

# **CALIFORNIA AIR RESOURCES BOARD EVSE STANDARDS REGULATION**

## **COMMENTS OF SAN DIEGO AIRPORT PARKING COMPANY (SDAP) ON CARB PROPOSED REGULATION OF EVSE STANDARDS**

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## **I. COMMENTS OF PROPOSED REGULATION**

## **II. INTRODUCTION**

In 2015, SDAP adopted ZEV's, which made up 50% of our fleet. SDAP is a private and small to medium size airport parking business located near a large California hub airport, in an urban densely populated area which San Diego county is the 5th most popular county in the USA and the 2<sup>nd</sup> most popular county in California, 2<sup>nd</sup> to Los Angeles. SDAP operates 20,000 fleet miles per month with passenger movement to and from the Airport and daily park EV's for San Diego residents and commercial business' that park at SDAP and are departing from San Diego International Airport. SDAP fleet vehicles will fall under ARB's ASB regulatory obligations to drive ZEV's. In 2015 and 2016, SDAP installed 3 EVSE's to support its fleet, these are Level 2 chargers, powered at 14 kW, SDAP has recently installed another 5 dual Level 2 chargers powered at 7 kW, and will complete installation of 2 fast DCFC's powered at 50 kW on July 1, 2019. The first 3 EVSE's are not networked or have any payment transaction access, the other 5 dual Level 2 chargers have no payment access; however, they are networked; and the 2 DCFC's will not have CC access; but will have RFID access and are networked. Since installing EVSE's SDAP has charged a flat rate to its customers for vehicle charging, which has allowed SDAP to keep the process simple and more economic with less devices added to the EVSE equipment for communication and reduces the maintenance cost and or repairs, which saves kWh cost to the customer to keep the fueling at a cost to make it a value over conventional fuel cost. SDAP would consider making some of the EVSE's on its premises open to public use during certain hours in the day to help open access to others that drive EV's or for other commercial operations that will not have immediate access to its own infrastructure. SDAP would pursue public access to its EVSE's in the future, if the regulatory process supports other means of payment for the services from the EVSE's that already exist. SDAP's comments will focus on a regulatory process that should also benefit small business that own infrastructure but are not an EVSP. 40% of the existing Level 2 EVSE's are owned by other site host such as a small commercial workplace or retail establishments (Appendix C2-25 p. 1). SDAP supports the regulation as standards need to be addressed; however, SDAP supports it with modifications and specifically wants this agency to consider an alternative for other small business that are NOT an EVSP, that own infrastructure, are interested in some public EVSE's. Such business' have already invested, have an opportunity to support the public EVSE process; but should have more time and flexibility. The determined cost does not represent those that are not in the EVSP business. SDAP is concerned about existing infrastructure requirements with retrofitting as such impacts are burdensome and additional investments will not be at 5% for these small business; moreover, consider, an alternative for these other small business that will be independent, private and single sites that would expect to find the full life value in their existing EVSE's before requiring to be retrofitted.

### **§ 2360.1 Requirements for Labeling Electric Vehicle Supply Equipment**

(a) Applicability: The requirements of this section apply to all EVSPs operating one or more publicly available Level 2 or DCFC EVSE installed in California.

(b) DCFC labeling deadline. By July 1, 2020, the EVSP shall install and maintain, for each publicly available EVSE operated by that EVSP, a label that complies with 16 CFR Part 309, Subpart B – Requirements for Alternative Fuels, Subject group 31 § 309.17 a(3) [as amended April 23, 2013].

(c) Level 2 EVSE labeling deadline. By July 1, 2023, Level 2, the EVSP shall install and maintain, for each publicly available EVSE operated by that EVSP, a label that complies with 16 CFR Part 309, Subpart B – Requirements for Alternative Fuels, Subject group 31 § 309.17 a(3) [as amended April 23, 2013].

