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OFFICE OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

OPENING TESTIMONY ON THE GREEN TARIFF SHARED RENEWABLES PROGRAMS PROPOSED BY PACIFIC GAS & ELECTRIC AND SAN DIEGO GAS & ELECTRIC

San Francisco, California
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CHAPTER 1

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

The Commission's Office of Ratepayer Advocates (ORA) welcomes this opportunity to present this testimony on the Green Tariff Shared Renewables (GTSR) programs proposed by Pacific Gas & Electric (PG&E) and San Diego Gas & Electric (SDG&E), as allowed in the Scoping Ruling dated October 25, 2013. Chapter 2 addresses each of the Green Tariff Shared Renewables (GTSR) proposals and issues specific to them and Chapters 3, 4 and 5 of this testimony address issues common to all the GTSR proposals. If implemented, the ORA recommendations will better ensure that nonparticipating ratepayers bear no costs or risks associated with the GTSR programs as required by Senate Bill (SB) 43. Accordingly, ORA recommends that the Commission direct PG&E and SDG&E (utilities or IOUs) to:

- Maintain the SB 43 requirement of tracking and accounting for all revenues and costs to ensure that the utility recovers the actual costs of the utility's green tariff shared renewables program and that all costs and revenues are fully transparent and auditable. (This is ORA's primary concern.) To achieve this, the Commission should ensure the utilities are:
  - Charging GTSR customers a rate that is cost based and fully compensatory, meaning that it covers all costs of the program including corporate overhead, employee benefits, administrative costs, marketing expenditures, procurement costs, integration costs and all costs related to the program.
  - Procuring conservatively: only procure the amount of resources for the GTSR programs that can be fully used by the program participants.
  - Keeping the procurement of GTSR resources and Renewable Portfolio Standard (RPS) resources separate.
  - Having the IOUs sell excess generation if low program participation results in any over-procured renewable generation for the GTSR programs.
  - Having shareholders bear any GTSR program administrative and marketing costs that cannot be recovered from participants in the event of low GTSR program participation.

- Administer the GTSR programs in a way that ensures fair competition.
    - Comply with Community Choice Aggregation (CCA) Code of Conduct and the principles of the Affiliate Transaction Rules.
    - Administer the GTSR programs as if through an affiliate.
- If administering an enhanced community renewables program:
    - Disallow any affiliates from participating in such a program.
    - Roll out the enhanced community renewables program before the green tariff program.
- Limit the GTSR programs to a five-year term and file a new application with the Commission in order to extend the program term.
- Limit GTSR program contracts for participants initially to 1 to 2 years.
- Employ the following participant protections:
    - Allow participating customers a “cooling-off period” after the initial subscription to change or cancel their subscription without penalty.
    - Provide all relevant information on each program’s website.
    - Require a Tier 3 Advice Letter for subsequent modifications to any GTSR program rate charges and credits.
    - Adopt SDG&E’s measures for participating customer protections for community shared renewables programs.

CHAPTER 2

(ELISE TORRES)

I. REVIEW OF EACH GTSR PROGRAM PROPOSAL

A. PG&E GREEN OPTION PROGRAM

Q. State your name and employer.

A. My name is Elise Torres, and I am a Public Utilities Regulatory Analyst with the Office of Ratepayer Advocates (ORA). I submit this rebuttal testimony on behalf of ORA in response to the revised testimony of PG&E in Application (A.)12-04-020 for its GTSR program, Green Option.

Q. Can you summarize your testimony in a few sentences?

A. Yes. ORA is primarily concerned about the accounting and ratemaking strategies the IOUs will utilize to ensure nonparticipating ratepayers remain indifferent to the GTSR programs as required by SB 43. Public Utilities Code section 2831(h) states the Legislative intent of SB 43 as requiring that:

> a [GTSR] program be implemented in a manner that ensures nonparticipating ratepayer indifference for the remaining bundled service, direct access, and [CCA] customers.

Section 2833(p) further obligates the Commission to:

> ensure that charges and credits associated with a participating utility's [GTSR] program are set in a manner that *ensures nonparticipant ratepayer indifference* for the remaining bundled service, direct access, and [CCA] customers and *ensures that no costs are shifted from participating customers to nonparticipating ratepayers.* (Emphasis added.)

ORA is also concerned about the size of the initial procurement of renewable resources for the PG&E's Green Option proposal.

Q. What is nonparticipating ratepayer indifference?

A. It is the principle that IOU customers that do not benefit in or participate in a new program offering by the IOU should not bear the risk or cost of that program. SB 43 also provides guidance on how ratepayer indifference should be achieved, specifically: "[a] participating utility shall track and account for all revenues and costs to ensure that the utility recovers the actual costs of the utility's green tariff shared renewables program and that all costs and revenues are fully transparent and auditable." Achieving this requirement of SB 43 is ORA's primary concern for the GTSR programs.

1. Green Option Procurement

Q. How can PG&E procure resources for the Green Option program in a way that assures nonparticipating ratepayer indifference?

A. The simplest and most transparent method to assure nonparticipating ratepayer indifference and the method that ORA strongly recommends is to keep Green Option resources and the IOUs procurement of Renewable Portfolio Standard (RPS) resources completely separate. PG&E should procure Green Option resources in a conservative manner, and in the event that there are excess Green Option resources, sell the excess.

Q. How is PG&E planning to procure resources for the Green Option program?

A. PG&E proposes to use a competitive solicitation process to procure resources for the Green Option program.[1] PG&E's testimony states that Green Option participants will pay the "renewable power rate," which is initially set at $107/MWh, for resources procured for the program.[2] This cost appears to reflect PG&E's anticipated time-of-day-adjusted starting price for the Renewable Energy Market Adjusting Tariff (Re-MAT).

Q. Is there a potential problem with PG&E's proposal in the future?

A. Yes. Going forward, PG&E's proposal allows for the cost of Green Option contracts and RPS procurement to follow diverging tracks by specifying that PG&E may execute long-term contracts for new smaller-scale Green Option energy at prices that could be higher than the weighted average cost of RPS deliveries for nonparticipants. [3] If PG&E does not sell these higher-priced resources to Green Option program participants,

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[1] PG&E Revised Testimony, December 6, 2013, p. 3-1.

[2] PG&E Revised Testimony, p. 4-2.

[3] PG&E Revised Testimony, p. 1-6.

bundled ratepayers will absorb their cost in the RPS program, violating the principle of nonparticipating ratepayer indifference.

Q. Why does this violate the principle of nonparticipating ratepayer indifference?

A. If PG&E's bundled ratepayers, who already pay for the RPS program, must in addition absorb the cost of higher-priced resources that are not purchased by Green Option program participants, then PG&E's bundled ratepayers will have to pay more than they would have if resources were procured solely for the RPS program. This will cause bundled ratepayers to pay more as a result of the Green Option program, violating the nonparticipating ratepayer indifference mandate of SB 43.

Q. Is there a way to avoid this problem?

A. Yes. There are two ways to avoid or minimize the impact of this problem. The first way, and the method that ORA strongly recommends, is to keep Green Option resources and RPS resources completely separate. The second way is to procure Green Option resources in a conservative manner, and in the event that there are excess Green Option resources, sell the excess. In order to maintain nonparticipating ratepayer indifference, any losses on sales of Green Option contracts must be tracked and attributed to Green Option participants.

Q. Is there a way to avoid the risk of violation of the indifference principle created by PG&E's proposal to apply any excess Green Option resources to its RPS portfolio?

A. This risk can be mitigated if PG&E only procures resources for the Green Option programs that are supported by participating customer demand and in the event that there is an excess, sells off that excess.

Q. Does PG&E propose to procure in this manner?

A. No. PG&E's share of the total 600 megawatts (MW) limit for the GTSR programs is 272 MWs.[4] PG&E proposes to procure resources for the Green Option

[4] PG&E Revised Testimony, p. 1-5.

program "at defined milestones." PG&E defines these increments as either 30 MWs of incremental load, or at the end of the calendar year.[5] PG&E also proposes to execute Green Option procurement contracts for up to 50 MWs, in advance of customer enrollments.[6]

Q. Why is PG&E's proposal problematic?

A. As discussed above, over-procurement for the Green Option program is a significant source of nonparticipating ratepayer risk. Thus, ORA recommends that the Commission substantially limit the amount of advanced procurement PG&E can undertake prior to pre-defined customer enrollment levels.

Q. What do you recommend specifically regarding enrollment?

A. PG&E should only procure Green Option resources as customer enrollment necessitates. In the event of low Green Option participation, there should be minimal excess Green Option resources, and PG&E should sell off the excess in order to minimize any stranded costs. There should also be a clear pre-defined link between Green Option participation levels and procurement for the program. This will help ensure that nonparticipating ratepayers remain indifferent to the Green Option program as required by Public Utilities Code Section 2833(h). The Commission should require PG&E to procure resources for the Green Option program in a conservative manner that links procurement amounts to actual program participation.

2. Green Option Program Cost Recovery

Q. Does PG&E's Green Option program cost recovery plan adequately account for all the program costs?

A. No, PG&E's cost recovery plan does not adequately explain how all the Green Option program costs will be solely recovered from participants. As proposed, the Green Option program risks violating the principle of ratepayer indifference. As discussed

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[5] PG&E Revised Testimony p. 1-7 and 1A-9.

[6] Id. at p. 1-6, FN5.

above, the key source of this risk is PG&E's proposal to bank unsubscribed energy for future RPS compliance (i.e., have bundled ratepayers pay for the cost of any excess RPS-eligible resources that PG&E procures for Green Option participants).[7] The Green Option is potentially a 272 MW program, thus, the cost for bundled ratepayers could be significant.

Q. How could using excess Green Option procurement for RPS compliance purposes violate the ratepayer indifference principle?

A. Using unsubscribed Green Option procurement represents a potential cost that nonparticipating ratepayers would not have incurred but for the Green Option program. There are several ways in which this may occur, and the Commission should establish safeguards from each of the following scenarios from occurring:

- The GTSR portfolio may be procured earlier than the IOU would otherwise procure energy for its RPS program, and if renewable energy prices are declining, using this energy to satisfy RPS obligations will cost more than necessary had the IOU waited and bought RPS generation at a later, lower price.
    - Assume, for example, that through the June 2014 Renewable Auction Mechanism (RAM) an IOU executes an additional contract for a 5 megawatt (MW) facility at a price equal to the weighted average of all other selected bids, but only signs up enough GTSR participants to subscribe the equivalent of 1 MW; nonparticipating ratepayers will be forced to pay the cost of the 4 MW that are unsubscribed. Assume as well, that this energy is not needed for RPS compliance until one-year after the facility begins delivery. The IOU banks that amount towards that year's RPS procurement obligations and defers its procurement of a new project for RPS compliance purposes accordingly. If that new project reflects a lower price than the contract the IOU paid for its GTSR program, nonparticipating ratepayers will have paid a higher price, and paid it one year earlier, as a direct result of the IOU's procurement for its GTSR program, violating the ratepayer indifference principle.

[7] PG&E Revised Testimony, p. 1-8.

- An IOU may use RPS mechanisms to take bids for GTSR resources,[8] but choose the cheapest resources to sell to its GTSR customers. Doing so harms the general body of ratepayers for whom the IOU is required to comply with RPS obligations, by favoring GTSR customers with cheaper energy. The IOU should keep the procurement of GTSR resources and RPS resources separate. But in the event the procurement of GTSR and RPS resources are not separated, the IOU should be obligated to use a "slice" of resources for its GTSR that mirror in price those used for RPS, or else the ratepayer indifference principle would be violated.

- The converse may also be true. The IOU may pay more for GTSR resources due to the relatively small size of their programs or some other reason. If it uses any unused portion of these resources to satisfy its RPS obligations, it may end up violating the ratepayer indifference principle because procurement directly to meet RPS obligations would have been less expensive but for the excess GTSR resources.

- All of the above concerns apply with equal force to the banking scenario, where an IOU that does not need excess GTSR resources to meet RPS procurement obligations banks them for future use under Section 2833(s). Any time these banked leftover GTSR resources cost more than then would have if were procured only for the RPS program, they violate the ratepayer indifference requirement.

- Using excess Renewable Energy Credits (RECs) associated with electricity procured for a GTSR program presents its own challenges vis-à-vis the ratepayer indifference requirement. That is, a REC procured as part of an energy transaction for GTSR cannot be used in the RPS program if it will cost the RPS program more than an independent REC would cost, or else the ratepayer indifference rule will be violated. ORA's recommendation to resolve this challenge is to keep the procurement of GTSR resources and RPS resources completely separate. The utilities should procure GTSR resources in a conservative manner, and in the event that there are excess GTSR resources, sell the excess.

Q. Is PG&E's testimony specific on how it will avoid the potential problems you raise?

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[8] Section 2833(c) requires IOUs to use RPS "tools and mechanisms" to procure resources for their GTSRs, so IOUs are likely to use the same method for seeking bids for GTSR contracts as they use for their RPS.

A. No. While PG&E's testimony proposes balancing account treatment as a way to ensure that all costs of the Green Option program are allocated back to Green Option participants[9], it fails to specify exactly how PG&E will ensure that the cost of any excess Green Option procurement will not be unfairly shifted to nonparticipating ratepayers.

Q. What does ORA recommend to avoid this cost-shift?

A. The most straightforward way to ensure nonparticipating ratepayer indifference would be a total separation of Green Option costs and revenues from PG&E's cost recovery for its bundled customers. This is consistent with recent Decision (D.) 12-12-037 and D.13-12-040, where the Commission ordered Southern California Gas Company (SoCal Gas) to establish cost and revenue tracking mechanisms to ensure that nonparticipating ratepayers would bear no cost or risk from new voluntary programs, and to provide for the refund of embedded costs that were used in the administration of the new programs but approved in previous general rate case proceedings.[10] The Commission should require PG&E to implement similar cost and revenue tracking mechanisms in this proceeding to ensure nonparticipating customers remain indifferent to the Green Option program.

3. Green Option Participating Customer Charges

Q. Does PG&E's proposal for Green Option participant rates ensure nonparticipating ratepayer indifference for customer charges?

A. Not completely. It professes to, and attempts to minimize risks to nonparticipating ratepayers. However, it falls short of assuring nonparticipating ratepayer indifference.

Q. What are the nonparticipating ratepayer risks of concern?

A. ORA is concerned that the charges PG&E proposes to include in the Green Option rates do not fully cover all of the costs of administering and procuring energy for

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[9] Id at p. 5-2.

[10] D.12-12-037, p.65, Ordering Paragraph 3 and D.13-12-040, p 11.

the program as required by SB 43. The Green Option rate should include the participants' share of all administration and marketing costs of the program.

Q. Are there any aspects of PG&E's proposal that ORA does support?

A. Yes, PG&E proposes that its shareholders bear any administrative and marketing costs in excess of revenues received from participating customers.[11] This proposal is especially important because PG&E approximates that half of the Green Option program costs will occur in the first two years of the program.[12] ORA supports this proposal because it is essential for maintaining nonparticipating ratepayer indifference.

Q. What changes would you make to other aspects of PG&E's proposal?

A. PG&E should utilize full-cost ratemaking for the Green Option program.

Q. What do you mean by full-cost ratemaking?

A. Full-cost ratemaking ensures that the rate charged to the Green Option customer is cost based and fully compensatory, meaning that it covers all costs of the program including corporate overhead, employee benefits, administrative costs, marketing expenditures, procurement costs, and any cost of any other goods or services that support the program. This is consistent with the SB 43 requirement that specifies: "[a] participating utility shall track and account for all revenues and costs to ensure that the utility recovers the actual costs of the utility's green tariff shared renewables program and that all costs and revenues are fully transparent and auditable."

