriate. However, the Administrators must identify in the Electric Program Investment Charge annual report the metrics used for each project." (D.13-11-025, Ordering Paragraph 27).</p>	<p>No project received an EPIC funding award in calendar year 2013. The Energy Commission will comply in 2014 and beyond.</p>	<p>12/31/2013</p>

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
CPUC project reporting requirements: Submit a final report for every project completed during the previous year, including a comprehensive description of the project, detailed findings and results, a summary of all data collected, and how the data may be accessed (D.13-11-025, Ordering Paragraph 14).	No EPIC project was completed in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
CPUC project reporting requirements: Identify the use of non-competitive awards (D. 13-11-025, Ordering Paragraph 15).	The Energy Commission made no EPIC award, competitive or non-competitive, in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	
CPUC project reporting requirements: Provide a justification for every non-competitive award made (D.13-11-025, Ordering Paragraph 18).	The Energy Commission made no EPIC award, competitive or non-competitive, in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
CPUC Annual Report Requirements: Follow the report outline agreed to by the EPIC administrators and DRA, and approved by the CPUC as contained in D. 13-11-025 (Attachment 5).	This report follows the outline indicated in D.13-11-025 Attachment 5.	2/28/2014
CPUC Budget Requirements: 10 percent cap on administrative costs, excluding program evaluation costs (D.12-05-037, ordering paragraph 5). IOU in-house costs are not included in the 10 percent administrative cap (D.13-11-025, Conclusion of Law 40). D.13-11-025, Ordering Paragraph 31: "The administrative costs to grant and administer the Intellectual Property licenses and royalties are not subject to the Commission's cap on the California Energy Commission's administrative budget for Electric Program Investment Charge."	Energy Commission administrative costs for 2012 and 2013 are less than the capped amount for 2012-2014.	12/31/2013
CPUC Budget Requirements: 5 percent cap on fund shifting between the following category areas (D.12-05-037, ordering paragraph 14): applied research and development, technology demonstration and deployment, and market facilitation (D.12-05-037, ordering paragraph 12(b)(i) lists the program areas; program areas are defined in D.12-05-037 Findings of Fact paragraph 3, 4, and 6). In addition, D.13-11-025, Ordering Paragraph 36: EPIC Program administrators "must file a petition to modify to request authority to shift more than five percent of the adopted budget for each funding category/program area or to new categories of funding."	The Energy Commission did not shift any EPIC project funds between category areas in calendar year 2013.	12/31/2013

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
CPUC Budget Requirements: Report authorized budget (program administration and each category/program area), committed/encumbered funds (administration, program solicitations, and individual project awards), and amount spent. IOUs must also report in-house activities. All administrators must report uncommitted/unencumbered funds. (D.13-11-025, Attachment 5).	The Annual Report includes expenditures for administration, committed/encumbered project funds, and uncommitted/unencumbered funds. No individual project award was made in calendar year 2013.	12/31/2013
CPUC Accumulated Interest Requirements: "Because the CEC cannot administratively return accumulated interest, the CEC must report the accumulated interest in arrears from the previous investment plan cycle, and the IOUs must reduce the amounts transferred to the CEC during the next triennial investment cycle by the reported accumulated interest amount and return an amount equal to the accumulated interest to ratepayers." (D.13-11-025, p. 105)	Accumulated interest will be reported in arrears at the end of the first triennial investment period: 2012-2014.	Planned for completion in the annual report due 2/28/2015
CPUC Annual Report Distribution Requirements: File Annual Reports annually on 2/28/13 through 2/28/20 with the CPUC's Energy Division Director. Annual reports shall be served on all parties in the most recent EPIC proceeding, all parties to the most recent general rate case of each electricity utility named above, and each successful and unsuccessful applicant for an EPIC funding award during the previous calendar year, except bidders for an IOU-administered EPIC contract that have signed a voluntary and informed waiver of the right to be served an EPIC annual report. (D.12-05-037, OP 16; D.13-11-025, p. 64 and OP 24).	The Energy Commission prepared the distribution list for this annual report in coordination with the CPUC and the EPIC IOU administrators to ensure the distribution list meets these requirements.	2/28/2014
CPUC Annual Report Distribution (additional): The CPUC Commissioners approving the final decision "encourage the CEC to make its reports accessible to the public on its EPIC webpage and through its Public Advisor." (D.13-11-025, p. 64)	The Energy Commission will post the EPIC annual report on its EPIC webpage and make the report available through the public adviser's office.	2/28/2014

