



Pre-Application Workshop

GFO-16-303

Advanced Vehicle-Grid Integration Research and Demonstration

Energy Research and Development Division
California Energy Commission

August 2, 2016



Agenda

Time	Topic
2:00 pm	Welcome and introductions
2:15 pm	Slide deck presentation
3:00 pm	Solicitation manual presentation
4:00 pm	Questions and answers (Verbal; a Q&A document will also be posted after this workshop)
5:00 pm	Networking and adjourn



Housekeeping

- In case of emergency
- Facilities
- Sign-in sheet
- Diversity Survey

WebEx Participant Link: <https://www.surveymonkey.com/r/CEC-08-02-2016>

- Updates on solicitation documents and today's presentation will be posted here:

Grant Funding Opportunity Website:

<http://www.energy.ca.gov/contracts/epic.html#GFO-16-303>



Commitment to Diversity

The Energy Commission adopted a resolution strengthening its commitment to diversity in our funding programs.

We continue to encourage disadvantaged and underrepresented businesses and communities to engage in and benefit from our many programs.

To meet this commitment, Energy Commission staff conducts outreach efforts and activities to:

- Engage with disadvantaged and underrepresented groups throughout the state.
- Notify potential new applicants about the Energy Commission's funding opportunities.
- Assist applicants in understanding how to apply for funding from the Energy Commission's programs.
- Survey participants to measure progress in diversity outreach efforts.



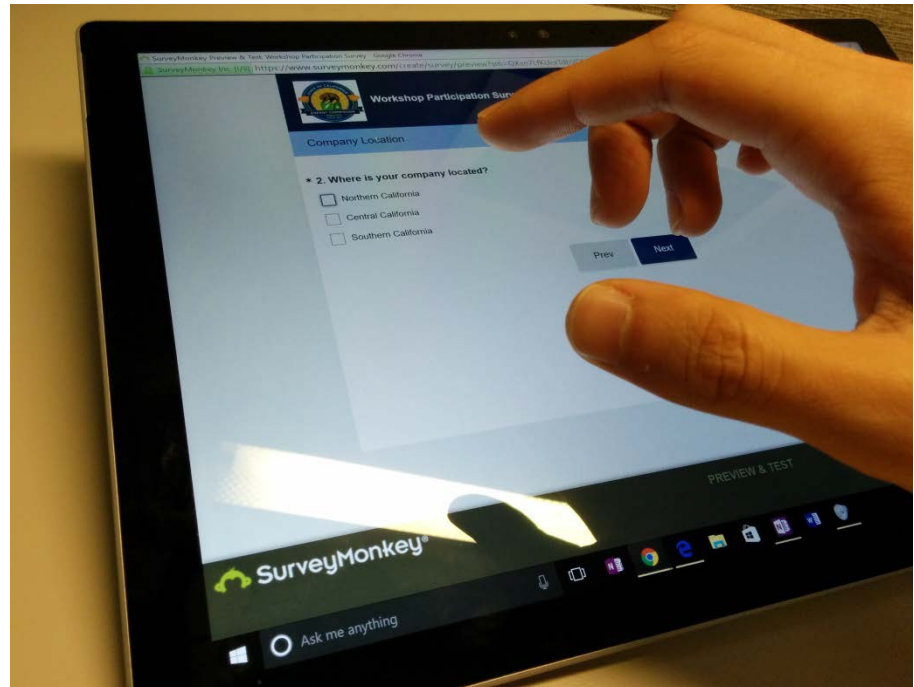
We Want to Hear From You!

1-Minute Survey

- The information supplied will be used for public reporting purposes to display anonymous overall attendance of diverse groups.

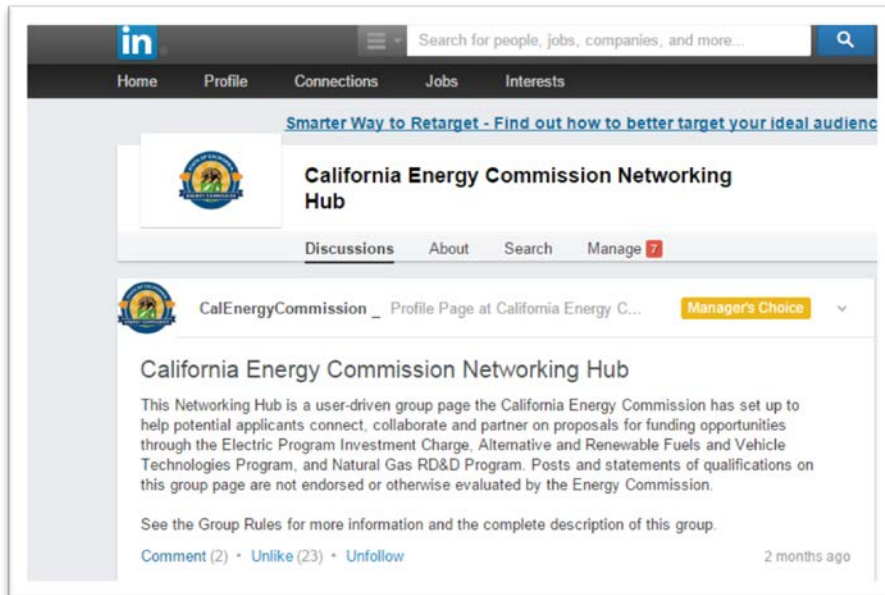
- iPads are being passed around the room
- Online SurveyMonkey for WebEx Participants:
<https://www.surveymonkey.com/r/CEC-08-02-2016>

