Electric Vehicle Charging Station Financing Program

(EVCS Financing Program or Program)

Questions, Answers, and Clarifications

California Pollution Control Financing Authority
and California Energy Commission

April 2015

Question 1: Can you provide a list of Electric Vehicle Charging Station (EVCS) providers or vendors?

Information on EVCS providers and vendors can be found at the following:

- Electric Power Research Institute (EPRI) – http://www.epri.com/Our-Work/Pages/Electric-Transportation.aspx
- Plug In America – http://www.pluginamerica.org/accessories
- GoElectricDrive - http://www.goelectricdrive.org/charging/charging-equipment-manufacturers-and-or-service-providers

This list is not comprehensive, other vendors may exist. Providing these links by no means constitutes an endorsement by CPCFA or the Energy Commission.

Question #2: What is the estimate of the number of Direct Current Fast Charging (DCFC) stations that will be installed in the next 24 months?

It is difficult to estimate the number of DCFC stations that will be installed in California over the next two years. There are multiple public and private entities that are involved in the funding or installation of DCFC stations in the state such as NRG Energy Inc., the air quality management districts, metropolitan planning organizations, and others.

On July 3, 2014, the California Energy Commission issued a Notice of Proposed Awards for the EV Charging Infrastructure Program Opportunity Notice (PON-13-606). The links provided below identify 71 DCFC stations that will be funded by the Energy Commission and installed in the ensuing years. Other private and public stations may be established and not included on this list:

http://www.energy.ca.gov/2014publications/CEC-600-2014-002/CEC-600-2014-002.pdf

http://www.energy.ca.gov/2014publications/CEC-600-2014-002/CEC-600-2014-002-AD.pdf

http://www.energy.ca.gov/2014publications/CEC-600-2014-002/CEC-600-2014-002-AD2.pdf

http://www.energy.ca.gov/2014publications/CEC-600-2014-002/CEC-600-2014-002-AD3.pdf

Question #3: Are public entities eligible borrowers for the EVCS Financing Program?

Public entities are not currently eligible borrowers under the initial phase of the Program. Pursuant to the EVCS Financing Program's Regulations, a qualified small business is a corporation, partnership, cooperative, or other entity, whether that entity is a nonprofit entity or for profit entity that:

- Is authorized to conduct business in the state;
- Has its primary business location within the boundaries of the state;
- Is not dominant in its field of operation; and
- Together with its affiliates have 1,000 or fewer employees.

Question #4: If the vehicle charging system is part of a photovoltaic (PV) carport, is the cost of the PV carport eligible?

Yes, provided the PV system directly supports the charging station. The cost of the PV Carport must be a necessary and allocable expenditure for the installation and operation of one or more eligible electric vehicle charging stations.

Question #5: Will a non-grid tied EV charger or portable charger be eligible?

Yes, provided the EVCS meets the definition of Electric Vehicle Charging Station supply equipment as defined by the EVCS Financing Program's Regulations.

Pursuant to the EVCS Financing Program's Regulations EVCS supply equipment means equipment which meets the minimum technical requirements set by the Energy Commission as follows:

(1) Direct current fast chargers shall utilize:
   i. Either the CHAdeMO standard, or SAE combination standard, or a combination of both; and
   ii. An open standard protocol for purposes of network interoperability.

(2) Level 2 charging equipment shall utilize:
   i. The SAE J1772 standard; and
   ii. An open standard protocol for purposes of network interoperability.

(3) Open standard protocol is waived for medium-and heavy-duty EVCS supply equipment.

Question #6: UC Irvine is both a public entity (university) and a non-profit entity. Would we be eligible?

The University, as a public entity, is not an eligible borrower. Non-Profit entities are eligible for the EVCS Financing Program as long as the non-profit:

- Is authorized to conduct business in the state;
- Has its primary business location within the boundaries of the state;
- Is not dominant in its field of operation; and
- Together with its affiliates have 1,000 or fewer employees.

Question #7: Where can I find EVCS Financing Program details? Where can I find a list of eligible EVCS lenders/banks?

The EVCS Financing Program's website will be made active simultaneous to the launch of the Program. CPCFA will host the Program's website. The Program's website will provide information on the Program, including but not limited to, the Program Standards, list of participating lenders, access to all required forms, and training materials for participating lenders.

