



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
February 12, 2025 Business Meeting
Backup Materials for The Regents of the University of California, on behalf of the
Los Angeles Campus**

The following backup materials for the above-referenced agenda item are available in this PDF packet as listed below:

1. Proposed Resolution
2. Contract Request Form
3. Scope of Work

[PROPOSED]

RESOLUTION NO: 25-212-03e

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION: The Regents of the University of California, on behalf of the Los Angeles Campus

RESOLVED, that the State Energy Resources Conservation and Development Commission (CEC) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the CEC approves agreement 600-24-003 with the Regents of the University of California, on behalf of the Los Angeles Campus for a \$200,000 contract. This agreement will conduct a workforce assessment of the zero-emission vehicle charging infrastructure labor market focusing on EV supply equipment installation and maintenance occupations; and

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the CEC held on February 12, 2025.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

Kristine Banaag
Secretariat



CONTRACT REQUEST FORM (CRF)

A. New Agreement Number

New Agreement Number: 600-24-003

B. Division Information

1. Division Name: Fuels and Transportation Division
2. Agreement Manager: Jana McKinny
3. MS- Not applicable
4. Phone Number: 279-226-1132

C. Contractor's Information

1. Contractor's Legal Name: The Regents of the University of California, Los Angeles
2. Federal ID Number: 95-6006143

D. Title of Project

Title of project: Electric Vehicle Supply Equipment Workforce Assessment

E. Term and Amount

1. Start Date: 2/12/2025
2. End Date: 8/28/2026
3. Amount: \$200,000

F. Business Meeting Information

1. Operational agreement to be approved by Executive Director? No
2. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
3. The Proposed Business Meeting Date: 2/12/2025
4. Consent or Discussion? Consent
5. Business Meeting Presenter Name: Jana McKinny
6. Time Needed for Business Meeting: N/A
7. The email subscription topic is: Clean Transportation Program

Agenda Item Subject and Description:

The Regents of the University of California, Los Angeles.

Proposed resolution approving agreement 600-24-003 with the Regents of the University of California, Los Angeles for a \$200,000 contract, and adopting staff's recommendation that this action is exempt from CEQA. This agreement will conduct a workforce assessment of the zero-emission vehicle charging infrastructure labor market focusing on electric vehicle supply equipment installation and maintenance occupations. (Clean Transportation Program Funding)
Contact: Jana McKinny

G. California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?

Yes

If yes, skip to question 2.

If no, complete the following (PRC 21065 and 14 CCR 15378) and explain why Agreement is not considered a "Project":

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because: N/A



2. If Agreement is considered a “Project” under CEQA answer the following questions.

a) Agreement IS exempt?

Yes

Statutory Exemption?

No

If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

PRC section number: None

CCR section number: None

Categorical Exemption?

Yes

If yes, list CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

CCR section number: 14 CCR Section 15306

Cal. Code Regs, tit. 14, §15306, Information Collection, provides that projects which consist of basic data collection, research, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are categorically exempt from the provisions of CEQA. This project will solely consist of basic data collection, research, and resource evaluation activities related to the workforce for zero-emission vehicle charging infrastructure.

Common Sense Exemption? 14 CCR 15061 (b) (3)

Yes

If yes, explain reason why Agreement is exempt under the above section. If no, enter “Not applicable” and go to the next section.

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect change in the environment because it is for a paper study and computational analyses, encompassing basic data collection, research, experimental management, and resource evaluation activities that do not result in major disturbances to an environmental resource. Specifically, work under this project consists of collecting information about workforce supply and demand; and subsequently projecting industry job growth and identifying regional workforce supply or training gaps.

The project will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.

b) Agreement IS NOT exempt.



IMPORTANT: consult with the legal office to determine next steps.

No

If yes, answer yes or no to all that applies. If no, list all as “no” and “None” as “yes”.

Additional Documents	Applies
Initial Study	No
Negative Declaration	No
Mitigated Negative Declaration	No
Environmental Impact Report	No
Statement of Overriding Considerations	No
None	Yes

H. Is this project considered “Infrastructure”?

No

I. Subcontractors

List all Subcontractors listed in the Budget (s). Insert additional rows if needed. If no subcontractors to report, enter “No subcontractors to report” and “0” to funds. **Delete** any unused rows from the table.

Subcontractor Legal Company Name	Budget
No subcontractors to report.	0

J. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter “No key partners to report.” **Delete** any unused rows from the table.