Thank you for your time!





Connect With Us



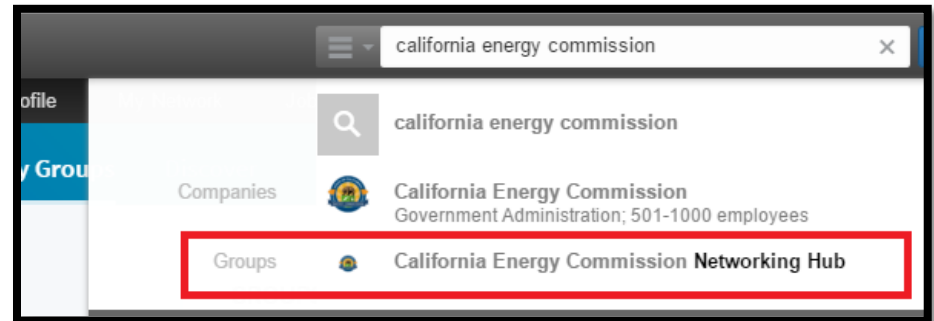


Find Partners via LinkedIn

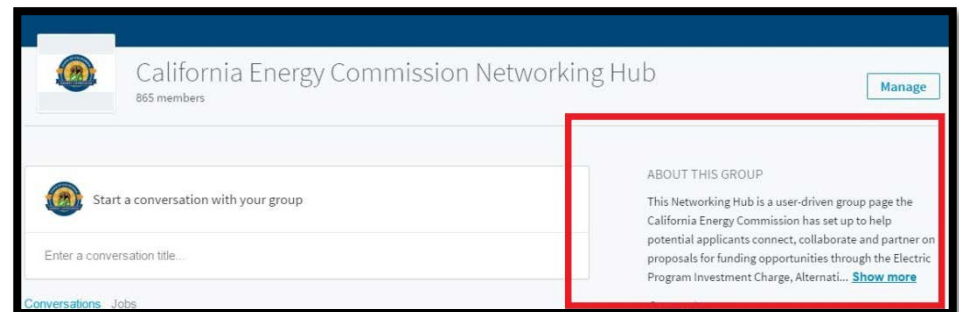
The Energy Commission created a user-driven LinkedIn group page to help potential applicants **connect, collaborate** and **partner** on proposals for funding opportunities.

Join the “California Energy Commission Networking Hub” using:

- The LinkedIn Search Box
- URL: bit.ly/CalEnergyNetwork



Then, use the ‘About this Group’ section on the LinkedIn group page to find **Funding Opportunity-specific subgroups**.





Background

- The Electric Program Investment Charge (EPIC) is funded by an electricity ratepayer surcharge established by the California Public Utilities Commission (CPUC) in 2011.
 - Annual program funds total \$162 million per year, with 80 percent administered by the California Energy Commission.
- The purpose of EPIC is to:
 - Benefit the ratepayers of the three largest electric investor-owned utilities: Pacific Gas and Electric Company, San Diego Gas and Electric Company, and Southern California Edison
 - Fund clean energy technology projects that promote greater electricity reliability, lower costs, and increased safety.
 - Encourage technological advancement and breakthroughs to achieve state's statutory energy goals.



Overview of Solicitation

The purpose of this solicitation is to fund **Applied Research and Development (AR&D)** and **Technology Demonstration and Deployment (TD&D)** projects.

The projects from this solicitation will advance technologies for plug-in electric vehicles (PEVs), including

- charging systems
- communications for bi-directional power flow
- recycling of PEV batteries
- integration of PEV fleets with the electric grid.

These focus areas will help California achieve the Governor's Executive Order B-16-2012 goal of reaching 1.5 million zero emission vehicles (ZEVs) on California's roadways by 2025.