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
<p>CPUC EPIC Report Distribution: In Section 2.15 Annual Reports, the CPUC final decision states: "PRC Section 25711.5(e) requires the CEC to submit reports to the Legislature on its administration of the EPIC program. The CEC should promptly provide copies of each of these reports to the Commission through the Commission's Executive Director and Energy Division Director." (D.13-11-025, p. 63). In addition, in the section of the CPUC EPIC final decision discussing treatment of intellectual property interests developed and royalties derived from EPIC-funded CEC grants and contracts (Section 2.18.1), the CPUC EPIC final decision states: "As a condition of approving the CEC's 2012-2014 investment plan, we will require that the CEC provide the Commission (through the Commission's Energy Division Director) a copy of all reports prepared for the Legislature. (D.13-11-025, p. 71-72). In D.13-11-025 Ordering Paragraph 29(a): "The California Energy Commission (CEC) must: Provide to the Commission copies of the Electric Program Investment Charge (EPIC) reports to the Legislature required by Public Resources Code Section 25711.5(e)."</p>	<p>In progress.</p>	<p>2013 EPIC report to the Legislature planned for completion prior to 4/30/2014</p>
<p>SB 96 (PRC §25711.5)(a): Award funds for projects that will benefit electricity ratepayers and lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state's statutory energy goals and that result in a portfolio of projects that is strategically focused and sufficiently narrow to make advancement on the most significant technological challenges that shall include, but not be limited to, energy storage, renewable energy and its integration into the electrical grid, energy efficiency, integration of electric vehicles into the electrical grid, and accurately forecasting the availability of renewable energy for integration into the grid.</p>	<p>The Energy Commission made no EPIC funding award in calendar year 2013. The Energy Commission will comply in 2014 and beyond.</p>	<p>12/31/2013</p>

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
<p>SB 96 (PRC §25711.5)(b): In consultation with the Treasurer, establish terms that shall be imposed as a condition to receipt of funding for the state to accrue any intellectual property interest or royalties that may derive from projects funded by the EPIC program. The commission, when determining if imposition of the proposed terms is appropriate, shall balance the potential benefit to the state from those terms and the effect those terms may have on the state achieving its statutory energy goals. The commission shall require each reward recipient, as a condition of receiving moneys pursuant to this chapter, to agree to any terms the commission determines are appropriate for the state to accrue any intellectual property interest or royalties that may derive from projects funded by the EPIC program.</p>	<p>The Energy Commission staff is consulting with the State Treasurer's Office regarding terms and conditions for intellectual property or royalties for EPIC funding awards. To this end, Energy Commission staff has provided the State Treasurer's Office with draft intellectual property terms and conditions for its review, as well as background information on the EPIC program and copies of the pertinent CPUC EPIC decisions. Energy Commission staff intend to meet with the State Treasurer's Office staff to discuss any comments it has on the intellectual property terms. The Energy Commission made no EPIC funding award in calendar year 2013.</p>	<p>Consultation with State Treasurer's Office is under way.</p>
<p>SB 96 (PRC §25711.5)(c): Require each applicant to report how the proposed project may lead to technological advancement and potential breakthroughs to overcome barriers to achieving the state's statutory energy goals.</p>	<p>No solicitation was released in calendar year 2013. The Energy Commission will comply in 2014 and beyond.</p>	<p>12/31/2013</p>
<p>SB 96 (PRC §25711.5)(d): Establish a process for tracking the progress and outcomes of each funded project, including an accounting of the amount of funds spent by program administrators and individual grant recipients on administrative and overhead costs and whether the project resulted in any technological advancement or breakthrough to overcome barriers to achieving the state's statutory energy goals.</p>	<p>Management tools are in place to comply with these requirements. Energy Commission staff will use Attachment 6 of D.13-11-025 to report annual progress and outcomes of each funded project, including the information required by PRC 25711.5, subparagraph (d). No EPIC project received funding in calendar year 2013.</p>	<p>12/31/2013</p>

