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June 16, 2014

Energy Division Tariff Unit
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Subject: **Comments on Draft Resolution E-4648, Pacific Gas and Electric Company Advice Letter No. 4351-E (Chevron Richmond Power Purchase Agreement)**

Dear Energy Division Tariff Unit:

Pacific Gas and Electric Company ("PG&E") respectfully submits the attached comments on California Public Utilities Commission ("Commission" or "CPUC") Draft Resolution E-4648 ("Draft Resolution" or "DR"), pursuant to Rule 14.5 of the CPUC Rules of Practice and Procedure and the Draft Comment Letter issued for this matter on May 19, 2014. Unless stated otherwise, capitalized terms refer to terms defined in the Term Sheet of the Qualifying Facility and Combined Heat and Power Program Settlement Agreement ("QF/CHP Settlement"), adopted by Decision ("D.") 10-12-035. PG&E's proposed edits to the Draft Resolution are included in Appendix A.

In Confidential Appendix B of these comments, PG&E addresses errors contained in the Draft Resolution's confidential appendix. Certain information in Confidential Appendix B, such as the price, terms and conditions of performance, the parties' negotiations, and other factors, could affect the price that PG&E subsequently pays for energy and is deemed to be confidential market sensitive information that should be protected from public disclosure. This information is being submitted in the manner directed by the Decision Adopting Model Protective Order and Non-Disclosure Agreement, Resolving Petition For Modification and Ratifying Administrative Law Judge Ruling, D.08-04-023 (issued on April 18, 2008), to demonstrate the confidentiality of the material and to invoke the protection of confidential utility information provided under either the terms of the IOU Matrix, Appendix 1 of D.06-06-066 and Appendix C of D.08-04-023 or General Order 66-C. In support of this request for confidential treatment, the Declaration of Harold Pestana Seeking Confidential Treatment and the IOU Matrix is attached as Appendix C to these comments.

Sincerely,

Brian Cherry /sho

Vice President – Regulatory Relations

I. Introduction and Overview of PG&E's Position

The DR correctly approves and grants PG&E cost recovery for the bilateral power purchase agreement ("PPA") between Chevron USA, Inc. ("Chevron") and PG&E (the "Parties") for the purchase of electricity from Chevron's Richmond combined heat and power ("CHP") generating facility ("Richmond PPA") and the Parties' Letter Agreement for deliveries pending approval of the Richmond PPA.[1] However, the Draft Resolution erroneously denies PG&E's counting of 27.85 megawatts ("MW") of CHP capacity and 39,644 metric tons ("MT") per year of greenhouse gas emissions reductions ("GHG Credits") from the New CHP Facilities toward PG&E's Targets under D.10-12-035. The DR is contrary to the terms of the QF/CHP Settlement and must be revised to (i) adopt the correct standard for counting MW and GHG Credits and (ii) approve PG&E's counting proposal without imposing a Tier 2 advice letter procedure.

The Richmond PPA's structure is similar to the pro-forma PPAs arising out of the QF/CHP Settlement. Under the pro-forma PPAs, New CHP Facilities must begin parallel operation within 60 months from the date of CPUC Approval or the prescribed development security is forfeited. The Term Sheet provides that MW and GHG Credits/Debits from new CHP PPAs will be counted at the time of PPA execution, subject to true-up by the IOU in its CHP Program Semi-Annual Report.

The Draft Resolution denies counting based on a perception that the Richmond PPA "does not specify that any particular number of MW will be built. The agreement simply specifies that Chevron may build 'up to 28 MW' of new bottoming-cycle CHP at the Richmond Refinery."[2] Actually, like the pro-forma PPA, 60 months after CPUC Approval are allotted under the Richmond PPA for Chevron to build its 17.85 MW bottoming cycle CHP steam turbine generator and 10 MW maximum Organic Rankine Cycle ("ORC") bottoming cycle CHP generation, subject to development security.[3] Like the pro-forma PPA, the Richmond PPA requires a Capacity Demonstration Test to enable a true up of initial PPA-based counting with observed capacity upon parallel operation. There is sufficient certainty pursuant to the QF/CHP Settlement for counting the MW and GHG Credits of the Richmond PPA at this time. However, the DR's misunderstanding of Chevron's performance requirements has led to several errors which must be corrected in the final resolution.