Please refer all inquiries to CalCAP@treasurer.ca.gov.

Question #8: I would note that Level 2 installation costs are greater than what was presented at the workshop especially for multi-unit dwellings (MUD).

The EVCS costs presented at the November 7, 2014 workshop held at the California Energy Commission were estimates of EVCS equipment and labor costs. The information presented was meant to provide an estimate of possible costs associated with the installation of EVCS and not a limitation or restriction on EVCS costs. Estimates of EVCS installation costs will vary given the site, location, electrical requirements, and other project issues.

If more current estimates of EVCS equipment and installation costs become available, the public is encouraged to send this information to CalCAP@treasurer.ca.gov.

Question #9: I am an existing California Capital Access Program (CalCAP) lender. Where can I find information on EVCS lender training and promoting the Program?

The EVCS Financing Program's website will be made active simultaneous to the launch of the Program. CPCFA will host the Program's website. The Program's website will provide information on the Program, including but not limited to, the Program Standards, list of participating lenders, access to all required forms, and training materials for participating lenders.

All current CalCAP lenders are encouraged to contact CPCFA at CalCAP@treasurer.ca.gov with inquiries or to enroll as a participating EVCS lender in the EVCS Financing Program.

Question #10: Are Tesla chargers eligible for financing?

Yes, provided the EVCS meets the definition of Electric Vehicle Charging Station supply equipment as defined by the EVCS Financing Program's Regulations.

Pursuant to the EVCS Financing Program's Regulations, EVCS supply equipment means equipment which meets the minimum technical requirements set by the Energy Commission as follows:

(1) Direct current fast chargers shall utilize:
    i. Either the CHAdeMO standard, or SAE combination standard, or a combination of both; and
    ii. An open standard protocol for purposes of network interoperability.
(2) Level 2 charging equipment shall utilize:

i. The SAE J1772 standard; and

ii. An open standard protocol for purposes of network interoperability.

(3) Open standard protocol is waived for medium-and heavy-duty EVCS supply equipment.

Question #11: Are privately-owned electric utilities eligible to participate?

Privately-owned utilities are eligible for the EVCS Financing Program as long as the privately-owned utility:

- Is authorized to conduct business in the state;
- Has its primary business location within the boundaries of the state;
- Is not dominant in its field of operation; and
- Together with its affiliates have 1,000 or fewer employees.

Question #12: Can the EVCS Financing Program be used in conjunction with other funding programs such as a county or city program, for example, to pay for the match contribution which the grant does not cover?

Yes, grant programs, from any source other than the California Energy Commission, do not conflict with the EVCS Financing Program Regulations. If the loan is enrolled in any other loan loss reserve or loan guarantee Program, this funding Program will only cover the portion of the loan not enrolled in another Program.

Question #13: Are permitting costs eligible to be financed?

Yes, permitting costs would be an eligible expense as long as it is a necessary and allocable expenditure for the installation and operation of one or more eligible electric vehicle charging stations.

Question #14: Are expenses to upgrade the electrical grid service outside of a building, such as transformers, eligible to be financed?

Yes, upgrades to electrical grids is an eligible expense as long as it is a necessary and allocable expenditure for the installation and operation of one or more eligible electric vehicle charging stations.

Question #15: What percentage cutoff will be used to identify disadvantaged communities on the CalEnviroScreen 2.0 tool?

Disadvantaged communities are identified by census tract and zip code information. A score at or above the 75th percentile using the methodology in the CalEnviroScreen 2.0 tool that ranks communities burdened by environmental and socioeconomic issues (http://oehha.ca.gov/ej/ces2.html) will be the cutoff point. EVCS's which are located in Disadvantaged Communities may be eligible for an additional 10% contribution to the enrolled loan amount provided that a borrower meets all Program and loan terms.

Question #16: Is financing EVCS for trucks or non-light duty vehicles eligible?

Yes, provided the EVCS meets the definition of Electric Vehicle Charging Station supply equipment as defined by the EVCS Financing Program's Regulations.

Pursuant to the EVCS Financing Program's Regulations, EVCS supply equipment means equipment which meets the minimum technical requirements set by the Energy Commission as follows:

(1) Direct current fast chargers shall utilize:
  i. Either the CHAdeMO standard, or SAE combination standard, or a combination of both; and
  ii. An open standard protocol for purposes of network interoperability.

