BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Orders Instituting Rulemaking to Continue Implementation and Administration of California Renewables Portfolio Standard Program.	R.11-05-005 (Filed May 5, 2011)

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E) REPLY TO OPENING COMMENTS REGARDING STAFF PROPOSAL FOR REVISING THE METHODOLOGY USED TO CALCULATE THE RENEWABLE NET SHORT FOR PROCUREMENT TO MEET THE CALIFORNIA RENEWABLES PORTFOLIO STANDARD

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TABLE OF CONTENTS

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Pacific Gas and Electric Company ("PG&E") respectfully submits this reply to parties' opening comments on the Administrative Law Judge's Ruling Requesting Comments on Staff Proposal for Revising the Methodology Used to Calculate the Renewable Net Short ("RNS") for Procurement to Meet the California Renewables Portfolio Standard ("RPS"), filed on February 19, 2014 (the "Ruling").

I. INTRODUCTION AND SUMMARY

Opening comments on the Ruling generally raise concerns that while the Ruling and attached Staff Proposal for Updating the RNS Methodology ("Staff Proposal") intended to promote greater clarity and transparency regarding the portfolio optimization strategy of retail sellers, implementation of the Staff Proposal may actually mislead stakeholders and misrepresent the RNS and portfolio optimization strategy of retail sellers. For example, the Office of Ratepayer Advocates ("ORA") characterizes the current RNS approach as unrealistic and the Staff Proposal's approach as almost certainly untrue.[1/] Additionally, Southern California Edison Company ("SCE") provided two hypothetical examples demonstrating the potential misleading

1/ ORA Opening Comments at 2.

nature of the Staff Proposal where a bank of surplus Renewable Energy Credits ("RECs") would be misapplied when not needed or even prior to proper accrual.[2/]

PG&E understands the Energy Division's interest in stimulating a more expansive dialogue regarding the key inputs and assumptions used by retail sellers' in their optimization strategies and therefore supports modifying the RNS to show both a physical net short position and a hypothetical "optimized" net short position that assumes potential optimization strategies are successfully implemented. However, as noted by parties in comments, the optimized RNS should reflect a retail seller's actual portfolio optimization strategy as proposed and ultimately approved by the Commission in an RPS procurement plan proceeding, rather than the Staff Proposals' arbitrary assumption that a bank of surplus -RECs are used for compliance evenly over a 10-year rolling basis.[3/] Further, as portfolio optimization decisions must be made based upon constantly changing market information and cannot be "locked in" at the time that an annual RPS Plan is adopted, PG&E supports SCE's suggestion that retail sellers could use responses to a list of questions to describe a framework or methodology for assessing optimization options that can be applied flexibly on an ongoing basis.

In Section I, PG&E provides additional comments directly related to the RNS and a retail seller's portfolio optimization strategy, including comments related to the key topics of cost-effectiveness showings and the Voluntary Margin of Procurement ("VMOP"). Section II addresses comments submitted by various parties on other aspects of the Staff Proposal, including various risk adjustment proposals and recontracting assumptions for expiring contracts.

II. REVISIONS TO THE RNS METHODOLOGY SHOULD ENSURE CONSISTENCY BETWEEN THE RNS AND THE RETAIL SELLER'S APPROVED RPS PLAN.

PG&E agrees with parties that emphasize the Staff Proposal's methodology of applying a bank of surplus RECs evenly over a 10-year rolling period provides little insight into a retail

2/ SCE Opening Comments at 6-7.

3/ See, e.g., ORA Opening Comments at 1.

seller's portfolio optimization actions and offers few benefits over the existing RNS calculation. / PG&E sees no benefit in assuming the arbitrary utilization of its bank over a 10-year rolling period.

Furthermore, the Green Power Institute's ("GPI") suggestion to shorten the rolling average period from ten to five years[4/] would only exacerbate the shortcomings with the Staff Proposal identified by PG&E and SCE.[5/] As presented in PG&E's Table 1 and SCE's Table III-2 in their respective opening comments, GPI's proposal would increase the likelihood that forecast RECs are applied in near-term years prior to the accrual of the RECs. Additionally, GPI's proposal would result in the illogical outcome that PG&E's projected bank between 2014 and 2018 would be nearly fully utilized, even though PG&E currently has no projected physical RPS short position in 2014-2018. Thus, use of banked RECs for compliance in that period would simply increase the amount of PG&E's surplus by the same amount, creating no net effect on the bank balance at the end of the 5-year period. If GPI's implication is instead that PG&E would sell all of its RPS bank over that 5-year period, PG&E disagrees with the reasonableness of that planning assumption and notes GPI has provided no support to suggest that such a use of the bank would be either possible (that demand exists in the market for such sales) or cost-effective. The purpose of the bank is to increase the probability of cost-effective RPS compliance by mitigating risks associated with generation and load variability. Actual liquidation of PG&E's bank prior to 2020 would directly contradict and undermine PG&E's prudent strategy of building and maintaining an adequate bank as a margin of procurement to manage a 33% operating portfolio after 2020. Furthermore, if one assumes for the sake of argument that PG&E could and did liquidate its entire project bank balance prior to 2020, the only practical impact of this strategy would be to require PG&E to target higher volumes of procurement in 2020 to immediately re-build an adequate bank to manage supply and demand

