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FINAL STATEMENT OF REASONS

Rulemaking to Establish Regulations for Improved Electric Vehicle Charger Recordkeeping and Reporting, Reliability, and Data Sharing

OAL Z # 2025-0617-03
Docket No. 22-EVI-04

INTRODUCTION

The California Energy Commission (CEC) proposed a rulemaking to establish new regulations for improved electric vehicle (EV) charger recordkeeping and reporting, reliability, and data sharing in the California Code of Regulations, Title 20, Division 2, Chapter 12, Articles 1 and 2 after considering all comments, objections, and recommendations regarding the proposed action. Additions of sections 3120 through 3135 would primarily:

(1) Track the number of EV charging ports installed in California by establishing inventory reporting requirements.
(2) Track the reliability of publicly or ratepayer funded direct current fast charging (DCFC) ports by adopting reliability recordkeeping and reporting requirements.
(3) Increase DCFC port uptime for publicly or ratepayer funded DCFC ports by setting reliability performance standards, including a 97 percent uptime standard.
(4) Share real-time data on the availability and accessibility of publicly available charging infrastructure for publicly or ratepayer funded charging ports to improve the EV driver experience.

The CEC also proposed to adopt related amendments to the CEC's procedures related to the designation and disclosure of confidential records contained in California Code of Regulations, Title 20, sections 2505 and 2507.

The purpose of the regulations is to:

(1) Increase CEC and public knowledge of the number, location, and reliability of EV charging ports in California.
(2) Increase the reliability of publicly or ratepayer funded DCFC ports.
(3) Increase driver knowledge of the availability and accessibility of publicly or ratepayer funded EV charging ports.

These new requirements are necessary to assess and forecast the number of electric vehicle charging ports needed to support California's electric vehicle adoption goals, assess the reliability of California's electric vehicle charging infrastructure, increase the reliability and availability of EV charging ports, and meet legislative requirements.

SUMMARY OF NEW CHANGES

The following non-substantive changes have been made to the proposed regulatory language since the Notice of Additional Public Comment Period and Summary of Changes issued on September 8, 2025:

Section: 2505
Summary of Change and Specific Purpose: Writes out full list of skipped subdivisions in citations and adds missing authority and reference note. Replaced authority for Government Code Section 6253(a) with current Section 7922.525(a) as the preexisting authority citation no longer exists. Added other authorities under the Public Records Act, Evidence Code, and Civil Code related to designation of confidential information.

Section: 2507
Summary of Change and Specific Purpose: Writes out full list of skipped subdivisions in citations and adds missing authority and reference note. Replaced authority for Government Code Section 6253(a) with current Section 7922.525(a) as the preexisting authority citation no longer exists. Fixed capitalization issues.

Section: 3120
Summary of Change and Specific Purpose: Adds missing subsection letter (a), and writes out full list of authorities and references cited.

Section: 3120(a)(4)
Summary of Change and Specific Purpose: Corrects an errant reference to section 3127 to correctly reference section 3131.

Section: 3121
Summary of Change and Specific Purpose: Adds missing subsection letter (a) and writes out full list of authorities and references cited.

Section: 3122(c)(1)
Summary of Change and Specific Purpose: Replaces “179 days from the effective date of this paragraph” with the specific September 27, 2026 calendar date.

Section: 3122(c)(2)
Summary of Change and Specific Purpose: Replaces “180 days from the effective date of this paragraph” with the specific September 28, 2026 calendar date.

Section: 3122
Summary of Change and Specific Purpose: Writes out full list of authorities cited.
Section: 3123(c)(4)
Summary of Change and Specific Purpose: Changed “the effective date of this section” to the April 1, 2026 effective calendar date.

Section: 3123(d)
Summary of Change and Specific Purpose: Corrects a non-substantive typo, adding the word “to”.

Section: 3123
Summary of Change and Specific Purpose: Writes out full list of authorities cited.

Section: 3124(c)(1)(B)
Summary of Change and Specific Purpose: Provides a non-substantive changed reference striking “or a subsequent version of OCPP” to state that regulated entities are only required to use OCPP version 2.0.1, not a subsequent version.

Section: 3124(c)(1)(C)
Summary of Change and Specific Purpose: Provides a non-substantive changed reference striking “or a subsequent version of OCPP” to state that regulated entities are only required to use OCPP version 2.0.1, not a subsequent version.

Section: 3124(c)(1)(D)
Summary of Change and Specific Purpose: Provided citation to section 3127 to identify the method of consumer notification needed to calculate downtime.

Section: 3124(c)(2)
Summary of Change and Specific Purpose: Adds non-substantive reference to section 3127. Provided citation to section 3127 to identify the method of consumer notification needed to calculate downtime.

Section: 3124
Summary of Change and Specific Purpose: Writes out full list of authorities cited.

Section: 3125
Summary of Change and Specific Purpose: Writes out full list of authorities cited. Provided the correct publication date of Open Charge Point Protocol version 2.0.1 incorporated by reference.

Section: 3125(a)
Summary of Change and Specific Purpose: Replaces “180 days from the effective date of this paragraph” with the specific September 28, 2026 calendar date. Provided the correct publication date of OCPP.

Section: 3125(a)(1)
Summary of Change and Specific Purpose: Provides a non-substantive changed reference striking “or a subsequent version of OCPP” to state that regulated entities are only required to use OCPP version 2.0.1, not a subsequent version. Provided the correct publication date of Open Charge Point Protocol version 2.0.1.

Section: 3125(b)
Summary of Change and Specific Purpose: Replaces “180 days from the effective date of this paragraph” with the specific September 28, 2026 calendar date.

Section: 3125(c)
Summary of Change and Specific Purpose: Replaces “179 days from the effective date of this paragraph” with the specific September 27, 2026 calendar date.

Section: 3126
Summary of Change and Specific Purpose: Writes out full list of authorities cited.

Section: 3128
Summary of Change and Specific Purpose: Writes out full list of authorities cited.

Section: 3129
Summary of Change and Specific Purpose: Writes out full list of authorities cited. Struck former language concerning model terms and conditions that the CEC staff would publish, and reordered subdivisions.