Overview of Solicitation

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Overview of Solicitation

Projects must fall within the following four project groups and meet the objectives specified for each group:

AR&D:

- Group 1: **Smart and Efficient Charging of PEVs**
- Group 2: **Advanced Vehicle-Grid Integration (VGI)
Technologies and Methods**
- Group 3: **Advanced Technologies for PEV Batteries**

TD&D:

- Group 4: **Advanced VGI for Fleets**



Overview of Solicitation

The intent of the **first three project groups** is to fund AR&D projects that effectively integrate PEVs into the electricity grid by enabling a higher mix of renewable resources, advancing the capabilities of PEVs, and improving the commercial viability of PEVs. Projects within these groups will research, develop, and advance technologies that optimize the benefits of PEVs to the electricity system by:

- Developing advanced tools and methods for smart and efficient charging with a focus on addressing intermittency and over-generation issues associated with renewable generation, allowing for a higher mix of renewable resources;
- Developing communication and protocols to enable bi-directional power flow to perform vehicle-to-grid (V2G) and vehicle-to-building (V2B) strategies expanding into home and private/public fleet applications; and
- Further developing and evaluating advanced technologies and methods for safe and efficient recycling of PEV batteries.



Overview of Solicitation

The intent of the **fourth project group** is to fund TD&D projects that yield and quantify multiple real-world benefits of advanced vehicle-grid integration (VGI) applications for electric vehicle fleets.

Projects within this group will be full-scale demonstrations of the integration of PEV fleet(s) with the electric grid and customer sites, with the aim of accelerating commercialization.

Projects must validate the economics and operating characteristics of any one or combination of the following technologies: actively-managed "smart" one-way charging (SC); V2B; and V2G, which are all elements of VGI.



Available Funding

There is **up to \$16,000,000** available for grants awarded under this solicitation. The total, minimum, and maximum funding amounts for each project group are listed below.

Project Group	Available funding	Minimum award amount	Maximum award amount	Minimum match funding amount
Group 1: Smart and Efficient Charging of PEVs	\$4,000,000 total for the first 3 project groups	\$500,000	\$1,500,000	Not required, but applications pledging match funding may receive additional points during the scoring phase.
Group 2: Advanced VGI Technologies and Methods			\$1,500,000	
Group 3: Advanced Technologies for PEV Batteries			\$1,000,000	
Group 4: Advanced VGI for Fleets	\$12,000,000	\$1,500,000	\$5,000,000	Match funding equal to at least 25% of the requested amount is required. Applications pledging match funding in excess of the 25% may receive additional points during the scoring phase.



Eligible Bidders

- This is an open solicitation for public and private entities, except for publicly owned utilities.
- Applicants must accept the EPIC terms and conditions.
 - Standard T&Cs:
<http://www.energy.ca.gov/research/contractors.html>
- Applicants are required to register with the California Secretary of State and be in good standing to enter into an agreement with the Energy Commission.
<http://www.sos.ca.gov>
- Applicants must propose a team with proven ability to successfully complete similar projects.



Key Dates

Activity	Action Date
Solicitation Release	July 20, 2016
Pre-Application Workshop	August 2, 2016
<u>DEADLINE FOR WRITTEN QUESTIONS</u>	<u>5:00 pm on August 9, 2016</u>
Anticipated Distribution of Questions and Answers	Week of August 15, 2016
<u>DEADLINE TO SUBMIT APPLICATIONS</u>	<u>5:00 pm on October 21, 2016</u>
Anticipated Notice of Proposed Award (NOPA)	December 2, 2016
Anticipated Energy Commission Business Meeting(s)	March 2017
Anticipated Agreement Start	Spring 2017
Latest Allowable Agreement Term End Date	March 31, 2021



GFO Application Requirements *(for Electronic Submission)*

- **Preferred method of delivery** is the Energy Commission Grant Solicitation System, available at: <https://gss.energy.ca.gov/>.
 - Electronic files must be in Microsoft XP (.doc format) and Excel Office Suite formats, unless originally provided in solicitation in another format.
- Attachments requiring signatures may be scanned and submitted in PDF format.
- Completed Budget Forms (Attachment 7) must be in Excel format.
- First-time users must register as a new user to access system.
Please be sure to register well ahead of the submission deadline.



GFO Application Requirements

(for Hard Copy Submittal)

- Submit Applications with all attachments in the order specified by the due date and time listed in Section III of the manual.
- Application documents should meet formatting requirements, page limits, and number of copies specified on page 17.
 - **One** hard copy and
 - **One** electronic copy on CD-ROM or USB memory stick.



