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Additional submitted attachment is included below.

ADAMS BROADWELL JOSEPH & CARDOZO

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721

TEL: (916) 444-6201
FAX: (916) 444-6209
tenslow@adamsbroadwell.com

SO. SAN FRANCISCO OFFICE

601 GATEWAY BLVD., SUITE 1000
SO. SAN FRANCISCO, CA 94080

TEL: (650) 589-1660
FAX: (650) 589-5062

DANIEL L. CARDOZO
CHRISTINA M. CARO
SARA F. DUDLEY
THOMAS A. ENSLOW
ANDREW J. GRAF
TANYA A. GULESSERIAN
KENDRA D. HARTMANN*
KYLE C. JONES
RACHAEL E. KOSS
NIRIT LOTAN
AARON M. MESSING
WILLIAM C. MUMBY
CAMILLE G. STOUGH

MARC D. JOSEPH
Of Counsel

**Admitted in Colorado*

March 30, 2020

Via Docket E-Comment and Email

California Energy Commission
Attn: Docket 19-ALT-01
Dockets Office, MS-4
1516 Ninth Street
Sacramento, CA 95814
Docket@energy.ca.gov

Re: Docket No. 19-ALT-01 – 2020-2023 Investment Plan Update for the Clean Transportation Program

Dear Commissioners and Commission staff:

On behalf of the California State Labor Management Cooperation Committee for the International Brotherhood of Electrical Workers and the National Electrical Contractors Association ("LMCC"), we submit these comments to the California Energy Commission ("CEC") in response to its Draft 2020-2023 Investment Plan Update for the Clean Transportation Program ("Draft Investment Plan Update"). NECA, IBEW and the LMCC represent more than 1,000 contractors and over 30,000 electricians in California.

The LMCC strongly supports the goals of the Draft Investment Plan Update to transform California's transportation infrastructure to support dramatic growth in clean, low-GHG electric vehicles, including continued funding for workforce training and development. As stated in the Draft Investment Plan Update:

> Central to the advancement of clean transportation technologies in commercial markets are investments made by the program into various workforce training and development projects. More than $31 million has been invested in workforce projects for more than 17,400 trainees.

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This longstanding, and statutorily mandated, support for workforce training programs is, however, undermined by the CEC's current position that incentives programs funded by the Clean Transportation Program cannot, in fact, require participants to employ properly trained workers. For example, the CEC has expressly forbidden its local agency partners that partner with the California Electric Vehicle Infrastructure Project ("CALeVIP") incentive programs from requiring installers of electric vehicle supply equipment ("EVSE") and related infrastructure to be trained and certified in the installation of such equipment, including requirements to be trained and certified by the Electric Vehicle Infrastructure Training Program ("EVITP").

EVITP is a national training and certification program for installers of electric vehicle charging systems that was developed by a broad spectrum of industry stakeholders to provide standardized training to ensure safety and reliability. EVITP certification is open to all electricians, union and non-union, is the only EVSE installation certification available. EVITP training has also been supported and funded under the Clean Transportation Program. But now this support is undermined by CEC's arbitrary prohibition on requiring that installers actually have this training.

The CEC should be promoting requirements to use a qualified, certified workforce, not forbidding such requirements. This ill-considered prohibition directly conflicts with the Clean Transportation Program's goal to increase the number of trained and qualified workforce available to perform this work. This prohibition requires local agencies to reward contractors that employ untrained and unqualified workers rather than investing in a workforce that is trained and ahs the skills necessary to ensure proper and safe installation. As a result, it creates an economic disincentive for contractors to invest in worker training and employ qualified workers. It also puts workers and the public at risk. Improperly installed EVSE pose fire, electrocution and other safety risks. Furthermore, this prohibition has been imposed without any stakeholder review or comment, and without support in the Clean Transportation Program Investment Plan.

The LMCC respectfully urges amendment of the Draft Investment Plan Update to clarify that incentive programs under the Plan may, in fact, impose training and certification requirements for installers of equipment subsidized under the Clean Transportation Program.

I. INTRODUCTION

In 2017, the CEC introduced a program offering Clean Transportation Program incentives for the purchase and installation of electric vehicle infrastructure for light-duty vehicles in specific regions throughout the state.[1] The California Electric Vehicle Infrastructure Project ("CALeVIP") targets "39 regions that have low rates of infrastructure installation or lack adequate incentives from utilities and other sources," providing incentives for both Level 2 and DC fast chargers to counties, businesses, and public agencies.[2] The CEC is considering a similar incentive project for medium- and heavy-duty charging infrastructure.[3]

Because of the potential hazards with high voltage EVSE systems, local agencies such as the San Diego Association of Governments ("SANDAG") wish to require worker certification to ensure reliability of the equipment they are subsidizing and in order to ensure electrical safety for construction workers, charging station users, emergency responders, electric vehicles and the power grid. Similar requirements have been regularly imposed by other entities including various utility incentive programs for EVSE installation.