#### **SDAP comments:**

- Be sure to disclose the kW, as at minimum this effects operating EV's, dwell time and range when refueling.
- This was also determined in 16 CFR part 309. The Commission states that it continues to find that a combination of objective and descriptive information will best meet consumers' needs for comparative cost-benefit information. The Commission also concludes that this format will best address the problems associated with developing and publishing such information.
- Further, in accordance with section 406(a)'s directive, is to review the rule "periodically to reflect the most recent available information.
- Today's EV dispensing power is greatly increasing and thereby the AFV's labeling requirement at that time of the ruling, had very limited power capacity for EV vehicle charging, which is not the case today or in the future.

### **§ 2360.2 Payment Method Requirements for Electric Vehicle Supply Equipment**

(a) Applicability. The requirements of this section apply to publicly available EVSE installed in California that require payment.

(b) The EVSP shall ensure that each EVSE that it operates, and for which this section applies, complies with the requirements of this section.

(c) Compliance deadlines.

(1) DCFC compliance deadline. A DCFC EVSE installed on or after July 1, 2020, shall comply with the requirements of this section. A DCFC EVSE installed prior to July 1, 2020, shall comply with the requirements of this section by five years from the date of installation, or July 1, 2020 (whichever is later).

(2) Level 2 EVSE compliance deadline. A Level 2 EVSE installed on or after July 1, 2023, shall comply with the requirements of this section. A Level 2 EVSE installed prior to July 1, 2023, shall comply with the requirements of this section by five years from the date of installation, or July 1, 2023 (whichever is later).

(d) All EVSE subject to this section shall have a credit card reader physically located on either the EVSE unit or a kiosk used to service that EVSE. The credit card reader shall comply with all of the following requirements:

(1) The credit card reader shall accept, at a minimum, Euro Mastercard Visa (EMV) chip, and, at a minimum, one of Visa, MasterCard or American Express.

(2) The credit card reader shall be non-locking and shall always permit customers to remove credit cards without damage to the card, including during a fault situation or power failure.

(3) The credit card reader device shall comply with PCI – DSS Level 1.

(e) All EVSE subject to this section shall have a mobile payment hardware physically located on the EVSE or kiosk used to service that EVSE.

(f) The EVSP shall provide and display a toll-free number on each EVSE or kiosk used to service that EVSE that provides the user with the option to initiate a charging session and payment at any time that the EVSE is operational and publicly available.

(g) At a minimum, the EVSP shall disclose to the user, at the point of sale, the following information, if applicable:

(1) A fee for use of the parking space.

(2) A nonmember plug-in fee from EVSP.

(3) Price to charge in U.S. dollars per kilowatt-hour or megajoule.

(4) Any potential changes in the price to charge, in U.S. dollars per kilowatt-hour or megajoule, due to variable pricing. This may be specified as a range of prices, in U.S. dollars per kilowatt-hour or megajoule.

(5) Any other fees charged for a charging session.

(h) The EVSP shall not require a subscription or membership in order to initiate a charging session for an EVSE subject to this section.

**SDAP comments:**

- Include other options as accepting cash and debit cards.
- Not all customers have cell phones that are smart phones (see appendix C-11 P.1) or will they necessarily have credit cards.
- Some chargers may have variable hourly pricing, this should be disclosed.
- Taxes, User fees, etc., should be displayed for example in some cases the Utility charges for "other electricity", a fixed facility charge, demand fees and also charges a varying tax fee that could differ by an additional 6% in some locations and it is charged on top of each kWh, a conversion for the **adjusted kWh** should be disclosed so that the end user knows how much each kWh actually is, just like at a gas station all of the taxes is already combined on top of the price of the gallon and thereby you know your total cost per mile for fuel economy. This allows the consumer to directly compare these other alternative fuel technologies to other fuels and to other stations providers on the price for fuel. Unless you provide the **adjusted kWh** price the consumer will not acknowledge that kilowatt hour price that needs to be calculated with the other fees that are directly tied to the number of kWh's dispensed, the kilowatt hour adjusted price disclosure obviates the need for engaging in mathematical calculations at the dispenser and aligns with other conventional fuel prices.