Key Partner Legal Company Name
No key partners to report.

K. Budget Information

Include all budget information. Insert additional rows if needed. If no budget information to report, enter “N/A” for “Not Applicable” and “0” to Amount. **Delete** any unused rows from the table.

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
ARFVTF	21/22	601.118N	\$200,000

TOTAL Amount: \$200,000

R&D Program Area: N/A

Explanation for “Other” selection N/A

Reimbursement Contract #: N/A



Federal Agreement #: N/A

L. Contractor's Contact Information

1. Contractor's Administrator/Officer

Name: Paula Noble

Address: 10889 Wilshire Blvd. Suite 700

City, State, Zip: Los Angeles, CA, 90095-1406

Phone: 310-794-0216

E-Mail: paula.noble@research.ucla.edu

2. Contractor's Project Manager

Name: Andrea Slater

Address: 675 S Park View Street

City, State, Zip: Los Angeles, CA, 90055

Phone: (310) 567-7780

E-Mail: slateram@ucla.edu

M. Selection Process Used

There are three types of selection process. List the one used for this CRF.

Selection Process	Additional Information
Exempt	SCM 3.06(A)(1)

N. Contractor Entity Type

Contractor Entity Type	Yes or No?
Private Company (<i>including non-profits</i>)	No
CA State Agency (<i>including UC and CSU</i>)	Yes
Government Entity (<i>i.e. city, county, federal government, air/water/school district, joint power authorities, university from another state</i>)	No

O. Is Contractor a certified Small Business (SB), Micro Business (MB) or Disabled Veterans Business Enterprise (DVBE)?

The contractor is a certified: N/A

P. Civil Service Considerations

- Not Applicable (Agreement is with a CA State Entity or a membership/co-sponsorship)? Yes
- Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER) No
- The Services Contracted: No.



If no, go to the next question. If yes, which of the following applies to the contract? More than one can apply, list each answer choice, and separate them with a comma:

- are not available within civil service
- cannot be performed satisfactorily by civil service employee
- are of such a highly specialized or technical nature that the expert knowledge, expertise, and ability are not available through the civil service system

The following applies to the contract: N/A.

- d. The Services are of such an urgent, temporary, or occasional nature that the delay to implement under civil service would frustrate their very purpose?

N/A.

Justification:

N/A

Q. Payment Method

1. Is the payment method Reimbursement, Advanced Payment, or Other?

Reimbursement.

If Other, explain: N/A.

2. If Reimbursement, is it in arrears based on Itemized Monthly, Itemized Quarterly, Flat Rate, or One-time?

Itemized Quarterly.

R. Retention

Is Agreement subject to retention? No.

If Yes, Will retention be released prior to Agreement termination? N/A.

S. Justification of Rates

Fringe Benefits have been calculated for each personnel title code in accordance with the University's current federally negotiated rate agreement, available online at <https://www.finance.ucla.edu/composite-benefit-rate-assessment>. Approved composite benefit rate by employee group: Other Academics (45.6%), Employees and Students with limited Benefits (3.8%).

T. Disabled Veteran Business Enterprise Program (DVBE)

Provide requested additional information.

1. Exempt (Interagency/Other Government Entity) Yes.
2. Meets DVBE Requirements DVBE No.
Amount: \$ 0 DVBE %:
3. Is the Contractor Certified DVBE or Subcontracting with a DVBE? If subcontracting with a DVBE, provide the name of the DVBE company. If none applies, enter "Not Applicable". Not Applicable
4. Contractor selected through CMAS or MSA with no DVBE participation No.
5. Requesting DVBE Exemption (attach CEC 95) No.



U. Miscellaneous Agreement Information

1. Will there be Work Authorizations? No.
2. Is the contractor providing confidential information? No.
3. Is the contractor going to purchase equipment? No.
4. What is the check frequency of the progress reports? Monthly, Quarterly, or Other? If Other, please provide explanation.

Quarterly

5. Will a final report be required? Yes.
6. Is the Agreement, with amendments, longer than three years? If yes, why?

No

V. The following items should be attached to this CRF (as applicable)

List all items that should be attached to this CRF by entering "Yes" or "No".

Item Number	Item Name	Attached
1	Exhibit A, Scope of Work/Schedule	Yes
2	Exhibit B, Budget Detail	Yes
3	DGS-GSPD-09-007, NCB Request	N/A
4	CEC 95, DVBE Exemption Request	N/A
5	Awardee CEQA Documentation	N/A
6	Resumes	Attached
7	CEC 105, Questionnaire for Identifying Conflicts	Attached

Approved By

Individuals who approve this form must enter their full name and approval date in the MS Word version.