(2) Level 2 charging equipment shall utilize:
  i. The SAE J1772 standard; and
  ii. An open standard protocol for purposes of network interoperability.

(3) Open standard protocol is waived for medium-and heavy-duty EVCS supply equipment.

Question #17: Are emerging EV charging technologies like transit on-route charging, fast charging, and 3-phase charging eligible for financing?

Yes, provided the EVCS meets the definition of Electric Vehicle Charging Station supply equipment as defined by the EVCS Financing Program's Regulations.

Pursuant to the EVCS Financing Program's Regulations, EVCS supply equipment means equipment which meets the minimum technical requirements set by the Energy Commission as follows:

(1) Direct current fast chargers shall utilize:
  i. Either the CHAdeMO standard, or SAE combination standard, or a combination of both; and
  ii. An open standard protocol for purposes of network interoperability.

(2) Level 2 charging equipment shall utilize:
i. The SAE J1772 standard; and
ii. An open standard protocol for purposes of network interoperability.

(3) Open standard protocol is waived for medium-and heavy-duty EVCS supply equipment.

Question #18: The standards for medium- and heavy-duty (MHD) EV chargers are still in development. Can the Program's technical requirement for the Open Standard Protocol be waived for these classes of vehicles?

Yes, the Open Standard Protocol technical requirement does <u>not</u> apply to EVCSs for MHD vehicles.

Question # 19: Infrastructure and installation costs associated with zero-emission MHD vehicles are higher than for light-duty vehicles. Suggest that the maximum amount a borrower can enroll in the Program is raised to $750,000.00.

The EVCS Financing Program is a pilot project with initial funding of $2,000,000. The California Energy Commission and the California Pollution Control Financing Authority will evaluate the Program after the initial funding is exhausted, including an analysis of the maximum amount a borrower can enroll in the Program. Initially, the maximum amount which may be enrolled in the Program by a single borrower is $500,000.

Question #20: Suggest that eligibility include public transit agencies as they are critical early adopters of heavy-duty transportation technologies.

Public entities are not currently eligible under the initial phase of the Program. Pursuant to the EVCS Financing Program's Regulations, a qualified small business is a corporation, partnership, cooperative, or other entity, whether that entity is a nonprofit entity or for profit entity that:

- Is authorized to conduct business in the state;
- Has its primary business location within the boundaries of the state;
- Is not dominant in its field of operation; and
- Together with its affiliates have 1,000 or fewer employees.

Question #21: Is the cost of labor and materials for trenching and replacement of concrete/asphalt associated with underground conduit work eligible for financing?

Yes, the cost of labor and materials for trenching and replacement of concrete/asphalt is an eligible expense as long as it is a necessary and allocable expenditure for the installation and operation of one or more eligible electric vehicle charging stations.

Question #22: If a borrower fully pays off a loan before 48 months, is the borrower eligible to receive a rebate earlier than month 49?

Yes, if the borrower meets the EVCS Financing Program's rebate requirements, the rebate is paid to the borrower once the loan is paid off or after 48 months, whichever comes first. In applying for a rebate, the borrower must certify that any outstanding principal was not paid from the proceeds of a subsequent loan refinancing or other financing structure from the same or any other financing institution.

Question #23: The loan term for a project is set to be a maximum of 48 months (4 years). Given the high upfront cost associated with the installation and hardware, experience indicates that the debt service exceeds revenue in most scenarios for terms less than 60 months (5 years). Suggest extending the window for the Program to 84 months (7 years).

The EVCS Financing Program is a pilot project with initial funding of $2,000,000. The California Energy Commission and the California Pollution Control Financing Authority will evaluate the Program after the initial funding is exhausted, including an analysis of the maximum term a lender can enroll in the Program. Initially, the maximum term a loan can be enrolled in the Program by a lender is 48 months; however, a lender is free to fund a loan for a longer term.

Question #24: If a school district uses a third party private contractor to install the EVCS, is financing available through the EVCS Financing Program?

A school district, as a public entity, is not an eligible borrower. Third party contractors are eligible for the Program, as long as the third party contractor:

1) Qualifies as a small business;
2) Has legal control of the EVCS installation site for a term that is equal to or greater than the length of the loan; and
3) Will assume the financial liability of the loan.

