

APPENDIX F:

Summary of Stakeholder Comments and Energy Commission Staff Responses on the *Electric Program Investment Charge: Proposed 2012-14 Triennial Investment Plan Staff Final Report*

The Energy Commission posted the *Electric Program Investment Charge: Proposed 2012-14 Triennial Investment Plan Staff Final Report (Proposed Investment Plan)* on October 23, 2012. Several participants submitted written comments to the Energy Commission for consideration. In this appendix, staff summarizes and responds to all comments submitted through October 29, 2012.

This appendix organizes comments by chapter of the Proposed Investment Plan: Applied Research and Development, Technology Demonstration and Deployment, Market Facilitation, New Solar Homes Partnership, Program Administration, and Program Benefits Assessment, with general comments grouped together in a seventh section. Each section includes a summary of comments and Energy Commission staff responses.

The summary includes comments expressing general support of various components included in the draft investment plan. These statements of support have informed preparation of the Proposed Investment Plan.

As summarized below, many of the written comments indicated an interest in participating in funding opportunities provided by the EPIC program. The Energy Commission plans to begin offering opportunities for funding through EPIC after July 2013. The Energy Commission plans to utilize competitive selection processes for applications for EPIC funding. Projects selected for EPIC funding will need to demonstrate investor-owned utility ratepayer benefits and meet other selection criteria.

The Energy Commission appreciates the active role that stakeholders have taken throughout the development of the *Proposed Investment Plan*, and welcomes public participation as the process continues.

Applied Research and Development

Energy Efficiency and Demand Response

Summary of Comments

The Technology Network (TechNet) and the Information Technology Industry Council (ITI) emphasized the value of conducting behavioral research to better understand consumer use

patterns. The participants suggested that EPIC place “‘integration of smart controls’ and the ‘behavioral issues’ (including the use of power management) to address the plug load issues.”¹

TechNet also submitted comments individually, suggesting that investments identified under S2 should be considered high priority. The participant also suggested that the Energy Commission communicate with technology companies to ensure that EPIC projects leverage work that has already been completed and do not duplicate existing efforts.²

Discussion and Staff Response

With respect to the joint comments from TechNet and ITI, staff would like to clarify that initiatives are not listed in any priority order. Staff agrees that research for reducing the energy use of plug load devices and research for evaluating consumer behavior related to plug load usage are important to reach California’s zero net energy goals for residential and non-residential buildings. The *Proposed Investment Plan* identifies improvements to the efficiency of plug load devices and integration of smart controls as potential research areas. Staff notes that potential EPIC investments in these areas will build on existing efforts, such as those of CalPlug at the University of California, Irvine.³ In addition, staff will conduct roadmapping activities under S10.3 to identify remaining gaps not addressed by other research efforts.

In response to comments filed individually by TechNet, initiatives included in this investment plan are intended to leverage existing efforts.

Clean Generation

Summary of Comments

The Department of Defense (U.S. DOD) submitted comments supporting applied research and development to examine how various ocean renewable energy technologies interact with military systems, stating that this could inform siting decisions “to enhance compatibility with [its] current and future operations.” U.S. DOD provided that “a significant portion of California’s offshore waters are part of a large network of land, air, and sea ranges that are absolutely vital to national security [...] If not properly coordinated, development in these waters will create future constraints on military testing and training (such as wave energy impacting submarine operations or wind energy impacting airborne radar testing) which will

1 TechNet and ITI comments http://www.energy.ca.gov/research/epic/documents/2012-10-31_meeting/comments/2012-10-26_TechNet_and_the_Information_Technology_Industry_Council_Comments_on_S1-6_TN-68228.pdf

2 TechNet comments http://www.energy.ca.gov/research/epic/documents/2012-10-31_meeting/comments/2012-10-26_Technology_Network_Comments_TN-68227.pdf

3 More information on CalPlug is available online at <http://calplug.uci.edu>.

compromise DOD's ability to carry out its national defense mission." U.S. DOD offers its participation in the EPIC process as it moves forward.⁴

The Geothermal Energy Association (GEA) provided comments that were generally supportive of the initiatives within the *Proposed Investment Plan* that address geothermal. GEA recommended that the EPIC program "consider supporting efforts to properly characterize the load balancing roles possible with geothermal power plants." GEA also suggested that EPIC "should provide solicitations seeking meritorious proposals not otherwise supported by DOE or GRDA."⁵

TechNet generally commented that the initiatives in S3 should be implemented with a technology neutral approach.

Discussion and Staff Response

Staff noted U.S. DOD's concern with offshore renewable energy technologies in the *Proposed Investment Plan*. Additionally, staff will work closely with U.S. DOD during the implementation of the Investment Plan to ensure that EPIC activities do not constrain military testing and training.