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4/ GPI Opening Comments at 1.

5/ SCE Opening Comments at 6-7; PG&E Opening Comments at 4-6.

uncertainties going forward. This strategy would leave PG&E's customers imprudently exposed to whatever market conditions exist at that time and, over time, would create unhealthy boom and bust cycles in the REC market.

As an alternative to the Staff Proposal, ORA recommends an RNS calculation that reflects the portfolio optimization plan the utility has proposed in its most recent RPS Procurement Plan.[6/] This recommendation is in line with PG&E's proposal to present an RNS in a manner that clearly shows a retail seller's actual "physical net short" and an "optimized net short", if different. To provide additional quantitative and qualitative data on each retail seller's RPS strategy, SCE recommends that retail sellers address a list of questions[7/] related to various factors that may influence portfolio optimization strategies. A detailed discussion of factors influencing RPS strategy, such as one guided by SCE's proposed questions, in conjunction with a presentation of the optimized RNS would provide more clarity and transparency for stakeholders than the RNS in the Staff Proposal. SCE's questions address many of the complex issues and concerns that PG&E considers and perhaps better address the complexity of the various, often competing factors influencing an RPS optimization strategy, than a simple presentation of the RNS. Inclusion in the RPS Plan of a portfolio optimization discussion that responds to SCE's questions would serve as a qualitative guide and input into the quantitative analysis performed and presented in the optimized RNS. This approach would also accommodate a variety of reasonable portfolio optimization methodologies, including both PG&E's stochastic approach and the stress case scenario-based approach described in SCE's opening comments.[8/]

PG&E recommends three minor edits to SCE's proposed questions. Question 2b should be revised to, "How does your position in the long term justify your projected bank size?" This is a more general question than the one proposed by SCE, which would more appropriately account

6/ ORA Opening Comments at 2-3.

7/ SCE Opening Comments, Attachment A.

8/ SCE Opening Comments at 8.

for a variety of long-term positions and bank sizes. Questions 6a and 6b should be deleted and replaced with "How does the retail seller's optimization strategy account for expected or unexpected curtailment?" This more general question accounts for a variety of curtailment considerations, approaches and assumptions than the question proposed by SCE.

III. COST-EFFECTIVENESS SHOWINGS SHOULD BE MADE WHEN TRANSACTIONS FOR INCREMENTAL PROCUREMENT ARE PRESENTED TO THE COMMISSION FOR APPROVAL.

Several parties commented that cost-effectiveness showings should only be required as part of an IOU's advice letters seeking authority to procure or sell RPS-eligible products.[9/] In contrast, ORA supports Staff's suggestion that a cost-effectiveness showing be included in each retail seller's RPS Procurement Plan.[10/]

A transaction-specific cost-effectiveness demonstration at the time of filing an RPS Plan would be of little value. PG&E agrees with SDG&E's assertion that due to price uncertainties, evaluating cost-effectiveness at the time of the RPS Plan, prior to the evaluation of actual offers to procure or sell RPS-eligible products, would be premature and not a productive use of stakeholder and Commission resources.[11/] Any showing in an RPS Procurement Plan would quickly become outdated as a retail seller's ultimate procurement and sales decisions are based on multiple variables that are continually changing. In practice, retail sellers can best minimize customer costs when they have the ability to examine and take advantage of all cost-effective commercial opportunities to purchase or sell RPS-eligible products consistent with its RPS Plan on a going-forward basis, continually adapting to market conditions as they evolve. As a result, portfolio optimization decisions are made on an on-going basis, not solely at the time of the development of a retail seller's annual RPS Plan. However, the RPS Procurement Plan is an appropriate forum for discussing a methodology for analyzing the cost-effectiveness of utilizing

9/ See, e.g., SCE Opening Comments at 8; San Diego Gas & Electric Company ("SDG&E") Opening Comments at 2.