The CEC generally permits local agencies to impose their own requirements for EVSE incentive programs that receive CALeVIP funding. However, the CEC has recently been informing local agencies that they will not receive funding from CALeVIP programs if they impose an EVITP workforce training requirement on participating installers.

Prohibiting local agencies from imposing a training and certification requirement puts workers, charging station users, and emergency responders at risk and forces agencies to subsidize work by workers who are not properly trained. CEC's goal of achieving a carbon-neutral economy can only be realized with the implementation of programs that ensure infrastructure is safely and accurately installed and maintained.

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[1] Patrick Brecht. *2020-2023 Investment Plan Update for the Clean Transportation Program*. CALIFORNIA ENERGY COMMISSION. Publication Number: CEC-600-2020-001-SD. March 2020, at 38.
[2] *Id.*
[3] *Id.* at 44.

II. EVSE SYSTEMS ARE COMPLEX SYSTEMS THAT POSE SIGNIFICANT SAFETY RISKS WHEN IMPROPERLY INSTALLED AND MAINTAINED

Installation of EVSE systems requires adhering to an extensive list of standards, electrical codes, and workmanship requirements. EVSE systems are complex and have specific installation requirements related to proper wire sizing, overvoltage and surge protection, shutoff, and load management, with specialized requirements for DC fast chargers and Level 2 chargers.[4]

Article 625 of the California Electrical Code specifies required methods for wiring, equipment construction, and safety protection systems, among other requirements. Improperly installed EVSE systems and infrastructure can result in fire, explosions, electric shock, severe damage to chargers and cars, and other hazardous situations.

The safe and reliable installation of EVSE systems requires specialized knowledge and training. For example, electric vehicle charging stations are considered by the National Electrical Code to be continuous load, which impacts how wiring is sized.[5] Installing the incorrect size wire or circuit breaker can lead to delays in permitting and cost increases, and can prevent the system from functioning properly.

Lack of a trained workforce has been a barrier to installation of EVSE and could ultimately slow or deter adoption of an extensive system of electric vehicle charging infrastructure. Development of a skilled and trained workforce to install EVSE systems will reduce these barriers to installation, increase customer satisfaction and safety, and further efforts to expand and accelerate the deployment of electric vehicles and supporting infrastructure throughout the state.

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[4] National Electrical Installation Standards. *Standards for Installing and Maintaining Electric Vehicle Supply Equipment*. August 2011 at 25.

[5] Plug-In San Diego Installation Best Practices Report. June 2016, at 15, available at https://energycenter.org/sites/default/files/docs/nav/transportation/plug-in_sd/Plug-in%20SD%20Installation%20Best%20Practices%20Report.pdf.

III. EVITP PROVIDES THE REQUISITE TRAINING TO ENSURE SAFE INSTALLATION OF EVSE SYSTEMS

EVITP was developed by an industry-wide collaboration of automakers, electrical vehicle supply equipment manufacturers, utility companies, electrical industry professionals, educational institutions and others. The program provides training and certification for both union and non-union electricians to safely and properly install EVSE systems and related infrastructure.[6] EVITP is supported by the U.S. Department of Energy and has been recommended or required by numerous utility electric vehicle infrastructure incentive programs to ensure that contractors install electric vehicle infrastructure safely.[7] In its report on its Charge Ready program, Southern California Edison found that, even with an EVITP certification requirement, the contractors working under the program met or exceeded its goals for employing Diversified Business Enterprises.

Specifically, EVITP covers the following topics that are essential for safe and reliable electric vehicle infrastructure installation, operation and maintenance:

- Electric Vehicle battery types, specifications and charging characteristics;
- Automobile manufacturer's charging performance integrity specifications;
- Utility interconnect policies and requirements;
- Utility grid stress precautions including demand response integration technologies;
- Role of electrical storage devices as charging intermediaries;
- Site assessment, load calculations, and fire prevention;
- Installing, commissioning and maintaining electric storage devices;
- Charging station fundamentals including brand/model-specific installation instructions for 120 VAC 15 amps, 120-240 VAC 60 amps and 480 VAC 125 amps or 600 VDC 550 amps;
- Service-level assessments and upgrade implementation;
- Integration of electric vehicle infrastructure with distributed generation;
- Internet protocol networking of charging stations;

[6] www.evitp.org.