Section: 3129(a)
Summary of Change and Specific Purpose: Replaces “180 days from the effective date of this paragraph” with the specific September 28, 2026 calendar date.

Section: 3130
Summary of Change and Specific Purpose: Writes out full list of authorities cited. Provided the correct publication date of Open Charge Point Interface 2.2.1 incorporated by reference.

Section: 3131(a)(6)(A)
Summary of Change and Specific Purpose: Replaces “[a]n API of the CEC’s choosing” with “[t]he Hourly Charger Data Reporting Specification as incorporated by reference in section 3125(b).”

Section: 3131(a)(6)(B)
Summary of Change and Specific Purpose: Provides a non-substantive changed reference striking “or a subsequent version of OCPP” to state that regulated entities are only required to use OCPP version 2.0.1, not a subsequent version. Provided the correct publication date of OCPP.

Section: 3131(b)(2)
Summary of Change and Specific Purpose: Removes “access to an API of the CEC’s choosing to” and adds “Hourly charger Data Reporting Specification” to state data required to be submitted pursuant to Section 3125(b).

Section: 3131
Summary of Change and Specific Purpose: Writes out full list of authorities cited. Renumbered subdivisions to account for withdrawn proposed regulatory language.

Section: 3132
Summary of Change and Specific Purpose: Writes out full list of authorities cite.

Section: 3133
Summary of Change and Specific Purpose: Writes out full list of authorities cited.

Section: 3133(b)(1)
Summary of Change and Specific Purpose: Adds non-substantive reference to section 3123, section 3125, and section 3131.

Section: 3133(c)
Summary of Change and Specific Purpose: Adds missing punctuation mark to fix non-substantive grammatical error.

Section: 3134
Summary of Change and Specific Purpose: Writes out full list of authorities cited.

UPDATE OF THE INITIAL STATEMENT OF REASONS

To provide additional information for the Specific Purpose and Necessity statements noted in the Initial Statement of Reasons, the CEC Staff has provided additional information for the following sections:

Section: 3125(a)(1)
Specific Purpose: The specific purpose of this subdivision is to require networked publicly or ratepayer funded chargers installed on or after 180 days from the effective date of this paragraph to obtain a Subset Certification in the Open Charge Alliance OCPP Certification Program for OCPP version 2.0.1, edition 3, published May 6, 2024, for Core and Advanced Security functionalities.
Necessity: This subdivision is necessary to ensure standardization of data to set a level playing field for measuring and tracking reliability. These chargers must be certified for OCPP version 2.0.1, which is a tool to improve reliability as required by Public Resources Code section 25231.5(d)(1) and ensures consistent and comparable data reporting across different charger models.
Section 3125 incorporates the OCPP document standards by reference. OCPP is a communication standard used by EV chargers to communicate with a central management system. Specifically, this standard defines structured messages, known as protocol data units, including the structure, fields, and metadata contained in those messages, which are sent between an EV charger and its central management system. OCPP messages provide key insight into an EV charger's operational status and reasons for faults. Staff proposes that data be transmitted via OCPP because OCPP is a broadly accepted protocol for communication between

chargers and charging network providers. This requirement is consistent with CEC EV charging programs, which are gradually requiring chargers to comply with OCPP 2.0.1 . CEC staff's understanding is that most charging network providers use some implementation of OCPP 1.6 or later.

Section: 3130(a)(8)(H)
Specific Purpose: The specific purpose of this subdivision is to require charging network providers to share the real-time status by port.
Necessity: This subdivision is necessary so that drivers know whether a port is operational and available. Section 3130 incorporates Open Charge Point Interface 2.2.1 by reference. Open Charge Point Interface is a communication standard that EV charging networks use to provide information about chargers and allow drivers from one network to use chargers on another network. Within this standard, there are specifications for data that provide real-time insight as to a charger's operational status, which is directly related to the purpose of the data sharing provisions of Section 3130. Although Open Charge Point Interface is largely used for EV charging networks to communicate with other EV charging networks, an EV charging network can use this standard as a set of rules to report operational status data about its chargers to other entities, such as third-party software developers under Section 3130(a). By requiring this standard, charging network providers will make operational data available in a format that third-party software developers' APIs can receive. This subdivision provides for charging port real-time status data sharing requirements similar to the National Electric Vehicle Infrastructure (NEVI) Standards and Requirements (23 Code of Federal Regulations, § 680.116(c)(8)(vii)).

Section: 3130(a)(10)
Specific Purpose: The specific purpose of this subdivision is to require charging network providers to share real-time price to charge.
Necessity: This subdivision is necessary so that drivers know how much it will cost to charge at a station. Section 3130 incorporates Open Charge Point Interface 2.2.1 by reference. Open Charge Point Interface is a communication standard that EV charging networks use to provide information about chargers and allow drivers from one network to use chargers on another network. Within this standard, there are specifications for data that provide real-time insight as to a charger's pricing information that an EV charging network can communicate to other EV charging networks, which is directly related to the purpose of the data sharing provisions of Section 3130. Although Open Charge Point Interface is largely used for EV charging networks to communicate with other EV charging networks, an EV charging network can use this standard as a set of rules to report operational status data about its chargers to other entities, such as third-party software developers under Section 3130(a). By requiring this standard, charging network providers will make pricing data available in a format that third-party software developers' APIs can receive.

ADDITIONAL UPDATE OF THE INITIAL STATEMENT OF REASONS

In addition to non-substantive spelling, grammar, numbering, or style edits to improve readability, the following changes were made to the proposed regulatory language after the CEC provided public comment periods, which were adopted by the California Energy Commission on October 8, 2025:

SECTION 2505. Scope.

Section: 2505(a)(5)(B)(10)
Summary of Change and Specific Purpose: Removes the reference to number (5) from reference section for information provided pursuant to Section 3125(b) thereby making all of 3125(b) applicable under this subsection. Strikes reference to Section 3125(b)(1) through (b)(4) as those subsections are now included in the reference in the above statement.
Necessity: This action is necessary to distinguish information submitted regarding a charger that is distinct from information that is shared with the National Renewable Energy Lab or a third-party.

SECTION 3120. Scope.