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
SB 96 (PRC §25711.5)(e): Notwithstanding Section 10231.5 of the Government Code, prepare and submit to the Legislature no later than April 30 of each year an annual report in compliance with Section 9795 of the Government Code that shall include all of the following:	This report, including information required by SB 96, will be considered by the Energy Commission for adoption prior to April 30. The Energy Commission will submit the adopted version of the report to the Legislature no later than April 30, 2014	Planned for completion prior to 4/30/2014
SB 96 (PRC §25711.5)(e)(1): A brief description of each project for which funding was awarded in the immediately prior calendar year, including the name of the recipient and the amount of the award, a description of how the project is thought to lead to technological advancement or breakthroughs to overcome barriers to achieving the state's statutory energy goals, and a description of why the project was selected.	No project was awarded EPIC funding in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(e)(2): A brief description of each project funded by the EPIC program that was completed in the immediately prior calendar year, including the name of the recipient, the amount of the award, and the outcomes of the funded project.	No EPIC project was completed in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(e)(3): A brief description of each project funded by the EPIC program for which an award was made in the previous years but that is not completed, including the name of the recipient and the amount of the award, and a description of how the project will lead to technological advancement or breakthroughs to overcome barriers to achieving the state's statutory energy goals.	No EPIC project was underway in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(e)(4): Identification of the award recipients that are California-based entities, small businesses, or businesses owned by women, minorities, or disabled veterans.	No project was awarded EPIC funding, and no EPIC project was underway in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(e)(5): Identification of which awards were made through a competitive bid, interagency agreement, or sole source method, and the action of the Joint Legislative Budget Committee pursuant to paragraph (2) of subdivision (g) for each award made through an interagency agreement or sole source method.	No project was awarded EPIC funding in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
SB 96 (PRC §25711.5)(e)(6): Identification of the total amount of administrative and overhead costs incurred for each project.	Administrative costs for EPIC for calendar year 2013 are reported herein. However, no EPIC project was awarded funding, and no EPIC project was underway in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(f): Establish requirements to minimize program administration and overhead costs, including costs incurred by program administrators and individual grant recipients. Each program administrator and grant recipient, including a public entity, shall be required to justify actual administration and overhead costs incurred, even if the total costs incurred do not exceed a cap on those costs that the commission may adopt.	Administrative costs for EPIC for calendar year 2013 are reported and justified herein. No EPIC project was awarded funding and no EPIC project was underway in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(g)(1): The commission shall use a sealed competitive bid as the preferred method to solicit project applications and award funds pursuant to the EPIC program.	The Energy Commission released no EPIC solicitations in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(g)(2)(A): The commission may use a sole source or interagency agreement method if the project cannot be described with sufficient specificity so that bids can be evaluated against specifications and criteria set forth in a solicitation for bid and if both of the following conditions are met:	The Energy Commission made no sole source or interagency agreements for EPIC funds in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(g)(2)(A)(i): The commission, at least 60 days prior to making an award pursuant to this subdivision, notifies the Joint Legislative Budget Committee and the relevant policy committees in both houses of the Legislature, in writing, of its intent to take the proposed action.	The Energy Commission made no sole source or interagency agreements for EPIC funds in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(g)(2)(A)(ii): The Joint Legislative Budget Committee either approves or does not disapprove the proposed action within 60 days from the date of notification required by clause (i).	The Energy Commission made no sole source or interagency agreements for EPIC funds in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013