Agreement Manager:

Approval Date:

Office Manager:

Approval Date:

Deputy Director:

Approval Date:

Exhibit A – Scope of Work

PROJECT SUMMARY & SCOPE OF WORK

☒ Contract

☐ Grant

Does this project include Research (as defined in the UTC)?

☒ Yes

☐ No

PI Name: Andrea Slater

Project Title: Electric Vehicle Supply Equipment Workforce Assessment

Project Summary/Abstract

Few resources are available for evaluating the labor market and associated workforce development needed to support California's rapidly developing electric vehicle (EV) infrastructure. This labor market includes a diverse set of occupations across many industries, with varying levels of education, training, and experience. Accurate, objective, relevant, timely, and accessible labor market data is imperative to ensure that an equitable and robust workforce is available to install and maintain electric vehicle supply equipment (EVSE), a critical component in reaching California's zero-emission vehicle (ZEV) goals. Research will be used to identify transferable skills, guide skill development, and strengthen career pathways that result in quality jobs. The California Energy Commission (CEC) has a broad understanding of the labor market for EV infrastructure, but additional information is needed to effectively target workforce training and development funds and ensure economic opportunities from the ZEV transition are available to priority populations.

The University of California, Los Angeles Labor Center (Contractor) will conduct a workforce assessment of the EV infrastructure labor market focusing on EVSE installation and maintenance occupations. The workforce assessment will include information about workforce supply and demand, project job growth, and identify any regional workforce supply or training gaps. To gain a better understanding of the skills, training and workforce needed to support EVSE, UCLA will:

- Collect information and data on the legislation, stakeholders, workforce, and training programs related to the EV charging infrastructure labor market.
- Identify the skills, occupations, and training needed to support EVSE installation and maintenance.
- Model the labor market supply and demand for EVSE installation and maintenance occupations needed to support California's EVSE deployment and reliability goals.
- Analyze the regional workforce currently available to support EVSE installation and maintenance and identify any workforce gaps, including but not limited to the following occupations: general electricians, Electric Vehicle Infrastructure Training Program (EVITP) certified electricians, electrical technicians, and registered service agents.

Information gained from this study will be published in a final report summarizing key findings and recommendations.

If Third-Party Confidential Information is to be provided by the State:

- ☐ Performance of the Scope of Work is anticipated to involve use of third-party Confidential Information and is subject to the terms of this Agreement; **OR**
- ☐ A separate CNDA between the University and third-party is required by the third-party and is incorporated in this Agreement as Exhibit A7, Third Party Confidential Information.

Scope of Work

TASK 1- AGREEMENT MANAGEMENT

Task 1.1 Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement.

The Contractor shall:

- Attend a “kick-off” meeting that includes the Commission Agreement Manager (CAM) and may include the Commission Agreement Officer (CAO) and a representative of the CEC Accounting Office. The meeting will be held remotely. The Contractor shall include their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the CAM in this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting.
- If necessary, prepare an updated *Schedule of Deliverables* based on the decisions made in the kick-off meeting.

The CAM shall:

- Arrange the meeting including scheduling the date and time.
- Provide an agenda to all potential meeting participants prior to the kick-off meeting.

Deliverables:

- An Updated Schedule of Deliverables (if applicable)

Task 1.2 Invoices

The Contractor shall:

- Prepare *invoices* for all reimbursable expenses incurred performing work under this Agreement in compliance with Exhibit B – Budget, Exhibit B3 – Invoice Elements and Exhibit G – Negotiated Alternative Language to UTC of the Agreement. Invoices shall be submitted with the same frequency as progress reports (Task 1.4). Invoices must be submitted to the CEC’s Accounting Office.

Deliverables:

- Invoices

Task 1.3 Manage Subcontractors

The goal of this task is to ensure quality products, to enforce subcontractor Agreement provisions, and in the event of failure of the subcontractor to satisfactorily perform services, recommend a solution to resolve the problem.

The Contractor shall:

- Manage and coordinate subcontractor activities. The Contractor is responsible for the quality of all subcontractor work and the CEC will assign all work to the Contractor. If the Contractor decides to add new subcontractors, they shall 1) comply with the Terms and Conditions of the Agreement, and 2) notify the CAM who will follow the CEC's process for adding or replacing subcontractors.

Task 1.4 Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement.