- The Term Sheet specifies that New CHP PPAs are counted upon contract execution and their MWs are trued up in the IOU's CHP Program Semi-annual Report based on the results of a Capacity Demonstration Test. However, the DR ignores these counting and update provisions.

[1] PG&E submitted the Richmond PPA and Letter Agreement for approval in PG&E Advice Letter 4351-E ("Advice Letter").

[2] DR, pp. 7-8.

[3] Advice Letter, Confidential Appendix A, Table 1 and Appendix E, Exhibit E.

- The Term Sheet provides that PPAs are counted at the time of execution regardless of whether the CHP Facilities are "existing" or "new." Postponing the counting of new facilities until they are operational would postpone counting for up to 5 years, but MW Targets must be met by the end of the First Program Period, which is November 22, 2015. By denying counting of New CHP Facilities upon contract execution, the DR favors PPAs with existing CHP Facilities that could be counted immediately.
- The Capacity Demonstration Test measures capacity, not GHG emissions. The DR improperly makes GHG counting contingent on the outcome of the Capacity Demonstration Test.
- CHP Facilities are eligible for counting based on CHP eligibility criteria in the PPA. The DR unreasonably requires a separate CPUC determination of CHP Eligibility.

These errors and a related error in the DR's cost reasonableness section are discussed below.

II. Discussion

No Capacity Demonstration Test is Required before MW and GHG Credits may be Counted. The QF/CHP Settlement contains the following MW Counting Rules: "An IOU may record in the CHP Program Reports as progress towards obtaining its MW Targets and GHG emissions Reduction Targets the MWs, GHG Credits or GHG Debits associated with the PPA at the time of execution" (Sec. 4.12); GHG benefit is calculated at the time of CHP PPA execution (Sec. 7.4.1.); tracking begins upon PPA execution for new PPAs (Sec. 8.2.2.), and CHP Program Reports include PPAs executed but not yet delivering. (Sec. 8.2.3.3.1.) These provisions are unconditional -- counting occurs at the time of contract execution and cannot be deferred until the facility comes on-line and performs a Capacity Demonstration Test.

The DR contradicts the QF/CHP Settlement Term Sheet by asserting that "[t]he Settlement clearly did not anticipate utilities counting MW of new CHP capacity upon approval of an Advice Letter and later verifying them with the Capacity Demonstration Test."[4] The Term Sheet did not provide for counting upon the Commission's approval of an advice letter because it had clearly directed that counting occur at the time of contract execution, subject to true up based on the results of a Capacity Demonstration Test.

The results of the Capacity Demonstration Test are irrelevant to the calculation of GHG Credits because they are based on the anticipated operations reflected in the PPA. The DR's requirement for PG&E to request approval of GHG counting based on the results of a Capacity Demonstration Test is wrong and beyond the scope of the Capacity Demonstration Test. GHG Credits are eligible for counting at the time of contract execution, and MW are the only units confirmed by a Capacity Demonstration Test.[5] Term Sheet Section 7.4 states: "[t]he GHG

[4] DR, p. 8.

[5] See Pro-forma Optional as-available PPA Sec 3.13(a). *See also* Term Sheet Sec. 5.2.5, "The capacity of a New CHP Facility to be used to count progress toward the MW Targets shall be established by a

benefit shall be calculated at the time of execution of the CHP PPA (includes RFO, bilateral agreement, Feed-In Tariff, as-available, PURPA <20 MWs)." GHG Emissions Reductions should be counted when the Commission authorizes PG&E to execute the Richmond PPA. There is no requirement in either the pro-forma PPA or the Term Sheet for GHG Credits to be trued-up. GHG Credits for New CHP Facilities are established under Term Sheet Section 7.3.1.1, which states, "[m]easurement is based on the Double Benchmark in place at the time of PPA execution compared to the anticipated operations reflected in the PPA." In this case, PG&E should count 39,644 MT GHG Credits based on Chevron's anticipated capacity value of 27.85 MW. Assuming the addition of 20 MW of bottoming cycle capacity consistent with development security, the new 17.85 MW steam turbine will create 35,238 MT of GHG Credits and 2.15 MW of new efficiency-based generation will create 947 MT of GHG Credits.

