

DOCKETED

Docket Number:	20-TRAN-02
Project Title:	SB 1000 Electric Vehicle Charging Infrastructure Deployment Assessment
TN #:	260805
Document Title:	PG&E Comments RE SB 1000 Staff Workshop
Description:	N/A
Filer:	System
Organization:	PG&E
Submitter Role:	Public
Submission Date:	12/23/2024 2:57:38 PM
Docketed Date:	12/23/2024

*Comment Received From: Joshua Harmon
Submitted On: 12/23/2024
Docket Number: 20-TRAN-02*

PG&E Comments RE SB 1000 Staff Workshop

Additional submitted attachment is included below.



Josh Harmon
CEC Liaison
State Agency Relations

1415 L Street, Suite 280
Sacramento, CA 95814
(628) 777-4138
Joshua.Harmon2@pge.com

23 December 2024

California Energy Commission
Docket Number 20-TRAN-02
715 P Street
Sacramento, CA 95814

RE: Senate Bill 1000 Staff Workshop

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to comment on the California Energy Commission's (CEC) Senate Bill (SB) 1000 Staff Workshop held on December 16, 2024.

PG&E is supportive of the CEC's SB 1000 assessment. We recognize the importance of this research in supporting state goals to deploy electric vehicles (EV) and charging infrastructure. PG&E hopes to continue collaborating with the CEC as California continues to advance transportation electrification for drivers facing home charging barriers.

CEC should make the 2024 SB 1000 assessment results publicly accessible in an interactive format.

In the December 16, 2024, Senate Bill 1000 Workshop, CEC staff noted that the 2024 SB 1000 assessment results will be compiled into a public map, such as the one previewed on slides 32 and 33. PG&E strongly supports the creation and publication of such a map, as this will allow the CEC's assessment efforts to not only influence future policy decisions, but also directly inform prioritizations of where to site chargers.¹

To ensure the map is used to its fullest capacity by market actors, it is crucial that the CEC creates a publicly accessible resource with interactive layers. Local authorities having jurisdiction (AHJ) may want to use the CEC's map to inform tactical decisions of where to prioritize funding or otherwise encourage the installation of chargers to support parking-constrained customers. PG&E recommends that this map be able to be imported into ArcGIS so that other entities may use it and add their own layers onto it.

In addition to AHJ's and site developers, PG&E has identified a specific use case for this map as part of PG&E's implementation of an Electric Program Investment Charge (EPIC) demonstration (EPIC 4.03) project. The goal of EPIC 4.03 is to inform PG&E's strategy to reduce barriers to providing scalable charging for parking-constrained customers - drivers living at multi-family and single-family housing without dedicated parking. PG&E recently closed a request for proposals for a vendor to size the parking-constrained customer market in PG&E's service territory and create a map of the results. PG&E

¹ PG&E recognizes that CEC will be providing data on a hexagonal basis, not at the parcel level. PG&E also requests that CEC specify the granularity of the hexagons.

will use this map to inform locations for the installation of charging stations as part of the demonstration component of the pilot. PG&E is interested in leveraging the data underlying the SB 1000 map as additional layers in combination with internal data (e.g., circuit level loading) for the work being done as part of EPIC 4.03. Access to the layers from the CEC SB 1000 map may provide the ability for a more efficient deployment of EPIC 4.03 by avoiding potential duplication of similar efforts.

PG&E recommends adjustments to the CEC’s definition of near home charging.

CEC’s modeling assumes that public level 2 chargers within 1/8th mile (660 feet) of home are convenient for overnight charging and public level 2 and DC fast chargers within two miles (10,560 feet) of home are convenient for daytime charging. We are concerned that 1/8th mile may be unnecessarily narrow of a definition. It is common for drivers relying on street parking to find themselves parking their cars overnight on the next block, which may very well be more than 1/8th mile away. If drivers are already used to parking more than 1/8th mile away from their apartments or homes at night, it is reasonable to consider co-located public chargers to also be within walking distance. PG&E is interested in aligning definitions for near home charging and encourages the CEC to increase the threshold from 1/8th mile to 1/6th.

PG&E agrees that, in some cases, a public charger located two miles away will be sufficient to meet drivers’ regular charging needs. However, PG&E recommends that this definition be amended to specify that only chargers co-located with public amenities such as grocery stores, etc. be considered “nearby” chargers. The CEC may want to further refine this definition to account for safety and charger utilization. These criteria can help assure reliability for drivers that rely on public charging.

PG&E believes the CEC is too aggressive with the assumptions for number of vehicles served by public nearby chargers and encourages the CEC to revisit its assumptions.

The CEC modeling assumes that one public level 2 charger can serve 3 EVs at night, one public level 2 charger can serve 2 EVs during the day, and one public level DC fast charger can serve 30 EVs during the day.² However, PG&E analyzed US Department of Transportation (DOT) data and it implies lower real-world utilization. For instance, DOT assumes a level 2 charger can charge a light-duty battery electric vehicle (BEV) from empty in 4-10 hours, while a DC fast charger can charge a light-duty BEV to 80% in 20 minutes to 1 hour.³ Assuming night hours are 8pm-6am and day hours are 6am-8pm, one public level 2 charger can serve 1.75 EVs at night and 2.5 EVs during the day, while one public level DC fast charger can serve 28 EVs during the day.

After analyzing DOT data, PG&E believes the CEC’s assumptions for SB 1000 modeling regarding the number of vehicles served by public chargers likely exceed actual uptake, especially for overnight level 2 chargers and daytime DC fast chargers. Vehicles are often left at chargers beyond their charging cycles, which then limits the availability for additional charging sessions by other vehicles. Additional factors such as safety, weather, distance to charger, and reliability can downwardly impact utilization figures.

² California Energy Commission. (2024, December 16). Senate Bill 1000 Workshop Electric Vehicle Charging Infrastructure Deployment Assessment [Slide show; PowerPoint]. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=260668>

³ Electric Vehicle Charger Levels and Speeds. (2023, June 29). U.S. Department of Transportation. <https://www.transportation.gov/urban-e-mobility-toolkit/e-mobility-basics/charging-speeds>

Along with these factors, drivers may not want to interrupt their night routines to charge their EV, especially during the late night to early morning timeframe. As such, PG&E recommends the CEC decrease its assumption for the number of vehicles served overnight from 3 EVs to 1 EV.

PG&E appreciates the opportunity to respond to this workshop and looks forward to continuing to collaborate with the CEC. Please reach out to me if you have any questions.

Sincerely,

Josh Harmon
State Agency Relations