Section: 3120(a)(2)
Summary of Change and Specific Purpose: Clarifies that the regulations explicitly apply to alternating current (AC) Level 2 or direct current fast charger (DCFC) charging stations.
Necessity: This addition is necessary to exclude Level 1 charging stations from the scope of this proposed regulation and specifically addresses public comments from the 45-day comment period seeking this clarification. Level 1 chargers are exempted from the regulations because they are functionally electrical outlets, which do not need to be tallied for the purposes of CEC reporting and are not expected to pose reliability challenges.

Section: 3120(a)(3)
Summary of Change and Specific Purpose: Clarifies that the regulations explicitly apply to AC Level 2 or DCFC charging stations.
Necessity: This addition is necessary to clarify the Level 1 charging stations exclusion from the scope of this proposed regulation and specifically addresses public comments from the 45-day comment period seeking this clarification.

SECTION 3121. Definitions.

Section: 3121(a)(13)
Summary of Change and Specific Purpose: Adds new “Data dictionary” definition for purposes of incorporating by reference two specifications including the Semiannual Charger Data Reporting Specification (July 29, 2025), incorporated by reference under Section 3123, and the Hourly Charger Data Reporting Specification (July 29, 2025), incorporated by reference under Section 3125.

Necessity: This definition is necessary to provide a template on how to format data specified in Sections 3123 and 3125 in the proposed regulatory language. Specifically, Sections 3123 and 3125 require recordkeeping and reporting agents to report to the CEC specified data. This definition identifies the two specific data specifications that recordkeeping and reporting agents must use to format data in order to fulfill their reporting requirements. This definition is necessary because without it, recordkeeping and reporting agents would not have clarity on the exact formats to report the data to the CEC. Therefore, this definition is necessary to ensure that the CEC receives reported data in a consistent format. This data also provides the CEC with information that provides insight into EV charging infrastructure that is relevant to the CEC's biennial Integrated Energy Policy Report. This directly responds to comments received during the 45-day comment period seeking more clarification on reporting data to the CEC.

Section: 3121(a)(14) – (53)
Summary of Change and Specific Purpose: The number of each definition following (13) is increased by one due to the inclusion of a new definition. This is a non-substantive numbering edit.

Section: 3121(a)(21)
Summary of Change and Specific Purpose: Alters the fleet charger definition to include those fleet chargers used by commercial vehicles operated by subcontractors of the charging station operator or accessible only through preexisting contracts or access agreements.
Necessity: This change is necessary to accommodate the nascent business models of shared private fleet charging. In many comments received by the CEC, shared private and public fleet charging operators explained how their business models undertake contracts with fleet EVs that provide contracted uptime for charger availability. This change directly responds to those comments.

Section: 3121(a)(25)
Summary of Change and Specific Purpose: Replaces the term "of any value" with "funds" in the definition. This change also excludes proceeds from credits generated under the Low Carbon Fuel Standard program established by the California Air Resources Board from being considered an incentive.
Necessity: These changes are necessary to remove any ambiguity from the definition. Specifically, these changes clarify the scope of the regulations by removing non-financial assistance such as consultation services for installing EV chargers as being considered an incentive. These changes are responsive to comments received during the 45-day comment period requesting clarification.

SECTION 3123. Semiannual Reporting Requirement.

Section: 3123
Summary of Change and Specific Purpose: Adds the Semiannual Charger Data Reporting Specification (July 29, 2025) data dictionary as incorporated by reference.
Necessity: This addition is necessary to link to the new data dictionary definition in Section 3121(a)(13), which is related to and clarifies reporting requirements under the proposed regulatory language, and directly responds to comments received during the 45-day comment period requesting clarification on data sharing. Specifically, Section 3123 requires recordkeeping and reporting agents to report to the CEC specified data. This addition is necessary because the Semiannual Charger Data Reporting Specification identifies the order and format that data must be reported to the CEC. Without this necessary ordering and formatting, the recordkeeping and reporting agent could transmit data in an order or format that the CEC's API would not expect to receive. Therefore, this addition is necessary to ensure that the CEC is able to receive data and to provide regulated entities with necessary formatting requirements.

Section: 3123(b) – (c)
Summary of Change and Specific Purpose: Amends references to Section 3121(b) to Section 3121.
Necessity: This change is necessary to correctly reference the definitions in section 3121. Section 3121 has no subdivision (b).

Section: 3123(d)
Summary of Change and Specific Purpose: Adds a reference to the new data dictionary definition in Section 3121(a)(13) as the format for submitting semiannual charging data reporting.
Necessity: This addition provides necessary clarification on data reporting. Specifically, additions were made to Section 3123 to identify and incorporate by reference the Semiannual Charger Data Reporting Specification of the data dictionary. This section is necessary to require recordkeeping and reporting agents to use the Semiannual Charger Data Reporting Specification to carry out their reporting obligations under Section 3123. This addition is related to and clarifies reporting requirements under the proposed regulatory language and directly responds to comments received during the 45-day comment period.

SECTION 3124. Publicly or Ratepayer Funded Charger Uptime Report Requirements.

Section: 3124(b)(2)(B)
Summary of Change and Specific Purpose: Amends the reporting period to H1-H2 from Q1-4 to align with the semiannual reporting period. This also changed the minutes in the reporting period to reflect the change from quarterly to semiannual reporting.
Necessity: This amendment is necessary to better align with national reliability standards and responds to comments made during the 45-day comment period regarding semiannual reporting.

Section: 3124(d)(4)
Summary of Change and Specific Purpose: Changes the number of days for the exclusion of vandalism downtime from 5 to 10 days.
Necessity: This change is necessary to give greater flexibility to charging operators to respond to downtime while still having the driver experience of uptime reflect the reported uptime including excluded downtime. This change responds to comments received during the 45-day comment period regarding an extension to the vandalism window of 5 days.

SECTION 3125. Additional Requirements for Networked Publicly or Ratepayer Funded Chargers.