The Actual Capacity of the New CHP Facilities will be Measured and Reflected in PG&E's CHP Program Semi-Annual Report. The DR requires counting based upon a Capacity Demonstration Test because the Richmond PPA provides New CHP Facilities "up to" instead of "equal to" 28 MW. This is unjustified because the PPA requires Chevron to construct a 17.85 MW steam turbine generator and up to 10 MW of ORC generation. While development of all the ORC generation units is less certain than the bottoming cycle steam turbine, Chevron anticipates that these units will be developed and they should therefore count towards both the MW and GHG targets upon contract execution. At a minimum, the DR should be modified to allow PG&E to count 20 MW of capacity and 36,186 MT of GHG Credits upon contract execution, with an opportunity for PG&E to count the remaining MW and GHG Credits in the future once development of the ORC generation units is more certain.

Term Sheet Section 8.2.2[6] provides that the MW and GHG Credits are counted, tracked, and reported in PG&E's CHP Program Semi-Annual Report.[7] The Term Sheet's MW Counting Rules establish the number of MW that the various types of CHP Facilities -- including Existing CHP Facilities, qualifying facilities ("QFs") who formerly sold to IOUs, and New CHP Facilities -- may contribute to the MW Targets.[8] The final reportable capacity of a New CHP Facility is

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Capacity Demonstration Test." The test does not establish counting for GHG Credits.

[6] Tracking in the report will begin upon execution of a new PPA by the Buyer and Seller for all CHP Facilities including existing, repowered or new, and excluding Transition PPAs.

[7] *Id.*, "Each CPUC Jurisdictional Entity shall prepare a semi-annual report (CHP Program Semi-Annual Report) detailing progress towards both MW Targets and GHG Emission Reduction Targets." Sec. 8.1.1. "The CPUC Jurisdictional Entities will each prepare and update a CHP Program Report that they will submit to the CPUC Energy Division." Sec. 8.1.3. "The CPUC Energy Division will post on the CPUC website public versions of the detailed updates for each CPUC Jurisdictional Entity, and maintain and publish a summary tracking progress toward both MW Targets and GHG Emissions Reduction Targets." Sec. 8.1.4.

[8] *Id.*, Sec. 5.2. The MWs contributed by CHP Facilities may be based on previous semi-annual Cogeneration and Small Power Producer Reports, Contract Nameplate values, or actual procurement capacity. Term Sheet, Sec. 5.2.3 and 5.2.4.

established by a Capacity Demonstration Test once the facility achieves parallel operation.[9]

In other words, the CHP Program Semi-Annual Report makes it possible for New CHP Facilities to be reported at the time of execution, even though they could not be expected to begin deliveries immediately. After a maximum development period of up to 60 months, the New CHP Facilities must take a Capacity Demonstration Test to establish their actual As-available capacity. The New Facility's contribution toward targets will be adjusted up or down in the CHP Program Semi-Annual Report through the application of the MW Counting Rules. Non-operational MWs are then removed from counting.

The Draft Resolution Errs by Assuming that the CHP Eligibility of the New CHP Facilities in the Richmond PPA cannot be Determined at this Time. The Richmond PPA was submitted as Confidential Appendix E to the Advice Letter. The Commission can verify that Chevron commits that the New CHP Facilities will be Bottoming Cycle CHP as defined in 18 Code of Federal Regulations Sec. 292.202(e), and as defined in the Term Sheet. Failure of the New CHP Facilities to maintain that status during the PPA term is an event of default. These requirements are identical to the requirements that would apply to new CHP Facilities subject to pro-forma PPAs arising out of the QF/CHP Settlement Agreement.

