IOU question:

1. The latest regarding applicability and current or future enforcement of these or other regulations for smart outlets for EV charging.

   We have been in active discussions with several companies and stakeholders regarding this application. We have a pathway for devices incorporating this approach to be type-approved. Some discussions have involved establishing an agreed upon “standard cable length” for such applications. We have active applications for type approvals using this approach.

2. Clarifying the applicability for charging on private property or behind a fence.

   The determining factor in whether a device falls under Weights and Measures jurisdiction is not “public accessibility” but commercial purpose. An example is a “club store” which has an attached retail motor fuel station which is only accessible only to “members.” In all cases such as this, it is the commercial purpose(s) definition found in Business and Professions Code (BPC) 12500(e) that determines applicability to weights and measures requirements.
   4 CCR 4000 [1.10.] G-UR.2.3. and G-UR.4.4. require that the owner of a device used for commercial devices provide regular access to the device for the purpose of inspection and assistance in testing based upon the design, construction, and/or location of the device.

3. Clarifying the applicability for contracted charging, where there is a commercial transaction between two parties, but there is a contract between them defining the terms of that transaction as it may related to operation, accuracy, metering, billing, etc.

   If the device being used as the basis for determining quantity and total cost under the contract, then yes, the device is commercial as defined by BPC 12500(e) and must meet all applicable requirements.

4. Addressing the applicability or considerations of L1 and L2 EVSE with detachable charging cords, as is common for public charging in Europe, and for addressing reliability and vandalism, as EVSE are growing in popularity here.

   We have been in discussions with stakeholders regarding this application. We have a pathway for devices incorporating this approach to be type-approved. Some discussions have involved establishing an agreed upon “standard cable length” for such applications through NGO outreach to automotive OEMs and EVSE manufacturers.
   Operational reliability is not in the oversight of DMS and/or County Sealers and outside our scope of authority. We do not require any device to be operational, only that it be correct if it is being used for commercial purposes.
   Vandalism/theft is a criminal act and an issue for law enforcement.

5. Clarify the exemptions that exist for "public utilities", including defining what a public utility is (i.e. publically owned, or regulated by the Public Utility Commission are two very different things that could and are likely being conflated), and under what scenarios that exemption is applicable (i.e. defining "owned and operated").

   4 CCR 4000 [3.40.] EVFS Code A.2. Exemptions states: “The use of any measure or measuring device owned, maintained, and used by a public utility or municipality only in connection with measuring electricity subject to the authority having jurisdiction such as the Public Utilities Commission.”
   A public utility qualifying for the exemption in A.2. is a publicly owned utility or (POU) and not an investor-owned utility company. This distinction is important due to a 1978/79 AG opinion that established that public entities are not persons and therefore not subject to laws that use terminology such as “no person shall…” Incorporated entities, on the other hand, are recognized as persons under the law and are not afforded the exemption established by the AG opinion. AB 2037 Authorizes a county sealer beginning January 1, 2026, to test and verify as correct any electric vehicle charger operated by a public agency, as defined, that is located in the county in which the sealer has jurisdiction. The bill also added BPC Section 12209.7 (Operative Jan. 1, 2026) which provides definitions for “public agency” and “local publicly owned electric utility.” The law exempts an electric vehicle charger from testing and verification by a county sealer if it is owned by a local publicly owned electric utility, as defined, and if certain requirements are met. (Including testing the device in accordance with practices consistent with field inspections that verify conformance to NIST HB 44 Section 3.40)

6. How retroactivity is addressed, i.e. if guidance or requirements around any of these or other questions is TBD or unclear, how assurances are provided, so enforcement or requirements around them won’t take effect for devices installed until sometime after that guidance and those requirements are clearly communicated, as is needed for market certainty.

   The Department’s regulation recognized pre-existing or legacy devices in the rulemaking and provided exemptions for AC devices installed before January 1, 2021, and DC devices installed before January 1, 2023. For any updates to NIST HB 44 that occur in subsequent years, both retroactive and non-retroactive requirements are addressed in the proceedings of NCWM leading up to the adoption of new requirements. 4 CCR 4000 [1.10.] General Code G-A.5. & G-A.6. elaborate on the meaning and applicability of retroactive and non-retroactive requirements.

7. How CDFA addresses Standardized Regulatory Impact Assessment (SRIA) requirements as required under the Administrative Procedures Act (APA), when implementing or updating code, by reference or otherwise.