Section: 3125
Summary of Change and Specific Purpose: Adds the Hourly Charger Data Reporting Specification (July 29, 2025) data dictionary as incorporated by reference.
Necessity: This addition is necessary to link to the new data dictionary definition in Section 3121 (13), which is related to and clarifies reporting requirements under the proposed regulatory language. Specifically, Section 3125 requires recordkeeping and reporting agents to report to the CEC specified data. This addition is necessary because the Hourly Charger Data Reporting Specification identifies the order and format that data must be reported to the CEC. Without this necessary ordering and formatting, the recordkeeping and reporting agent could transmit data in an order or format that the CEC's API would not expect to receive. Therefore, this addition is necessary to ensure that the CEC is able to receive data and to provide regulated entities with necessary formatting requirements. This addition also responds to comments received during the 45-day comment period regarding data reporting clarity.

Section: 3125(a)(2)(I)
Summary of Change and Specific Purpose: Specifies requirement for protocol data unit NotifyEventRequest.
Necessity: This data provides error codes that identify the type of downtime for a charger and whether a charger in a faulted status is capable of charging. This data will provide information to calculate uptime rates accurately.

Section: 3125(a)(2)(J)
Summary of Change and Specific Purpose: Renumbers section to reflect addition of 3125(a)(2)(I).
Necessity: This is a non-substantive numbering edit.

Section: 3125(b)(4)
Summary of Change and Specific Purpose: Adds the date and time that the record was first recorded by the central system.
Necessity: This data field will provide metadata time stamps associated with a charger's operative status that is necessary to message sequencing and identifying all messages in a single transaction. This metadata will provide information as to downtime.

Section: 3125(b)(5)
Summary of Change and Specific Purpose: Adds the BootNotificationRequest instance records. Renumbers section to reflect addition of 3125(b)(4).
Necessity: This data provides the firmware edition of the charger and definition of the error codes that are used by NotifyEventRequest. This data is critical for error tracking and will provide information as to whether a charger's downtime is excludable.

Section: 3125(b)(6)
Summary of Change and Specific Purpose: Adds the NotifyEventRequest instance records. Renumbers section to reflect addition of 3125(b)(4).
Necessity: This data provides error codes that identify the type of downtime for a charger and whether a charger in a faulted status is capable of charging. This data will provide information to calculate uptime rates accurately.

Section: 3125(g)
Summary of Change and Specific Purpose: Adds fleet charger to the list of chargers that need not meet requirements of subdivisions (a) through (f) of the section. Makes non-substantive update to spelling, grammar, numbering, or style to improve readability.
Necessity: These changes are necessary to clarify that fleet chargers are exempt from subdivisions (a) through (f). These directly address comments received from the 45-day comment period about fleet charger exclusions. Fleet chargers are exempted from these subdivisions as they have demonstrated incentive to ensure high uptime.

Section: 3125(h)
Summary of Change and Specific Purpose: New subsection (h) specifies submission format consistent with the hourly charger data reporting specification of the data dictionary.
Necessity: This addition is necessary to provide clarity on reporting data protocol units. Specifically, additions were made to Section 3125 to identify and incorporate by reference the Hourly Charger Data Reporting Specification of the data dictionary. This Section is necessary to require recordkeeping and reporting agents to use the Hourly Charger Data Reporting Specification to carry out their reporting obligations under Section 3125. This addition responds to comments from the 45-day comment period regarding data sharing clarity.

SECTION 3126. Additional Requirements for Nonnetworked Publicly or Ratepayer Funded Chargers.

Section: 3126(d)
Summary of Change and Specific Purpose: Adds fleet charger to the list of chargers that need not meet requirements of subdivisions (a) through (c) of the section. Makes non-substantive update to spelling, grammar, numbering, or style to improve readability.
Necessity: These changes are necessary to clarify that fleet chargers are exempt from subdivisions (a) through (c) and directly address comments received from the 45-day comment period about fleet charger exclusions. Fleet chargers are exempted from these subdivisions as they have demonstrated incentive to ensure high uptime.

SECTION 3131. Enrolled Charging Network Providers for Publicly or Ratepayer Funded Chargers.

Section: 3131(a)
Summary of Change and Specific Purpose: Adds the CEC email address through which applicants must submit an application to become an enrolled charging network provider.
Necessity: This addition is necessary to clarify the application process but does not, however, respond to any comments received during the 45-day comment period.

LOCAL MANDATE DETERMINATION

The proposed regulation does not impose a mandate on local agencies or school districts that requires state reimbursement pursuant to Government Code Sections 17500 et seq. None of the costs to local governments due to the proposed regulations are reimbursable to the state. Operating EV charging ports is generally a discretionary decision for local governments, so the costs are not required; moreover, the proposed amendments apply generally to all entities operating EV charging ports rather than applying specific mandates to local governments. Because they do not impose unique new requirements on local agencies, they are not a reimbursable mandate for this reason as well (*County of Los Angeles v. State of California* (1987) 43 Cal.3d 46).

CONSIDERATION OF REASONABLE ALTERNATIVES, INCLUDING THOSE THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

The CEC determined pursuant to Government Code section 11346.9(a)(4) that no alternative before it would be more effective in carrying out the purpose for which this action is proposed; no alternative would be as effective as and less burdensome to affected persons than the adopted regulations; and no alternative would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

Additionally, no alternatives were identified or proposed that would lessen any adverse economic impact on small businesses, pursuant to Government Code Section 11346.9(a)(5).

In addition to the proposed regulations, the CEC evaluated the following alternatives:

<u>Alternative 1</u>

Under one alternative, the CEC considered requiring charging port uptime reporting and uptime requirements but not inventory reporting. This alternative would only require charging network providers and site hosts to report charging port uptime as required by Public Resources Code section 25231.5 and not set regulations for inventorying charging ports.

While Alternative 1 has a lower estimated reporting cost than the staff proposal, it would not provide the CEC with EV charging port inventory data. CEC staff requires this data to complete statutorily mandated forecasts and reports, including without limitation, the biennial Integrated Energy Policy Report, or IEPR. The benefit of this data is considered a second-order benefit and is not quantified here, but staff expects that the data will provide significant benefits to the state.

Alternative 2

Under the second alternative, the regulation would apply the proposed uptime requirement to public or ratepayer funded AC Level 2 charging ports. Setting a 97 percent uptime standard for AC Level 2 ports as well as DCFCs would provide greater reliability benefits than applying these requirements to only state or ratepayer funded DCFC ports.