PG&E is not required to pay for deliveries under the Richmond PPA unless the New CHP Facilities are CHP-eligible. Thus, PG&E will confirm that these facilities are CHP-eligible, as it does currently for existing CHP Facilities, to ensure that its PPA payments are reasonable. If the Commission postponed its finding of CHP eligibility until the New CHP Facilities come on-line, it would create a disincentive for IOUs to procure New CHP Facilities to meet their Settlement Targets.

PG&E should not be required to file a Tier 2 Advice Letter for approval of its Capacity Demonstration Test. Verification by advice letter is unreasonable because it would require the CPUC to determine matters that PG&E is already required to self-report under D.10-12-035. PG&E's existing CHP Program Semi-annual Report obligation[10] accomplishes what is intended by the DR's proposed Tier 2 Advice Letter without unnecessary delay and burden on the Commission. A Capacity Demonstration Test is not needed to establish countable capacity.

The DR errs by counting Chevron Richmond's New CHP Facilities as "Behind the Meter" CHP Facilities. Section 7.4 of the Term Sheet states that for bilateral and as-available PPAs, the GHG benefit shall be calculated at the time of PPA execution. For behind the meter CHP Facilities, counting begins upon actual operations. The Term Sheet defines behind the meter facilities as subsidized "Self-Generation Incentive Program" facilities and new CHP Facilities that do not export to the grid.[11] Most of the output of Richmond's New CHP Facilities will be

[9] *Id.*, Sec. 5.2.5.

[10] *Id.*, Sec. 8.1.1.

[11] *Id.*, Sec. 4.9.1.

used to meet onsite load, but some will be exported to the grid, consistent with as-available capacity. The GHG Credits of such PPAs are counted at the time of execution.

The DR has applied the wrong benchmark to determine reasonableness. The DR incorrectly uses the existing 1986 Standard Offer PPA between the Parties as the benchmark of reasonableness for the new PPA "because PG&E had the option to continue contracting indefinitely with Chevron."[12] That is not correct because Chevron is adding new CHP generation to its site. PG&E may choose to contract with Chevron or other CHP providers. Recently, the Commission found PG&E's bilateral procurement of generation counting toward PG&E's local resource adequacy and renewables targets to be reasonable, based on a comparison with PG&E's other local reliability and RPS RFO options.[13] Valuation of the Richmond PPA should be based on PG&E's market alternatives, not on the PPA for the pre-existing facility.[14]

Certain Statements in the Confidential Portion of the DR must also be Revised. PG&E's suggested corrections to the confidential portion of the DR are provided separately in confidential Appendix B to these comments.

III. Recommendation and Conclusion

The Final Resolution should confirm that PG&E may immediately count the 27.85 MW of New Facilities provided by the Richmond PPA toward its Settlement Targets. The counting of MW and GHG Credits associated with a CHP PPA toward the procuring IOU's Targets at the time of PPA execution is a material term of the Settlement Agreement that cannot be amended without potentially triggering a re-evaluation of the Settlement Agreement.[15] The Commission has concluded that the Term Sheet is precedential.[16] The Draft Resolution's counting proposal is clearly incorrect and must be revised to avoid committing an error of law. PG&E recommends that Draft Resolution be revised to conform with D.10-12-035, as shown in Appendix A and Confidential Appendix B to these comments.

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[12] Finding of reasonableness, *see*, Finding of Fact 16; benchmark comparison, *see*, DR pp. 10 and 11.

[13] Approval of PPA between PG&E and Placer County Water Authority, D.13-04-022, pp. 6-7, "Valuation."

[14] The Chevron Richmond facility will be expanded, so the reasonableness of the Richmond PPA cannot be based on a comparison of its costs with those of the legacy PPA. This is different from the O.L.S.-Agnews PPA, which replaced a Standard Offer PPA for a facility that did not undergo any physical changes. See, Res. E-4494.