Q. Is there precedent for what you propose?

A. Yes. As noted above, this recommendation is supported by D.12-12-037 and D.13-12-040, in which the Commission required SoCalGas to utilize full-cost ratemaking

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[11] PG&E Revised Testimony, p. 5-2, citing to, p. 1B-14.

[12] Id. at p. 2-9, citing to Table 2-2. The year 1 and year 2 program costs are $4,252,462, compared to the total 5 year costs of $8,857,230.

for the gas compression services tariff and the biogas conditioning tariff rate charged to participants and also required that the rate be fully compensatory.[13]

Q. What specifically should PG&E do differently?

A. In order for the Green Option rate to be fully compensatory, it must also include all nonbypassable charges in order to ensure they are not shifted to nonparticipating customers. ORA does not agree with PG&E's participant rate proposal to recover the Renewable Integration Charge (RIC).

Q. Please explain.

A. The RIC reflects the costs of integrating renewable energy supplies into the system so they can be distributed to customers. The Commission has not yet adopted a calculation method for this charge but is expected to in R.12-03-014.[14] PG&E proposes to only apply the RIC to Green Option participants who sign up for the program after the charge has been approved by the Commission.[15]

Q. What is ORA's reaction to this proposal?

A. The Commission should reject this proposal because it is inequitable for participants who signed up for the Green Option prior to the adoption of the RIC to avoid their fair-share of program-specific costs. This proposal could also result in cost-shifting to nonparticipants if a majority of the Green Option participants sign up for the program prior to the adoption of the RIC and the RIC charge cannot be fully recovered from new participants.

B. SDG&E SUN RATE PROGRAM

Q. Can you summarize your testimony in a few sentences?

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[13] D.13-12-040, pp. 8-9, and D.12-12-037, p. 65, Ordering Paragraph #2.

[14] PG&E Revised Testimony, p. 4-2. The Commission recently issued a new long-term procurement plan rulemaking, R.13-12-010, the successor to R.12-03-014. While is not clear when or where the Commission will consider implementation of a renewable integration charge, when that information is developed, the cost should be considered as part of the GTRS programs and attributed to GTSR program participants.

[15] PG&E Revised Testimony, p. 4-2.

A. Yes. As explained above regarding PG&E's proposed Green Option program, ORA is primarily concerned about the accounting and ratemaking strategies the IOUs will utilize to ensure nonparticipating ratepayers remain indifferent to the GTSR programs as required by SB 43. Public Utilities Code section 2831(h) states the Legislative intent of SB 43 as requiring that:

> a [GTSR] program be implemented in a manner that ensures nonparticipating ratepayer indifference for the remaining bundled service, direct access, and [CCA] customers.

Section 2833(p) further obligates the Commission to:

> ensure that charges and credits associated with a participating utility's [GTSR] program are set in a manner that *ensures nonparticipant ratepayer indifference* for the remaining bundled service, direct access, and [CCA] customers and *ensures that no costs are shifted from participating customers to nonparticipating ratepayers*. (Emphasis added.)

ORA is concerned about aspects of SDG&E's SunRate proposal, specifically SDG&E's plan to recover program costs in the event participation levels are too low to allow for cost recovery exclusively from participants and how the application of excess program procurement to SDG&E's RPS portfolio will be carried out in a way that ensures nonparticipating ratepayers remain indifferent to the SunRate program.

1. SunRate Procurement

Q. Please describe SDG&E's SunRate procurement plan.

A. SDG&E's testimony states that the price SunRate participants will pay for the SunRate commodity will be based on the cost of the incremental local solar projects procured for the program through the RAM process.[16] SDG&E further explains that the SunRate commodity price will be based on the average price of the projects procured for the program at the time the customer signs up for the program.[17] If a participant signs up

[16] SDG&E Revised Testimony, December 6, 2013, Chapter 4, p. 9.

[17] Id.

for the program before new SunRate resources have begun delivery then the commodity price will be based on "the average price of the projects in the existing SunRate pool that have achieved full commercial operation when the program begins."[18] SDG&E's procurement plan is to select the least expensive RAM bids to meet any existing RAM procurement requirements and then select the next least expensive bids that also meet the SB 43 size and location eligibility requirements, for the SunRate program.[19]

Q. Does SDG&E's proposal present any problems?

A. Yes, if SDG&E does not sell the higher-priced SunRate resources in the SunRate program, bundled ratepayers will absorb the cost of the excess GTSR resources in the RPS program, violating the principle of nonparticipating ratepayer indifference.

Q. Why does this violate the principle of nonparticipating ratepayer indifference?

A. For the SunRate program, a nonparticipating ratepayer risk exists that SDG&E may procure solar energy for the program in excess of the amount that SunRate participants will fully utilize. As SDG&E explains, such excess procurement could be banked for RPS compliance purposes,[20] but this leaves open the possibility that ratepayers will pay higher prices for future compliance needs that SDG&E could have possibly met at a lower cost if they had delayed procurement until a need was forecasted. Currently, solar prices are trending downward.[21] Thus, if SDG&E buys energy now for the SunRate program, and does not sell all of the energy to SunRate subscribers, under its proposal it will transfer this energy to its RPS procurement bank, under the RPS rules.

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[18] Id.

[19] Id. at p. 5. SB 43 created Public Utilities Code Section 2833(b) which limits generating facilities participating in the GTSR programs to those with a nameplate rated generating capacity not exceeding 20 megawatts. Public Utilities Code section 2833(e) requires the utilities to procure resources for the GTSR program that are located in reasonable proximity to enrolled participants.

[20] SDG&E Revised Testimony, Chapter 4, p. 19.

[21] See, e.g., Photovoltaic (PV) Pricing Trends: Historical, Recent, and Near-Term Projections, produced by the National Renewable Energy Laboratory and Lawrence Berkeley National Laboratory, November 2012, available at http://www.nrel.gov/docs/fy13osti/56776.pdf.

However, if it does not buy the energy now and bank the excess, but simply buys it for RPS when the need arises, the energy may be less expensive.

Q. Is there a way to avoid this problem?

A. Yes: Keep procurement of GTSR resources and RPS resources completely separate. The utility should procure GTSR resources in a conservative manner (based on actual program demand), and in the event that there are excess GTSR resources, sell the excess.

Q. Are there other ways SDG&E can procure resources for the SunRate program that will promote nonparticipating ratepayer indifference?

A. Yes, the amount of resources SDG&E procures for the SunRate program, and the timing of this procurement, will have a significant impact on nonparticipating ratepayer indifference. Nonparticipating ratepayers face a significant risk from absorbing excess SunRate procurement. Using over-procured RECs or generation from the SunRate program to satisfy SDG&E's RPS obligations will violate the ratepayer indifference principle if it costs SDG&E more to satisfy its RPS obligations with unsold SunRate megawatts than SDG&E would pay if it satisfied its RPS obligations independently of the SunRate program. This risk can be avoided or significantly mitigated if SDG&E only procures resources for the SunRate program that are supported by participating customer demand.

Q. Does SDG&E propose to procure in this manner?

A. Yes, SDG&E proposes a 10 MW procurement limit for the initial SunRate program. SDG&E's share of the total 600 MW limit for the GTSR programs is 59 MWs.[22] Since SDG&E is proposing to offer two GTSR programs, SunRate and Share the Sun, the 59 MWs cap is applicable to the combined total of both programs. SDG&E proposes to initiate both its SunRate and Share the Sun programs as 10 MW pilots.[23]

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[22] Id. at p. 19

[23] Id. Chapter 1, p. 6.

ORA finds merit with SDG&E's rationale for initiating its GTSR programs as limited megawatt pilot programs. SDG&E proposes to initiate its all-customer solar access programs as 10 MW pilots. SDG&E estimates that 7,000 customers will participate in the SunRate and Share the Sun programs combined.[24] Seven thousand customers represent 0.5% of SDG&E's total electric meters.[25] SDG&E states its rationale behind this pilot proposal as:

> to confirm our estimated levels of customer participation and determine the best terms and conditions for expanding the program on a larger scale, consistent with the goals of SB 43.[26]

Q. Do you recommend any other changes for SDG&E's procurement plan?

A. Yes, ORA recommends that SDG&E establish clear pre-defined links between SunRate participation levels and procurement for the program. This will help ensure that nonparticipating ratepayers remain indifferent to the SunRate program as required by Public Utilities Code Section 2833(h).

2. SunRate Program Cost Recovery

Q. Does SDG&E's SunRate program cost recovery plan adequately account for all the program costs?

A. Not completely. As proposed, there is risk that the SunRate program will violate the principle of ratepayer indifference. As discussed above in Section A.1 of this Chapter, the key source of this risk is the provision that nonparticipating ratepayers will serve as the backstop for unsubscribed energy. The limited size of the SunRate program mitigates some of this risk. The 20 MW procurement for both of SDG&E's GTSR

[24] SDG&E Response to ORA Data Request 007, Q1.

[25] Id.

[26] Id. Chapter 1, p. 6-7.

programs, SunRate and Share the Sun, represents 0.2% of SDG&E's RPS goals for compliance period 3.[27]

Q. What does SDG&E propose in terms of excess SunRate procurement?

A. SDG&E's testimony explains its proposal to use excess procurement to meet its RPS requirements, and/or bank such resources for future compliance needs,[28] but unsubscribed SunRate procurement nevertheless represents a potential cost that nonparticipating ratepayers would not have incurred but for the SunRate program.

Q. What does ORA recommend to maintain nonparticipating ratepayer indifference?

A. There are two things SDG&E should do to maintain nonparticipating ratepayer indifference. First, as discussed in above, the most straightforward way to ensure nonparticipating ratepayer indifference would be a total separation of SunRate program costs and revenues from SDG&E's cost recovery for its bundled customers. This is consistent with D.12-12-037 and D.13-12-040, where the Commission ordered SoCal Gas to establish cost and revenue tracking mechanisms to ensure nonparticipating ratepayer indifference.[29] The Commission should require SDG&E to implement a cost and revenue tracking mechanism to ensure nonparticipating customers remain indifferent to the SunRate program.

Second, there is a risk the SunRate program will not attract enough participants to absorb the initial marketing and administrative costs for the SunRate program. As such, SDG&E should follow PG&E's proposal to have its shareholders bear any administrative and marketing costs in excess of revenues received from participating customers.[30] The

[27] Id. Chapter 4, p, 19.

[28] Id. Chapter 5, p. 20.

[29] D.12-12-037, p. 65, Ordering Paragraph 3. D.13-12-040, p. 11.

[30] PG&E Revised Testimony, p. 5-2, citing to p. 1B-14.

Commission should adopt this proposal in order to maintain nonparticipating ratepayer indifference.

3. SunRate Participating Customer Charges

Q. Does SDG&E's proposal for SunRate participant rates ensure nonparticipating ratepayer indifference regarding customer charges?

A. Not completely. SDG&E attempts to minimize risk for its nonparticipating customers. However, nonparticipating ratepayers still face risks if the Commission approves SDG&E's proposal for SunRate participant rates as described in its revised testimony.

Q. What are the nonparticipating ratepayer risks of concern?

A. ORA is concerned that the charges SDG&E's proposes to include in the SunRate participant charges do not fully cover all of the costs of administering and procuring energy for the program as is required by SB 43. SDG&E estimates approximately $3.5 million in incremental administrative costs to implement and administer the SunRate and Share the Sun pilots over a five-year period.[31] This amount reflects SDG&E's estimate before applying loaders and escalators, so the actual cost could be much higher than $3.5 million.[32] According to SDG&E's figures, over two-thirds of the overall cost will be incurred during the first two years of the program, due to the development and initial implementation of both programs.[33]

Q. How does ORA recommend SDG&E ensure that nonparticipating ratepayers remain indifferent to the SunRate program costs?

A. The SunRate participant charges should include the participants' share of all administration and marketing costs of the program. As discussed above, SDG&E has not proposed a recovery plan for any administrative and/or marketing expenses that exceed

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[31] SDG&E Revised Testimony, Chapter 2, p. 41.

[32] SDG&E Revised Testimony, Chapter 2, p. 41.

[33] Id. The combined costs for year 1 and 2 of the pilots is $2,729,000 compared to the total five-year costs of $3,498,000.

the revenues recovered from participants. The Commission should require SDG&E's shareholders to bear any administrative and/or marketing costs in excess of revenues received from participating customers, in the event of unsustainably low program participation.

If ratepayers are choose not to participate in the SunRate program, they should not pay for the program's administrative costs. The best way to ensure that existing staff and administrative resources do not subsidize the program is to use separate staff and resources to carry out the SunRate program. There are two basic aspects of the SunRate program – customer care (and other aspects of program administration), and procurement. With regard to customer care (or service), at start-up, the SunRate program will require a great deal of staff time and effort, answering customer questions and promoting the program to SDG&E's customer base. Using existing staff to perform this work will take resources from existing customers who do not sign up for the SunRate program. Indeed, it is likely that because the SunRate program is new, each participating customer will use a proportionately higher share of SDG&E staff time than do existing customers on regular bundled service. Thus, the reduction in staff time and other resources for bundled customers could be significant, which is why it is essential that all SDG&E staff time and resources attributed to the SunRate program be carefully tracked and recovered from SunRate participants.

Q. What other SunRate program costs are of concern to ORA?

A. The Commission should require that SunRate participants pay their share of nonbypassable charges, just as all bundled customers do. The rate should also include all nonbypassable charges in order to ensure they are not shifted to nonparticipating customers. ORA is also concerned with SDG&E's SunRate proposal to recover the Renewable Integration Charge (RIC) or general renewable integration costs.

Q. How does ORA recommend SDG&E account for renewable integration costs?

A. As discussed above in Section A.3, the RIC reflects the costs of integrating renewable energy supplies and the Commission has not yet adopted a calculation method for this charge but is expected to in Rulemaking 13-12-010.[34] SDG&E did not incorporate any renewable integration costs into the prices for the SunRate program.[35] SDG&E states it is "open to reviewing what renewable integration costs would be appropriate to incorporate" and will consider applying such costs if the pilot program is expanded.[36] ORA recommends that once the Commission adopts a value for the RIC, SDG&E incorporate the RIC into the SunRate for then existing participants as well as for all new participants. The Commission should adopt this proposal because it will also reduce cost-shifting to nonparticipants and it is inequitable for SunRate participants to avoid program-specific costs.

C. SDG&E SHARE THE SUN PROGRAM

Q. Can you summarize your testimony in a few sentences?

A. Yes. In general, ORA supports SDG&E's Community Shared Renewables program, Share the Sun. This type of GTSR program provides benefits that green tariff type programs do not. Community renewables programs can provide economic benefits to the communities where they are located. These benefits can include job creation and retention of local dollars in the local community.[37] Shared community renewables programs also encourage the development of energy projects built close to the source of demand. This benefits all ratepayers by potentially reducing or delaying the need to build

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[34] PG&E Revised Testimony, p. 4-2. The Commission recently issued a new long-term procurement plan rulemaking, R.13-12-010, the successor to R.12-03-014. While is not clear when or where the Commission will consider implementation of a renewable integration charge, when that information is developed, the cost should be considered as part of the GTRS programs and attributed to GTSR program participants.