However, Alternative 2 would have a higher estimated cost than the staff proposal as it would apply reliability requirements to more charging ports. CEC staff do not propose applying reliability standards to publicly or ratepayer funded AC Level 2 ports at this time.

Pursuant to Government Code Section 11346.9(a)(4), CEC staff have considered these two proposed alternatives and concluded that they are not feasible, nor do they allow the CEC to fulfill its statutory mandate.

DOCUMENTS INCORPORATED BY REFERENCE

The CEC incorporates by reference all the following technical, theoretical, or empirical studies, reports, or similar documents:

1. Open Charge Point Protocol, Open Charge Point Protocol version 2.0.1 Edition 3, May 6, 2024, https://www.openchargealliance.org/downloads/.
2. EV Roaming Foundation, Open Charge Point Interface 2.2.1, September 7, 2023, https://evroaming.org/app/uploads/2021/11/OCPI-2.2.1.pdf.
3. California Energy Commission, *Semiannual Charging Data Reporting Specification of the Data Dictionary* (2025)
4. California Energy Commission, *Hourly Charging Data Reporting Specification of the Data Dictionary* (2025)

All documents incorporated by reference were made available upon request directly from the CEC throughout the course of this rulemaking action. Any documents additionally incorporated by reference since the initial publication of this rulemaking action were also made available for public review in compliance with Government Code Section 11347.1. The CEC determined that it would be cumbersome and impractical to publish the above documents in the California Code of Regulations. Specifically, these documents are lengthy and the *Semiannual Charging Data Reporting Specification of the Data Dictionary*, and the *Hourly Charging Data Reporting Specification of the Data Dictionary* have specific formatting requirements.

TECHNICAL, THEORETICAL, OR EMPIRICAL STUDIES, REPORTS, OR SIMILAR DOCUMENTS

The CEC has relied upon the following technical, theoretical, or empirical studies, reports, or similar documents in drafting the proposed regulations:

1. Alexander, Matt. January 2022. *Home Charging Access in California.* California Energy Commission. Publication Number: CEC-600-2022-021, https://www.energy.ca.gov/sites/default/files/2022-01/CEC-600-2022-021.pdf.
2. Gamage, Tisura, Alan Jenn, Gil Tal. 2023. *Reliability of Corridor DC Fast Charging ports and the Prevalence of no-Charge Events.* EVS36 — 36th Electric Vehicle Symposium & Exposition.
3. J.D Powers. Press release, August 17, 2022. "Growing Electric Vehicle Market Threatens to Short-Circuit Public Charging Experience, J.D. Power Finds."
4. Plug In America. February 2022. *The Expanding EV Market: Observations in a Year of Growth,*" https://pluginamerica.org/wp-content/uploads/2022/03/2022-PIA-Survey-Report.pdf.
5. U.K. Department for Transport. March 2023. Consumer Experience at Public Chargepoints: Government Response to the 2021 Consultation on the Consumer Experience at Public Chargepoints, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1146685/government-response-to-the-2021-consultation-on-consumer-experience-at-public-chargepoints.pdf. https://www.jdpower.com/business/press-releases/2022-us-electric-vehicle-experience-evx-public-charging-study

All documents relied upon were made available upon request directly from the CEC throughout the course of this rulemaking action. Any documents additionally relied upon since the initial publication of this rulemaking action were also made available for public review in compliance with Government Code Section 11347.1.

UPDATED INFORMATIVE DIGEST

The CEC finds that no revisions have been made that would warrant a change to the informative digest contained in the Notice of Proposed Action.

UPDATED ECONOMIC AND FISCAL IMPACT STATEMENTS

The CEC's initial findings remain the same but minor adjustments have been made to the economic and fiscal impact statements. The revised calculations can be found in Attachment A and in the updated STD Form 399.

SUMMARY OF RESPONSES TO PUBLIC COMMENTS RECEIVED

All responses to public comments, including acceptance of recommendations and justification when recommendations were not accepted, are appended to this Final Statement of Reasons, and included in the final rulemaking record.

ATTACHMENT A: ECONOMIC AND FISCAL IMPACT MODELING, ASSUMPTIONS, AND CALCULATIONS

Attachment A: Cost and Benefit Modeling Assumptions documents staff assumptions used to calculate the economic impacts of the proposed regulations stated in California standard (STD) form 399. Staff assumed that 2026 will be the first full calendar year that the regulations are in force. Staff assumes a 5 percent inflation rate.

All dollar values shown in Attachment A and the STD 399 are in 2026 dollars.

ECONOMIC IMPACT STATEMENT

A. ESTIMATED PRIVATE SECTOR COST IMPACTS

A.1. Staff estimates that the proposed regulation:

- Impact businesses and/or employees due to the regulations setting new requirements for electric vehicle (EV) charging network providers, site hosts, and charging station operators.
- Impact small businesses due to setting new reporting requirements for site hosts and charging station operators, a portion of which will be small businesses.
- Impose reporting requirements due to the required inventory and charging port reliability reporting requirements.

A.2. A cost analysis of the proposed regulations conducted by CEC staff estimates that the direct costs of the regulations to regulated entities in 2026 will be approximately $11,234,854. See response B.1 for this calculation. CEC staff estimates that the direct benefits of these regulations will be approximately $57,800 in 2026. See response C.3 for this calculation. The regulation will have recurring costs of $7,170,591 and benefits of $57,800 annually following 2026.

A.3. Staff estimates that the regulations will impact approximately 1,247 businesses in California in 2026. This number is based on the current number of EV charging networks and charging station operators of nonnetworked charging ports in California as reported to the National Renewable Energy Laboratory (NREL), scaled up by 20 percent annually.

The proposed regulations will affect EV charging networks, EV charging station operators, EV charging station site hosts, and businesses involved in the maintenance and repair of EV charging stations.

Staff estimates that 1,190 of the business affected by the regulation are small businesses. Staff defines a small business as a charging station operator operating twenty or fewer nonnetworked charging ports, or a charging network provider managing 1,000 or fewer networked charging ports.