   The Department follows all regulatory requirements as required under the APA and every regulatory action is reviewed internally by CDFA Finance and Legal departments before being submitted to the Office of Administrative Law (OAL) for review. SRIA applies to major regulations as defined. The requirements for type evaluation for devices sold and/or installed for commercial purposes, placing a device in service, and adoption of NIST HB 44 are all statutory. The regulation promulgated for EVSE adopted the specifications and tolerances necessary for devices to be tested and verified that they meet statutory requirements. The regulation did not meet the “major regulation” threshold ($50M or more in economic impact during any 12 month period from filing with OAL to 12 months after full implementation).

State Agency:

1. Have there been any studies/research on the demand for RSAs related to the number of chargers already installed and the AB 2127 charger installation forecasting (EVI Pro4)?

   No. The concept of expending time and resources to assess how many RSAs may be necessary for a given device has not been explored. The market demand and business opportunity generally establishes the pace and number of businesses entering any specific field. The RSA numbers are driven by a need from the marketplace; not by a metric established by the State.

2. Does DMS maintain a list of RSAs licensed to seal/reseal chargers? How many are there, where are they distributed, and what is the average service area for RSAs?

   Yes, there is a list of all RSAs on the DMS website. There are 601 RSAs overall and 45 RSAs specifically registered for EVFS. Each RSA may be a single entity (Agency and agent) or employ multiple service agents to serve its customers. As for their distribution and service area, these are factors which are up to the RSAs themselves. RSAs are businesses which have registered to work on commercial devices. The State does not drive the number, location, distribution, or service area of these businesses; the demands of marketplace and opportunity determine the number of businesses entering it.

3. Is there a list of companies that employ RSAs, training providers, or testing equipment manufacturers?

   If the question is “is there a list of agencies?” – yes, on our website.
   Registered Service Agencies are private entities as are the companies that employ them. There are over 1.8 million commercial weighing and measuring devices in the state that are serviced by RSAs and their service agents (employees).
   The state does not train service agents; they are trained by their respective employers. The state registers Service Agencies and licenses service agents to ensure that each is familiar with the laws and regulations applicable to the devices they install, repair, adjust, calibrate, and place in service.
   It is up to an agency to be familiar with the code requirements and their equipment. They can reach out to the equipment manufacturer for the equipment they have invested in to learn how to use it.
   The code requirements for each device type as well as Examination Procedure Outlines (EPOs) are available on our website to provide RSAs with the applicable specifications, tolerances, and user requirements for each device type and the step-by-step test procedures county and state officials use when inspecting a device installed for commercial purpose(s).
   We have met with Co-Chair of the Electric Vehicle Infrastructure Training Program (EVITP) requesting that their training incorporates information regarding RSA legal requirements and the RSA business opportunity for trainees. We have also offered to provide on-sight presentations to their trainees as an addition to their training program. No response has been received from our post meeting outreach.
   Expanding RSAs can also be facilitated by providing notice to enrollees for California Electric Vehicle Infrastructure Project (CALeVIP) incentives that equipment installed for commercial purposes is subject to applicable Weights and Measures Laws & Regulations including type evaluation, installation and placing into service by an RSA or Sealer, submitting a placed-in-service report to the County Sealer, and that the device maybe subject to registration fees with the local County Office of Weights and Measures.
   Regarding testing equipment -
   Providing a list of testing equipment manufacturers would be contrary to our purpose which is to provide equity in the marketplace. We cannot highlight, recommend or endorse any specific equipment manufacturer, nor could we guarantee that our list would be fully inclusive as there are companies in the development stages of producing EVSE test equipment.

4. What training programs are available to learn the skills and safety procedures necessary for sealing and resealing chargers?

   CDFA-DMS provides training to county officials on the use of test standards and on the EPO for EVSE. RSAs provide training to their service agents.

5. How many hours, and what is the hourly rate or cost, for sealing/resealing chargers in the field? For type certifying equipment at the manufacturer?

   County Officials with an established device fee ordinance may collect a device registration fee that is intended to cover their costs for administering and enforcing weights and measures laws. The fee is based upon a uniform schedule of fees prescribed by the Secretary (BPC 12240) The frequency of county inspection for each device type is established in 4 CCR § 4070.
   RSAs are independent businesses that establish their own fee structure for services.
   Type approval is a fee-for-service program. Manufacturers pay for evaluator's time, equipment fees (if any), and travel and per diem when applicable. CTEP fees are set at $150/hr plus other costs per an established schedule. NTEP sets their own fee schedule for in-house evaluations or contracts with a recognized state laboratory which charges based on its established fee schedule.

6. How is the equipment purchased though 600-23-005 being utilized?

   To type evaluate devices, conduct testing and inspections in the field, to conduct hands-on training with county officials, and loaned to counties who have completed training for them to conduct device inspections.