- Electric vehicle chargers are not 100 percent efficient. Some energy is lost to heat in the process of converting the energy that is supplied to the charger to a form that is usable by the vehicle battery.
- The kW power of each EVSE should be standardized to its actual throughput and tested at installation to determine the EVSE electric vehicle charger throughput and consider including this factor as the trenching distance creates line loss which creates other cost and will impact the kW throughput regardless of the rating of the EVSE and this should be the kW number disclosed on the label. Otherwise, without this fact the throughput will, if lower than the label, will impact the dwell time and the actual kW power dispensed, which can determine a bad experience by the consumer if they believe they are going to get 11 kW but only get 9 kW and plan to stop to fuel for a specific time to gain X miles but instead ended up short due to this factor on the label.

#### **§ 2360.4 Reporting for Electric Vehicle Service Providers**

(a) Applicability. The requirements of this section apply to all EVSPs operating, or intending to operate within 45 days, one or more publicly available Level 2 or DCFC EVSE installed in California.

(b) Initial reporting deadline for existing EVSPs. On or before 45 days after [effective date of the regulation], the EVSP shall collect and submit the following information to the Executive Officer:

(1) Initial EVSP contact information as specified in subsection (g).

(2) An EVSE model certification, as specified in subsection (h), for each EVSE model operated in California.

(3) EVSE inventory and usage information, as specified in subsection (i). For this initial inventory and usage information report, the EVSP may omit information that it has not collected in the past if that information could not be reasonably obtained within the past 45 days.

(c) Initial reporting deadline for new EVSPs. If an EVSP intends to operate one or more publicly Level 2 or DCFC EVSE installed in California on or after [effective date of the regulation], then that EVSP shall collect and submit the following information to the Executive Officer at least 45 days before installation of any EVSE in California:

(1) Initial contact information as specified in subsection (g).

(2) An EVSE model certification, as specified in subsection (h), for each EVSE model that the EVSP intends to install in California within the next 45 days.

(3) EVSE inventory and usage information, as specified in subsection (i). For this initial inventory and usage information report, the EVSP may omit information that it has not collected in the past if that information could not be reasonably obtained within the past 45 days.

(d) Reporting deadline for new EVSE models. If an EVSP intends to operate a new unique EVSE model in California on or after [effective date of the regulation], then that EVSP shall collect and submit initial contact information to the Executive Officer as specified in subsection (h) at least 45 days prior to installation of that EVSE model in California.

(e) Annual reporting deadline for all EVSPs. On or before March 1 of each year, the designated contact for the EVSP shall collect and submit to the Executive Officer annual EVSE usage for the prior calendar year, as specified in subsection (i).

The first annual report is due March 1, 2021. For example, an EVSP would submit information no later than March 1, 2021 for EVSE that it operated between January 1, 2020 and December 31, 2020.

(f) Information updates. Any EVSP reporting under this subsection shall update its initial contact information and EVSE model certification within 45 days of any changes to that information.

(g) Initial EVSP contact information. The initial EVSP contact information reported by the EVSP shall include all of the following information.

(1) EVSP company name.

(2) Website for EVSP.