[15] See, *Joint Motion for Approval of ...Settlement Agreement*, R.04-04-003, et al., 10/8/2010. "Each Party shall review any Commission orders regarding this Settlement Agreement to determine if the Commission has changed, modified, or severed any portion of the Settlement Agreement, deleted a term, or imposed a new term….etc." Attachment A, *CHP Program Settlement Agreement,* pp. 4-5.

[16] "The Term Sheet attached to the Proposed Settlement is precedential." *Id.*, Conclusion of Law 20.

Appendix A

Reference	Draft Resolution	Requested Correction[17]
Finding 8	Settlement Term Sheet Sec. 5.2.5 requires that the capacity of a new CHP facility to be used to count progress toward the MW targets will be established by a Capacity Demonstration Test	Settlement Term Sheet Sec. 5.2.5 requires that the final capacity of a new CHP facility to be used to count progress toward the MW targets will be established by a Capacity Demonstration Test
Finding 9	PG&E is not permitted to count new CHP MW toward its CHP MW target prior to completion of a Capacity Demonstration Test on those new MW.	PG&E is ~~not permitted~~ authorized to count the MW and GHG Credits associated with the maximum contract capacity of the New CHP Facilities ~~new CHP MW~~ toward its CHP MW target prior to completion of a Capacity Demonstration Test ~~on those new MW~~.
Finding 10	The Commission has no basis for calculating GHG reductions toward the Settlement Emissions reduction Target until it is known how many MW of new CHP will be constructed as a result of the Richmond PPA.	The ~~Commission has no basis for calculating~~ maximum contract capacity should be used to calculate GHG reductions toward the Settlement Emissions reduction Target until it is known how many MW of new CHP will be constructed as the a result of the Richmond PPA.
Finding 11	The Commission will determine whether and how to count new CHP MW and GHG emissions reductions toward the QF/CHP Settlement targets when PG&E submits the results of a Capacity Demonstration Test via Tier 2 Advice Letter.	The GHG emissions reductions counted at the time of contract execution are subject to revision pursuant to a Capacity Demonstration Test because Chevron has flexibility to develop up to 10 MW of organic Rankine facilities.
Finding 14	The Commission will make a determination as to whether the new generation units meet the Settlement CHP/QF definition at the time PG&E submits the results of the Capacity Demonstration Test.	The New CHP Facilities constructed under the Richmond PPA are eligible CHP Facilities as defined by the QF/CHP Settlement Agreement.

[17] Underlining reflects additions and strikethrough represents deletions.

Ordering Paragraph 1	The request of Pacific Gas & Electric Company for authority to execute the Richmond Power Purchase Agreement with Chevron U.S.A. and the associated cost-recovery proposal described in Advice Letter AL 4351-E is approved.	The request of Pacific Gas & Electric Company for ~~authority to execute~~ approval of the Richmond Power Purchase Agreement and Letter Agreement with Chevron U.S.A. and the associated cost-recovery proposal described in Advice Letter AL 4351-E is approved.
Ordering Paragraph 2	The request of PG&E to count toward its Settlement targets 27.85 Megawatts of incremental capacity and 39,644 metric tonnes of Greenhouse Gas Emissions Reductions is denied.	The request of PG&E to count toward its Settlement targets 27.85 Megawatts of incremental capacity and 39,644 metric tonnes of Greenhouse Gas Emissions Reductions is ~~denied~~ granted.
Ordering Paragraph 3	Pacific Gas & Electric Company shall submit via a Tier 2 Advice Letter with the results of a Capacity Demonstration Test showing the megawatt capacity of new generating units at the Richmond refinery, and PG&E may request permission to count the MW and greenhouse gas Emissions Reductions from the new units at that time.	Pacific Gas and Electric Company shall count the MW and GHG Credits associated with the maximum capacity of the New CHP Facilities at this time, subject to true-up with the results of the New CHP Facilities’ Capacity Demonstration Test.