10/ ORA Opening Comments at 3.

11/ See SDG&E Opening Comments at 2.

a bank in lieu of incremental procurement and for evaluating the trade-off between maintaining a bank of a certain size to address supply and demand variability versus selling portions of the bank.

ORA further asserts that "currently, utilities simply make their portfolio optimization decisions without a thorough analysis of the alternatives and their associated costs."[12/] This statement is incorrect, and ORA offers no evidentiary support for it. In fact, PG&E does consider alternatives and their costs when making portfolio optimization decisions as demonstrated in PG&E's advice letter filings seeking CPUC approval of proposed RPS contracts, including PG&E's recent advice letter filings for REC purchases[13/], where PG&E provided a detailed analysis of the costs and benefits from the proposed transactions as well as the potential alternatives. . SCE also describes the cost-effectiveness showing that is provided as part of its optimization strategy when submitting a REC sales contract for approval.[14/] The questions proposed by SCE for inclusion in the RPS Plan[15/] illustrate many of the considerations and uncertainties evaluated when developing a framework for considering transactions to optimize an RPS portfolio. Discussion of these topics in more detail will help to shed light on the uncertainties and alternatives evaluated when implementing an optimization strategy.

IV. TIMEFRAME LIMITS ON A VOLUNTARY MARGIN OF PROCUREMENT WOULD ARBITRARILY IMPAIR A RETAIL SELLER'S ABILITY TO MANAGE ITS PORTFOLIO RISK.

Most parties generally agreed that a voluntary margin of procurement ("VMOP") should not be subject to a quantitative limit and that retail sellers should not be limited in the number of years into the future a VMOP is projected.[16/] ORA takes the extreme position that a VMOP

12/ ORA Opening Comments at 3.

13/ Advice Letter 4300-E, filed October 10, 2013, Appendix H.

14/ SCE Opening Comments at 8.

15/ SCE Opening Comments at Attachment A.

16/ See, e.g., SCE Opening Comments at 9; SDG&E Opening Comments at 4-5; Union of Concerned Scientists ("UCS") Opening Comments at 4.

projection be limited to no more than five years, even though ORA offers no reason to believe that the variability and uncertainty that VMOP is meant to address will end after five years.

Shortening the VMOP will inappropriately reduce a retail seller's ability to reasonably and prudently manage portfolio risks.

Regarding attractively priced products, SDG&E correctly articulates that an unforeseen shortfall at the end of a compliance year would reduce a retail seller's negotiation leverage and potentially result in a higher price, thereby harming ratepayers.[17/] Similarly, UCS points out that VMOP limits could restrict a retail seller's ability to take advantage of projects with attractive prices or unique attributes that benefit ratepayers.[18/] Regarding portfolio risk management, SCE remarks on the dynamic nature of factors that impact bank size and concludes that each retail seller should determine its portfolio risk and an appropriate level of VMOP.[19/] Similarly, SDG&E calls VMOP a prudent planning approach for "inherently risky" procurement.[20/] PG&E strongly agrees with these comments and SDG&E's assertion that "the ability to procure excess quantities in order to protect against an unknown future must be preserved" for retail sellers to ensure compliance with the RPS Program.[21/]

V. RESPONSES TO OTHER ELEMENTS OF THE STAFF PROPOSAL

A. Using The Project Viability Calculator As A Basis For Risk Adjusting Projects In Development Suffers From The Same Weaknesses As The Staff Proposal And Only Amplifies Risks Regarding Protection of Proprietary and Commercially-Sensitive Information.

ORA recommends that the Commission adopt a standardized risk-adjustment methodology available for public review and suggests that the existing RPS Project Viability Calculator ("PVC") be used as a starting point for the proposed risk adjustment calculation.[22/]

17/ SDG&E Opening Comments at 5.

18/ UCS Opening Comments at 4.

19/ SCE Opening Comments at 9.

20/ SDG&E Opening Comments at 6.

21/ *Id.* at 6.

22/ ORA Opening Comments at 5.

Given the concerns with the Staff Proposal methodology identified in PG&E's opening comments, PG&E views the public use of the existing PVC calculator to create frequent project-specific, risk-adjusted forecasts as even more burdensome and potentially disruptive to the market than the Staff Proposal. Using the PVC calculator would introduce several additional fields to score for each project, increasing the administrative burden of implementing the methodology. Many of these additional fields, including project financing status, transmission system upgrade requirements, and reasonableness of commercial operation date, would present significant confidentiality concerns. This expanded standardized approach would also fail to accommodate for the different portfolios and risks inherent to each individual retail seller. For the reasons set forth in PG&E's opening comments, the Commission need not and should not create a burdensome benchmarking methodology that will provide little useful information and could actually diminish the viability of projects in retail seller's RPS portfolios by making their proprietary development information public.