Charging station servicing and operating costs will only be allowable if the borrower's primary business is **not** EVCS installation, operation or manufacturing.

Question #25: Other than the rebate to the eligible borrower, is the loan loss reserve handled in the same manner as the Air Resources Board's (ARB) Truck Loan Assistance Program?

Yes, this Program is designed to be similar to the other loan loss reserve Programs CPCFA currently administers.

Question #26: Will the funds in the loan loss reserve be held in a separate account similar to the ARB Truck Loan Assistance Program?

Yes, the EVCS Financing Program requires a lender or CPCFA's trustee to hold the loan loss reserve funds in a separate account, and these funds may not be co-mingled with any other loan loss reserve funds.

Question #27: We recommend the Program be open to a broad range of lending entities, including specialty finance companies, hedge funds, and leasing companies.

CPCFA will work with a broad range of lender types including any of the following:

- Federal-chartered bank
- State-chartered bank
- Federal certified not-for-profit community development financial institution
- Savings association
- Lending institution that has executed a participation agreement with the SBA under the guaranteed loan program
- Consortium of these foregoing entities [1]
- Small business investment company
- Credit Unions
- Other certified community development financial institution
- Microbusiness Lender
- Finance lender as defined pursuant to the California Financial Code Section 22009 making commercial loans as defined pursuant to the California Financial Code Section 22502.

Any interested lenders are encouraged to contact CPCFA at CalCAP@treasurer.ca.gov.

[1] California Health and Safety 44559.1(d)(1)

Question #28: We recommend the Program focus on networked charging with the ability: 1) of the customer to price services to recover costs, 2) of the customer to facilitate any vehicle-grid-integration (VGI) rates or Programs being initiated by the utility companies, and 3) to collect data on utilization trends to plan for further charging needs.

The Program does not require networked charging. Charging station network connectivity is at the sole discretion of the borrower.

Question #29: In many cases, projects may include "making the site ready" for the installation of additional EVCS and ports than what was initially installed. This reduces installation costs in the future, as more EV infrastructure is added to the location. Suggest that these make-ready property improvements be eligible for financing. This is particularly critical to address the challenges in the Multi-Unit Dwelling market which is a priority for this Program.

Costs to make a site ready for future EV infrastructure installations are eligible under the Program, provided that at least one EVCS is installed and operational at the time of the financing.

Question #30: EVSCs may be owned by a third-party, often referred to as an Electric Vehicle Service Provider (EVSP). EVSPs have a role in the market for deployment of EVSC for convenience charging, including DCFC. Suggest the Program allow for EVSPs to be eligible as borrowers.

Yes, EVSPs are eligible for the Program, as long as the EVSP:

1) Qualifies as a small business;
2) Has legal control of the EVCS installation site for a term that is equal to or greater than the length of the loan; and
3) Will assume the financial liability of the loan.

Charging station servicing and operating costs will only be allowable if the borrower's primary business is **not** EVCS installation, operation or manufacturing.

Question #31: Can you provide information on EVs and demographics?

	Fresno	Sacramento	San Jose	California
PEVs per 1,000 people	0.49	0.97	5.54	1.8
Public Level 2 and Fast Charge Infrastructure: # of Locations and Total Chargers	Level 2: 5 locations 8 chargers Fast Charge: 0 locations 0 chargers	Level 2: 74 locations 222 chargers Fast Charge: 4 locations 8 chargers	Level 2: 142 locations 370 chargers Fast Charge: 18 locations 33 chargers	Level 2: 1,703 locations 4,233 chargers Fast Charge: 162 locations 280 chargers
Median Household Income (2008-2012)	$45,741	$55,846	$90,747	$61,400
Homeownership Rate, 2008-2012 (%)	54.2 PEV Owners: 92	57.6 PEV Owners: 93	58.1 PEV Owners: 89	56 PEV Owners: 87
Bachelor's Degree or Higher, 2008-2012 (% of Persons Age 25+)	19.4 PEV owners: 71	27.9 PEV owners: 81	46 PEV owners: 90	State: 30.5 PEV owners: 83
Female (%)	50 PEV owners: 23	51.1 PEV owners: 24	49.7 PEV owners: 24	State: 50.3 PEV owners: 24

Source: UC Davis, Ken Kurani Presentation 11-14-14