Note that the distribution of EV charging ports affected by the regulation is not the same as the distribution of small and typical businesses. While small businesses make up approximately 95 percent of the businesses regulated by the regulation, staff estimates that typical businesses manage approximately 82 percent of the EV charging ports affected by the regulation, because a typical business operates, on average, many more EV charging ports than a small business. See response B.2. for more details.

A.4. Staff estimates that no new businesses will be created or eliminated by the proposed regulations, since similar regulations already exist in the federal National Electric Vehicle Infrastructure (NEVI) Standards and Requirements (23 Code of Federal Regulations, § 680.116.). The federal NEVI program requires a 97 percent uptime standard. See *Tracking and Improving Reliability of California's Electric Vehicle Charging ports*, Chapter 10 for more information.

A.5. The proposed regulation has a statewide geographic impact.

A.6. Staff estimates that zero new jobs will be created by this regulation, as a conservative assumption. See *Tracking and Improving Reliability of California's Electric Vehicle Charging ports*, Chapter 10 for more information.

A.7. Staff estimates that the regulations will not disadvantage California businesses by making it more expensive to produce goods or services here since EV charging available in California is not exported to residents in other states, and because the federal NEVI Program sets similar EV charging reliability standards as the proposed regulations (23 Code of Federal Regulations, § 680.116).

B. ESTIMATED COSTS

B.1. There are two steps to estimating the costs of the proposed regulations: 1) estimating the cost of the recordkeeping and reporting requirements, and 2) estimating the cost of the reliability standards. Recordkeeping and reporting requirements include inventory reporting as well as reliability reporting.

First, staff produced the following estimates for reoccurring recordkeeping and reporting costs for small and typical businesses. Staff considers any regulated entity that is not a small business to be a typical business.

Reoccurring recordkeeping and reporting costs are derived as follows:

- Staff estimated the recordkeeping reporting costs of the regulations in the first full year of implementation by estimating the labor hours required to both set up the recordkeeping and reporting framework (one-time costs) and ongoing reporting costs. The exact cost will depend on which entity is reporting, as different entities have different recordkeeping and reporting requirements under the regulations.

- Staff then multiplied the labor hours by Bureau of Labor and Statistics average hourly rates for the various employees that would do the work estimated in the previous step.
- Staff then multiplied the estimated working hours by the estimated average wage calculated in the pervious step, excluding entities that are not required to report under the regulations.

This produces a total reporting cost for industry in 2026 of $6,086,494. Please see Table B-1 below:

Table B-1: Initial and Recurring Reporting Costs for Year One of the Proposed Regulation

Reporting Cost Type	Small Businesses	Typical Businesses
Initial Setup	$2,501	$19,089
Recurring	$1,419	$5,853
Total Cost Per Business	$3,920	$24,942
Number of Businesses	1,190	57
Total Cost for Businesses	$4,664,800	$1,421,694
Total Cost for All Businesses	$6,086,494	

CEC staff then assessed the costs and benefits associated with implementing the 97 percent DCFC port uptime requirement. This analysis estimated the marginal cost of increasing the uptime of DCFC ports from an assumed baseline reliability to 97 percent uptime and multiplying this marginal cost by the anticipated number of regulated DCFC ports installed between 2024 and 2026, the first year the regulations are anticipated to take effect.

The first step in this calculation is estimating the number of publicly and ratepayer funded DCFC ports that will be installed between 2024 and 2026. CEC staff estimate this to be 3,400 DCFC ports. Additionally, CEC staff expects 170 federally funded DCFC ports to be installed through the end of 2026, which for the purpose of this regulation are considered state funded. These charging ports already must comply with a 97 percent uptime standard through the federal NEVI program so their relatability costs are not included here.

The number of relevant charging ports is then multiplied by the estimated cost of a service level charging port maintenance agreement, which was estimated through consultation with industry. Staff assumes a per port service level agreement cost of

$1,512 (2026$) for DCFCs. These future service level agreement costs assume a 5 percent inflation rate.

Staff then calculated the cost of maintaining 97 percent uptime for small and typical businesses. Staff assumes that 3,400 publicly or ratepayer funded DCFC ports will be installed between 2024 and 2026. The assumed service level agreement cost to assure 97 percent DCFC uptime is assumed to be $1,512, an assumption based on industry consultation. Staff also assumes that 18 percent of 3,400 DCFC ports are operated by small businesses, as in 2021, 18 percent of entities that received Clean Transportation Program funding were small businesses. This shows 612 total charging ports operated by small businesses and 2,788 total charging ports operated by typical businesses. Staff assumes that each of the 612 charging ports installed at small businesses between 2024 and 2026 will be distributed evenly across 612 small businesses. The average typical business will operate an average of 49 DCFC ports.

Table B-2 shows these costs:

Table B-2: Initial and Recurring (in Out Years) Uptime Costs for Each Year of the Proposed Regulation

Uptime Cost Type	Small Businesses	Typical Businesses
Initial	$1,512	$1,512
Recurring (in out years)	$1,512	$1,512
Total Cost Per Port Per Business Per Year	$1,512	$1,512
Number of Businesses Impacted	612	57
Number Ports Per Business	1	49
Total Cost for All Businesses	$925,344	$4,223,016

Thus, the following initial and annual ongoing costs per business for each business type are:

- Initial costs for a typical business: $19,089 in initial reporting set up costs + $5,853 in recurring reporting costs + $74,088 in first-year reoccurring uptime cost = $99,030 first-year total cost.
- Initial costs for a small business: $2,501 in initial reporting set up costs + $1,419 in recurring reporting costs + $1,512 in first-year recurring uptime costs = $5,432 first-year total cost.
- Annual recurring costs for a typical business: $5,853 reporting costs + $74,088 uptime costs = $79,941 reoccurring total cost.
- Annual recurring costs for a small business: $1,419 reporting costs + $1,512 uptime costs = $2,931 reoccurring total cost.