B. The RNS Should Be Retained As An Appropriate Tool To Track Retail Sellers' Progress Toward Compliance with the Procurement Quantity Requirements.

The Center for Energy Efficiency and Renewable Technologies ("CEERT") questions whether the RNS methodology serves any purpose in light of the state's Loading Order and the possibility that retail sellers may choose to or be required to procure renewables in excess of existing RPS statutory mandates.[23/] PG&E disagrees with any implication that the RNS should simply be eliminated. The RNS serves as a useful benchmark in procurement planning and does not serve only to limit the procurement of renewable generation. Rather, the RNS appropriately tracks any RPS-eligible procurement a retail seller enters into in order to satisfy its statutory RPS requirements. This RPS obligation may be distinguished from any separate mandate to procure RPS-eligible products that may arise from the Commission's long-term procurement planning ("LTPP") or any other proceeding. However, the RNS appropriately measures a retail seller's

23/ CEERT Opening Comments at 6.

progress towards its statutorily-defined procurement quantity requirements by counting all RPS-eligible procurement, including any need identified in the LTPP and met with an RPS-eligible resource.

C. Critiques Of Risk-Adjustment Methodologies

GPI asserts that the risk-adjustment methodologies used by each of the IOUs are biased low, resulting in success rates that are too high.[24/] GPI suggests assigning success rates closer to 60-70 percent for projects under-development.[25/] GPI's proposal is outdated and unreasonable given the increasingly stringent requirements for projects bidding into renewable solicitations. For example, in the most recent Renewable Auction Mechanism ("RAM") solicitation, a project must employ a technology currently in use at a minimum of two operating facilities of similar capacity worldwide (equivalent scoring of 90 in Staff Proposal); have secured site control (equivalent scoring of 90 in Staff Proposal); and include a development team that has begun construction or completed at least one other project of similar technology and capacity (equivalent scoring of 90 in Staff Proposal). This results in executed projects that are well beyond the minimum thresholds defined in the Staff methodology. While meeting solicitation eligibility criteria by no means ensures the success of projects, given the many other variables that can impact project developing, lowering success rates to 60-70 percent for under-development projects blindly ignores both the stricter requirements for new projects and the generally positive trend in renewable project success rates due in part to increased developer experience, maturation of technologies, favorable commercial terms and conditions including price, and streamlining of permitting processes.

GPI further describes PG&E's internal risk approach as weak, based on the assumption that PG&E simply assumes high success rates for projects that have not yet encountered a milestone.[26/] This is due to GPI's implicit assumption that a retail seller will have no capability

24/ Opening Comments of GPI at 3-4.

25/ *Id*. at 4.

26/ *Id*. at 4.

to screen for or assess negative factors that could threaten a project's viability until a contractual milestone is reached. That presumption is simply not true. As discussed above, the RAM, Renewable Market Adjusting Tariff ("ReMAT"), and PG&E's 2013 RPS solicitations all have minimum eligibility requirements linked to project viability, effectively screening out at the solicitation stage projects that are at highest development risk. For example, both RAM and ReMAT require full site control (scored at 90 per the Staff Proposal), while the 2013 RPS Solicitation required a phase II or equivalent interconnection status (scored at 75 per the Staff Proposal). In addition to these minimum requirements, PG&E has found that some facilities submitting bids with 2020 initial delivery dates intend to come online much earlier to take advantage of expiring tax credits. Because such facilities plan to achieve commercial operations well before their initial delivery date with PG&E - and to sell energy in the interim to other sellers - it would be unnecessary and inaccurate to apply high risk penalties to these projects.

D. Additional Permitting Criteria Add Little Value To A Risk Adjustment Method

While PG&E is sensitive to the Joint Conservation Parties'[27/] concerns with respect to secondary permitting, most developers that executed contracts in recent solicitations have offered projects in advanced stages of development that already achieved significant progress on submitting and securing required permits. In general, developers have no incentive to propose and attempt to construct projects in areas that do not allow such development or with significant permitting risk. In light of these facts, the Joint Conservation Parties' assertion that projects that have not applied for lead agency permits should receive a permitting score of 0 is unrealistically pessimistic and will distort any adopted benchmarking process.[28/] As discussed in PG&E's opening comments, the creation of a resource-intensive benchmarking process is unnecessary.

