

Docket: : A.17-01-020, et al.
Exhibit Number : _____
Commissioner : Peterman
Admin. Law Judges : Wong, Cooke,
: Goldberg
ORA Project : Rick Tse
Coordinator



ORA
OFFICE OF RATEPAYER ADVOCATES



**OFFICE OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**PREPARED REBUTTAL TESTIMONY
ON PACIFIC GAS AND ELECTRIC COMPANY'S
DIRECT CURRENT FAST-CHARGE MAKE-READY
STANDARD REVIEW PROGRAM**

San Francisco, California
September 5, 2017

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1 **I. BACKGROUND**

2 This rebuttal testimony was prepared by the Office of Ratepayer Advocates (“ORA”) of
3 the California Public Utilities Commission (“Commission”) in Application (“A.”) 17-01-020. In
4 this docket, the applicant requests Commission approval to implement its proposed \$22.4 million
5 (“M”) Direct Current Fast-Charge Make-Ready Program (“Fast-Charge Program”) pursuant to
6 Senate Bill 350 (“SB 350”). On July 25, 2017, ORA, The Utility Reform Network (“TURN”),
7 and ChargePoint individually filed opening testimony. In addition, The Green Power Institute,
8 The Community Environmental Council (“GPI/CEC”), the Natural Resources Defense Council,
9 Plug In America, The Coalition of Utility Employees, Sierra Club, The Greenlining Institute, the
10 Union of Concerned Scientists, and the Alliance of Automobile Manufacturers (collectively
11 “Joint Parties”) filed jointly.¹ ORA’s rebuttal testimony responds to the recommendations of
12 various parties as presented in their opening testimonies on Pacific Gas and Electric Company’s
13 (“PG&E”) Fast-Charge Program proposal.

14 Rick Tse served as ORA’s witness and project coordinator, and is responsible for the
15 overall coordination and preparation of this testimony. Mr. Tse’s prepared qualifications and
16 testimony are contained in Appendix A of this report. ORA’s legal counsel for this proceeding is
17 Tovah Trimming.

18 **II. SUMMARY OF RECOMMENDATIONS**

19 ORA conducted an in-depth review and analysis of parties’ opening testimonies, and
20 provides the following comments:

- 21 ○ ORA supports the recommendation of TURN, ChargePoint, and GPI/CEC for
22 PG&E to develop a commercial charging rate for direct current fast charging that
23 addresses prohibitive demand charges.
- 24 ○ ORA agrees with the Joint Parties that PG&E should prioritize direct current fast
25 charging sites that are open to integrating technology solutions, such as onsite
26 solar and battery storage.

27

¹ All citations to parties’ testimony refer to testimony on PG&E’s proposed Fast-Charge Program unless otherwise stated.

1 **III. DISCUSSION**

2 **A. PG&E should develop a commercial electric vehicle charging**
3 **rate to complement its proposed Fast-Charge Program.**

4 ORA supports the recommendation of TURN, ChargePoint, and GPI/CEC for PG&E to
5 develop a time-varying commercial electric vehicle (“EV”) charging rate for direct current fast
6 charging (“DCFC”) that addresses prohibitive demand charges. The lack of a complementary
7 rate incentive for PG&E’s Fast-Charge Program exposes ratepayers to the risk of stranded assets.
8 The September 2016 Assigned Commissioner’s Ruling specifically permits transportation
9 electrification (“TE”) applications to “propose projects to change the rate structures, including
10 demand charges, that are currently in effect for electric vehicles used in commercial
11 applications.”² As concluded in a tariff study by the Rocky Mountain Institute, and noted by
12 TURN in its opening testimony, “demand charges can be responsible for over 90% of electricity
13 costs for DCFC sites.”³ Indeed, as GPI/CEC asserts, “demand charges are a serious impediment
14 to increased usage and profitability for DCFC.”⁴ The potential for high demand charges “is a
15 significant barrier to the development of viable business models for public DCFC network
16 operators”⁵ and will serve to deter site utilization and potentially leave assets stranded.
17 Therefore, the Commission should require PG&E to develop a rate that addresses the barrier of
18 demand charges to mitigate the risk of stranded assets.