[35] SDG&E Revised Testimony, Chapter3, p. 16.

[36] SDG&E Revised Testimony, Chapter 3, p. 16.

[37] *See* Vote Solar, *Economic and Job Creation Benefits of SB 43/AB 1014: A California Shared Renewable Energy* Program (2013), *available at* http://votesolar.org/wp-content/uploads/2013/04/VSI-SB-43-AB-1014-JEDI-final.pdf.

new transmission lines. For these reasons, ORA supports SDG&E's proposal to offer a shared community renewables program.

ORA is concerned about two aspects of SDG&E's Share the Sun proposal: 1) SDG&E's plan for recovering program administrative and marketing costs in the event participation levels are too low to allow for cost recovery exclusively from participants; and 2) the accounting methods SDG&E proposes to recover Share the Sun program specific costs in a way that maintains nonparticipating ratepayer indifference.

1. Share the Sun Procurement

Q. How can SDG&E procure resources for that Share the Sun program in a way that assures nonparticipating ratepayer indifference?

A. The same sources of nonparticipating ratepayer risk exist for the Share the Sun program as were discussed for the SunRate program in Section B.1 above. The risk generated by SDG&E's proposal to bank any excess SunRate procurement for future RPS compliance is also relevant to the Share the Sun program, given SDG&E's proposal to utilize the Feed-in-Tariff (FiT) process to procure new resources for the Share the Sun program.[38]

Q. Why?

A. Because the FiT price may change. According to D.12-05-035, the resource price applicable to the FiT may adjust up or down in response to under-subscription or over-subscription, respectively, every bi-monthly period.[39]

Q. Can you explain further?

A. Yes, if excess Share the Sun procurement is banked by SDG&E for future RPS compliance, there is a risk that the nonparticipating ratepayer indifference principle will

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[38] SDG&E Revised Testimony, Chapter4, p. 11.

[39] D.12-05-035 Decision Revising Feed-In Tariff Program, Implementing Amendments to Public Utilities Code Section 399.20 Enacted by Senate Bill 380, Senate Bill 32, and Senate Bill 2 1X and Denying Petitions for Modification of Decision 07-07-027 by Sustainable Conservation and Solutions for Utilities, Inc., issued May 31, 2012, Section 6.4 Re-MAT Price Adjustment Mechanism for Each Product Type (pp. 44-48).

be violated. If the cost of renewable resources is consistently stepped down then any resources that were procured at an earlier date, will cost more to satisfy RPS requirements than if the resources had been procured on an as-needed basis. If SDG&E does not sell these higher-priced resources to Share the Sun program participants, bundled ratepayers will absorb the cost in the RPS program, violating the principle of nonparticipating ratepayer indifference.

Q. Is there a potential problem with SDG&E's proposed Share the Sun program in the future?

A. Yes, SDG&E proposes to execute a Power Purchase Agreement (PPA) with Share the Sun developers and commit to purchasing "all output from the project in order to facilitate project financing and construction."[40] Accordingly, SDG&E is responsible for purchasing any excess renewable energy generated from a Share the Sun project. This highlights the need for a mechanism to ensure that nonparticipating ratepayers do not pay for any added cost of banking any excess Share the Sun resources.

Q. Does ORA recommend a solution?

A. Yes, SDG&E should track the procurement costs for the unsubscribed portion of Share the Sun resources and, to the extent they exceed the then-applicable average RPS cost for non-participants (i.e., for contracts being executed at the same time), allocate the difference to the next generation of Share the Sun participants.

Q. Does ORA have any other concerns regarding Share the Sun procurement?

A. Yes, ORA is concerned about the lack of a mechanism to ensure the eligibility requirements for Share the Sun developers are met. SDG&E proposes to require Share the Sun developers to meet two sets of eligibility criteria:

> one set pertaining to the developer's ability to successfully interact with SDG&E's customers and another pertaining to the developer's ability to build a renewable facility.[41]

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[40] SDG&E Revised Testimony, Chapter4, p. 12.

[41] SDG&E Revised Testimony, Chapter4, p. 12.

For the second set of eligibility criteria, SDG&E proposes to mirror the requirements for the FiT program with some additional Share the Sun specific criteria.[42] The FiT developer eligibility requirements are extensive and provide a thorough review of a developer's ability to build a renewable facility.[43]

Q. What is ORA's concern?

A. ORA supports the use of the FiT program eligibility requirements for Share the Sun developers but is concerned SDG&E's proposal does not provide for any Commission oversight of the developer application review process.

Q. How should SDG&E's program be changed?

A. The Commission should require SDG&E to submit an annual report to the Commission and ORA listing all Share the Sun developer applications, describing in detail the eligibility review process, and an explanation of why certain developers were ultimately selected to participate in the Share the Sun program. This requirement will ensure that all of the Share the Sun developer eligibility criteria are met, which benefits Share the Sun participants and nonparticipating SDG&E customers.

2. Share the Sun Cost Recovery

Q. Does SDG&E's Share the Sun program cost recovery plan adequately account for all the program costs?

A. No. As proposed, there is risk that the Share the Sun program will violate the principle of ratepayer indifference. The key source of this risk is the provision that nonparticipating ratepayers will serve as the backstop for unsubscribed energy. The limited size of the Share the Sun program mitigates some of this risk.

Q. Do you have concerns if the program were larger than what SDG&E proposed?

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[42] Id.

[43] For a list of the FiT developer eligibility criteria see SDG&E Revised Testimony, Chapter 4, p. 13-15.

A. Yes, and several commenters propose a much larger program for SDG&E. The Utility Reform Network (TURN), Interstate Renewable Energy Council (IREC), and Vote Solar recommend that SDG&E's initial program size be up to the statutorily authorized amount of 59 MW.[44]

Q. Why would this change increase your concern?

A. Nonparticipating ratepayers face a significant risk from absorbing excess Share the Sun procurement. This risk increases with the size of the Share the Sun program. Also, if the procurement size increases then SDG&E will have to use more staff and resources to market and implement the Share the Sun program, driving up program costs. This creates a greater risk that SDG&E will not be able to recover all of the program costs from Share the Sun participants, which could lead to cost-shifting to nonparticipating customers.

Q. What about shifting excess Share the Sun procurement to meet SDG&E's RPS obligations – does SDG&E's proposal violate the ratepayer indifference requirement in the GTSR statute?

A. It could. SDG&E's testimony explains its proposal to use excess Share the Sun procurement to meet its RPS requirements, and/or bank such resources for future compliance needs,[45] but unsubscribed Share the Sun procurement could cost more than general RPS procurement, especially if procured earlier than needed, which creates a potential risk of cost-shifting to nonparticipating ratepayers. I listed each of these risks in the bullets in Section A.2 above.[46]

Q. Does SDG&E's proposal for Share the Sun pose a potentially greater risk than its SunRate proposal?

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[44] TURN Reply Comments, pp. 6-7; and IREC Reply Comments, p. 20.

[45] Id. Chapter 5, p. 20.

[46] ORA Rebuttal Testimony, Chapter 2, Section A.1, pp. 5-7.

A. Yes, because SDG&E’s procurement price cap proposal only applies to the SunRate program, and not the Share the Sun program.[47]

Q. Should SDG&E’s price cap also apply to Share the Sun?

A. Yes, SDG&E’s SunRate price cap proposal should also apply to the Share the Sun program. The Sun Rate price cap may need modification in order to apply to the Share the Sun program.

Q. Is there another way besides using a price cap to mitigate the risk Share the Sun over-procurement poses to nonparticipating ratepayers?

A. If a price cap is unworkable for the Share the Sun program, the Commission could instead require SDG&E to carefully track the procurement costs for the unsubscribed portion of Share the Sun resources and, to the extent they exceed the then-applicable average RPS cost for nonparticipants (i.e., for contracts being executed at the same time), allocate the difference to the next generation of Share the Sun participants.

Q. What does ORA recommend?

A. SDG&E should employ one of the two above discussed strategies to ensure that nonparticipating ratepayers remain indifferent to procurement for the Share the Sun program.

Q. What other concerns do you have about Share the Sun?

A. I have concerns related to the administrative and overhead costs of the program. There is a risk the Share the Sun program will not attract enough participants to absorb the initial marketing and administrative costs of the program. As was discussed in Section B.3 above, a majority of the SunRate and Share the Sun program costs will occur in the first two years of the programs.[48]

Q. How could SDG&E reduce this risk?

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[47] Id. Chapter 4, p. 10.

[48] SDG&E Revised Testimony, Chapter 2, p. 41.

A. In order to mitigate this risk, the Commission should require SDG&E to adopt PG&E's proposal to have its shareholders bear any administrative and marketing costs in excess of revenues received from participating customers.[49]

3. Share the Sun Participant Rate Charges and Credits

Q. What costs do you propose that SDG&E include in the Share the Sun rate charges and credits and why?

A. As discussed above in Section B.3, the SunRate and Share the Sun rates should include the costs for ancillary services and the RIC. SDG&E proposes to use existing staff to perform the administrative and marketing work for the Share the Sun program.[50] This work will take resources from existing customers who do not sign up for the Share the Sun program. Due to the fact that the program is new, each participating customer is likely to use a proportionately higher share of SDG&E staff time than existing customers on regular bundled service.

Q. What do you recommend as a solution?

A. The Commission should require SDG&E to carefully track the cost of SDG&E staff and resources utilized for the administration and management of the Share the Sun program in order to recover the cost exclusively from program participants.

Q. What other concerns do you have about SDG&E's Share the Sun rate?

A. As was discussed above in Section B.3, SDG&E does not propose to include the RIC or any other renewable integration costs in the Share the Sun rate.[51] SDG&E does state that it is open to considering what renewable integration costs should be

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[49] PG&E Revised Testimony, p. 5-2, citing p. 1B-14.

[50] SDG&E Revised Testimony, Chapter 2, p. 39.

[51] SDG&E Revised Testimony, Chapter 3, p. 16.

included into the charges for the SunRate and Share the Sun pilots,[52] but is not doing so yet.

Q. What do you recommend?

A. Consistent with the ratepayer indifference principle, the RIC value, once adopted by the Commission, should be included in the Share the Sun rate in order to ensure that program participants pay for the program costs, and to avoid cost-shifting to nonparticipating customers.

Q. Does this conclude your testimony?

A. Yes.

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[52] Id.

CHAPTER 3
(VALERIE KAO)

I. GTSR PROGRAMS MUST UPHOLD RATEPAYER INDIFFERENCE WITH RESPECT TO PROCUREMENT

A. INTRODUCTION AND SUMMARY

Q. Please state your name and position.

A. My name is Valerie Kao, and I am a Public Utilities Regulatory Analyst in the Office of Ratepayer Advocates.

Q. Please summarize the points you will be making in this section of your testimony.

A. My testimony will address the need for GTSR procurement to be in compliance with the renewables portfolio standard (RPS) program rules; I then describe several specific ways in which the proposed GTSR programs run the risk of violating the ratepayer indifference mandate.

ORA's primary recommendation is for the IOUs to keep GTSR resources and their procurement of RPS resources completely separate. The IOUs should procure GTSR resources in a conservative manner, and in the event that there are excess GTSR resources, sell the excess. Further, the Commission should strictly enforce SB 43's requirement that "[a] participating utility shall track and account for all revenues and costs to ensure that the utility recovers the actual costs of the utility's green tariff shared renewables program and that all costs and revenues are fully transparent and auditable." To achieve the accounting requirements specified in SB 43, ORA recommends that the Commission require the utilities to adhere to the general cost recovery requirements of D.13-12-040 and D.12-12-037 in implementing the GTSR programs, as discussed below.

In the event, however, that the Commission does not adopt ORA's primary recommendation and allows the utilities to use unsubscribed GTSR resources to meet their RPS requirements, GTSR procurement must comply with the RPS program rules, as I discuss further below.

B. RPS Rules

Q. Why are the RPS program rules relevant to GTSR procurement?

A. Because the GTSR statute provides that resources the utility cannot use for its GTSR program can be applied to fulfill the utility's obligation to provide 33 percent renewables in its portfolio, as long as the utility does not violate the ratepayer indifference principle in doing so.

Q. What statutory provision provides this?

A. Public Utilities Code § 2833 specifies:

> A participating utility shall, in the event of participant customer attrition or other causes that reduce customer participation or electrical demand below generation levels, apply the excess generation from the eligible renewable energy resources procured through the utility's green tariff shared renewables program to the utility's renewable portfolio standard procurement obligations or bank the excess generation for future use to benefit all customers in accordance with the renewables portfolio standard banking and procurement rules approved by the Commission.

The Commission confirms this requirement in D.13-11-024, stating: "if approved, procurement under green pricing programs counts toward RPS requirements only if such procurement meets all the relevant requirements under the Commission's RPS Program."[53]

Q. Are there any other limits to a utility's ability to apply excess generation from the GTSR program to the RPS obligations besides the ratepayer indifference requirement?

A. Yes. In order for a utility to apply any excess generation resulting from GTSR procurement to its RPS obligations, or to bank such generation for future RPS obligations, such procurement must comply with the RPS program rules.

Q. Why do you say this?

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[53] D.13-11-024, Decision Conditionally Accepting 2013 Renewables Portfolio Standard Procurement Plans and Integrated Resource Plan and On-Year Supplement, issued November 20, 2013, p. 19, available at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M081/K872/81872675.PDF.

A. As long as the IOUs procure GTSR resources in advance of customer subscriptions, there is a risk that some or all of this procurement will result in excess generation that will then be used for RPS compliance. Therefore all GTSR procurement must comply with the RPS program rules.

Q. Do the utilities currently have any other recourse for dealing with excess RPS resources?

A. Yes, a utility may also choose to sell excess RPS resources, which the IOUs have done in the past. ORA recommends that the IOUs exercise this option with respect to unsubscribed GTSR resources that are not currently needed for RPS compliance (i.e., resources that they would otherwise bank), if they find it economical to do so. I discuss this option further below.

Q. Describe the RPS program rule(s) with which the utility must comply?

A. Public Utilities Code § 399.11(e)(1) requires the Commission to "ensure rates are just and reasonable, and are not significantly affected by the procurement requirements of [the RPS statute]." The Commission has developed and adopted processes and methodologies to specify how reasonableness should be evaluated with respect to RPS procurement.

Q. What are the rules related to reasonableness in the RPS program?

A. A key rule is that the IOUs follow a least-cost best-fit approach with respect to evaluating offers from developers of RPS-eligible resources. In general, the least-cost best-fit methods utilized by the IOUs are intended to ensure that the IOUs select offers through their general RPS solicitations that are, first and foremost, least-cost; in addition, the utilities are required to consider renewable resources that best fit their system needs.[54] For the RAM and Re-MAT, project specifications are incorporated into the

[54] See D.04-07-029 *Opinion Adopting Criteria for the Selection [of] Least-Cost and Best-Fit Renewable Resources*, filed July 12, 2004 in R.04-04-026, available at http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/38287.pdf.

screening phase for determining eligible bids in any of three product "buckets" (best-fit); for RAM, eligible bids are then evaluated solely on the basis of price (least-cost).[55]

Q. What does this mean for the GTSR resources in your view?

A. In general, resources procured through the RAM will likely be more cost-competitive than those procured through the Re-MAT. If the IOUs procure additional resources for the GTSR programs through the Re-MAT, they might increase the magnitude of the cost risk resulting from excess renewable procurement.