- (3) Name of designated contact person.
- (4) Email of designated contact person.
- (5) Phone number of designated contact person.
- (6) Mailing address of designated contact person.
- (h) EVSE model certification. The EVSE model certification reported by the EVSP shall include all of the following information, for each EVSE model:
  - (1) Manufacturer name and model number.
  - (2) Type of EVSE (Level 2 or DCFC EVSE).
  - (3) Nominal voltage, current supported (amps), power supported (kilowatts).
  - (4) Number of ports.
  - (5) Number of connectors and connector standard.
  - (6) Type of payment devices installed.
  - (7) Manufacturer website.
  - (8) EVSP toll-free number or numbers displayed on the EVSE model.
  - (9) EVSE model photos: front, back, payment hardware, fee display (if display is multiple pages, include photos of complete information)
  - (10) Kiosk, if applicable
- (i) Annual EVSE inventory and usage information. The annual EVSE inventory and usage report filed by the EVSP shall include all of the following information, broken down per publicly available EVSE operated by the EVSP in California:
  - (1) New EVSE installations in California in the reporting period:
    - (A) Station ID - unique identifier which allows stations to be tied to station details.
    - (B) Station Name - the name of station.
    - (C) EVSE ID
    - (D) Station Address
    - (E) Latitude, longitude - the physical location of the station, Longitude: decimal degree example -126.104965. Latitude: decimal degree example 50.770774.
    - (F) Model of EVSE
  - (2) Listing of retired, decommissioned, or EVSE in California that have been removed in the reporting period:
    - (A) Station ID- unique identifier which allows stations to be tied to station details.
    - (B) Station Name- the name of station.
    - (C) EVSE ID
    - (D) Station Address
    - (E) Latitude, longitude - the physical location of the station
    - (F) Model of EVSE
  - (3) Total number of charging sessions started with a credit card.
  - (4) Total number of charging sessions started with an NFC.
  - (5) Total number of charging sessions started with a toll free number.
  - (6) Total number of charging sessions started with membership RFID card.
  - (7) Total number of charging sessions started with service provider application.
  - (8) Total number of other methods of payment, including sessions that did not require payment.
  - (9) Total time (in terms of percentage of total operational time) payment transactions were unable to occur due to nonfunctioning credit card reader or near field communication reader. Total operational time per EVSE, total operational time for credit card reader, total operational time for NFC, total operational time for toll free number, total operational time for RFID. Total operational time for annual period.
  - (10) Report pricing
    - (A) A fee for use of the parking space.
    - (B) A nonmember plug-in fee.
    - (C) Price to charge in U.S. dollars per kilowatt-hour or megajoule.
    - (D) Any potential changes in the price to charge, in U.S. dollars per kilowatt-hour or megajoule, due to variable pricing. This may be specified as a range of prices, in U.S. dollars per kilowatt-hour or megajoule.
    - (E) Any other fees charged for a charging session.

(j) Reporting to the National Renewable Energy Laboratory (NREL) Alternative Fuels Data Center (AFDC).

(1) At least once a month if there are any changes, for each publicly available EVSE operated by the EVSP in California, the EVSP shall report each EVSE installed to NREL using the standard fields listed below, to be published on AFDC.

(2) For any EVSE decommissioned since the last report, the EVSP shall report the date the EVSE was decommissioned. For any EVSE no longer operated by the EVSP since the last report, the EVSP shall report the date the EVSP ceased operating the EVSE.

(3) The EVSP shall ensure that its data reported to NREL match corresponding data reported to the Executive Officer in its annual EVSE inventory and usage information report.

(4) NREL data reported by the EVSP shall include all of the following, broken down per publicly available EVSE operated by the EVSP in California:

(A) Station ID – unique identifier which allows stations to be tied to station details.

(B) Station Name – the name of station.

(C) Phone number – the phone number to call if a user has problems at the station.

(D) Access type – how a user accesses the station (i.e. private, private – government only, private – residential, public, public – limited hours, public – call ahead, public – card key at all times, public – credit card at all times (no membership requirement)).

(E) Access Days/Time – hours of public operation for the station.

(F) Station Type – Primary customer the station is intended to serve (i.e. multi-unit dwelling, workplace, fleet, transportation network company, public).

(G) Payment Methods – list of payment methods accepted at the station.

(H) Payment Actions – list of how a user pays with their payment method at the station.

(I) Latitude, Longitude – the physical location of the station.

(J) Network – the network service provider (EVSP) of the station.

(K) Pricing – field that provides pricing information to the consumer (i.e. \$/kWh (kilowatt-hour), \$/MJ (megajoule), demand response, variable, non-member fee, parking fee).

(L) Open Date – date station was first in service.

(M) Address – Country, State, Postal Code, City, Street Address, Directions.

(N) EVSE ID – a unique identifier for the EVSE within the network provided by the EVSP.

(O) Latitude, Longitude – the physical location of the EVSE.

(P) Manufacturer of EVSE – the company that manufactured the EVSE.

(Q) Model of EVSE – the model number of the EVSE.

(R) Serial Number of EVSE – unique identifier on the EVSE assigned by the manufacturer.