Tables B-3 and B-4 show the overall year one cost of the regulation:

Table B-3: Total Costs in Year One of the Proposed Regulation for Small Businesses

Cost Type	Small Business Numbers and Costs
Initial Set Up & Ongoing Reporting Cost	$3,920
Number of Businesses Impacted by Reporting Costs	1,190
Total Reporting Cost for Impacted Businesses	$4,664,800
Uptime Cost	$1,512
Number of Businesses Impacted by Uptime Costs	612
Total Uptime Cost for Impacted Businesses	$925,344
Total Year One Costs for Impacted Small Businesses	$5,590,144

Table B-4: Total Costs in Year One of the Proposed Regulation for Typical Businesses

Cost Type	Typical Business Numbers and Costs
Initial Set Up & Ongoing Reporting Cost	$24,942
Number of Businesses Impacted by Reporting Costs	57
Total Reporting Cost for Impacted Businesses	$1,421,694
Uptime Cost	$74,088
Number of Businesses Impacted by Uptime Costs	57
Total Uptime Cost for Impacted Businesses	$4,223,016
Total Year One Costs for Impacted Typical Businesses	$5,644,710

The total aggregate first-year cost for small businesses and typical businesses is $11,234,854.

B.2. Staff estimates that the proposed regulations would only impact the EV charging industry.

B.3. These regulations impose new reporting requirements for operators of EV charging ports. Recordkeeping and reporting agents must report charging port inventory to the CEC, and operators of DCFC ports installed after January 1, 2024 that receive public or ratepayer funding must report charging port reliability to the CEC. As calculated in response B.1, staff estimates that the reoccurring cost of these new reporting requirements for a typical business is $5,853 per year.

B.4. The proposed regulation is not expected to directly impact housing costs.

B.5. The federal government has set comparable regulations under the NEVI Program (23 Code of Federal Regulations, § 680.116.). Differences between state and federal requirements are not expected to impose additional costs to businesses.

C. ESTIMATED BENEFITS

C.1. Staff estimates that the proposed regulations will benefit Californians by increasing the reliability of DCFC ports and consumer confidence in EVs, which produce significant pollution reduction benefits for the state of California.

C.2. These benefits are the result of the statutory requirement that the CEC adopt EV charging port reliability reporting standards and tools to increase charging port uptime, as required by Assembly Bill 2127 (Ting, Ch. 365, Statutes of 2022) and Assembly Bill 126 (Reyes, Ch. 319, Statutes of 2023).

C.3. The proposed regulations are expected to create both direct and indirect benefits for Californians.

Staff estimated direct benefits by estimating the direct cost to EV drivers of attempting to charge at an unreliable DCFC port. When a driver attempts to use a broken DCFC port, they may drive to another EV charging station to find a functioning DCFC port. This assumes that the driver cannot find another functioning charging port at the same charging station and must drive to another station, but since any other functional charging port at the first station may be occupied this is a reasonable assumption for modeling purposes.

Staff assumes that DCFC ports have on average a utilization rate of 15 percent and that each charging event averages 1 hour. The proposed uptime regulations are expected to lead to a marginal improvement in DCFC port uptime of approximately 12 percent. Both of these are conservative assumptions. These assumptions are shown in Table C-1.

Table C-1: DCFC Port Modeling Assumptions

Assumed DCFC port utilization rate	15%
Assumed uptime rate of DCFC ports prior to regulations	85%
DCFC port uptime required by regulations	97%
Marginal improvement in DCFC port uptime required by regulations	12%

Multiplying 8,760 hours in a year by a DCFC port utilization rate of 15 percent and a marginal improvement in DCFC port uptime of 12 percent, assuming each charging event averages 1 hour, shows that the proposed regulations will increase the number of successful charging events at each regulated DCFC port by 158 charging events per year.

The direct benefit of the regulations is thus the avoided cost of driving to another EV charging station for 158 charging events per year. Assumptions to calculate this per-charging port avoided cost are shown in Table C-2.

Table C-2: Avoided Costs Assumptions

Average distance between DCFC stations (miles)	0.5
Average EV efficiency (miles per kilowatt-hour)	3.0
Average retail DCFC cost per kilowatt-hour (2026$)	$0.64

Using CEC data staff calculates that on average DCFC stations are located 0.5 miles apart in California.

Staff also assumes that the average EV can travel 3.0 miles per kilowatt-hour of electricity consumed. Staff assumes that the average retail electricity price at a public EV charging port is $0.64 (2026$), a conservative assumption.

[(0.5 miles of avoided travel / 3.0 miles per kilowatt-hour) * $0.64 per kilowatt-hour] * 158 marginal successful charging sessions per regulated charging port per year = $17 direct consumer benefits per DCFC port per year.

This produces $17 direct consumer benefits per charging port per year.

Multiplying 3,400 publicly or ratepayer funded DCFC ports with the annual consumer direct economic benefit of $17 per charging port produces an expected consumer direct economic benefit of approximately $57,800 per year. Importantly, this is only direct benefits from the proposed regulation.

Staff expects that the regulation will produce significantly greater second-order consumer benefits by improving the reliability of EV charging ports, but since these indirect benefits consist of greater driver confidence in EV charging and convenience, they are difficult to quantify and are not estimated here. The inventory and reliability reporting regulations will additionally produce similar second-order benefits including greater public information on the number of EV charging ports in California, their

reliability, and their availability and accessibility. These regulations will also improve the quality of state forecasting, the quantitative benefit of which is similarly not estimated here.

C.4. Staff expects that the proposed regulation may produce moderate marginal investment in EV charging in California and moderate expansion of EV charging businesses. See Chapter 10 for more information.

D. ALTERNATIVES TO THE REGULATION

D.1. Staff proposed two alternatives to the regulation, which are shown in Table D-1:

Table D-1: Alternatives Considered

Alternative 1	Alternative 2
Do not require EV charging port inventory reporting	Apply reliability reporting and uptime requirements to publicly and ratepayer funded AC Level 2 ports

D.2. Alternative 1 does not produce different benefits from the proposed regulation as both directly regulate the reliability of the same number of charging ports. The cost of Alternative #1 is lower than the staff proposal due to lower reporting costs caused by the absence of charging port inventory reporting. However, as described in response C.3 charging port inventory reporting is expected to produce significant, but difficult to quantify, benefits to public knowledge and state agency forecasting.

Alternative #2 regulates an additional 28,500 publicly and ratepayer funded AC Level 2 ports. The costs and benefits of Alternative #2 are higher than the staff proposal due to regulating the reliability of a greater number of chargers.

