

DOCKETED

Docket Number:	19-TRAN-02
Project Title:	Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure
TN #:	246313
Document Title:	Pacific Gas and Electric Comments - on Electric School Bus Infrastructure Funding Workshop
Description:	N/A
Filer:	System
Organization:	Pacific Gas and Electric
Submitter Role:	Public
Submission Date:	9/30/2022 3:58:26 PM
Docketed Date:	9/30/2022

*Comment Received From: Pacific Gas and Electric
Submitted On: 9/30/2022
Docket Number: 19-TRAN-02*

PG&E Comments on Electric School Bus Infrastructure Funding Workshop

Hello,

Please see attached. Kindly let me know if you have any questions. Thank you.

Additional submitted attachment is included below.



Licha Lopez
CEC Liaison
State Agency Relations

1415 L Street, Suite 280
Sacramento, CA 95814
(202)903 4533
Elizabeth.LopezGonzalez@pge.com

September 30, 2022

California Energy Commission
Docket Unit, MS-4
Fuels and Transportation Division
Director Hannon Rasool
Docket No 19-TRAN-02
715 P Street
Sacramento, CA 95814

RE: Pacific Gas and Electric Company Comments on the California Energy Commission's Electric School Bus Infrastructure Workshop (Docket Number 19-TRAN-02)

Dear Director Rasool:

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to comment on the California Energy Commission's (CEC) staff workshop held on September 13, 2022, to discuss a funding solicitation concept to advance and prepare California public school districts to utilize vehicle-to-grid integration (VGI) for battery-electric school buses and an electric school bus bi-directional infrastructure funding concept.

PG&E supports the expansion of new VGI technologies to charge electric school buses. The bi-directional chargers that work with these electric vehicles (EVs) will be able to provide power back to the grid in emergency situations or to help mitigate the impact of Public Safety Power Shutoff (PSPS) events. They will also create additional energy resources during periods of high electricity demand. As more electric buses are expected to be ordered throughout the state in the near future, PG&E welcomes the opportunity to collaborate with the CEC in support of expanding VGI across California's communities.

The expansion of VGI to public school districts' fleets is a significant opportunity for the communities of California and the grid, and PG&E supports the CEC's commitment to creating this program. PG&E encourages the CEC to consider the constraints applied to the program and to ensure such constraints do not adversely impact the expansion and/or implementation of the program. For example, communities located in high-fire threat districts should be a priority for the program. However, there may not be sufficient demand for school buses in those specific areas. Therefore, PG&E recommends extending program eligibility beyond such areas while still keeping a priority for high-fire threat districts. In conjunction, PG&E suggests that greater incentives be offered to high-fire threat areas and additionally to disadvantaged communities.

PG&E has concerns that the CEC aims to impose a 60 kilowatt (kW) minimum requirement for bidirectional EVSE (Electric Vehicle Service Equipment). Requiring a minimum of 60 kW will likely limit program participation because it overlooks existing options, as well as the needs of lower income communities. For example, there are currently 50 kW bidirectional chargers used with certain electric school buses and there is an upcoming 30 kW bidirectional EV charger that could be more easily afforded by schools in disadvantaged communities. Furthermore, the required 60 kW charging station could be delivered with up to five charging dispensers, thus allowing only 12.5kW to be available per vehicle.¹ Finally, PG&E suggests that greater incentives be offered for higher capacity chargers rather than an all-or-nothing approach.

PG&E supports the CEC in encouraging the use of the latest technology standards for bidirectional EV chargers, as exemplified with the requirement of 1741 SB.² Currently however, there are no products that support that standard, and there are very few that support 1741 SA. California has already made an exception, which requires only UL 1741 for the Emergency Load Response Program (ELRP), because it addresses safety concerns while also allowing the program to meet the needs specified in the Governor's emergency declaration. Taking into consideration that this is a nascent market, it seems premature and unnecessary to limit participation in such a way.

Lastly, with manufacturers slow to increase production until demand is better proven, there is somewhat of a "chicken-and-egg" dilemma. To address this, PG&E suggests that the CEC consider more opportunities to increase supply and lower cost by determining pathways to guarantee purchases, or to prepurchase equipment, thus allowing purchases to be done in bulk.

PG&E appreciates the opportunity to comment on the electric school bus infrastructure workshop and looks forward to working with the CEC and other stakeholders on this funding concept. Please reach out to me should you have any questions.

Sincerely,

Licha Lopez
State Agency Relations

¹ Such as the Rhombus 60kW charger with five dispensers.

² UL 1741 including SA and SB are safety standards certifying products which meet the requirements needed to ensure safe and reliable operation in support of grid modernization efforts. UL 1741 addresses safety concerns while the newer revisions (SA, SB, and soon SC) add additional functionality.