RSA:

1. What is DMS doing to improve these numbers to ensure consumers have confidence in the deployment of EVSEs?

   CDFA-DMS and County W&M officials inspect devices to determine whether they comply.
   It is the responsibility of the manufacturer to ensure that the devices they manufacture are type evaluated and match the type evaluation.
   It is the responsibility of the RSA to ensure that the devices are installed in a manner which meets all applicable requirements and matches the type evaluation.
   It is the responsibility of the device owner to ensure that they are investing in appropriate equipment and to maintain that equipment.
   For the compliance rates to improve, manufacturers, RSAs, and Device owners must adhere to the code requirements.

Submitter's Comment:

It's obvious manufacturers, EVSPs, and installers aren't complying with weights and measures laws and RSA statutory requirements. With all the tax dollars deployed to quickly put in an EVSE infrastructure that ultimately is funded by taxpayers to help the EVSE industry provide us an electric vehicle charging infrastructure. These expenditure reports provided by counties are alarming as taxpayers pay the EVSE manufacturers, EVSPs, and installers who sell and install these EVSE installations. But at the same time these expenditure reports show EVSEs are cheating consumers and not complying with weights and measures regulations whose existence is to primarily protect consumers. Taxpayers are the consumers paying the EVSE industry to install unreliable EVSEs that also ultimately hurt consumers. If the 24/25 Cal DMS expenditure report continues to show noncompliance by the EVSE industry.

2. What does the state of California or DMS plan on doing to protect consumers and taxpayers?

   CDFA-DMS and County officials have demonstrated through the compliance rates that violations have been documented, and enforcement actions have been taken. These enforcement actions are taken to protect consumers.

   Submitter's Comment:

   For decades weights and measures requirements have brought consumer confidence resulting in profitability to gas stations, grocery stores, agricultural operations, Recyclers, construction suppliers, etc as consumers have confidence in these markets. Unlike other industries such as the ones mentioned above who generally support marketplace competition and consumer confidence; the EVSE industry is opposite and in general in opposition to weights and measures regulations that for decades if not centuries has helped other industries succeed.

3. What is California doing to increase the confidence consumers have in EVSEs?

   There are many agencies and organizations involved in the EVSE infrastructure build-out to support wide-spread EV adoption. Consumer confidence is based on experience, familiarity, and consistency. W&M jurisdictions, with training and support from CDFA-DMS are ramping up their efforts of inspections and enforcement to support a transparent, accurate, and consistent EV fueling experience. Additional equipment is being acquired by the State to better support counties with resource constraints limiting their ability to conduct EVSE inspections.

Electrical Contractor:

1. Does relocation of an existing certified unit to another site on contiguous property require CTEP retesting if no internals are touched?

   To clarify, CTEP (the California Type Evaluation Program) evaluates prototype devices to determine whether the device will be capable of meeting requirements applicable to that device type.
   A device which passes this evaluation is issued a Certificate of Approval (if the device is evaluated by CTEP) or a Certificate of Conformance (CC) if the device is evaluated by NTEP (the National Type Evaluation Program)
   County Sealers inspect and test devices to determine whether the devices, as installed: 1. Are type evaluated and match the type evaluation certificate, and 2. Meet applicable code requirements.
   Registered Service Agencies (RSAs) repair and install devices intended to be used for commercial purposes; these agencies have special authorities and responsibilities.
   To answer the question about CTEP – no, so long as the device matches the applicable type evaluation, the device does not need to go through type evaluation again.
   To elaborate – the device WILL need to be placed into service by an RSA with a placed in service report for the new location submitted to the local county W&M official within 24 hrs or placed in service by a sealer.
   Relocation of a device installed prior to the effective date of the regulation that was exempt for the established period is a new installation and will result in that device needing to meet all the current requirements prior to being placed in service.

2. Will DMS or NIST publish a protocol for testing higher output DCFCs where we must use the man-in-the-middle cable?

   It is up to an RSA to be familiar with the limitations of their own equipment, the requirements of code, and to determine whether the equipment they have is suitable for testing a given device. The CDFA-DMS EVFS EPO No. 52 is available and provides some guidance on this subject.
   NIST is conducting a workshop next week on DC energy measurement and legal metrology for DC energy. Information is available on the NIST website.