[7] See, e.g., the California Public Utilities Commission's Transportation Electrification programs pursuant to SB 350, which require EVITP certification for installation of EVSE infrastructure.

- Electrical Code standards and requirements;
- Fire protection and OSHA regulations;
- Electrical installation standards for ZEV equipment;
- First responder safety and fire hazard measures;
- Next generation charging; and
- EVSE troubleshooting, repair and commissioning.

IV. CEC MUST ADOPT A CONSISTENT POLICY ALLOWING INCENTIVE PROGRAM PARTNERS TO REQUIRE EVITP TRAINING OF EVSE INSTALLERS

In its Investment Plan Update, the CEC acknowledges that "workforce training and development are critical" and outlines its efforts to invest in and help develop installation and maintenance training programs.[8] This approach is directly at odds with CEC staff's refusal to allow local partners to require that installers of EVSE systems be EVITP certified.

CEC staff has relied on the claim that a worker certification requirement conflicts with the CEC requirement that grant recipients employ contracting practices that promote open competition.[9] This argument fails for several reasons.

First, EVITP requirements do not bar open competition because any licensed electrician can be EVITP certified, union or nonunion. Over 3,000 electricians in California are already EVITP-certified. EVITP training is not burdensome. It requires just 24 to 30 hours of training and testing, and can be provided by community colleges, utility training centers and apprenticeship training centers. Because it is an open program developed by a broad spectrum of stakeholders, it does not limit open competition in any way. Any electrician can obtain this certification.

Second, California courts have consistently held that competitive bidding requirements are not violated where an agency merely restricts the field of qualified bidders to those who meet certain requirements or possess particular skills.[10] Per

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[8] Patrick Brecht. *2020-2023 Investment Plan Update for the Clean Transportation Program*. CALIFORNIA ENERGY COMMISSION. Publication Number: CEC-600-2020-001-SD. March 2020, at 59.
[9] *See, e.g.,* Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) Terms and Conditions, at 8.
[10] *See, e.g., Taylor Bus Serv., Inc. v. San Diego Bd. of Educ.* (1987) 195 Cal.App.3d 1331, 1343.

the Public Contract Code, "[a]ny public entity ... shall specify the classification of the contractor's license which the contractor shall possess at the time a contract is awarded."[11] California courts have interpreted this to mean that contracting entities have discretion to determine the appropriate level of licensure needed to complete a project, even if the license required by the contract is more than what is legally necessary for the work.[12]

Third, programs that have required EVITP certification for installers have continued to meet goals in regard to work opportunities for underserved businesses enterprises or communities. Southern California Edison ("SCE"), for example, evaluated the impact of its EVITP certification requirement for installation of electric vehicle charging stations in its Charge Ready program. It found that, even with this requirement, the participating contractors exceeded SCE's goals for employing Diversified Business Enterprises.[13]

V. CONCLUSION

Industry developed EVITP certification in recognition that specialized training in the installation of EVSE systems and charging stations was necessary to ensure reliable and safe installation. The need for proper workforce training is also expressly recognized in the Draft Investment Plan Update. Yet we now have a situation where the CEC is expressly forbidding local agencies from actually requiring workers to have such training.

This conflicts with the goals of the Draft Investment Plan Update and wastes the investment that industry, contractors and the CEC has made in developing the EVITP training and certification program. This also sends a message to contractors that it is not worthwhile to invest in workforce training and discourages participation in the very training that the Investment Plan Update is trying to

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[11] Cal. Pub. Cont. Code § 3300.

[12] *M&B Const. v. Yuba Cty. Water Agency*, 68 Cal. App. 4th 1353, 1360–61 (1999) (county water agency's bid specifications required that the contractor have a Class A general engineering contractor's license because of the nature of the work involved in the project, even though legally, a Class B or Class C license would be sufficient.).

[13] SCE Charge Ready Phase 1 Program Report, at 21–22, available at https://www1.sce.com/wps/wcm/connect/48270afc-aa77-4e4c-9cb1-bb2dcb8b5f66/Charge+Ready+Pilot+Report+Summary_Amended.pdf?MOD=AJPERES&attachment=false&id=1525298577774. Diversified Business Enterprises are defined by CPUC as businesses certified as being owned by one or more diverse groups, including women, minorities, LGBTQ, and disabled veterans. CPUC General Order 156.

support. The LMCC urges the CEC to clarify in the Draft Investment Plan Update that EVSE incentive programs may support workforce training by requiring the use of trained and qualified installers.

Sincerely,

Thomas A. Enslow

TAE:ljl