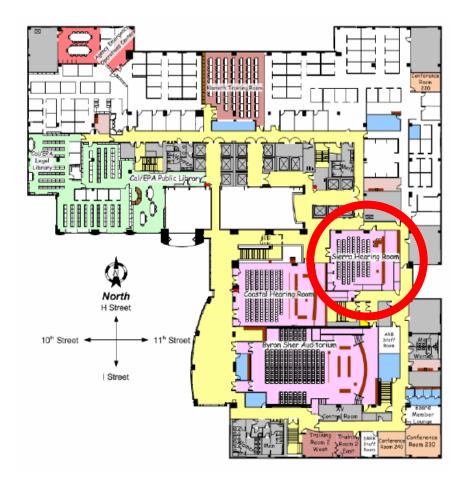
SB 454 Electric Vehicle Charging Stations Open Access Public Workshop

May 30, 2018



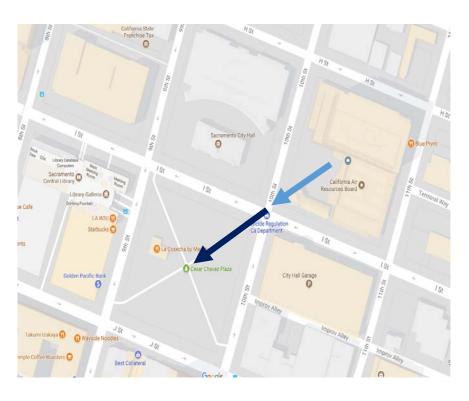
Welcome to the California EPA Building

Meeting Room – 2nd floor





California EPA Building Evacuation Procedures



- During a Fire Drill you may hear
 - Loud alarm
 - Flashing lights
 - Notifications over speaker
- Evacuate to Cesar Chavez Park
 - Exit out of the room take the stairs next to the ladies restroom
 - Exit doors on 11th street
 - Cross I Street
 - Visitor meeting place at the fountain



Agenda

- Accessing stations today
- Senate Bill 454 Electric Vehicle Charging Stations Open Access Act
- Charging Station Open Access Considerations
- Proposed National Renewable Energy Laboratory Reporting
- Proposed Requirements Interoperable Billing Standard
- Proposed Requirements required on electric vehicle service equipment
- Proposed Requirements reporting
- Proposed compliance timeline
- Why are these requirements important?
- Process timeline



Accessing stations today



Different methods of payment for members of networks

- Network Members: place RFID card on station or start charging in network specific app
- Non-Network users: make a toll free call or download an app to access a station



Electric Vehicle Charging Stations Open Access Act

- SB 454 (Statutes of 2013)
- California Health and Safety Code § 44268, 44268.2
- No membership requirement to use publically available Electric Vehicle Service Equipment (EVSE)
- Fees to use EVSE must be disclosed at point of sale
- Credit card/mobile technology for payment
- Location and payment info must be provided to National Renewable Energy Laboratory (NREL)
- State may adopt interoperability billing standards



Charging Station Open Access Considerations

- Standardize starting a charging session experience for consumers
- Facilitate non-member access to networked electric vehicle charging stations
 - Ubiquitous methods of payment
 - Ease of customer use
 - Not locking out any consumer base
- Provide a singular source of station location information



Proposed National Renewable Energy Laboratory (NREL) reporting

- Electric Vehicle Service Providers (EVSPs) must report all publicly available stations to NREL on a continuous basis
 - New API format must be used (handout)
- Publicly available station information will be housed on the Alternative Fuels Data Center website/app for consumer access



Proposed Requirements - Interoperable Billing Standard

- Open Charge Point Interface version 2.1
- Network-network communication protocol
- Incorporated as a test procedure until finalized through a standards body



Proposed Requirements – required on EVSE

- Credit card reader
 - PCI-DSS (Level 1) compliant

- 9.6 kW 240 vac/40 amps CONDUCTIVE
- Federal Trade Commission (FTC) Labeling Requirement for Alternative Fuels and Alternative Fueled Vehicles 16 Code of Federal Regulations (CFR), Part 309
- Display of fees in accordance with Division of Measurement Standards readability guidelines



Proposed Requirements – Reporting

Electric Vehicle Service Provider (EVSP) initial statement of compliance per model

Photos of a representative station from all sides indicating:

- Credit Card reader
- Toll-free phone number display
- Display face
- Sample consumer fee display (align with NIST HB 130 2.34.3)
- Product model number and serial number location
- Federal Trade Commission (FTC) Labeling Requirement for Alternative Fuels and Alternative Fueled Vehicles 16 Code of Federal Regulations (CFR), Part 309



Proposed Requirements – Reporting (continued)

Electric Vehicle Service Provider (EVSP) NREL station location information to CARB quarterly

Provide all the information that was sent to NREL

Station usage information to CARB annually

- Number of sessions started with credit card
- Number of sessions started with toll free number
- Number of sessions started with RFID card
- Number of sessions started with app
- Percentage of up and down time for stations with reason for down time



Proposed Compliance Timeline

Requirements	New Stations	Existing stations
Credit card readers	No later than January 1, 2022	no less than 5 years after first installation, or by January 1, 2022, whichever comes later.
Toll free number	No later than January 1, 2020	No later than January 1, 2020
NREL / AFDC reporting	At time of adoption	At time of adoption
ОСРІ	No later than January 1, 2020	No later than August 1, 2020
Tile 16 CFR Part 309 labeling	No later than January 1, 2022	No later than August 1, 2020



Why are these requirements important?

- Credit Card Readers
 - Ubiquitous method of payment for goods and services
 - Easiest transition from gasoline purchase to electricity purchase for consumer
 - Unrealistic to require all consumers to have a smartphone
 - On major city single space parking meters
- Toll free number display
 - Failsafe for consumers in the event all technologies fail



Process timeline

- Staff report released September 4, 2018
- Public Hearing October 25-26, 2018



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