

MAJOR REGULATIONS STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

DF-131 (NEW 11/13)

STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

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1. Statement of the need for the proposed major regulation.

The proposed regulation implements the requirements of SB 454 and ensures consistent and transparent access to charging infrastructure. SB 454 requires Electric Vehicle Supply Equipment (EVSE) to be accessible to EV drivers regardless of membership in network subscription services, that all costs be disclosed at the point of sale, that EVSE locations and payment mechanisms be reported to NREL, that interoperability standards be used to standardize public access to networked stations, that credit card and mobile payment options be available, and requires labeling and reporting. Without the proposed regulation there would be no standardization as required, no consistency in compliance and no mechanism for enforcement of the law.

2. The categories of individuals and business enterprises who will be impacted by the proposed major regulation and the amount of the economic impact on each such category.

The directly affected industries are expected to be the Electric Vehicle Supply Providers (EVSPs), of which an industry classification distribution is estimated based on the market share of current businesses. This distribution of the EVSP market share has 58 percent in Other Electrical Equipment and Component Manufacturing (NAICS 3359), about 38 percent in Retail Trade (NAICS 44-45), 3 percent in Management, Scientific, and Technical Consulting Services (NAICS 5416), and about 1 percent in Electric Power Generation, Transmission, and Distribution (NAICS 2211), based on current data on site ownership by businesses in California.

Individuals and entities that are not directly regulated by the EVSE Standard may see higher prices for EV charging as compliance cost are passed through to end-users.

3. Description of all costs and all benefits due to the proposed regulatory change (calculated on an annual basis from estimated date of filing with the Secretary of State through 12 months after the estimated date the proposed major regulation will be fully implemented as estimated by the agency).

Costs: Direct costs are estimated for the directly affected entities. They consist of one-time up-front and ongoing costs related to: replacement costs for existing Level 2 EVSEs, costs related to the required credit card and mobile payment technologies, interoperability costs, costs for disclosure of charging prices, labeling costs, and reporting. The direct cost for the proposed regulation is estimated for the 2020-2030 time period relative to the baseline; it is estimated to total \$115.2 million (in 2018 dollars) over this time period, with annual costs ranging from \$1.1 million to \$16.8 million.

Benefits: The proposed regulation is anticipated to increase driver access to EVSEs and allow a more consistent and transparent experience. This increased access is anticipated to result in drivers having confidence to transition more of their driving miles to PEVs, which could increase electric vehicle miles traveled (eVMT) statewide. The emissions benefits from increased eVMT as a result of the proposed regulation are difficult to separate from the multitude of other regulations, goals, incentives, and consumer behaviors that impact total VMT and eVMT. These benefits are not quantified due to insufficient data.

4. Description of the 12-month period in which the agency estimates the economic impact of the proposed major regulation will exceed \$50 million.

The proposed regulation has the first requirements starting in 2020 and will be fully implemented in 2028. The proposed regulation is a major regulation requiring a Standardized Regulatory Impact Assessment (SRIA) because the estimated annual economic impact is greater than \$50 million in multiple years between 2020 and 2028.

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5. Description of the agency's baseline:

The economic impacts of the proposed regulation are estimated relative to the baseline. The Emissions Factor Model (EMFAC2017) was used to forecast the number of PEVs each year through 2030. EMFAC2017 projects new vehicle PEV populations for exact compliance with the ZEV Regulation. CARB staff then used these PEV projections to estimate the total number of EVSEs that would be in place through 2030 using the Electric Vehicle Infrastructure Projection Lite (EVI Pro Lite) tool.

CARB utilized the Regional Economic Models, Inc. (REMI) Policy Insight Plus Version 2.1.1 to estimate the macroeconomic impacts of the proposed EVSE Standard regulation on the California economy. CARB uses the REMI single-region, 160-sector model with the model reference case adjusted to reflect the Department of Finance conforming forecasts. These forecasts include California population figures dated January 2018, U.S. real GDP forecast, and civilian employment growth numbers dated November 2017.

6. For each alternative that the agency considered (including those provided by the public or another governmental agency), please describe:

- a. All costs and all benefits of the alternative
- b. The reason for rejecting alternative

Alternative 1: 7-year Compliance Requirement

- a. Alternative 1 results in \$89 million in total compliance costs over 2020 through 2030, which is 23 percent lower than the proposed regulation. Alternative 1 results in the same benefits as the proposed regulation, but these benefits are delayed due to the delay in compliance requirements.
- b. Alternative 1 would result in significantly fewer compliant Level 2 and DCFC EVSE in the early years of implementation. Alternative 1 was rejected because it does not provide the maximal benefits which can be achieved through the proposed regulation.

Alternative 2: 3-year Compliance Requirement

- a. Alternative 2 results in \$125 million in total compliance costs over 2020 through 2030, which is 8.7 percent higher than the proposed regulation. Alternative 2 provides benefits sooner than the proposed regulation.
- b. Compared to the proposed regulation, Alternative 2 results in a 9 percent increase in costs, but only approximately a 6 percent increase in benefits. While the goal is to get open access EVSEs into the market as quick as possible, forcing the EVSEs to be compliant in 3 years may not be feasible for all parties involved. Alternative 2 was rejected because it is less cost effective, and may not be feasible for all regulated parties.

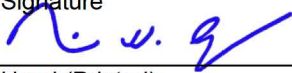
7. A description of the methods by which the agency sought public input. (Please include documentation of that public outreach).

CARB staff has been engaged with stakeholders via forums and public processes from the onset of the proposed rulemaking. Initially, outreach and input focused on stakeholder forum settings to define potential actions by CARB on SB 454. CARB hosted a two forums with industry stakeholders in December 8, 2017 and March 30, 2018. CARB staff also gathered public feedback on the proposed regulation through public workshops and a webinar. This public workshop on May 30, 2018, which was webcast, solicited stakeholder feedback on the proposed regulation, the regulatory process, and solicited for alternatives. Subsequent to this workshop, CARB staff hosted a public webinar on June 21, 2018, to present proposed definitions for regulated parties and to discuss reporting requirements. CARB staff held a second public workshop on November 7, 2018, during which CARB staff presented draft regulatory language and requested feedback from stakeholders.

8. A description of the economic impact method and approach (including the underlying assumptions the agency used and the rationale and basis for those assumptions).

As described in Section C of the SRIA, it is conservatively assumed as to not understate the costs, that existing Level 2 EVSEs lacking compliant hardware and signage will be replaced instead of retrofitted. This installation cost is input into the REMI model as an increase in production costs for the directly affected industries. The directly affected industries are assumed to be the EVSPs, of which an industry classification distribution is estimated based on the market share of current businesses. The compliance costs incurred by the EVSPs for the installation, equipment, and other items will result in a corresponding increase in demand for industries supplying those goods and services, which is input in the REMI model as an increase in final demand. The years of analysis are 2020 through 2030; these years are used to simulate the impacts of the proposed EVSE Standard 12 months post full implementation.

Agency Signature



Date

12/31/2018

Agency Head (Printed)

Richard Corey