Q. Are there any other RPS program rules with which the utilities must comply in applying excess GTSR resources to meet the RPS obligations?

A. Yes. Another key rule applicable here is the cost containment (or "*de minimis")* principle embodied in Public Utilities Code §§ 399.15(c) and (f), which states:

> The commission shall establish a limitation for each electrical corporation on the procurement expenditures for all eligible renewable energy resources used to comply with the renewables portfolio standard….
>
> If the cost limitation for an electrical corporation is insufficient to support the projected costs of meeting the renewables portfolio standard procurement requirements, the electrical corporation may refrain from entering into new contracts or constructing facilities beyond the quantity that can be procured within the limitation, unless eligible renewable energy resources can be procured without exceeding a *de minimis* increase in rates, consistent with the long-term procurement plan established for the electrical corporation pursuant to Section 454.5.

These provisions of the RPS statute require that any amount spent to procure RPS resources above the 33% statutory mandate must have only a *de minimis* impact on rates.[56]

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[55] See D.10-12-048 *Decision Adopting the Renewable Auction Mechanism*, in R.08-08-009, http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/128432.pdf, Section 7.3 Project Selection (pp. 33-36).

[56] DRA briefed the meaning of the *de minimis* provision in response to a ruling issued in connection with SDG&E's GTSR program, A.12-01-008 *DRA Opening Brief on Legal Issues*, filed April 8, 2013, http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M064/K768/64768359.PDF, at 2.

Q. Does this rule apply to the IOU programs?

A. Yes.

Q. Do the IOUs concede this point?

A. PG&E does not. PG&E's Motion for approval of a settlement agreement allowing its program (Joint Motion) erroneously asserts that its Green Option complies with this cost containment principle because the Green Option is a voluntary program.[57] The RPS statute provides with regard to voluntary programs that a retail seller may voluntarily increase its procurement of RPS-eligible resources beyond the RPS requirements.[58]

Q. Why is PG&E's argument that the *de minimis* principle does not apply here erroneous?

A. Because in this case, the utilities propose using excess GTSR resources for RPS compliance, the *de minimis* rule applies and GTSR resources may not impose more than a *de minimis* impact on rates.

Q. What is the risk that the programs will not meet the *de minimis* rule here?

A. Each IOU's GTSR program presents a risk of over-procurement, if either fewer customers participate than anticipated and/or the IOUs procure more resources than the anticipated or actual level of participation. If over-procurement occurs, and the IOUs do not recover the costs of excess procurement from GTSR participants (or from shareholders), the program risks imposing more than *de minimis* costs on nonparticipating ratepayers. Such costs violate the RPS *de minimis* rule.

Q. How does the *de minimis* rule requirement apply to RPS procurement?

A. The Commission is currently considering proposals in the RPS proceeding (R.11-05-005) to specify how much over-procurement is *de minimis* in the context of RPS generally. Energy Division is scheduled to issue a Revised Staff Proposal on

[57] Joint Motion at 20.

[58] Public Utilities Code § 399.15(b)(3).

January 14, 2014; parties are scheduled to file comments (opening and reply) on both Energy Division Staff's proposal and alternative proposals, by February 25, 2014.[59]

Q. Do the RPS rules relate to GTSR procurement?

A. Yes. The statute provides in Section 2833(c) that the IOUs should use RPS mechanisms to procure megawatts (MW) for their GTSR program.

Q. What mechanisms are those?

A. There are several Commission-approved procurement mechanisms that the IOUs may use, of which SDG&E and PG&E identify two main options. One is the RAM, through which renewable Distributed Generation (DG) entities offer competitive bids to develop projects ranging in size from 3 to 20 megawatts. The RAM is currently authorized for a fifth solicitation to occur no later than June 27, 2014; separately, the Commission is considering whether to re-authorize the RAM for further solicitations.[60] The other possible mechanism is the Re-MAT, through which renewable DG entities may secure contracts to develop projects up to 3 MW. A third option is the annual RPS solicitations, although neither SDG&E nor PG&E propose to procure resources through such solicitations. A key difference between the RAM and Re-MAT, aside from project size, is that developers have relatively more information in the Re-MAT about the price at which their offers will be accepted; bidders in the RAM mechanism have a stronger incentive to offer their least-cost bid, given the lack of a publicized "price ceiling" and the general assumption that they do not know the exact prices being offered by competitors.

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[59] R.11-05-005 *Administrative Law Judge's Ruling Requesting Comments on Staff Proposal for a Methodology to Implement Procurement Expenditure Limitations for the Renewables Portfolio Standard Program, filed July 23, 2013*, available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M073/K350/73350639.PDF, Section 6 Question 27; and November 20, 2013 Workshop discussing RPS Procurement Expenditure Limitation (PEL) Proposals, workshop materials available at http://www.cpuc.ca.gov/NR/rdonlyres/7157FB43-3CFB-4F9D-9127-E5EFCDA20D9C/0/PELWorkshopAgendaandPresentations.zip.

[60] See *Administrative Law Judge's Ruling Requesting Comments on the Renewable Auction Mechanism*, filed December 31, 2013, available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M084/K331/84331873.PDF.

Q. Does ORA have a preferred procurement mechanism through which the IOUs should secure additional resources for their GTSR programs?

A. A solicitation like the RAM will likely generate more cost-competitive bids than a mechanism such as the Re-MAT, which offers a fixed-price contract (during each bi-monthly period) irrespective of whether projects can be developed at lower costs.

Q. Does this mean ORA prefers the RAM mechanism over Re-MAT?

A. Yes. Given AB 327's direction to limit the size of projects located in identified "impacted and disadvantaged communities" to 1 MW, and insofar as the IOUs prioritize projects that are located closer to customer load, it may be necessary to procure some GTSR resources through the Re-MAT. However ORA prefers the RAM option because of its lack of a fixed price, which serves as an incentive to developers to provide their most competitive bids. Further, as discussed more fully in the testimony of ORA witness Xian Ming Li, the utilities should conduct all GTSR procurement conservatively so that costs do not outpace actual participant contributions, including such contributions for projects located in "impacted and disadvantaged communities."

C. There are several ways using over-procured renewable generation from the GTSR programs to satisfy RPS obligations could violate the ratepayer indifference mandate.

Q. What is the main risk with respect to SDG&E and PG&E's proposed procurement for their GTSR programs?

A. The main risk is that the IOUs may procure renewable energy but not secure enough subscriptions to fully use that resource. Both IOUs propose to bank any unsubscribed energy for future use; in addition, SDG&E proposes additional ways of minimizing this risk: 1) applying the excess toward its Voluntary Margin of Procurement (VMOP), which I explain below; and 2) selling the excess on the open market.[61]

Q. How would banking work, and what is ORA's concern with the proposal?

[61] SDG&E Revised Testimony, Chapter 4, pp. 20-21.

A. Such excess procurement could be banked for RPS compliance purposes, but this leaves open the possibility that ratepayers will pay more, and more immediately, for future compliance needs that each IOU could have possibly met at a lower cost if they had delayed procurement until a need was forecasted.

Q. Do the IOUs have unmet RPS compliance obligations currently for which they need to bank excess resources?

A. No. Currently, all three IOUs are in a long position (over-procured) for the next several years so more generation to meet their RPS requirements is not necessary in the short and medium term.[62] SDG&E's 2013 RPS Compliance Plan states that it expects to meet compliance requirements for Compliance Periods (CP) 1, 2 and possibly CP 3.[63] PG&E's 2013 RPS Compliance Plan states, "PG&E currently forecasts an incremental need for long-term energy deliveries from RPS-eligible resources beginning in 2020 (prior to applying any excess procurement from earlier compliance periods) to better ensure ongoing compliance with the 33% RPS requirements beginning in 2021 and beyond."[64] SCE's 2013 RPS Compliance Plan states that it forecasts a net long position for both CPs 1 and 2, and it does not expect to have a net short position (i.e., a procurement need) until CP 3.[65]

Q. If resources are procured now for GTSR programs and banked, how could this violate the ratepayer indifference principle?

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[62] See annual RPS compliance reports: https://www.pge.com/regulation/RenewablePortfolioStdsOIR-IV/Pleadings/SCE/2013/RenewablePortfolioStdsOIR-IV_Plea_SCE_20131204_292131.pdf (SCE),

[63] SDG&E 2013 RPS Compliance Plan, filed December 4, 2013, pp. 13-14, available at https://www.sdge.com/sites/default/files/regulatory/SDGE-2013-RPS-Plan.pdf.

[64] PG&E 2013 RPS Compliance Plan, filed December 4, 2013, p. 27, instructions for access available at https://www.pge.com/regulation/RenewablePortfolioStdsOIR-IV/Pleadings/PGE/2013/RenewablePortfolioStdsOIR-IV_Plea_PGE_20131204_292136.pdf.

[65] SCE 2013 RPS Compliance Plan, filed December 4, 2013, pp. 6-7, available at https://www.pge.com/regulation/RenewablePortfolioStdsOIR-IV/Pleadings/SCE/2013/RenewablePortfolioStdsOIR-IV_Plea_SCE_20131204_292131.pdf.

A. Recent reports show that solar PV prices have been trending down consistently for the last several years.[66] If an IOU buys energy now for GTSR, and does not sell all of the energy to GTSR subscribers, under its proposal it will transfer this energy to its RPS procurement bank, under the RPS rules. However, if it does not buy the energy now and bank the excess, but simply buys it for RPS when the need arises, the energy may be cheaper given the downward price trend. Given current price trends, the risk appears real that nonparticipating ratepayers will pay more, and more immediately, than in the absence of GTSR procurement.

Q. Can you illustrate the cost risk with an example?

A. For example: if through the June 2014 RAM an IOU executes an additional contract for a 5 MW facility at a price equal to the weighted average of all other selected bids, but only signs up enough GTSR participants to subscribe the equivalent of 1 MW, then the remaining 4 MW are unsubscribed. The IOU would bank the 4 MW excess and possibly defer procurement of a new project for RPS compliance purposes accordingly. If that new project reflects a lower price than the contract the IOU secures for GTSR participants, nonparticipating ratepayers will have paid a higher price, and one year earlier, as a direct result of the IOU's procurement for the GTSR program.

Q. Is there a similar risk through the Re-MAT?

A. Yes. According to D.12-05-035, the Re-MAT price may adjust up or down in response to developer under-subscription or over-subscription, respectively, every bi-monthly period.[67] If the Re-MAT price is consistently stepped down, a similar result as

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[66] See, e.g., Photovoltaic (PV) Pricing Trends: Historical, Recent, and Near-Term Projections, produced by the National Renewable Energy Laboratory and Lawrence Berkeley National Laboratory, November 2012, available at http://www.nrel.gov/docs/fy13osti/56776.pdf.

[67] D.12-05-035 Decision Revising Feed-In Tariff Program, Implementing Amendments to Public Utilities Code Section 399.20 Enacted by Senate Bill 380, Senate Bill 32, and Senate Bill 2 1X and Denying Petitions for Modification of Decision 07-07-027 by Sustainable Conservation and Solutions for Utilities, Inc., issued May 31, 2012, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167679.PDF, Section 6.4 Re-MAT Price Adjustment Mechanism for Each Product Type (pp. 44-48).

described above would occur if an IOU does not sign up enough GTSR participants to subscribe all of the contracted output. That is, if the IOUs procure GTSR resources through the Re-MAT, and that procurement results in excess RPS resources, and if the Re-MAT price is consistently stepped down over time, then nonparticipating ratepayers will have paid more and more immediately than if the IOUs had waited to procure such resources when they were needed for RPS compliance.

Q. Can't the IOUs simply bank excess GTSR resources to their RPS programs in a way that avoids this problem?

A. It would be challenging and potentially a conflict of interest for the IOU to attempt to allocate these costs appropriately between GTSR participants and nonparticipants, if the IOU is motivated to minimize the cost of the GTSR program as a means to compete with groups offering similar products or services, to promote a positive public image, or any other relevant reasons. Currently when the IOUs have excess RPS resources, they sell them. Such sales may be at a loss or a profit; regardless, excess RPS resources represent a sunk cost to ratepayers and the remaining question to the IOU is whether it is more economical to sell such resources or to bank them for future compliance.

Q. Why a conflict of interest?

A. If an IOU executes a contract for meeting RPS compliance and a second, higher-priced contract for a GTSR program, in the event of excess GTSR resources the IOU may be motivated to switch those contracts in order to obfuscate the cost impact of such excess procurement on the general body of ratepayers.

Q. Are there ways to control or prevent excess GTSR resources from violating the ratepayer indifference principle when they are applied to meet RPS obligations?

A. Yes. The IOUs can identify specific resources in the tracking mechanisms required by Public Utilities Code § 2833(q)). The IOUs can also procure GTSR resources conservatively, only buying as new subscriptions dictate. The testimony of Xian Ming Li explains this case in Chapter 4.

Q. How?

A. The simplest and most transparent method to track GTSR resources and the method that ORA strongly recommends is to keep GTSR resources and RPS resources completely separate. The IOUs should procure GTSR resources in a conservative manner, and in the event that there are excess GTSR resources, sell the excess.

Alternatively, the IOUs' GTSR tracking mechanisms would need to track procurement costs attributable to the GTSR program in a transparent manner so that the actual costs of the GTSR resources can be fully allocated to GTSR program participants and cannot be commingled with the IOUs' RPS resources in order to gain a more favorable outcome for GTSR participants.

Q. Have the IOUs tried to control the cost impact of this risk?

A. SDG&E has, but not PG&E. SDG&E makes an effort to mitigate the risk in its Share the Sun proposal, by specifying that it will pay the lower of the Default Load Aggregation Point (DLAP) price and the applicable Re-MAT price for any unsubscribed energy, following the third year of a given contract's delivery term. In this way, the cost of unsubscribed energy to SDG&E would be no more than the avoided procurement cost for such energy, which reduces the risk of incremental costs from unsubscribed GTSR resources.

Q. Does ORA agree with SDG&E's proposal for handling unsubscribed energy as discussed in the previous question?

A. Not entirely. While ORA acknowledges SDG&E's effort to control the cost impact of unsubscribed energy for Share the Sun, it is still possible that nonparticipating ratepayers will pay more and more immediately for Share the Sun developers' contracted deliveries that go unsubscribed during the first three years of operation. Again, the simplest and most transparent method to track GTSR resources and the method that ORA strongly recommends is to keep GTSR resources and the IOUs' procurement of RPS resources completely separate.

Q. Does ORA agree that SDG&E's procurement approach is more conservative than PG&E's?

A. Yes, with respect to the manner that SDG&E proposes to structure its incremental procurement. That is, SDG&E states that it intends to evaluate customer interest each year following the first year of the programs, before determining whether to procure additional resources. By contrast, PG&E proposes to procure incremental resources, after the initial 50 MW, upon the earlier of the end of each calendar year and incremental participating customer demand equal to 30 MW. This is problematic because PG&E proposes to procure incremental resources each year even if there is no incremental customer demand. In terms of total program size, SDG&E proposes to procure 20 MW for the pilot (10 MW for each program) and then request expansion via advice letter filings, whereas PG&E is prepared to procure up to the total 272 MW permitted by SB 43.

Q. What about SDG&E's proposal to fit excess procurement within its voluntary margin of over-procurement (VMOP), as a way to reduce the risk that over-procurement in CTTS will burden nonparticipating ratepayers?