The Contractor shall:

- Prepare *quarterly progress reports* which summarize all Agreement activities conducted by the Contractor for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Each progress report is due within 15 calendar days after the end of the reporting period. The CAM will provide the format for the progress reports.

Deliverables:

- Quarterly Progress Reports

Task 1.5 Final Meeting

The goal of this task is to discuss closeout of this Agreement and review the project.

The Contractor shall:

- Meet with CEC staff prior to the term end date of this Agreement. The meeting will be held remotely. This meeting will be attended by the Contractor Project Manager and the CAM. The CAM will determine any additional appropriate meeting participants. The administrative and technical aspects of Agreement closeout will be discussed at the meeting.
- Present findings, conclusions, and recommended next steps (if any) for the Agreement, based on the information included in the Final Workforce Report.
- Prepare a *written document of meeting agreements* and unresolved activities.
- Prepare a *schedule for completing the closeout activities* for this Agreement, based on determinations made within the meeting.

Deliverables:

- Written documentation of meeting agreements
- Schedule for completing closeout activities

TECHNICAL TASKS

TASK 2 LANDSCAPE ANALYSIS

The goal of this task is to gather background information and identify existing resources related to workforce for the lifecycle of EVSE: innovation (research and development), manufacturing, installation, maintenance (or repair) and end-of-life (recycling).

The Contractor shall:

- Review existing state and federal legislation related to EVSE, including but not limited to installation, reliability, and repair.
- Conduct a literature review of existing industry reports on labor market demand related to EVSE.

- Review existing methodologies for modeling the workforce impact of EV infrastructure, including but not limited to: Argonne National Laboratories JOBS EVSE 2.0 and 2022 Evergreen Assessment.
- Research career pathways for occupations related to EVSE repair and maintenance, including early career development, apprenticeship programs, and transferable skills for existing workers.
- Draft a *summary of findings from the legislation, literature, modeling, and career pathway reviews* and provide to the CAM.
- Identify key EVSE industry stakeholders including but not limited to EVSE manufacturers and education, installation, network, and service providers.
- Identify and review available EVSE training programs in California and outside of California related to charger installation and maintenance.
- Compile and categorize a *List of EVSE Industry Stakeholders and Training Programs*, including contact information and provide to the CAM.

Deliverables:

- Summary of findings from EVSE workforce legislation, literature, modeling, and career pathway reviews
- List of EVSE Industry Stakeholders and Training Programs

TASK 3 DATA COLLECTION

The goal of this task is to collect data to inform the workforce assessment by conducting an industry survey of EVSE stakeholders.

The Contractor shall:

- Develop industry *Survey Questions* focusing on the workforce needed to install and maintain EVSE. CAM approval of draft survey questions is required prior to proceeding.
- Develop a *Survey Distribution List* targeting EVSE industry stakeholders identified in Task 2. CAM approval of draft survey distribution list is required prior to proceeding.
- Conduct employer interviews to clarify skills needed versus posted desired qualifications. Compare job descriptions of similar titles in the same EVSE-related occupations.
- Draft a *summary of the industry survey results and findings from the employer interviews* and provide to the CAM.
- Identify and collect statistical data resources including but not limited to California's labor market, industries, workforce training and development, occupations, employment projections, wages, and related economic data.
- Prepare a *Data Collection Outline* to map what data sources will inform project tasks and chapters of the Final Workforce Report.

The CAM shall:

- Provide the 2030 and 2035 charger installation forecast data from the AB 2127 - Third Charging Infrastructure Assessment (if available) to estimate the workforce needed to install EVSE.
- Provide data from the Biannual Charger Uptime Assessment (if available), to estimate the workforce needed to maintain EVSE.

Deliverables:

- Draft Survey Questions and Survey Distribution List, to be reviewed and approved by the CAM
- Final Survey Questions and Survey Distribution List
- Summary of EVSE industry surveys and employer interviews
- Data Collection Outline

TASK 4 SKILLS MAPPING

The goal of this task is to determine skills necessary to install and maintain EVSE and map those skills to federal worker occupation and business industry codes.

The Contractor shall:

- Using data collected through the industry survey, map skills needed to install and maintain EVSE to existing Standard Occupation Classification (SOC) codes for workers.
- Review the process, and analyze the potential benefits or drawbacks, for updating or adding SOC codes specific to EVSE installation and maintenance.
- Determine which industry sectors contain EVSE installation and maintenance jobs by North American Industry Classification System (NAICS) code.
- Prepare a *summary of EVSE skills mapping findings* and provide to the CAM. If applicable, recommend updates to SOC codes to include EVSE installation and maintenance occupations.