3. Are there any OEMs currently performing CTEP/NTEP testing at the factory prior to shipping?

   There are OEMs (Original Equipment Manufacturers) who have reached out with the intention of performing testing prior to shipping and a procedure has been established on how to do so, however, we are not aware of any who have actively implemented this procedure. Even with in-factory testing and sealing of the metrological components of an EVSE, an RSA is still required to install and place the device in service as user requirements are verified upon installation and cannot be tested in the factory.

EVSE Manufacturer:

1. DMS has not issued guidance to counties or industry to guide interpretation of AB2453. Is there guidance in progress? How should manufacturers interpret the exception in AB2453 when determining whether to submit a new placed in service report?

   Business and Professions Code Section 12509.5 speaks to a device which had previously been placed in service by an RSA or a sealer which is receiving repairs which do not affect the device being correct [as defined by BPC 12500(c)].

   Correct means that the device conforms to all the commercial device requirements including adopted specifications, tolerances, and user requirements. If the repair includes any changes that impact the device conforming to its type evaluation certificate or modifies any component that may affect metrology (including changing cable length), then testing by an RSA or Sealer is needed and new placed is service report is required of the RSA.

EVSE Company:

1. How will California ensure harmonization between its EVSE accuracy classes and the international standards outlined in OIML Guide 22, particularly regarding DC charging tolerances and verification procedures?

   CDFA-DMS does not ensure harmonization with OIML standards. CDFA-DMS strives to ensure conformance to the national model laws and consensus standards adopted by NCWM and published in NIST HB 44. NIST, as part of the U.S. Department of Commerce, consults with OIML, NCWM, and other standards setting bodies on global harmonization efforts, but this is not a state function.

2. What mechanisms are in place to ensure the integrity and accessibility of transaction data from EVSEs, especially in cases of power loss or system failure, in compliance with both California regulations and OIML Guide 22?

   This functionality is tested during type evaluation and must be recallable for three years. Devices not capable of meeting the requirement are not approved.

EVSE Aggregator/operator:

1. After a device has been certified, if CDFA later introduces new requirements, will the existing certification remain valid, or does it need to be maintained and updated? How should such updates be done, and what are the consequences if they are not done?

   An existing type evaluation certificate (whether CTEP or NTEP) would still be valid for devices manufactured before the effective date of the update. Upon adoption of a new requirement, the manufacturer of the device(s) identified on the evaluation is responsible for producing equipment which meets the latest version of requirements.

   Example: A device has an evaluation XX-XXX which was issued in 2023, a new non-retroactive requirement is adopted and then published into NIST HB 44 in 2025, the manufacturer must ensure that all devices manufactured in 2025 and after meet the latest version of requirements.

   When a new requirement is introduced into NIST HB 44 it is assessed and debated to determine whether or not this requirement would become retroactive or non-retroactive (i.e. will all devices previously manufactured need to meet this requirement, or only newly manufactured devices), there are also instance where a change may become effective with a non-retroactive status for a period of time to allow industry to make necessary updates to existing equipment (in this application this information is included as part of the language for the requirement – i.e. Non-retroactive XX/XX/XXXX, to become retroactive on XX/XX/XXXX).The requirement(s) published in NIST HB 44 as adopted in CA establish the requirements for devices installed for commercial purposes in the state.

2. Since CDFA has recognized the importance of software, the best approach might be for CDFA to define their requirements in a standardized way—such as integrating them into OCPP message definitions—and require both hardware and platform vendors to use the same standard.(This already exists to some extent, it would be better if it could be further refined down to the level of specific message definitions)

This should include not only the data in OCPP messages but also how inspectors can view the required information on the hardware and platform. A unified standard would avoid frequent updates and compatibility issues in the future.

The Open Charge Alliance (OCA) is a global non-profit organization, and the Open Charge Point Protocol (OCPP) is utilized by a larger group than just commercial device owners in California. The CDFA-DMS CTEP program has reached out to OCA to collect information regarding parameters which can be modified through OCPP but has not yet received a response. It should be noted that OCA has developed a white paper regarding compliance with "DMS California Pricing Requirements" however, CDFA-DMS was not consulted in the development of this document.

EVSE Technology Developer:

1. Do you have any regulations about using mobile robotics for EV charging?

   My company is a startup looking at building small robots for the job, video here. Another company is here.

   Two small robots in rotation (bucket brigade) replace a cable; I'm interested in making that the official stance of CA government for future grant/contract applications. How would I go about making that happen?

   We plan to charge EVs wherever we can during the day on solar PV, which will be workplaces and public areas.

   All devices installed for commercial purposes must be type approved. The device/system indicated would need to be approved prior to being sold, installed, and used for commercial purposes. NIST HB 44 Section 3.40 specifications, tolerances, and user requirements would apply.