A. SDG&E intends to fit any unsubscribed energy from its GTSR pilots within its VMOP, which constitutes a portion of their "Minimum Margin of Procurement" in the RPS program.

Q. What are the VMOP and Minimum Margin of Procurement?

A. These margins are allowances in the RPS program for the fact that an IOU may over- or under-procure renewable energy toward its 33% RPS goals due to contract failure or other unforeseen causes. The RPS program excuses the IOU from adverse action for such over- or under-procurement because it is nearly impossible to procure precisely 33% (or the amount required in a particular year).

Q. What does SDG&E say about the VMOP as a means to reduce the risk of violating the ratepayer indifference principle applicable to GTSR programs?

A. SDG&E says it "has terminated multiple contracts and conducted some sales of RPS resources, leaving room for additional procurement within its authorized VMOP. [GTSR] procurement would fall within the authorized margin if [SDG&E's November

2012 RPS] procurement plan is in effect at the time the procurement is expected to occur."[68]

Q. What is ORA's reaction to the VMOP argument?

A. SDG&E's VMOP argument is problematic if it provides SDG&E with undue discretion for using its VMOP to procure excess RPS resources. In general, the IOUs have some degree of flexibility to specify the methodology for determining their own VMOPs, therefore the VMOP does not appear to be a meaningful tool for addressing the risk of over-procurement to nonparticipating ratepayers. Specifically, SDG&E's 2013 RPS Compliance Plan states that its VMOP "includes volumes that it may procure for special customer programs, such as its proposed connected…to the sun ('CTTS') pilot program." This suggests that SDG&E will be able to define unsubscribed GTSR resources as fitting within its VMOP since it has structured its VMOP to accommodate such procurement. The Commission approved SDG&E's 2013 RPS Compliance Plan in D.13-11-024; it specified, however: "[t]o the extent…that PG&E's or SDG&E's Applications seek modifications to the RPS Program…, PG&E and SDG&E must act consistent with the rules of the RPS Program or seek specific changes to the RPS Program. Approval of these separate Applications does not necessarily mean that the RPS Program requirements change to accommodate the programs [*sic*] terms."[69] Should the Commission determine not to approve SDG&E's proposed VMOP approach in future RPS compliance plans, SDG&E may not be able to fit unsubscribed GTSR resources within its VMOP.

Again, the simplest and most transparent method to track GTSR resources and the method that ORA strongly recommends is to keep GTSR resources and the IOUs' procurement of RPS resources completely separate. If GTSR resources are procured in a conservative manner, excess GTSR resources could fit within each IOU's VMOP.

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[68] A.12-01-008 Opening Brief of San Diego Gas & Electric Company on Policy and Legal Matters, filed April 8, 2013, p. 8.

Q. Would SDG&E's proposal to fit excess GTSR resources in the VMOP work for a larger program size (of say SDG&E's share of the amount specified by SB 43, i.e., 59 MW)?

A. It may not. If SDG&E's programs are larger there could be far too much excess procurement in those programs to fit within the VMOP, which SDG&E forecasts to be 0.2 percent of retail sales, or 44 gigawatt-hours (GWh), in 2020.[70] If load growth is significantly lower than what an IOU forecasts in estimating its annual RPS targets, then it may have excess RPS-eligible resources that fill up its Minimum Margin of Over-Procurement entirely, such that no room is left for unsubscribed energy from the GTSR programs.[71]

Q. What about PG&E's program?

A. In PG&E's case, any excess RPS procurement will not fit within its VMOP.

Q. Why?

A. PG&E's forecasted VMOP through 2030 is zero GWh.[72] In its 2013 RPS Compliance Plan, PG&E explains that "PG&E views an adequate bank of surplus procurement as a voluntary margin of procurement, necessary to: (1) mitigate risks associated with short-term variability in load; (2) protect against project failure or delay exceeding forecasts; and (3) eliminate the need at this time to intentionally procure long-term contracts above the 33% target by utilizing the bank to manage the year-to-year variability from performing RPS resources."[73]

(continued from previous page)

[69] D.13-11-024, p. 21.

[70] See SDG&E's 2013 RPS Procurement Plan Compliance Filing, filed December 4, 2013, https://www.sdge.com/sites/default/files/regulatory/SDGE-2013-RPS-Plan.pdf, pp. 73-74.

[71] See D.11-12-020 Decision Setting Procurement Quantity Requirements for Retail Sellers for the Renewables Portfolio Standard Program, issued December 5, 2011.

[72] PG&E 2013 RPS Compliance Plan, p. 132.

[73] PG&E 2013 RPS Compliance Plan, pp. 52-53.

Q. What about the IOUs' ability to sell excess procurement? Does that allay ORA's concerns about bundled ratepayer risk?

A. Partially, but not entirely. ORA is aware of several excess RPS sales transactions that the IOUs have executed in the past three years.[74] The pricing information for specific transactions is confidential, so it is unclear whether the sales are made at a loss or profit. Although the specific pricing terms for particular transactions are confidential, in aggregate, the revenues from sales of excess RPS resources is less than the cost of the contracts being sold. Regardless, excess RPS resources represent a sunk cost to bundled ratepayers and the main question to utilities is whether it is more economical to bank or sell such resources. ORA recommends that the IOUs sell excess renewable resources resulting from GTSR procurement if they find it economic to do so.

D. In order to Maintain Ratepayer Indifference, the Proposed Programs must Ensure Fair Competition

Q. Introduce your testimony in this section.

A. In this section I discuss the need for the GTSR programs to ensure fair competition, and specifically the requirements that the IOUs adhere to the Commission's Community Choice Aggregation Code of Conduct and Affiliate Transaction Rules.

Q. What do you mean by "fair competition"?

A. The IOUs should not use their monopoly status, ready access to customer lists, dominance in the market or other benefits of incumbency and monopoly to harm competitors who wish to offer similar products or services to customers.

Q. Discuss the relevance of fair competition with respect to maintaining ratepayer indifference through the GTSR programs.

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[74] See, for example, SDG&E's advice letters 2476-E, available at http://regarchive.sdge.com/tm2/pdf/2476-E.pdf, 2441-E, available at http://regarchive.sdge.com/tm2/pdf/2441-E.pdf; PG&E's advice letter 4329-E, available at http://pge.com/nots/rates/tariffs/tm2/pdf/ELEC 4329-E.pdf; and SCE's advice letter 2641-E, available at https://www.sce.com/NR/sc3/tm2/pdf/2641-E.pdf .

A. In 1997 the Commission initiated a rulemaking to "establish standards of conduct governing relationships between California's…electric utilities and their affiliated, unregulated entities providing energy and energy-related services…."[75] At that time, the Commission was determining how to ensure fair competition in a deregulated electric industry, with explicit concern for preventing the IOUs and their affiliates from gaining unfair competitive advantages through cross-subsidization of products and services. Of particular relevance to this case, D.97-12-088 was clear in the Commission's intent to take a precautionary approach in developing the Rules:

> In this proceeding, the Commission and the parties are spending a great deal of time and resources developing rules to *prevent cross-subsidization and market power abuse between a utility and its affiliate*…. As a result of the rules adopted in this decision, in combination with existing affiliate transaction rules, we have developed a body of regulation to prevent such abuses.
>
> We do not wish to adopt a mechanism by which the utility can circumvent these rules by offering the products or services itself instead of through an affiliate, especially when the utility's offering is for a competitive or potentially competitive service and might interfere with the development of a competitive market. Significantly, *we recognized* in the SoCalGas PBR decision *the utility's market power*:
>
> We also note SoCal's argument that the Commission should presume that if SoCal does not currently offer a service, it cannot have market power with respect to it, and it is therefore a competitive service. *By the very nature of SoCal's monopoly position in the energy and energy services market, its access to comprehensive customer records, its access to an established billing system, and its "name brand" recognition, it may be that SoCal enjoys significant market power with respect to any new product or service in the energy field.* (Id. at p. 63; emphasis added.)[76]

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[75] R.97-04-011 / Investigation (I.) 97-04-012 Order Instituting Rulemaking to Establish Standards of Conduct Governing Relationships Between Energy Utilities and Their Affiliates, ftp://ftp.cpuc.ca.gov/gopher-data/energy_division/affiliate/R9704011_I9704012.doc, filed April 9, 1997.

[76] D.97-12-088 Opinion Adopting Standards of Conduct Governing Relationships Between Utilities and Their Affiliates, issued December 16, 1997, pp. 89-90.

Q. Did the 2000-01 Energy Crisis change the ability of energy service providers to serve retail customers?

A. The energy restructuring of the late 1990s failed, yes, but there are still opportunities for competition in retail energy services, such as Community Choice Aggregation (CCA).

Q. Are there rules about competition between IOUs and CCAs?

A. Yes; the Affiliate Transaction Rules and the CCA Code of Conduct and Expedited Complaint Procedure adopted by the Commission in D.12-12-036 (CCA Code of Conduct) both serve to level the competitive playing field somewhat.

Q. Why do you think these rules are relevant here?

A. Because, as I discuss further below, GTSR programs will directly compete with existing, proposed and as yet unestablished CCA program offerings, the CCA and Affiliate Transaction rules should apply.

Q. Given that SB 43 directs the IOUs to propose and potentially administer GTSR programs, how do you propose that the programs insure against unfair competition?

A. The most effective way to insure against unfair competition would be for the IOUs to use a separate affiliate to offer their GTSR programs so that all costs and overhead are completely separate for GTSR programs and the IOUs bundled service. In the event that the Commission does not order the IOUs to administer the proposed programs through an affiliate, the Commission should nevertheless require the IOUs to administer the proposed programs (if approved) *as if* through an affiliate and to abide by the principles embodied in the Affiliate Transaction Rules.

Q. Is there precedent for such action?

A. Yes - two recent decisions in So Cal Gas' application for a biogas conditioning and upgrading service (BCS) tariff and So Cal Gas' application for a gas compression upgrading service tariff.[77] The Commission's intent to uphold the principles of the Affiliate Transaction Rules, even though it permits So Cal Gas to provide this new service, is clear in D.13-12-040:

> Taken together, [P.U.C. §§ 701, 454, and 740.8] require the Commission to balance among the goals of promoting the development of alternative renewable energy resources, reducing air pollution, and *preventing unfair competition by utilities with non-utility enterprises*.[78] (Emphasis added.)

Q. Does the GTSR statute contain a similar requirement to separate expenses for GTSR and bundled offerings?

A. Yes. In terms of accounting, SB 43's requirement that "[a] participating utility shall track and account for all revenues and costs to ensure that the utility recovers the actual costs of the utility's green tariff shared renewables program and that all costs and revenues are fully transparent and auditable" is entirely consistent with the principle of separation as reflected in the Affiliate Transaction Rules.[79] The general cost recovery requirements of D.13-12-040 and D.12-12-037 could be utilized for the GTRS programs as-is to achieve the accounting requirements specified in SB 43.

Q. Are there other requirements of the Affiliate Transaction Rules that you think are relevant to the IOUs' program offerings here?

A. Beyond that explicit requirement of a separate affiliate implementing the GTSR programs, the Affiliate Transaction Rules also outline several other key

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[77] D.12-12-037 Decision Granting Application to Establish a Compression Services Tariff Subject to Certain Ratepayer Protections and to Rules to Ensure Fair Competition, issued December 27, 2012 in A.11-11-011, available at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M040/K653/40653068.PDF; and D.13-12-040 Decision Adopting Joint Settlement Agreement and Granting Southern California Gas Company's Application to Establish a Biogas Conditioning and Upgrading Services Tariff, issued December 26, 2013 in A.12-04-024, adopted decision and attachments available at http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=84257339. ORA was an active party in this proceeding and a signing Party to the adopted settlement.

[78] Id. at pp. 23-24.

[79] Public Utilities Code Section 2833(q).

issues/areas that highlight the importance of nondiscrimination, transparency with respect to both marketing and record-keeping, separation, and regulatory oversight.

Q. What do you contend should happen here with regard to these rules?

A. The IOUs should comply fully with the Affiliate Transaction Rules if they are permitted to administer the proposed GTSR programs and if the Commission does not require them to establish a new affiliate to administer the programs. For example, in D.13-12-040 the adopted settlement requires So Cal Gas to make the tariff charged to BCS customers fully compensatory and cost based; to ensure that the BCS Tariff be promoted on a competitively neutral basis with periodic reporting to provide the Commission with a means of ongoing oversight and adjustment as needed to avoid unfair competition; and that the BCS Tariff be offered on a nondiscriminatory basis.[80]

Q. What about the CCA Code of Conduct mentioned above?

A. Many of the Affiliate Transaction Rules' principles of ensuring fair competition carry over to the CCA Code of Conduct. The Commission should require that the IOUs abide by these rules in their implementation and administration of their GTSR programs.

Q. Explain why the IOUs should abide by the CCA Code of Conduct with respect to their GTSR programs.

A. The requirement to abide by the CCA Code of Conduct is straightforward with respect to PG&E's proposal, since Marin Clean Energy (MCE) is already providing both a 50 percent RPS energy product ("Light Green") and a 100 percent RPS energy product ("Deep Green") product. Sonoma and the City and County of San Francisco are also attempting to roll out a program and the same rules should apply to those programs if approved.

Q. What about SDG&E?

[80] D.13-12-040, Attachment A, pp.11-15.

A. While ORA is not aware of any CCA currently operating in SDG&E's territory, San Diego County's Board of Supervisors recently approved funding for a CCA study as part of its County Renewable Energy Plan.[81] In any event, in order to be consistent with the Affiliate Transaction Rules, the IOUs should abide by the CCA Code of Conduct given that they will be offering a competitive or potentially competitive product or service.[82]

Q. Are the IOUs abiding by the CCA rules now?

A. It is not clear that PG&E is doing so. The Commission's Energy Division rejected PG&E's Advice Letter 4210-E, which PG&E filed in an attempt to comply with the CCA Code of Conduct. Energy Division's rejection letter cites Rules 2 and 22 and the fact that "PG&E says it expects to market against CCAs in the future, but has not yet formed an independent marketing division. *Thus, it has not demonstrated it has adequate procedures in place* that will preclude the sharing of information with its independent marketing division that is prohibited by these rules." (Emphasis added.) As of January 10, 2014, PG&E has not submitted a revised Compliance Plan.[83]

Q. How else do you propose that the IOUs insure against unfair competition with respect to the proposed GTSR programs?

A. Insofar as an IOU's green tariff program may also be in competition for the same customers with its own enhanced community renewables program, ORA suggests

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[81] Statement of Proceedings, County of San Diego Board of Supervisors Regular Meeting, Meeting Agenda, Wednesday, September 25, 2013 http://www.sdcounty.ca.gov/bos/agenda/sop/092513sop.docx, Agenda Item 1; and
April 10, 2013 Memo to Board of Supervisors from Dianne Jacob, Supervisor, Second District, Subject: Comprehensive Renewable Energy Plan (Districts: All), http://www.diannejacob.com/issues/land-use-and-environment/board-asks-staff-to-develop-a-renewable-energy-plan/.

[82] D.97-12-088 Opinion Adopting Standards of Conduct Governing Relationships Between Utilities and Their Affiliates, issued December 16, 1997, pp. 89-90.