27/ The "Joint Conservation Parties" are the Nature Conservancy, Defenders of Wildlife, Natural Resources Defense Council and Sierra Club California.

28/ *See* Joint Conservation Parties Opening Comments at 6.

However, if the Commission elects to move forward with the benchmarking proposal, the permitting scores as presented in the Staff Proposal should not be modified.

E. Current Re-Contracting Assumptions Are Valid And Reporting Of Expiring Contracts In The RNS Is Not Necessary.

PG&E supports SDG&E's position that the current RNS' re-contracting assumptions are valid.[29/] SDG&E comments that "there is no way to accurately predict if, when, and at what price expiring contracts will seek to re-contract."[30/] PG&E agrees that forecasting or assuming re-contracting amounts in the RNS is purely speculative, does not reflect retail sellers' re-contracting strategies, and cannot account for market changes which may cause expiring contracts to become unfavorable for re-contracting.

With respect to ORA's[31/] and UCS's[32/] calls for transparency, PG&E already provides the public with a detailed list of its expiring contracts in its RPS compliance report. To the extent these parties are calling for the inclusion of the volumes for expiring contracts as a line item in the RNS that would reduce an open position, this suggestion is both duplicative from an informational perspective with current filings and also would be highly distorting to the extent it assumes all expiring volumes are re-contracted. The re-contracting of expiring volumes is far from certain as projects may (1) be decommissioned at the end of their contract, (2) require substantial investment for repowering, (3) or be uneconomic relative to other offers available to a retail seller.

In addition, GPI misinterprets the expiring contract volumes in the RPS compliance report,[33/] in which utilities are required to show annual generation from expiring contracts through 2030. These volumes are informational only, are not assumed to be re-contracted for future compliance, and do not impact the annual RPS positions presented in the filing.

29/ SDG&E Opening Comments at 7.

30/ *Id.* at 7.

31/ ORA Opening Comments at 6.

32/ UCS Opening Comments at 5.

33/ GPI Opening Comments at 7.

F. Given that the RPS Program Is Meant to Confer a State-Wide Benefit, ESPs Should Also Be Required to Plan For And Demonstrate RPS Compliance.

The Alliance for Retail Energy Markets ("AReM") and Noble Americas Energy Solutions LLC ("Noble") argue generally that the RNS methodology should not be applied to electric service providers ("ESPs"). While some specific aspects of the proposed methodology may not apply to all load-serving entities, including ESPs, PG&E disagrees that the use of risk adjustment methodologies should not apply to ESPs because those entities should be "free to manage their own risks when undertaking renewable procurement."[34/] Because the benefits of achieving the RPS Program goals confer state-wide benefits, the Commission has been granted authority by the Legislature to ensure that ESPs comply with the RPS requirements, including ensuring that compliance requirements are imposed on IOUs and ESPs in the "same" fashion.[35/] This interest in creating a level playing field, transparency around RPS progress on a statewide level, and ultimately compliance by all retail sellers provides ample support for requiring ESPs to report their progress toward and strategy to achieve RPS compliance and to fill their RPS open positions using a methodology that is the same as that required of IOUs in all applicable respects.

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34/ AReM Opening Comments at 6.

35/ Cal. Pub. Util. Code § 380(e) (providing that each load-serving entity shall be subject to "the same requirements" under the RPS program as are applicable to the IOUs); Cal. Pub. Util. Code § Section 365.1(c) (same); Cal. Pub. Util. Code §§ 399.12(j)(3) (ESPs must be "subject to the same terms and conditions applicable to an [IOU]" under the RPS program) (emphasis added).

VI. CONCLUSION

PG&E appreciates this opportunity to submit this reply to comments on the Ruling and requests that the Commission propose a decision consistent with its opening comments on the Ruling.

Respectfully Submitted,

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Dated: March 26, 2014

VERIFICATION

I am an employee of PACIFIC GAS AND ELECTRIC COMPANY, a corporation, and am authorized to make this verification on its behalf. I have read the foregoing "Pacific Gas and Electric Company's (U 39 E) Reply to Opening Comments Regarding Staff Proposal for Revising the Methodology Used to Calculate the Renewable Net Short for Procurement to Meet the California Renewables Portfolio Standard," dated March 26, 2014. The statements in the foregoing documents are true of my own knowledge, except as to matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 26th of March, 2014 at San Francisco, California.

/s/ Stephanie Greene
Stephanie Greene
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