Deliverables:

- Summary of EVSE skills mapping findings and recommendations

TASK 5 WORKFORCE SUPPLY AND DEMAND MODEL

The goal of this task is to analyze the currently available workforce and estimate the projected workforce needed to meet California's 2030 and 2035 charger installation forecast and reliability goals.

The Contractor shall:

- Develop a *Workforce Supply and Demand Model* for the workforce occupations related to EVSE installation and maintenance and provide to the CAM.

The model should at minimum be able to report on the specific workforce supply and demand and estimate the projected workforce needed to meet California's 2030 and 2035 charger installation forecast and reliability goals by:

- Application (light-duty, medium/heavy-duty).
 - Charger type (Level 2, DC fast charger).
 - Site type (public, workplace, multi-family homes and single-family homes).
 - Geographic location.
 - Delineate between installation and maintenance workforce.
 - Within the electrician occupation category, delineate between licensed general electricians needed to install EVSE and EVITP-certified electricians needed to install EVSE funded or authorized by state/federal agencies and programs such as the CEC, California Air Resources Board or the National Electric Vehicle Infrastructure program.
 - Include registered service agents.
 - Include priority populations including but not limited to disadvantaged communities, low-income communities, rural, and tribal populations.
- Document the model methodology with at minimum: data sources, assumptions, and calculations.

- Compare results to results from other industry models reports.
- Prepare a *summary of the workforce supply and demand model methodology and results* and provide to the CAM.

Deliverables:

- Workforce Supply and Demand Model
- Summary of workforce supply and demand model methodology and results

TASK 6 GEOGRAPHICAL GAP ANALYSIS

The goal of this task is to analyze any occupation or skills gaps between the workforce supply and demand for occupations related to EVSE installation and maintenance.

The Contractor shall:

- Identify and document the criteria for analyzing occupation or skill gaps.
- Compare the workforce supply and demand modeled in Task 5 and identify any regional occupational or skill gaps.
- Compare any identified occupational or skill gaps with the capacity of available training programs to identify any gaps in workforce development needs.
- Prepare a *summary of criteria and findings from the geographical workforce gap analysis* and provide to the CAM. If applicable, provide recommendations to address regional workforce or training gaps.

Deliverables:

- Summary of criteria and findings from the geographical workforce gap analysis

TASK 7 TRAINING PROGRAMS

The goal of this task is to compile an index of available training programs related to EVSE installation and maintenance.

The Contractor shall:

- Identify what features constitute quality workforce development programs and training programs. Criteria may include, but is not limited to, program oversight, data transparency, accreditation, supportive services, and job placement assistance.
- Prepare a *Training Program Index* of applicable charger installation and maintenance and training programs including those available outside of California, but accessible by residents.
 - Include, at minimum, program cost, curriculum topics/modules, training hours, and delivery method.
 - Categorize by program type, such as early career pathway development, apprenticeship, technical training for upskilling, etc.

Deliverables:

- Training Program Index (to be included final workforce report described in Task 8)

TASK 8 FINAL WORKFORCE REPORT

The goal of this task is to draft and submit a report of the workforce needed to support California's electric vehicle supply equipment summarizing project findings from Tasks 2-7.

The objective of this task is to present a public workforce assessment of the supply and demand for EVSE installation and maintenance occupations; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations to bridge skill and training program gaps.

In addition to any other applicable requirements, the Final Workforce Report must comply with the Americans

with Disabilities Act (ADA) of 1990 (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability; all applicable regulations and guidelines issued pursuant to the ADA; Cal. Gov. Code sects. 7405 and 11135; and Web Content Accessibility Guidelines 2.0, or a subsequent version, as published by the Web Accessibility Initiative of the World Wide Web Consortium at a minimum Level AA success criteria.

The Contractor shall:

- Prepare a *report outline*, to be reviewed and approved by the CAM.
- Prepare a *draft report* on the workforce needed to support California's electric vehicle supply equipment complying with ADA requirements and following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt.
- Submit *final report* on the workforce needed to support California's electric vehicle supply equipment in Microsoft Word format or similar electronic format as approved by the CAM.

Deliverables:

- Workforce Report Outline, to be reviewed and approved by the CAM
- Draft Workforce Report, to be reviewed and approved by the CAM
- Final Workforce Report