[83] PG&E Advice Letter 4210-E, http://pge.com/nots/rates/tariffs/tm2/pdf/ELEC_4210-E.pdf accessed December 12, 2013. Rule 2 of the CCA Code of Conduct states "[n]o electrical corporation shall market or lobby against a [CCA], except through an independent marketing division…" and Rule 22 states "…each electrical corporation that intends to market or lobby against a CCA shall submit a compliance plan demonstrating to the Commission that there are adequate procedures in place that will preclude the sharing of information with its independent marketing division."

that the IOUs roll out their programs (if approved) in a sequential manner. Specifically, ORA recommends that the enhanced community renewables option, which should facilitate rather than stifle competition, be offered before the green tariff option (which poses greater concerns for ORA regarding fair competition between IOUs and CCAs).

Q. How could an IOU roll out its programs in a sequential manner?

A. One potential way is for the IOU to design and implement its enhanced community renewables program so that customers have the opportunity to consider participating in that program before the green tariff option is available to them. ORA would suggest that customers have at least one year to consider the option of participating in the enhanced community renewables program before the utility starts offering and marketing the green tariff option.

Q. Why do you say that the enhanced community renewables option will facilitate competition?

A. An enhanced community renewables option like SDG&E's proposed Share the Sun program would allow many providers to deal with customers, rather than just the IOU. Specifically, a program like Share the Sun would provide a platform for third party providers to compete to offer a product/service to customers, whereas the SunRate and Green Option programs are more clearly "sole source" in terms of the relationship between provider (IOU) and customer.

Q. Do you have other recommendations to protect competition?

A. Yes. ORA recommends that the IOUs not allow any utility affiliates to participate as a solar provider in their respective GTSR programs. In the event that the Commission allows a utility affiliate to participate in the GTSR programs, at a minimum, the IOU should update its Affiliate Transactions Compliance Plan to demonstrate affirmatively that it will not afford any preferential treatment to such entities or otherwise facilitate unfair competition with respect to its GTSR program.[84]

[84] Affiliate Transaction Rules, Rule VI.A Compliance Plans.

Another way to protect competition is for the Commission to strictly enforce SB 43's requirement that "[a] participating utility shall track and account for all revenues and costs to ensure that the utility recovers the actual costs of the utility's green tariff shared renewables program and that all costs and revenues are fully transparent and auditable." If ratepayer indifference is not strictly enforced, the IOUs may intentionally or unintentionally transfer GTSR costs to the larger body of nonparticipating ratepayers, which would have the effect of under-pricing the costs of providing the GTSR service in comparison to other market competitors. Again, the simplest and most transparent method to track GTSR resources and the method that ORA strongly recommends is to keep GTSR resources and IOU procurement of RPS resources completely separate. In addition, ORA recommends that the general cost recovery requirements of D.13-12-040 and D.12-12-037 be required for the GTSR programs to achieve the accounting requirements specified in SB 43.

CHAPTER 4
(XIAN MING LI)

I. PROPOSALS TO ALLEVIATE OTHER SOURCES OF RISK TO NONPARTICIPATING RATEPAYER INDIFFERENCE

A. INTRODUCTION AND SUMMARY

Q. Please state your name and position.

A. My name is Xian Ming (Cindy) Li, and I am a Public Utilities Regulatory Analyst in the Office of Ratepayer Advocates.

Q. Please summarize the points you will be making in this section of your testimony.

A. My testimony introduces four recommendations from ORA to alleviate potential sources of risk to maintaining nonparticipating ratepayer indifference in SDG&E's and PG&E's Green Tariff Shared Renewables (GTSR) programs. These four recommendations are as follows:

- GTSR programs should be limited to a five-year term and applications should be filed to extend the programs
- GTSR programs should be fully compensated by participants, with shareholders bearing the risk of low participation and under collection
- GTSR programs should be rolled out conservatively
- GTSR program contracts for participants should initially be limited to 1 to 2 years

Q. What are the potential risks to nonparticipating ratepayer indifference that your testimony addresses?

A. The risks are:

1. Low participation levels
2. Program costs exceeding costs recovered from participants
3. Over-procurement
4. The undue spread of increased costs of renewable integration to nonparticipants

B. GTSR PROGRAMS SHOULD BE LIMITED TO A FIVE-YEAR TERM

1. Five-Year Term

Q. What is the first recommendation, what risk will it alleviate, and how will it do so?

A. The first recommendation is to limit GTSR programs to a five-year term. The legislative intent of SB 43 supports this approach, since § 2834 states that the chapter regarding GTSR programs "shall remain in effect only until January 1, 2019." Whether the GTSR programs will succeed in the future is unknown, but the programs do present risks to nonparticipating ratepayers and a defined period of program availability would limit the exposure of nonparticipating ratepayers to such risks. GTSR programs having term limits consistent with SB 43 would provide the Commission an opportunity to assess the success of the GTSR programs prior to considering the possibility of extending program authority.

Q. How would a limitation for five-year program terms correspond to the IOU's plans for the proposed programs?

A. Both IOUs propose to keep their GTSR programs open to new enrollees for five years, until January 1, 2019.[85] However, PG&E proposes to have the ability to extend its Green Option program past the initial five-year term by filing a Tier 3 Advice Letter, though information is not provided on when and with what justification the Advice Letter would be filed.[86] A Tier 3 Advice Letter is not the proper method for the extension of a program with this level of inherent ratepayer risk.

Q. Why is a Tier 3 Advice Letter not the proper method to extend GTSR programs?

A. The key difference between an Application and Tier 3 Advice Letter relates to the applicant's or intervening parties' right to an evidentiary hearing. Tier 3 does not

[85] SDG&E Opening Comments, p. 13 & PG&E Opening Comments, p. 10.

provide for such a hearing, while an Application does.[87] Extensions and expansions of the programs, in ORA's view, require an Application and full Commission Decision under Commission Rules (Rules) of Practice and Procedure Articles 2-3.[88] The Commission must have an opportunity to evaluate the programs and determine whether their performance warrants extension and/or expansion. Such evaluation may require evidentiary hearings to determine and resolve factual disputes about how the programs have performed. Because a Tier 3 Advice Letter does not allow for such hearings, only a full Application is appropriate to test the merits of prior program performance.[89]

2. An IOU Seeking to Continue its Program Past Five Years Should File A New Application For Renewal

Q. Why is an Application the proper method to extend the GTSR programs?

A. The Commission should require the IOUs to file an application to offer the GTSR programs beyond the five-year term. This approach is consistent with recent Commission Decision, D.13-12-040 which also sets a term limit on an IOU program authority and allows the utility to file an application if it wishes to extend program authority beyond the term limit.[90] This approach provides an opportunity for the Commission to assess the success of the program and develop a record on whether the initial programs indeed maintained nonparticipating ratepayer indifference. The program extension could be conditioned on changes necessitated by the first five years of experience.

(continued from previous page)

[86] PG&E Revised Testimony, p. 1-3.

[87] For hearing rules on a formal application, *see* Rules, Article 14.

[88] Rules, Article 2, Applications Generally, and Article 3, Particular Applications (available at http://docs.cpuc.ca.gov/WORD_PDF/AGENDA_DECISION/143256.PDF).

[89] For example, PG&E submitted Application 09-05-016 for authorization to continue the ClimateSmart program, a voluntary participation "green" program, similar to the GTSR programs. See Decision 10-10-025, p .4.

[90] D.13-12-040, p. 30-31.

PG&E conceded that the GTSR program design should be informed by lessons learned from its past ClimateSmart program, an offset program designed to allow customers to offset their greenhouse gas impacts. PG&E's revised Testimony, discussing how the IOU will apply its experiences with the ClimateSmart program to the Green Option program, states: "ClimateSmart Program Lesson Learned 6: More care should be paid to the program duration and also the renewal process…."[91] PG&E has acknowledged that the duration of a program is a very important component of the program; thus, the possibility of extending the program merits full Commission review of the program through the application process. This requirement will minimize some of the nonparticipating ratepayer risk arising from the GTSR programs and will ensure that the effects of the GTSR programs on participating customers and nonparticipants are fully evaluated before the program authority is extended.

Q. What is the ClimateSmart program and how does it relate to the GTSR programs?

A. ClimateSmart was a voluntary carbon offset program that was administered by PG&E from 2007-2011. It is in some ways similar to both PG&E's Green Option and SDG&E's SunRate program as it was a "voluntary program that enabled participants to pay an additional amount on their monthly bill to support an environmental purpose."[92] ClimateSmart was initially authorized from 2007 to 2009, with a sunset date of December 31, 2009 if PG&E did not file an application to continue the program.[93] In 2009, PG&E submitted an application to the Commission for a two year extension of the ClimateSmart program. The Commission issued D.10-10-025 granting PG&E's request to extend the ClimateSmart program until the end of 2011. As a condition of granting the extension until the end of 2011, the Commission mandated that an independent third-party evaluate

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[91] PG&E Revised Testimony, p .2-3.

[92] PG&E Revised Testimony, p. 2-2

[93] D.06-12-032 Ordering Paragraph 13.

the ClimateSmart program by June 15, 2012.[94] 3Degrees Group, Inc. (3Degrees) completed the evaluation and issued a report on their finding on March 29, 2012.[95] This report provided lessons learned applicable to the development of the GTSR programs.

Q. How does PG&E's experience with ClimateSmart reflect the need to limit the GTSR programs to a five-year term?

A. As discussed above, the Commission authorized PG&E to offer ClimateSmart from 2007 to 2009 and required PG&E to file an application to continue to offer the ClimateSmart beyond that initial term.[96] The 3Degrees Evaluation of the ClimateSmart Program found that the program's goals and customer participation projections were set unrealistically high.[97] The Evaluation also found that participation rates, which were estimated to range from 145,000-296,000 customers,[98] were much lower than forecast; the program had only approximately 31,000[99] participating customers at its highest enrollment level. The extreme difference between forecasted participation and actual enrollment is especially enlightening given that PG&E (using ratepayer funds) aggressively marketed the program when it was first rolled out. Given the high uncertainty in terms of enrollment, the GTSR programs should have term limits and comprehensive Commission reviews prior to considering an extension of the programs to avoid the problems of the ClimateSmart program.

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[94] D.10-10-025 Ordering Paragraph 5.

[95] 3Degrees, Comprehensive ClimateSmart Program Evaluation Report Pursuant to Ordering Paragraph 5 of D.10-10-025, filed June 15, 2012, available at http://docs.cpuc.ca.gov/PublishedDocs/EFILE/CF/169290.PDF.

[96] D.06-12-032, Ordering Paragraph 13

[97] 3Degrees Comprehensive ClimateSmart Program Evaluation Report, p. 33.

[98] Id. at p. 28

[99] Id. at Attachment to Appendix C, Program Metrics from the 2007-2010ClimateSmart Annual Reports, with an Update through December 31, 2011 (Appendix C), p.1 (ClimateSmart cumulative enrollment as of December 31, 2008 was 30,948, the highest level of enrollment for any year the project was offered).

C. GTSR PROGRAMS SHOULD BE FULLY COMPENSATED BY PARTICIPANTS, WITH SHAREHOLDERS BEARING THE RISK OF LOW PARTICIPATION AND UNDER COLLECTION

Q. What is your second recommendation, what risk will it alleviate, and how will it do so?

A. The GTSR programs should be fully compensated by participants, but if participation is too low to sustain the programs, shareholders should bear the risk and costs of such an event, rather than nonparticipating customers. The shareholders should bear the risk of underestimating program participation leading to under-collection of funds to cover the costs of the programs. Further discussion of full-cost ratemaking for each GTSR program is addressed above, in Chapter 2.

Q. Have the IOUs addressed costs that cannot be recovered from participants?

A. PG&E's proposal acknowledges that it "will be responsible for managing both start-up costs and variable costs to fully recover costs over the life of the program. PG&E shareholders accept the risk of administration and marketing costs not recovered during the first 5 years of the program."[100] SDG&E has not provided a plan to address costs that cannot be recovered from participants. PG&E and SDG&E shareholders should accept the risk of any shortfall in recovering GTSR program costs from participants, including but not limited to marketing and administration costs. This approach would maintain nonparticipating ratepayer indifference in the event that participation in the GTSR programs is unsustainably low.

Q. How should PG&E's experience with ClimateSmart inform the risk of the costs of marketing and administration that should be expected for the GTSR programs?

A. PG&E's experience with ClimateSmart shows that PG&E greatly underestimated the costs to enroll customers, leading to cost-shifting from participants to nonparticipants. PG&E spent $3,261,000, on marketing and administration costs[101] for

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[100] PG&E Revised Testimony, p. 1B-14.

[101] 3Degrees, Comprehensive ClimateSmart Program Evaluation Report Appendix C, p. 3, Table 4.

the ClimateSmart program in 2007, almost five times the participant contributions, $704,000, to the program that year.[102] In 2008, PG&E spent $5,938,000[103] on marketing and administration costs for the program, over double what it received from program participants, $2,558,000.[104] PG&E significantly underestimated the marketing costs per program participant. PG&E projected that the ClimateSmart costs (marketing, administrative, enrollment costs) per customer enrollment would range from $48 to $60 under the medium acquisition cost case (expected).[105] The actual enrollment costs per participant from 2007- 2009 ranged from $160 to $215.[106]

Q. What lesson does the ClimateSmart experience with marketing, administrative and enrollment costs provide?

A. This experience provides strong evidence for requiring IOU shareholders to cover any marketing and administration costs not covered by the participants, as PG&E proposes.[107] In light of the significant cost-shifting from participants to nonparticipants that occurred as a result of the ClimateSmart program, the Commission should require both IOUs' shareholders to bear any costs of the GTSR programs, including but not limited to marketing and administrative costs, that exceed the costs recovered from participants.

D. GTSR PROGRAMS SHOULD BE ROLLED OUT CONSERVATIVELY

1. The GTSR Programs should be Rolled Out as Limited Megawatt Pilot Programs

[102] Id. at p. 3, Table 3.

[103] Id. at p. 3, Table 4.

[104] Id. at p. 3, Table 3.

[105] 3Degrees, Comprehensive ClimateSmart Program Evaluation Report, p. 33, Chart 4.

[106] Id.

[107] PG&E Opening Comments, p. 10.

Q. What is your third recommendation, what risk will it alleviate, and how will it do so?

A. Enrollment levels in voluntary participation programs, as well as enrollment costs, can be difficult to forecast. This fact is supported by PG&E's experience with the ClimateSmart program, where it spent significant amounts marketing and rolling out the program but never signed up enough customers to justify that cost. To avoid the same result, ORA recommends that the IOUs roll out the GTSR programs as pilot programs with initial low megawatt (MW) procurement levels, and only expand procurement as warranted by participation levels.

Q. How many MW of renewable energy resources does each utility plan to procure and what enrollment levels does this represent?

A. SDG&E proposes to roll out both of its GTSR programs out as 10MW pilots. The pilot approach offers many advantages; as SDG&E points out in its Testimony, the starting point of 10MW will "(2) ensure that this procurement does not out-pace customer interest, … [and] (4) reduce the exposure of nonparticipating customers."[108] SDG&E forecasts that approximately 7,000 customers - approximately 0.5% of SDG&E's total number of electric meters – will participate in both programs but does not provide an allocation by each program (SunRate or Share the Sun) or year.[109] PG&E would be "authorized to procure up to 50 MW in advance of subscriber demand so long as the cost of such procurement, on a weighted average portfolio basis, does not exceed the applicable renewable power rate."[110] At the "earlier of incremental subscriber demand equal to 30 MW or the end of each calendar year,"[111] PG&E would commit to additional

[108] SDG&E Revised Testimony, Chapter 4, pp. 5-6.