Generally, staff believes that GEA's recommendations should be examined further through implementation of a geothermal research roadmap and gap analysis, which are within the scope of S10.3: Conduct Scenario Assessments and Gap Analyses That Will Be Used to Develop or Update Research Roadmaps. With respect to GEA's specific recommendation to use EPIC funding for characterizing the role of geothermal power plants in load balancing, staff believes that this falls within the scope of S7.1: Determine the Characteristics of the Generation Fleet of 2020 for Grid Operators and Planners.

Staff agrees that the investment plan should be technology neutral, however not resource neutral. State energy policy and Assembly Bill 32 (Nunez 2006) identify the role of efficient combined heat and power technologies in achieving California's clean energy and greenhouse gas reduction goals.

Smart Grid Enabling Clean Technology

Summary of Comments

TechNet provided comments in support of S6, S7, and S9. The participant supports "demonstrating electric vehicle charging systems that will provide grid frequency regulation, helping to avoid blackouts and brownouts, and customer-side projects that demonstrate energy

4 Department of Defense comments http://www.energy.ca.gov/research/epic/documents/2012-10-31_meeting/comments/2012-10-26_US_Department_of_Defense_Comments_TN-68196.pdf

5 Geothermal Energy Association comments http://www.energy.ca.gov/research/epic/documents/2012-10-31_meeting/comments/2012-10-25_Geothermal_Energy_Associations_Comment_TN-68195.pdf

storage for peak load reduction, load management, demand response and integration of renewables.”⁶

Discussion and Staff Response

Staff acknowledges TechNet’s support of S6, S7, and S9.

Cross-cutting

Summary of Comments

With respect to S10.2, TechNet suggested that the Energy Commission consider working with the Public Utilities Commission to examine new home area networking technologies and grid interoperability.

Discussion and Staff Response

Staff will conduct roadmapping activities under S10.3 to identify remaining gaps not addressed by other research efforts.

Technology Demonstration and Deployment

Energy Efficiency and Demand-side Management

Summary of Comments

TechNet expressed support for S12, but suggested that the scope identify residential settings.⁷

Discussion and Staff Response

Staff believes that this investment plan already addresses this issue, as S12.1 references technologies resulting from the S1 initiatives, which includes both commercial and residential technology applications. Additionally, S12.2 identifies the residential sector as one of its targets.

Clean Energy Generation

Summary of Comments

TechNet generally supports the activities identified in S13, but expressed concern that many of the solicitations under S13.1 “will be allocated to biomass-to-energy projects.” TechNet requested that S13.2 be revised in scope so that it is more technology neutral.⁸

6 TechNet comments http://www.energy.ca.gov/research/epic/documents/2012-10-31_meeting/comments/2012-10-26_Technology_Network_Comments_TN-68227.pdf

7 TechNet comments http://www.energy.ca.gov/research/epic/documents/2012-10-31_meeting/comments/2012-10-26_Technology_Network_Comments_TN-68227.pdf

8 *Ibid.*

Discussion and Staff Response

The CPUC Phase 2 decision identifies that 20% of the total funding for Technology Demonstration & Deployment must be used for bioenergy projects. Staff offers that the technologies are not specified and demonstration of other precommercial generation technologies, including fuel cells, will be eligible for funding under the initiatives in S13.

Market Facilitation

Workforce Development

Summary of Comments

The UC Berkeley Donald Vial Center on Employment in the Green Economy (Donald Vial Center) submitted comments regarding the workforce development portion of the Proposed Investment Plan. The Donald Vial Center expressed general support for the revisions to S17.1, and suggested that “the IOUs should also be expected to contribute financially to this effort to ensure its success.” The participant also requested that the stakeholder list for S17.1 be revised to include “apprenticeship programs and participating unions and employers.” The Donald Vial Center’s comments were supportive of the removal of the workforce clearinghouse initiative, but suggested that EPIC also include funding for applied research to address workforce issues. Lastly, the participant suggested inclusion of “seed funding for a University-based Center on the Clean Energy Workforce” modeled after the UC Davis Advanced Lighting Center.⁹

Discussion and Staff Response

In response to comments from the Donald Vial Center, the CPUC’s Phase 2 decision limits the IOU EPIC programs to technology demonstration and deployment activities; the decision indicates that workforce development falls under the market facilitation area. Staff will coordinate with the IOUs to leverage existing workforce development programs. Additionally, staff has revised the stakeholder list in S17.1 to include “apprenticeship programs and participating unions and employers.” Staff also modified S18.3 to include the suggested stakeholders. Staff believes that the assessments and roadmaps identified in this initiative could be used to determine the feasibility for potential future investments in the workforce needs assessment area, including funding for a university-based clean energy workforce center.

⁹ Donald Vial Center comments http://www.energy.ca.gov/research/epic/documents/2012-10-31_meeting/comments/2012-10-

[26 UC Berkeley Center for Labor Research and Education Comments TN-68197.pdf](#)