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CONFIDENTIAL APPENDIX B
REDACTED IN ITS ENTIRETY

PG&E's June 16, 2014
Comments on Draft Resolution E-4648

Appendix C:

Declaration of Harold Pestana Seeking Confidential Treatment of Certain Data and Information Contained in PG&E's June 16, 2014 Comments on Draft Resolution E-4648, and Matrix

DECLARATION OF HAROLD PESTANA SEEKING CONFIDENTIAL TREATMENT OF CERTAIN DATA AND INFORMATION CONTAINED IN PG&E'S JUNE 16, 2014 COMMENTS ON DRAFT RESOLUTION E-4648

(PACIFIC GAS AND ELECTRIC COMPANY - U 39 E)

I, Harold Pestana, declare:

1. I am presently employed by Pacific Gas and Electric Company ("PG&E"), as a Senior Manager within PG&E's Energy Procurement organization. I have been employed by PG&E since 1997, and during that time I have acquired knowledge of PG&E's contracts with numerous counterparties and have also gained knowledge of the operations of gas and electric sellers in general. Through this experience, I have become familiar with the type of information that would affect the negotiating position of electric sellers with respect to price and other terms, as well as with the type of information that such sellers consider confidential and proprietary. I can also identify information that buyers and sellers of electricity would consider to be "market sensitive information" as defined by California Public Utilities Commission ("CPUC") Decision ("D.") 06-06-066 and D.09-12-020, that is, information that has the potential to materially impact a procuring party's market price for electricity if released to market participants.

2. I am the Senior Manager of the group responsible for negotiating PPAs to comply with the CHP Settlement's procurement obligations. Based on my knowledge and experience, I make this declaration seeking confidential treatment of the information contained in Appendix B to PG&E's Comments on Draft Resolution E-4648 ("Confidential Information").

3. Attached to this declaration is a matrix that describes the Confidential Information for which PG&E seeks continued protection against public disclosure, states whether PG&E seeks to protect the confidentiality of the Confidential Information pursuant to D.06-06-066

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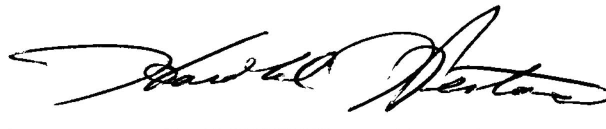
and/or other authority, and where PG&E seeks protection under D.06-06-066, the category of market sensitive information in D.06-06-066 Appendix I Matrix ("Matrix") to which the Confidential Information corresponds.

4. The attached matrix demonstrates that the Confidential Information: (1) constitutes a particular type of confidentiality-protected data listed in the Matrix; (2) corresponds to a category or categories of market sensitive information listed in the Matrix; (3) may be treated as confidential consistent with the limitations on confidentiality specified in the Matrix for that type of data; (4) is not already public; and (5) cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure. In the column labeled, "PG&E's Justification for Confidential Treatment", PG&E explains why the Confidential Information is not subject to public disclosure under either or both D.06-06-066 and General Order 66-C. The confidentiality protection period is stated in the column labeled, "Length of Time."

5. By this reference, I am incorporating into this declaration all of the explanatory text in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that to the best of my knowledge, the foregoing is true and correct. Executed on June 16, 2014, at San Francisco, California.



HAROLD PESTANA

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
COMMENTS ON DRAFT RESOLUTION E-4648

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) Constitutes data listed in Appendix 1 to D.06-06-066 (Y/N)	2) Data correspond to category in Appendix 1:	3) Complies with limitations of D.06-06-066 (Y/N)	4) Data not already public (Y/N)	5) Lead to partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
Document: Confidential Appendix B (Addressing Errors in the Confidential Appendix of the Draft Resolution)							
Entire document	Y	VII.B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS)	Y	Y	Y	This confidential appendix describes terms and conditions from the Richmond PPA, which are confidential under Item VII.B of the D.06-06-066 Appendix 1 matrix for 3 years from date contract states deliveries to begin; or until one year following expiration, whichever comes first. Now that the Richmond PPA has been signed, the 3 year protection period begins when deliveries begin under the Richmond PPA.	3 years from the commencement of deliveries under the Richmond PPA

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