October 5, 2012

California Energy Commission
Dockets Office, MS-4
Re: Docket Number: 12-EPIC-01
1516 Ninth Street
Sacramento, CA 95814-5512
Via email to docket@energy.ca.gov

Supplemental Comments of the California Center for Sustainable Energy regarding the Draft First Triennial Investment Plan for the Electric Program Investment Charge Program

The California Center for Sustainable Energy (CCSE) thanks the California Energy Commission (Energy Commission) for the opportunity to provide these supplemental public comments regarding the draft first triennial investment plan for the Electric Program Investment Charge (EPIC) Program. In addition to our earlier support and comments, we offer these additional comments regarding EV infrastructure and Workforce Development Strategic Objectives.

CCSE offers the following recommendations to the Energy Commission for revisions to the draft first triennial investment plan for EPIC Program funds administered by the Energy Commission:

I. Workforce Development: New Strategic Objective 15.3 (S15.3)- Clean Energy Workforce Needs Assessment

CCSE believes there is a need to facilitate employment opportunities and training programs in the clean energy sector, helping companies reduce their human resource expenses while creating job opportunities for LMI and at-risk communities. Energy and cleantech companies in California enjoy numerous opportunities for growth, including proximity to one of the largest markets in the U.S., massive demand for commercialized products, large manufacturing facilities and strong business leadership across multiple industries. It is a region primed for innovation and change with an untapped or underutilized workforce, particularly in LMI and at-risk communities. However, the cleantech industry requires skilled and specialized workers that the market cannot yet provide.

CCSE sees immense opportunity to train and educate a clean energy workforce statewide that will create livable wage jobs and channels of job placement. A Clean Energy Workforce Needs Assessment (Workforce Assessment) would illuminate the workforce needs, demands, and opportunities of the region. Through this process of evaluating the region, EPIC funding would support interviews and interaction with existing workforce program administrators, experts,

stakeholders, and industry representatives to identify the projected workforce needs and available jobs in the region's various clean energy industries. A Workforce Assessment is one step towards the larger goal of building multiple cleantech hubs that in turn generate more demand for a large, skilled clean energy workforce.

A Workforce Assessment is critical to maximize the efficiency of workforce training programs. The project leverages both CCSE's and other's workforce experience and CEC's needs to train a new cleantech workforce and promote entrepreneurial enterprises. The assessment would include the following components:

1. Interviews with existing programs, stakeholders and organizations;
2. In-depth interviews with industry representatives to identify the needs and projections of each clean energy sector;
3. Industry clusters, market demand and needs analysis;
4. Identification of the skills and knowledge needed to reach the industry demands;
5. Development and mapping of training and education programs to attain the skills needed;
6. Regulatory analysis to facilitate workforce training;
7. Job placement strategies and impact analysis of a trained workforce; and
8. Identification of performance metrics.

In CCSE'S over fifteen-year history, the Center has developed extensive experience providing workforce training and outreach on various energy topics for professional and consumer audiences. CCSE has coordinated on various workforce training programs with partners in the public and private sectors. For example, CCSE is focusing on the nascent building performance industry and is a Building Performance Institute training affiliate. Drawing on the expertise of our in-house trainers, who collectively share over twenty-five years of experience in the home performance industry as contractors and raters, as well as outside training partners, CCSE has developed a well-rounded set of course offerings focused on building successful home performance businesses. CCSE would like to see this experience replicated in Los Angeles and centers across the state.

A statewide Clean Energy Workforce Assessment would engage key members of the workforce community and create a dialogue to identify best practices to grow the clean energy workforce, create a strategic plan for the Workforce Center that meets the employment needs of the region's job seekers and clean energy industries, and create new jobs by training members of the community who can fill job vacancies in the Clean Energy sector. We recommend that this be added as a new **Strategic Objective 15.3.**

II. PEV Infrastructure: New Strategic Objective 14.7 (S14.7): Provide Funding to promote the streamlined and coordinated permitting of solar and PEV charging infrastructure

The results of CCSE's plug-in electric vehicle (PEV) owner survey of over 1,400 California drivers show a strong correlation (39%) between solar PV and PEV adoption. Additionally, the survey identified 91% of these PEV owners also installed an Electric Vehicle Supply Equipment (EVSE) at their residence. While this data indicates early adopter behavior, it does suggest that PEV consumers in the future will also be interested in installing solar PV. If this trend continues, it

emphasizes the importance of streamlining the installation processes of both solar PV and EVSE.

CCSE has identified a unique opportunity to leverage work being done to streamline the installation of both solar and PEV infrastructure. CCSE's management of both the Southern California Rooftop Solar Challenge as well as regional and statewide PEV readiness planning has highlighted several areas of overlap between these efforts. In many cases the approaches employed to improve the efficiency of solar permitting may also be applied to permitting EVSEs. For example, both solar and PEV programs have recognized that the training and education of both contractors and public officials is necessary to streamline permitting. We suggest that the CEC funds an intermediary organization that could communicate the lessons learned and can help transfer knowledge across technologies as well as jurisdictions and utilities. We encourage the CEC to help coordinate and leverage these efforts by providing resources to first implement a statewide needs assessment of both technologies that will highlight areas for improvement. PEV planning and the Solar Rooftop Challenge provide a necessary role in market facilitation, and there is a need for greater funding to identify and understand potential gaps that may exist, further hindering the market. In addition, we encourage the CEC to provide funding to provide technical assistance to municipalities and utilities that have not been provided assistance in previous programs and to provide assistance to local governments to implement identified best practices for streamlining. These efforts will fill in the gaps necessary to provide a unified approach to streamlining solar and PEV installation processes.

CCSE recommends that a new Strategic Objective 14.7 (S14.7) be added: Provide Funding to promote the streamlined and coordinated permitting of solar and PEV charging infrastructure.

We appreciate the opportunity to provide these supplemental comments to the Energy Commission, and we look forward to further coordination with the Energy Commission and IOUs in the coming months in the development of their first triennial investment plans.

Sincerely,

Sachu Constantine
Director of Policy
California Center for Sustainable Energy
8690 Balboa Ave., Suite 100
San Diego, CA 92123
sachu.constantine@energycenter.org

cc: Pamela Doughman (by email: Pamela.doughman@energy.ca.gov)
Erik Stokes (by email: erik.stokes@energy.ca.gov)