[109] SDG&E Response to ORA Data Request DRA-SDG&E-DR-07, Received December 17, 2013.

[110] PG&E Revised Testimony, p. 1B-8.

[111] Id.

procurement. PG&E assumes that 12,000 will participate in 2015 with participation increasing to 30,000 customers by the end of 2019.[112]

Q. How many MW of renewable energy resources should each utility initially procure?

A. In light of the risks over-procurement poses for nonparticipating customers and the difficulty in estimating participation levels for voluntary "green" programs, the Commission should approve SDG&E's initial procurement of 10 MW for each of its GTSR programs. It should also require PG&E to roll out its Green Option program as a pilot program with conservative initial procurement. Utilizing SDG&E's conservative initial procurement of 10MW for the Sun Rate program and based on the ratio of each participating utility's retail sales to total retail sales of electricity by all participating utilities, PG&E should initially procure 45 MW.[113] Subsequent procurement should be supported by customer interest and subscriptions.

Q. How does PG&E's experience with ClimateSmart reflect the need to roll out the GTSR programs conservatively?

A. The vast difference between the ClimateSmart marketing and administrative costs and participant contributions to the program discussed above underscores the need for the GTSR programs to be rolled out in a way that ensures program costs do not significantly out-pace participant contributions. The Commission should use PG&E's experience to mandate a slow rollout of GTSR programs, to avoid large and unnecessary expenditures (by participants and nonparticipating ratepayers). Especially for PG&E's program, which proposes 272 MWs of generation,[114] the Commission should slow down the rollout given PG&E's prior track record.

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[112] PG&E Revised Testimony, p. 2-10.

[113] The ratio of each participating utility's retail sales to total retail sales of electricity by all participating utilities is 45% PG&E, 45% SCE and 10% SDG&E.

[114] PG&E Revised Testimony, p. 1-5.

2. The IOUs Should Provide Annual Reports on the Programs

Q. How should the IOUs demonstrate that an expansion beyond an initial MW procurement is warranted?

A. The IOUs should provide annual reports on the progress of the programs to allow for mid-course corrections, and file a new application for enlargement of the program. These reports should include information on program subscription rates, program costs, program revenues, and any other relevant factors that relate to proposed expansion of the programs. The information should feed in to proposals to make changes to the programs, including an expansion in procurement beyond an initial low MW procurement.

E. GTSR PROGRAMS SHOULD OFFER INITIAL CONTRACTS OF ONLY ONE TO TWO YEARS RATHER THAN LONG TERM CONTRACTS

Q. What is your fourth recommendation, what risk will it alleviate, and how will it do so?

A. PG&E and SDG&E should initially offer only one- to two-year contracts with the program participants. As previously discussed, PG&E proposes an initial subscription term of at least one year[115] while SDG&E proposes a minimum of one year with options for long-term contracts of either two, three, five or ten years.[116] Rather than allowing longer term contracts at the onset of the programs, contract terns should initially be limited to one to two years. This would allow participants to be charged their fair share of increased costs of renewable integration and prevent the undue spread of those increase costs to nonparticipants.

Q. Why shouldn't long-term contracts be made available from the start of the programs?

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[115] PG&E Revised Testimony, p. 1B-6

[116] SDG&E Revised Testimony, Chapter 2, p. 15.

A. Long-term contracts would allow participants to lock in a Green Tariff or SunRate energy price for the term of participation in the program. While this strategy may induce greater participation from customers interested in commodity cost certainty over a long-term,[117] it could allow participants to avoid their fair share of the costs of integrating renewables. Those future integration costs would then need to be spread only to nonparticipants, while long-term participants are shielded from the increased costs during their contract period. SDG&E's proposal would offer long-term contracts of either two, three, five or ten years[118] while PG&E's proposal may "require participating customers to commit to an initial subscription term of at least one year. At the end of the initial subscription term, a participating customer will remain on the program on a month-to-month basis, under the same terms, unless the participating customers affirmatively elect to return to default bundled service."[119] One- or two-year contracts with default to the then-current subscription rate, unless and until the customer elects to change their subscription, would limit the undue spread of increased costs of renewable integration to nonparticipants. Renewable integration charges are discussed in more detail in Chapter 2 of ORA's testimony.

Q. When should the option of long-term contracts be made available to participants?

A. This is an issue that should be considered in future applications to renew the programs. In those applications, the utilities should show that renewable integration charges are not unduly spread to nonparticipants and that subscribership levels and procurement costs are well-understood.[120] This information would allow the

[117] SDG&E Revised Testimony, Chapter 2, p. 16.

[118] SDG&E Revised Testimony, Chapter 2, p. 15.

[119] PG&E Revised Testimony, p. 1B-6.

[120] Well-understood subscribership could be demonstrated by steady, predictable changes in the number of participants.

Commission to determine the stability of the program and compare costs to decide whether longer-term contracts would be reasonable to offer.

CHAPTER 5
(XIAN MING LI)

I. PARTICIPANT PROTECTIONS

A. INTRODUCTION AND SUMMARY

Q. This section of testimony discusses recommended measures that will provide protections to participating GTSR customers. These recommended measures include those applicable to "green pricing" and "community shared renewables" programs.

Q. What is the difference between green pricing and community shared renewables programs as you refer to them here?

A. A green pricing program allows customers to purchase local renewable energy through their utility, which provides bill adjustments based on their purchase. A community shared renewables program allows customers to subscribe to local renewable projects through a renewables provider who sells the power to the utility, which provides bill adjustments to the customers based on their subscription.

Q. What protections do you suggest for green pricing programs?

A. ORA's recommendations are as follows:

1. Customers should be allowed a "cooling off period" after the initial subscription to change or cancel their subscription without penalty.
2. The IOUs should provide all relevant information on each program's website.
3. Subsequent modification to rate charges and credits should be submitted through Tier 3 Advice Letters.

Q. What protections do you suggest for community shared renewables programs?

A. ORA supports SDG&E's measures for participating customer protections as sufficient and recommends that the Commission adopt them for any Commission authorized community shared renewable programs. Additional recommendations are made for adoption by the Commission and renewable resource providers.

B. PROTECTIONS FOR PARTICIPANTS OF GREEN PRICING PROGRAMS

1. Customers should be allowed a "cooling off period" after the initial subscription to change or cancel their subscription without penalty

Q. What is the first recommended measure to protect participants of green pricing programs?

A. ORA recommends that both utilities provide participants with a sixty-day "cooling off period" after the initial subscription in which the customer can cancel or change their subscription if they will be subject to early termination fees. This sixty-day time frame allows customers to receive one bill showing rate impacts and to consider whether the rate is appropriate for them. While both utilities propose to offer websites that will allow customers to determine total bill impacts before subscription, such tools would only provide estimates of impacts.[121] Customers should have the opportunity to see the actual bill impact and consider whether their subscription or subscription level is appropriate and make changes in an initial subscription period without penalty. This will be especially valuable for customers considering committing to long-term contracts of two, three, five or ten years, as suggested by SDG&E (if the Commission allows long-term contracts).[122]

Q. Have SDG&E and PG&E proposed early termination fees? If so, how will those fees be determined?

A. Both SDG&E and PG&E's GTSR program consider an early termination fee for participating customers who cancel prior to the end of their initial subscription term. PG&E proposes an initial subscription term of at least one year[123] while SDG&E proposes a minimum of one year with options for long-term contracts of either two, three,

[121] SDG&E Revised Testimony, Chapter 2, pp. 35-36 and PG&E Revised Testimony, p. 2-6.

[122] SDG&E Revised Testimony, Chapter 2, p. 15.

[123] PG&E Revised Testimony, p. 1B-6

five or ten years.[124] For SDG&E, participants terminating the contract before the end of the contract term would be subject to a fee "comprised of the above-market costs associated with the participant's subscription of solar energy plus any administrative costs associated with the participant's subscription."[125] SDG&E does not currently provide a "cooling off period."[126] PG&E does not provide information on what fee would be considered "reasonable" but proposes that if such a fee were established participants would have a sixty-day "cooling off period" after the initial subscription to cancel without an early termination fee. PG&E should provide the Commission with a proposed method for calculating a "reasonable" termination fee, as SDG&E has done, before its application is approved. If customers will be subject to early termination fees, they should have the opportunity to change or cancel their subscription for a period after their initial subscription with no penalty.

Q. How will information on the early termination fees be provided to customers?

A. SDG&E will provide a "table of fixed termination costs by year and contract duration each year"[127] while PG&E's testimony does not discuss how this information will be made available. If an early termination fee is adopted, PG&E should adopt SDG&E's proposal to provide customers with information on termination costs based on a customer's contract year and duration. Each utility should provide this information on its website for the program to offer customers greater cost certainty when considering participation.

Q. How should the costs of cancellation and subscription changes be recovered if a "cooling off period" is available with no penalties?

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[124] SDG&E Revised Testimony, Chapter 2, p. 15.

[125] SDG&E Revised Testimony, Chapter 3, p. 16.

[126] SDG&E Opening Comments, p. 12.

[127] SDG&E Revised Testimony, Chapter 3, p. 17.

A. The costs of cancellation and subscription changes in the “cooling off period” should be categorized as marketing and administrative costs since they are the caused through differences between customer expectations of the program and actual bill impacts. Nonparticipating customers should not be charged for considering the program and subsequently cancelling or making changes to their subscription within the “cooling period” since tools to estimate potential bill impacts may not accurately reflect changes to their bills. As previously discussed, PG&E shareholders accept the risk of marketing and administration costs not covered by participating customers[128] and ORA recommends applying this approach to SDG&E as well.

2. The IOUs should provide all relevant information on each program’s website

Q. What is the second recommended measure to protect participants of green pricing programs?

A. PG&E and SDG&E should provide all relevant information on their program websites so that customers are fully informed before signing up for the programs. SDG&E and PG&E each propose disclosure of some but not all relevant information that would allow customers to make informed decisions about participation. Taken together, the proposed disclosures appear adequate, so ORA recommends that the Commission require that all the information that each utility proposes for disclosure be included on each utility’s website The specific information each utility plans to provide is as follows:

PG&E[129]

1. Internet-based interface to allow prospective customers to determine bill impacts and GHG reductions

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[128] PG&E Revised Testimony, p. 1B-14.

[129] PG&E Settlement Section 3.6.3.

2. Quantity of benefits achieved by participating customers, collectively or where possible, individually[130]

SDG&E[131]

1. Pilot program information and an overview

2. Information on how to enroll

3. Frequently Asked Questions ("FAQs")

4. Interactive tools to help customers understand different participation levels, bill impacts, options available that may best suit their individual needs and how the participation translates in to environmental benefits

5. Program enrollment forms and contracts where applicable

6. Program contact information.

All of this information should be on each utility's website. SDG&E has offered in-depth details on the specific tools and information that will be available through its website that PG&E should adopt for its website as well. Both utilities discuss electronic newsletters that include program information, such as achieved environmental benefits.[132] Both should also provide such information through a progress report section on their website to track collective benefits metrics. Additionally, both utilities should provide online tools to estimate early termination fees if such fees are adopted. In this way, customers will have reasonable information about the programs before signing up.

3. Subsequent modification to rate charges and credits should be submitted through Tier 3 Advice Letters

[130] PG&E has not provided details on how this information will be presented to customers, whether on their website or mailed directly. ORA recommends this information be provided on their website for ease of public access.

[131] SDG&E Revised Testimony, Chapter 2, p.35.

[132] SDG&E Revised Testimony, Chapter 2, p.37 and PG&E Revised Testimony, p.2-7.

Q. What is the third recommended measure to protect participants of green pricing programs?

A. Subsequent modifications to rate charges and credits should be submitted through Tier 3 Advice Letters as these modifications do not currently meet the requirement for Tier 2 Advice Letters.[133] PG&E's Settlement discusses a Tier 3 Advice Letter for initial approval of rates and credits and Tier 2 Advice Letters for subsequent modifications after consulting with the Green Option Advisory group.[134] SDG&E requests that after Commission approval of rates, charges and credits described in testimony, subsequent changes (expansion of the program and other aspects) be authorized through Advice Letter filings with no Tier specified.[135] The IOUs should submit Tier 3 Advice Letters for approval of subsequent modifications to rate charges and credits.

Q. Why are Tier 2 Advice Letters not appropriate for the consideration of subsequent modifications to rate charges and credits?

A. Under the Commission's General Order (GO) 96-B, a Tier 2 Advice Letter serves as a request for approval where the Commission's Energy Division, and not the full Commission, has delegated authority to approve or disapprove the request.[136] The GTSR programs are untested new statutory programs that require Commission vigilance to ensure there is no violation of the ratepayer indifference principle. Many contracts under GTSR raise the possibility of violating the ratepayer indifference principle if their

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[133] Reply Comments of ORA On PG&E and SDG&E's Opening Comments, p. 6-9 and p. 21.

[134] PG&E Settlement Section 3.4.5.

PG&E will create an advisory group composed of environmental, consumer, low-income advocates, Commission staff, labor and other relevant stakeholders. The advisory group will provide ongoing guidance relating to the implementation of the Green Option program. PG&E Revised Testimony, p. 1B-13.

[135] SDG&E Revised Testimony, Chapter 2, p. 41.

[136] *See* Commission GO 96-B, Rules for filing and publishing tariffs for gas, electric, telephone, telegraph, water and heat utilities, Energy Industry Rule 5.2 (available at http://docs.cpuc.ca.gov/PUBLISHED/GENERAL_ORDER/164747.htm).

megawatts are undersubscribed and are therefore applied to meet RPS requirements. In view of these risks, and the statute's obvious intent for the Commission, and not its staff, to enforce the indifference principle,[137] the Commission, and not Energy Division, must approve matters delegated to the Commission in the GTSR statute through Tier 3 Advice Letters.

C. PROTECTIONS FOR PARTICIPANTS OF COMMUNITY SHARED RENEWABLES PROGRAMS

1. SDG&E's measures for participating customer protections should be adopted

Q. What measures should be adopted to protect participants of community shared renewables programs?

A. ORA supports many of SDG&E's proposals to protect participants of their Share the Sun pilot. If PG&E adopts a community shared renewables program, it would be useful to apply these measures. ORA supports the following measures included in SDG&E's application:[138]

i. A standard customer authorization form to subscribe the customer and a Customer Program Participation Agreement authorizing the release of electric and energy usage and pertinent billing information to the provider

ii. Qualification criteria for solar providers for the Commission or SDG&E to adopt including compliance with SDG&E's FiT PPA, licensing/registration consistent with California Solar Initiative (CSI) solar contractor requirements and a demonstration that their business structure supports program requirements

iii. Standard Solar Provider Program Agreements with terms and conditions which require provides to (1) be solely responsible for their compliance with applicable laws, Commission decisions and the Share the Sun program terms, including responsibility for all subcontractors;

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[137] *See* Section 2833(p) ("The *commission shall ensure* that charges and credits associated with a participating utility's [GTSR] program are set in a manner that *ensures nonparticipant ratepayer indifference…."*; emphasis added).

[138] SDG&E Revised Testimony, Chapter 2, pp.19-20, pp.26-33, pp.35-37, Appendix A.