Direct incremental costs and direct economic benefits of the staff proposal and alternatives in the year 2026 is shown in Table D-2.

Table D-2: Alternatives Considered Modeling Inputs

	Staff proposal	Alternative #1	Alternative #2
Reporting costs	$6,086,494	$2,783,802	$6,086,494
Regulated charging ports (2026)	3,400	3,400	31,900
Direct incremental cost	$11,234,854	$7,923,332	$26,673,024
Direct economic benefits	$57,800	$57,800	$533,761

D.3. The proposed regulations and alternative proposals are expected to produce far greater indirect benefits than the direct economic benefits quantified here.

While Alternative #1 has a lower estimated reporting cost than the staff proposal, it would not provide the CEC with reliable EV charging port inventory data. CEC staff requires this data to complete statutorily mandated forecasts and reports. The benefit of this data is considered a second-order benefit and is not quantified here, but staff expects that this data will provide significant benefits to the state.

D.4. The proposed regulations set performance standards for EV charging ports rather than the use of specific actions or procedures.

E. MAJOR REGULATIONS

E.1. – E.3. These requirements are not applicable to the CEC as it is not a California Environmental Protection Agency board, office, or department.

E.4. As shown in B.1 staff estimates that the direct economic cost of the proposed regulations is $11,234,854 in 2026. As shown in C.4 staff estimates that the direct economic benefit of the proposed regulations is $57,800 in 2026. The regulation will have costs of $7,170,591 and benefits of $57,800 annually following 2026.

E.5. Staff expects that the proposed regulations will moderately increase investment and innovation in EV charging in California. See Chapter 10 for more information. Staff expects that the regulations will provide environmental benefits by increasing the adoption of EVs, providing positive benefits to the health, safety, and welfare of California residents. See Chapter 11 for more information.

FISCAL IMPACT STATEMENT

A. FISCAL EFFECT ON LOCAL GOVERNMENT

A.6. None of the costs to local governments due to the proposed regulations are reimbursable to the state. Operating vehicle charge equipment is generally a discretionary decision for local governments, so the costs are not required; moreover, the proposed amendments apply generally to all entities operating EV charging ports rather than applying specific mandates to local governments. Because they do not impose unique new requirements on local agencies, they are not a reimbursable mandate for this reason as well (County of Los Angeles v. State of California (1987) 43 Cal.3d 46).

Additional local government expenditures created by the regulation are considered voluntary, as they will only affect local governments who voluntarily choose to request public or ratepayer funding for DCFC ports.
Nevertheless, staff estimates that the number of publicly or ratepayer funded DCFC operated by local governments will increase between 2024 and 2026 by approximately 389 DCFC ports. For completeness staff assumed that the number of regulated DCFC ports operated by local governments is 270 in 2026. These assumptions are shown in Fiscal Table A-1.

Table A-1: Local Government Assumptions

Year	Number of regulated charging ports	Note
2026	270	Staff estimate.
2027	324	Assumes 20% year-on-year growth.
2028	389	Assumes 20% year-on-year growth.

Following the calculation in section B.1, staff assumes the marginal cost of the uptime regulation is $1,512 (2026$) per DCFC port per year. Reporting costs are excluded here for simplicity as they are expected to be primarily borne by the charging network provider. Costs in FY 24-25 are zero, as the regulations are expected to come into force in calendar year 2026. This analysis excludes reporting costs, which are expected to be largely borne by large EV charging network providers.

Table A-2: Local Government Estimated Fiscal Impact

Year	Fiscal impact
FY 26-27	$408,240
FY 27-28	$489,888
FY 28-29	$587,866
Total	$1,485,994

Thus, the three year fiscal impact for 2026-27 – 2028-29 is $1,485,994 (2026$). However, many local government DCFC ports will be exempted from the regulation as they may serve fleet vehicles operated by the local government.

Staff expects that the regulation may produce some savings for local governments due to increasing the reliability of DCFC ports and allowing for greater adoption of EVs by local governments, but these benefits are difficult to quantify and are not estimated here because such estimates will not be able to be calculated until after promulgation of the proposed regulations.

B. FISCAL EFFECT ON STATE GOVERNMENT

B.4. The regulations will create no fiscal impact in the current fiscal year, as the regulations are not expected to enter into force until 2026. Staff expects a small fiscal impact on state agencies that directly operate DCFC ports that receive public or ratepayer funding. The primary state agency that operates EV charging ports is the Department of General Services. CEC staff assumptions about the growth of charging ports operated by the Department of General Services are shown in Fiscal Table B-1.

Table B-1: DGS Assumptions

Year	Number regulated charging ports	Note
Existing DGS DCFC 2024 (most are exempt from regulation)	9	Provided by DGS, Q1 2024. Existing charging ports not regulated by regulations.
Regulated DCFC ports 2026	3	
Regulated DCFC ports 2027	4	Assumes average 29% year-on-year growth.
Regulated DCFC ports 2028	5	Assumes average 29% year-on-year growth.

Multiplying the expected number of new DCFC ports installed by Department of General Services between 2026 and 2028 by the expected per charging port compliance cost of $1,512 (2026$) per charging port per year shows an expected fiscal impact. Reporting costs are excluded here for simplicity. Costs in FY 24-25 are zero, as the regulations are expected to come into force in calendar year 2026. This analysis excludes reporting costs, which are expected to be largely borne by large EV charging network providers.

Table B-2: DGS Estimated Fiscal Impact

Year	Fiscal Impact
FY 26-27	$ 4,536
FY 27-28	$ 6,048
FY 28-29	$ 7,560
Total	$ 18,114

Thus, the three year fiscal impact for 2026-27 – 2028-29 is $18,114.

The proposed regulations are not expected to produce direct fiscal savings for state government. The proposed regulations may produce second-order savings by encouraging the procurement of high efficiency EVs in state fleets, but these second-order savings are not calculated here because such estimates will not be able to be calculated until after promulgation of the proposed regulations.

C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS

C.3. While EV charging ports funded by the federal NEVI Formula Grant Program are required to comply with all applicable regulations proposed in this report, staff does not anticipate that these requirements would result in additional state expenditures.