Energy Commission Responsibility or Requirement	Status for portion of the EPIC funds administered by the Energy Commission	Date completed or anticipated completion date
SB 96 (PRC §25711.5)(g)(2)(B): It is the intent of the Legislature to enact this paragraph to ensure legislative oversight for awards made on a sole source basis, or through an interagency agreement.	The Energy Commission made no sole source or interagency agreements for EPIC funds in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013
SB 96 (PRC §25711.5)(g)(3): Notwithstanding any other law, standard terms and conditions that generally apply to contracts between the commission and any entities, including state entities, do not automatically preclude the award of moneys from the fund through the sealed competitive bid method.	The Energy Commission released no EPIC solicitations in calendar year 2013. The Energy Commission will comply in 2014 and beyond.	12/31/2013

Sample EPIC Project Status Report Template

Investment Program Period	Program Administrator	Project Name	Project Type	A brief description of the project	Date of the award	Was this project awarded in the immediately prior calendar year?	Assignment to Value Chain	Encumbered Funding Amount (\$)	Committed Funding Amount (\$)	Funds Expended to date: Contract/Grant Amount (\$)	Funds Expended to date: In house expenditures (\$)
Select from: 1st triennial (2012-2014); 2nd triennial (2015-2017); 3rd triennial (2018-2020)	Select from: CEC, PG&E, SCE, SDG&E	Enter project title.	Describe the type of project th.	General description (objective, scope, deliverables, schedule)	The date the award/grant was made. (Format: XX/XX/XXXX)	Yes/No	Select from: Generation, Transmission, Distribution, Grid Operation/Market Design, Demand-Side Management	(\$)	(\$)	(\$)	(\$)

Sample EPIC Project Status Report Template

Funds Expended to date: Total Spent to date (\$)	Administrative and overhead costs to be incurred for each project	Leveraged Funds	Partners	Match Funding	Match Funding Split	Funding Mechanism	Intellectual Property	Identification of the method used to grant awards.	If competitively selected, provide the number of bidders passing the initial pass/fail screening for project	If competitively selected, provide the name of selected bidder.	If competitively selected, provide the rank of the selected bidder in the selection process.
(\$)	(\$) Does not include EPIC administration costs. Includes only project specific administrative and overhead costs.	(\$) Specify amount of leveraged funds (if applicable).	Identify the name of any partners to this project (if applicable).	Specify the match funding amount for this project (if applicable)	If the match funding is split, specify the amount.	Identify pay-for-performance contracts or grants	Describe any Intellectual Property (ies) for this project (if applicable).	For example: competitive bid, interagency agreement, sole source.	Provide the number of successful bids in the competitive solicitation.	Name of the successful bidder for this award.	(1st, 2nd, etc.)

Sample EPIC Project Status Report Template

If competitively selected, explain why the bidder was not the highest scoring bidder, explain why a lower scoring bidder was selected.	If interagency or sole source agreement, specify date of notification to the Joint Legislative Budget Committee (JLBC) was notified and date of JLBC authorization.	Does the recipient for this award identify as a California-based entity, small business, or businesses owned by women, minorities, or disabled veterans?	How the project leads to technological advancement or breakthroughs to overcome barriers to achieving the state's statutory energy goals	Applicable metrics	Update
Only applicable if competitively selected and not the highest ranking bidder.	See Public Resources Code § 25711.5(e)(5). Applicable to CEC, only.	Enter "Yes" or "No". See General Order 156; Public Resources Code § 25711.5(e)(4)	See Public Resources Code § 25711.5(e)(1). Applicable to CEC, only.	Describe qualitative and quantitative metrics applicable to project.	Describe work accomplished during the year.