(2) keep customer information confidential; (3) allow Commission oversight over consumer complaints that cannot be resolved between the customer and solar provider; (4) assume responsibility for tax liability when considering its business structure, and for communicating any tax liability to customers, (5) comply with SDG&E's co-branding policy; and (6) adhere to the terms of both the Share the Sun program agreement and the PPA; meaning that default under one agreement will cause default in the other.

iv. Provisions for the customer/solar provider agreement such as a buyer beware provision and the ability for customers to bring complaints against the solar provider through the Commission complaint process

v. A standard pricing form allowing customers to easily compare subscription proposals

vi. A solar provider information sheet to help customers evaluate proposals

vii. A recommendation for the Commission allow to the customer to file an informal complaint directly with the Commission's Consumer Affairs Branch as an aid to help resolve the complaint. The customer may also elect to file a complaint in accordance with the dispute provision of its agreement with the solar provider.

viii. Website with list of participating solar providers and links to their websites. SDG&E will also post a list of questions customers should consider in their evaluation of providers.

Q. What additional measures should the Commission require to protect customers in their interactions with solar providers?

A. Additional measures the Commission should adopt include:

i. The Customer Program Participation Agreement authorizing the release of confidential customer information to the solar provider should include terms to discontinue the provision of data upon the termination of the customer's subscription with the provider.

ii. The Commission should require SDG&E and the solar providers to work together to develop online tools to provide economic analyses to the customers on the SDG&E website. The ability to approach one website to estimate the impact on their SDG&E bill would enable customers to more easily compare solar providers.[139]

Q. Does ORA recommend any other measure to protect customers?

A. As discussed under protections for participants of green pricing programs, participants of community renewables programs can also benefit from a “cooling off period.” Renewable resource providers can only offer customers an estimate of bill impacts and should allow participants the opportunity to change or cancel their subscription based on actual bill impacts. A “cooling off period” of sixty days would allow customers to receive one bill showing rate impacts and to consider whether their subscription with the provider is appropriate for them. Renewable resource providers should offer this “cooling off period” to customers subscribing to the program.

Q. Does this conclude your testimony?

A. Yes.

[139] SDG&E testimony describes the discussion on this subject from the workshop in which some participants supported such a tool while others indicated that solar providers would be the best source for providing it. SDG&E Revised Testimony, Chapter 2, p. 36

ATTACHMENT 1a

ORA DATA REQUEST
DRA-SDG&E-DR-07
CONNECTED TO THE SUN – A.12-01-008
SDG&E RESPONSE
DATE RECEIVED: DECEMBER 3, 2013
DATE RESPONDED: DECEMBER 17, 2013

Question 1: Please provide SDG&E's forecasts for the level of participation in the SunRate and the Share the Sun programs it expects in the first year the program is available, the second year the program is available, the third year the program is available, the fourth year the program is available, and the fifth year the program is available. Please explain how SDG&E developed this forecast and provide the workpapers that SDG&E relied on in developing this forecast.

SDG&E Response 01:
SDG&E forecasts that approximately 7,000 customers - approximately 0.5% of SDG&E's total number of electric meters[1] - to participate in the *connected…..to the sun* programs, including both the SunRate pilot phase and the Share the Sun pilot program. SDG&E intends for the launch of both programs to coincide as much as practicable, in order to better enable customer choice of solar offerings. As such, participation levels and administrative costs for the programs are forecasted in the aggregate (not separated by program). Further, SDG&E utilized secondary research[2] to calculate the ratio of residential to non-residential customers who may participate in the program. SDG&E has not conducted customer research to determine the allocation of the 7,000 forecasted customers on a year-by-year basis. Associated calculations and citations are included in the attached work paper.

Microsoft Excel
97-2003 Worksheet

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[1] This estimate is consistent with the forecast provided in Dawn Osborne's January 17, 2012 testimony at Section III. A.1.a, p. 9 of approximately 0.5%.

[2] NREL report: Status and Trends in U.S. Compliance and Voluntary Renewable Energy Certificate Markets (2012 Data), p.10

ORA DATA REQUEST
DRA-SDG&E-DR-07
CONNECTED TO THE SUN – A.12-01-008
SDG&E RESPONSE
DATE RECEIVED: DECEMBER 3, 2013
DATE RESPONDED: DECEMBER 17, 2013

Question 2: Please calculate the estimated costs for the both the SunRate program and the Share the Sun program in each of the following circumstances and explain how SDG&E will recover these costs in each of the following circumstances. Please also provide the estimated participant monthly bill impact (on average) for the SunRate program and the Share the Sun program under each of the following circumstances:

a) Total participation in the SunRate Program is 1% or less, of the total forecasted number of SDG&E customers eligible to participate in the Sun Rate program.

b) Total participation in the SunRate Program is 25% of the total forecasted number of SDG&E customers eligible to participate in the SunRate program.

c) Total participation in the SunRate Program is 50% of the total forecasted number of SDG&E customers eligible to participate in the SunRate program.

d) Total participation in the SunRate Program is 100% of the total forecasted number of SDG&E customers eligible to participate in the SunRate program.

e) Total participation in the Share the Sun Program is 1% or less, of the total forecasted number of SDG&E customers eligible to participate in the Share the Sun program.

f) Total participation in the Share the Sun Program is 25% of the total forecasted number of SDG&E customers eligible to participate in the Share the Sun program.

g) Total participation in the Share the Sun Program is 50% of the total forecasted number of SDG&E customers eligible to participate in the Share the Sun program.

h) Total participation in the Share the Sun Program is 100% of the total forecasted number of SDG&E customers eligible to participate in the Share the Sun program.

ORA DATA REQUEST
DRA-SDG&E-DR-07
CONNECTED TO THE SUN – A.12-01-008
SDG&E RESPONSE
DATE RECEIVED: DECEMBER 3, 2013
DATE RESPONDED: DECEMBER 17, 2013

SDG&E Response 02:

As described in the testimony of Aaron Franz (references to testimony are to the prepared testimony served Dec. 6, 2013), SDG&E is not requesting incremental funding from ratepayers for the program. SDG&E expects to incur administrative costs to implement the SunRate and Share the Sun programs, which are specific and assignable to program participants. SDG&E also anticipates variable costs that will depend on actual enrollment levels, such as billing, call center and procurement staff support. Regarding these variable costs, preliminary costs may be negligible until certain participation thresholds are reached. SDG&E will monitor such variable costs as participants enroll and when enrollment triggers incremental costs (such as, *e.g.*, additional employees), SDG&E will track and recover those costs from participants. The estimates in the table below summarize the fixed costs for the first five years of the program and may change as SDG&E implements the program.

	Program Total	2014	2015	2016	2017	2018
Capital Expenditures (Billing System Dev)	$ 600,000	$ 600,000	$ -	$ -	$ -	$ -
Program Management	$ 700,000	$ 200,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000
Outreach and Education	$ 269,000	$ 60,000	$ 109,000	$ 31,000	$ 48,000	$ 21,000
Web Development and Online Tools	$ 180,000	$ 120,000	$ -	$ 60,000	$ -	$ -
O&M Costs	1,149,000	380,000	309,000	191,000	148,000	121,000
Total Project Expenditures*	1,749,000	980,000	309,000	191,000	148,000	121,000

SDG&E will begin recovery of administrative costs at the outset of the program, through the administrative charge described in the testimony of Chris Yunker. SDG&E would start with an initial monthly charge of nominal amount, such as $5 per month. These revenues would continue over time to offset costs booked into subaccount for administrative costs. SDG&E would continue to monitor customer participation rates to determine whether the monthly fee for administrative costs needs to be re-examined. Whether adjustments need to be made to the monthly fee would be based on participation rates and costs accumulation in order to balance cost recovery and ensure customer participation. As participation increases, SDG&E would adjust the fee for changes in costs.

SDG&E Response 02 Continued:

Below are the illustrative values for a residential customer, as described in the testimony of Chris Yunker, as well as illustrative values for a small commercial customer:

Line	***SunRate* Pricing Methodology (Illustrative Values)**		
		Residential $/kWh	**Small Commercial** $/kWh
1	Cost of Local Solar ($/kWh) (Based on existing 2013 SunRate Pool)	0.08912	0.08912
2	Value of Solar Energy and Capacity	0.00527	0.00527
3	**SunRate** (Line 1 - Line 2)	**0.08385**	**0.08385**
4	**SDG&E's Average Commodity Cost (Varies by Customer Class)**	**0.08013**	**0.08495**
5	PCIA (Varies by Customer Class)	0.00017	0.00024
6	CAISO GMC	0.00069	0.00069
7	**Customer Service Adjustment** Line 5 + Line 6)	**0.00086**	**0.00093**
8	**Total** (Line 3 - Line 4 + Line 7)	**0.00458**	**(0.00017)**

A typical non-CARE residential Inland customer with basic service that elects into the SunRate program and using 500 kilowatt-hours per month could see a monthly winter bill increase of 7.9%, or $7.29. A typical monthly electric bill could increase from $92.14 to $99.43. While a small commercial with secondary service using 1,500 kilowatt-hours per month could see a monthly winter bill increase of 1.7% or $4.75. A typical monthly electric bill could increase from $277.13 to $281.88.[3]

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[3] Rates effective 12/1/13 per Advice Letter 2544-E.

SDG&E Response 02 Continued:

Since the solar cost for customers electing into the Share the Sun program would be dependent upon the charge provided by the developer, bill impacts are not available. The table below provides illustrative charges that would apply.

	Share the Sun **Pricing Methodology (Illustrative Values)**		
Line		**Residential** $/kWh	**Small Commercial** $/kWh
1	Re-MAT Fit Starting Price (TOD Adjusted passed on typical solar profile)	0.10440	0.10440
2	Value of Solar Energy and Capacity	0.00527	0.00527
3	**Share the Sun Rate** (Line 1 - Line 2)	**0.09913**	**0.09913**
4	**SDG&E's Average Commodity Cost (Varies by Customer Class)**	**0.08013**	**0.08495**
5	PCIA (Varies by Customer Class)	0.00017	0.00024
6	CAISO GMC	0.00069	0.00069
7	**Customer Service Adjustment** Line 5 + Line 6)	**0.00086**	**0.00093**
8	**Total** (Line 3 - Line 4 + Line 7)	**0.01986**	**0.01511**
9	**Re-MAT Fit Credit (Rights to this Capacity are Assigned to the Customer from the Developer)**	**0.10440**	**0.10440**
10	**Net Adjustment to Customer** (Line 8 - Line 9)	**(0.08454)**	**(0.08929)**

ATTACHMENT 1b

Assumptions	
Total SDG&E Electric Meters	1,400,000
Average Estimated Participation Level	0.5%
Estimated Residential %	96.4%
Estimated Nonresidential %	3.6%

	Forecasted Residential	Forecasted Non-Residential
5-year Average Number of Forecasted Participants	6749	251
Total	7000	

From NREL report: Status and Trends in U.S. Compliance and Voluntary Renewable Energy Certificate Markets (2012 Data), Table 6, p.15. 2012 Utility Green Pricing Data:

Table 6. Estimated Cumulative Green Power Customers by Market Segment, 2006–2012 (selected rows only)

	2006	2007	2008	2009	2010	2012
Utility Green Pricing	**490,000**	**550,000**	**550,000**	**550,000**	**570,000**	**570,000**
Residential	470,800	526,700	519,700	526,300	544,700	549,600
Nonresidential	15,500	20,200	26,100	26,000	22,900	17,200

Residential ratio	96.4%
Nonresidential ratio	3.6%

APPENDIX A

QUALIFICATIONS OF WITNESSES

QUALIFICATIONS AND PREPARED TESTIMONY
OF
ELISE TORRES

Q.1. Please state your name and business address.

A.1. My name is Elise Torres. My business address is 505 Van Ness Avenue, San Francisco, California, 94102.

Q.2. By whom are you employed and in what capacity?

A.2. I am employed by the State of California at the California Public Utilities Commission (CPUC) as a Regulatory Analyst in the Office of Ratepayer Advocates (ORA).

Q.3. Please state your educational background and experience.

A.3. I have a J.D. from the University of California, Hastings College of the Law, and a B.S. in City and Regional Planning from the California State Polytechnic University.

I had a legal fellowship prior to joining the CPUC and I worked on a Commission proceeding concerning the siting of a transmission substation.

I joined the staff of the California Public Utilities Commission in June of 2012, in the Electricity Pricing and Customer Programs Branch of ORA. I have worked on several electric rate design proceedings. I served as a witness for ORA in PG&E's 2012 Economic Development Rate proceeding. I sponsored testimony for the case and testified on behalf of ORA in evidentiary hearings. I also served as a witness for ORA in PG&E's 2014 General Rate Case, Phase 2. I sponsored testimony for that case on Small Commercial Rate Design. I also review Petitions for Modification and other utility filings related to electric rate design and customer programs and respond on behalf of ORA.

Q.4. What testimony are you sponsoring in this proceeding?

A.4. I am sponsoring Chapters 1 and 2 of ORA's prepared testimony.

Q.5. Does this complete your testimony?

A.5. Yes

QUALIFICATIONS AND PREPARED TESTIMONY
OF
VALERIE KAO

Q.1. Please state your name and business address.

A.1. My name is Valerie Kao. My business address is 505 Van Ness Avenue, San Francisco, California, 94102.

Q.2. By whom are you employed and in what capacity?

A.2. I am employed by the State of California at the California Public Utilities Commission (CPUC) as a Regulatory Analyst in the Office of Ratepayer Advocates (ORA).

Q.3. Please state your educational background and experience.

A.3. I have a Master's in Pacific and International Affairs from the University of California, San Diego, and a Bachelor of Arts in Peace and Conflict Studies from the University of California, Berkeley.

I joined CPUC in 2007 and have worked in the Policy Analysis Branch of Communications Division, the Administrative Services Division, the Demand-Side Analysis Branch of Energy Division, and the Electricity Pricing and Customer Programs Branch of ORA. I have worked on numerous electric rate design and demand-side management (i.e., energy efficiency, demand response and customer-side distributed generation) proceedings.

Q.4. What testimony are you sponsoring in this proceeding?

A.4. I am sponsoring Chapter 3 and of ORA's prepared testimony.

Q.5. Does this complete your testimony?

A.5. Yes

QUALIFICATIONS AND PREPARED TESTIMONY
OF
XIAN MING LI

Q.1. Please state your name and business address.

A.1. My name is Xian Ming (Cindy) Li. My business address is 505 Van Ness Avenue, San Francisco, CA 94102.

Q.2. By whom are you employed and what is your job title?

A.2. I am employed by the California Public Utilities Commission as a Public Utilities Regulatory Analyst in the Electricity Pricing and Customer Programs Branch of the Office of Ratepayer Advocates (ORA).

Q.3. Will you please briefly state your educational background and experience?

A.3. I hold a Master of Science degree in Agricultural Resource Economics from the University of California Davis, and a Bachelor of Arts degree in Economics from University of California Berkeley. I joined ORA in October of 2012 and have provided analyses and comments for several Demand Response (DR) proceedings, including the previous DR Order Instituting Rulemaking (DR OIR) R.07-01-041 and the current DR OIR R.13-09-011. I review all filings related to Demand Response for ORA.

Q.4. What testimony are you sponsoring in this proceeding?

A.4. I am responsible for Chapter 4, Proposals to Alleviate Other Sources of Risk to Nonparticipating Ratepayer Indifference and Chapter 5, Participant Protections.

Q.5. Does this complete your testimony at this time?

A.5. Yes, it does.