19 **B. PG&E should prioritize DCFC sites that are open to**
20 **integrating technology solutions.**

21 ORA agrees with the Joint Parties that PG&E should prioritize DCFC sites that are open
22 to integrating technology solutions, such as onsite solar and battery storage, to reduce charging
23 costs for customers.⁶ In the absence of any rate incentives or technology solutions, customers

² September 14, 2016 Assigned Commissioner’s Ruling Regarding the Filing of the Transportation Electrification Applications Pursuant to Senate Bill 350, p. 20.

³ Rocky Mountain Institute, Garrett Fitzgerald and Chris Nelder, EVGo Fleet and Tariff Analysis (March 2017), p. 1; TURN Testimony, p. 21, lines 1-2.

⁴ GPI/CEC Testimony, p. 11, lines 19.

⁵ Rocky Mountain Institute, Garrett Fitzgerald and Chris Nelder, EVGo Fleet and Tariff Analysis (March 2017), p. 1.

⁶ Natural Resources Defense Council, Plug In America, The Coalition of Utility Employees, Sierra Club, The Greenlining Institute, the Union of Concerned Scientists, and the Alliance of Automobile Manufacturers Testimony, p. 1, lines 19-26 (hereinafter “Joint Parties Testimony”).

1 face the prospect of having to pay a high premium for charging and have no incentive to charge
2 in a way that enhances grid management. This, as Joint Parties note, contravenes the directive of
3 Public Utilities Code §740.12(a)(1)(G), which requires EV deployment to assist in grid
4 management, integration of renewables, and reduction of fuel costs for drivers.⁷

5 Although PG&E stated that it is developing changes to demand charges and time-of-use
6 periods for commercial customers via its 2017 General Rate Case Phase II,⁸ there is currently no
7 rate proposal for the Fast-Charge Program. Therefore, the Commission should require PG&E to
8 prioritize DCFC sites that are open to integrating technology solutions, such as onsite solar and
9 battery storage, to reduce charging costs for customers.

10 **IV. CONCLUSION**

11 ORA recommends that the Commission order PG&E to develop a commercial EV
12 charging rate for its proposed Fast-Charge Program and to address prohibitive demand charges.
13 In addition, ORA recommends that the Commission require PG&E to prioritize DCFC sites that
14 are open to technology solutions integration.

⁷ Joint Parties Testimony, p. 1, lines 21-26 and p. 2, lines 1-3.

⁸ PG&E Testimony for Application 17-01-022, Chapter 1, Attachment A, p. 3, lines 4-9.

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APPENDIX A

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
RICKEY KIT TSE**

Q1: Please state your name, business address, and position with the California Public Utilities Commission.

A1: My name is Rickey Kit Tse and my business address is 505 Van Ness Avenue, San Francisco, CA 94102. I am a Senior Utilities Engineer in the Energy Safety and Infrastructure Branch of the Office of Ratepayer Advocates.

Q2: Please summarize your educational background.

A2: I attended the University of California at Davis. I graduated in 1999 with a Bachelor of Science in mechanical engineering.

Q3: Briefly describe you professional experience.

A3: After graduating in 1999, I started my professional career at AT&T (then Pacific Bell) as an engineer in the construction and engineering department designing telecom network in support of high-speed DSL (Digital Subscriber Line) service. My core responsibilities included facilities design, permitting, construction oversight, and budget management. I spent about three years in the telecommunications industry before joining a consulting firm as a civil engineer associate working on hydrology designs for small commercial developments. In 2003, I started my career with the California Public Utilities Commission as a utilities engineer in the Safety and Enforcement Division (formerly the Consumer Protection and Safety Division). I spent the next 13 years working on General Order 167 enforcement to ensure California power plants complied with Commission's operation and maintenance standards. My responsibilities involved conducting outage inspections, compliance audits, and incident investigations. I am a licensed professional engineer and am technically-versed in power generation, transmission, and distribution systems. In 2016, I joined the Office of Ratepayer Advocates and am the project coordinator responsible for of the transportation electrification application proceeding pursuant to Senate Bill 350.

Q4: What is your responsibility in this proceeding?

A4: I am sponsoring this prepared testimony on PG&E's Fast-Charge Program.

Q5: Does this conclude your prepared testimony?

A5: Yes, it does.