(S) Power Sharing capabilities of EVSE- if this EVSE has multiple ports does it distribute power among all ports in use.

(T) Port ID – a unique identifier for each port, unique within the context of the EVSP servicing the EVSE.

(U) Level – classification of the port which indicates the rate of the battery charge (i.e. AC Level 2 (3.3kW – 22kW) DC Fast (23kW+).

(V) Connectors – connector types available at the EVSE to connect to the vehicle (i.e. SAE J1772, J1772 Combo, CHAdeMO).

(k) Confidential business information. If the EVSP believes any information required to be reported under this section is confidential business information, the EVSP shall prominently label the specific information considered to be confidential, and shall include an explanation for why the EVSP believes the identified information is confidential. All documents (including spreadsheets and other items not in a standard document format) designated as containing confidential business information also must prominently display the phrase “Contains Confidential Business Information” above the main document title and in a running header. All information reported and not identified as confidential business information is subject to public disclosure pursuant to California Code of Regulations, title 17, sections 91000 through 91022, and the California Public Records Act (government Code, §§. 6250 et seq.). The Board may also disclose information claimed by the applicant to be confidential as required by law.

(l) The EVSP shall submit the initial EVSP contact information, EVSE model certification, annual EVSE inventory and usage information, as well as any subsequent updates to that information, electronically via email to EVSE@arb.ca.gov, unless the Executive Officer has approved in writing another format.

**SDAP comments:**

- Non-operational EVSE's should have an OEM remedy requirement to respond to services and repairs that are easily serviced in X amount of a time period and when the repair is more serious the repair would be responded to and serviced in X amount of a time period. As without this requirement the EVSE's that are proprietary, cannot necessarily be diagnosed and fixed by local support which could create excessive down time.

**§ 2360.5 Civil Penalty Schedule**

(a) An EVSP cited for any violation of section 2360.1 is subject to a \$300 penalty if the EVSP submits a demonstration of correction and pays the assessed penalty within 45 days from personal or certified mail receipt of the Citation.

(b) An EVSP cited for any violation of sections 2360.2 in whole or in part is subject to a \$600 penalty if the EVSP submits a demonstration of correction and pays the assessed penalty within 45 days from personal or certified mail receipt of the Citation.

(c) An EVSP cited for any violation of sections 2360.4 in whole or in part is subject to a \$600 penalty if the EVSP submits a demonstration of correction and pays the assessed penalty within 45 days from personal or certified mail receipt of the Citation.

(d) An EVSP cited for violation of section 2360.3 is subject to a \$1,000 penalty if the EVSP submits a demonstration of correction and pays the assessed penalty within 45 days from personal or certified mail receipt of the Citation.



(e) If the EVSP cited for any violation of this chapter fails to correct the cited violation within 45 days of personal or certified mail receipt of the Citation that EVSP is subject to an additional penalty of \$1,000 for each 45-day period for which the cited violation is not corrected, to a maximum of \$37,500.

(f) The penalties in this section apply per EVSE or per kiosk, as applicable.

(g) The Executive Officer shall annually adjust all penalties specified in this section for inflation based on the California Consumer Price Index, beginning one year after [insert effective date of the regulation].

**SDAP comments:**

- There should be a Penalty for Non-operation after X amount of days of a service call. Lack of a response by the OEM impacts the consumer and there should be a standard for maintaining the operation of the EVSE if the malfunction requires the OEM to diagnose the failure or the repair.
- Other site host that are not EVSP OEM's will rely on these OEM's to service and repair their equipment.

## **CONCLUSION**

SDAP request ARB to consider the foregoing and to make modifications as hereby described in order to best support standards that will address open access for all EVSE's and will support good EV driving experiences that will be made available to the public and to ensure repairs are timely serviced. SDAP is recommending an alternative for small business site host that are not EVSP's to be allowed an extended period of time for retrofitting that will at minimum match the life of the EVSE. SDAP appreciates that ARB is moving into more regulatory standards that will support local, statewide and national EV vehicle charging. This ensures EV fleets and EV drivers that access will be reliable.

Respectfully submitted,

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