Application Requirements

Each application must complete and include the following:

1. Application Form	6a. Schedule (MS Excel)
2. Executive Summary	7. Budget (MS Excel)
3. Fact Sheet	8. CEQA Compliance Form
4. Project Narrative	9. References and Work Product
5. Project Team Form	10. Contact List
6. Scope of Work	11. Commitment and Support Letters



Special Requirements for this Solicitation

- Two special requirements are found in Section II.B.2 on Page 16:
- 1) Electric Vehicle Pilot Survey response if project is funded
 - Applicants who receive funding under this solicitation will be required to respond to the Electric Vehicle Pilot Survey related to CPUC Proceeding R.13-11-007, “Alternative Fueled Vehicles Rulemaking” (2013).
- 2) Standards Implementation
 - Completely follow all applicable VGI standards, unless seeking to correct specific perceived flaws in the standards, in which case the proposal must point out and justify wherever this is the case.



Other Notes

- The **EPIC Terms and Conditions** (Ts&Cs) are **non-negotiable** and must be accepted as is:
<http://www.energy.ca.gov/contracts/pier.html#epicterms>
- After the slide presentation during this workshop, we will open the solicitation manual and review all requirements and attachments.
- As an introduction, the following slides feature two of the twelve attachments :
 - Project Narrative
 - Commitment and Support Letter Form



Project Narrative (Attachment 4)

- This is your opportunity to tie everything together and explain the entirety of the project. The narrative should explain:
 - Why your project is important?
 - What you will be doing in your project?
 - How are you going to complete the project?
 - How will ratepayers benefit?
 - What it is going to cost ratepayers, and is it worth it?



Commitment and Support Letter Form (Attachment 11)

- This form provides guidelines for letters of support or commitment that are submitted with the application.
 - Commitment letter commits an entity or individual to providing the service or funding described.
 - Support letter details an entity's or individual's support for the project.
- All Applicants are required to submit **at least one** support letter from a project stakeholder.
- Any project partners that will make other contributions to the project must submit a commitment letter.
- Match funding for each Application must be supported by a match fund commitment letter.
- Limited to two pages per letter, excluding the cover page.



How will my Application be Evaluated?

Administrative Screening Phase

Application Administrative Screening Process

1. Energy Commission staff screens applications per criteria in the solicitation.
2. Criteria is evaluated on a pass/fail basis.
 - ✓ Applicants must pass all screening criteria or the application will be disqualified.

Some Reasons for Disqualification

- ✓ Application not submitted by the specified due date and time.
- ✓ Applicant did not address one of the eligible project groups.
- ✓ Requested funding is outside of the specified minimum/maximum range.
- ✓ Project completion date beyond the specified agreement end date.
- ✓ Application does not include one or more support letters.
- ✓ Application contains confidential material.



How will my Application be Evaluated? Quantitative Scoring Phase

- Each Applicant must review the Evaluation and Award Process section of the solicitation manual and ensure the application's project narrative gives a clear and complete response to each scoring criterion.
- Each Applicant must ensure that the other *Attachments* (e.g. Scope of Work, Budget Forms) are complete and correct.
- An Evaluation Committee will conduct scoring per the *Scoring Criteria*.
- For Criteria 1-4, applications must obtain a minimum passing score of 49.00 out of 70 points in order to continue in the process.
- Furthermore, for Criteria 1-7, applications must also obtain a minimum passing score of 70.00 out of 100 points to be considered for funding.
- Passing applications will be considered for additional points per Criteria 8-10.



What is the Scoring Scale?

% of Possible Points	Interpretation	Explanation for Percentage Points
0%	Not Responsive	Response does not include or fails to address the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable.
10-30%	Minimally Responsive	Response minimally addresses the requirements being scored. The omission(s), flaw(s), or defect(s) are significant and unacceptable.
40-60%	Inadequate	Response addresses the requirements being scored, but there are one or more omissions, flaws, or defects or the requirements are addressed in such a limited way that it results in a low degree of confidence in the proposed solution.
70%	Adequate	Response adequately addresses the requirements being scored. Any omission(s), flaw(s), or defect(s) are inconsequential and acceptable.
80%	Good	Response fully addresses the requirements being scored with a good degree of confidence in the Applicant's response or proposed solution. No identified omission(s), flaw(s), or defect(s). Any identified weaknesses are minimal, inconsequential, and acceptable.
90%	Excellent	Response fully addresses the requirements being scored with a high degree of confidence in the Applicant's response or proposed solution. Applicant offers one or more enhancing features, methods or approaches exceeding basic expectations.
100%	Exceptional	All requirements are addressed with the highest degree of confidence in the Applicant's response or proposed solution. The response exceeds the requirements in providing multiple enhancing features, a creative approach, or an exceptional solution.



Questions and Answers

Please send all questions related to GFO-16-303 to:

Phil Dyer, Commission Agreement Officer

1516 Ninth Street, MS-18

Sacramento, CA 95814

Telephone: (916) 654-1651

Fax: (916) 654-4423

Phil.Dyer@energy.ca.gov

Deadline to submit questions:

5:00 pm on August 9, 2016



Thank you!