

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



FILED
12-22-14
04:59 PM

Order Instituting Rulemaking to Continue
Implementation and Administration of
California Renewables Portfolio Standard
Program.

Rulemaking 11-05-005
(Filed May 5, 2011)

**REPLY COMMENTS OF
THE OFFICE OF RATEPAYER ADVOCATES ON THE ADMINISTRATIVE
LAW JUDGE'S RULING (1) ISSUING AN ENERGY DIVISION PROPOSAL ON
THE RENEWABLES PORTFOLIO STANDARDS CALCULATOR, (2)
ENTERING THE PROPOSAL INTO THE RECORD, AND (3) SETTING A
COMMENT AND WORKSHOP SCHEDULE**

IRYNA A. KWASNY

**CHARI WORSTER
RAJAN MUTIALU
NEHA BAZAJ**

Attorney for the Office of Ratepayer
Advocates

Analysts for the Office of Ratepayer
Advocates

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Tel. (415) 703-1477
Fax: (415) 703-2262
Email: iryna.kwasny@cpuc.ca.gov

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Tel: (415) 703-1585
Email: chari.worster@cpuc.ca.gov

December 22, 2014

I. INTRODUCTION

The Office of Ratepayer Advocates (ORA) respectfully provides these reply comments in accordance to the October 10, 2014 *Administrative Law Judge's Ruling (1) Issuing an Energy Division Proposal on the Renewable Portfolio Standards Calculator, (2) Entering the Proposal into the Record, and (3) Setting a Comment and Workshop Schedule* (ALJ Ruling).

The ALJ Ruling seeks comments on Energy Division's (ED's) Staff Proposal on the Renewables Portfolio Standards (RPS) Calculator (Calculator) to develop policy based portfolios to inform the California Public Utility Commission's (CPUC or Commission) Long Term Procurement Plan (LTPP) proceeding and the California Independent System Operator's (CAISO's) Transmission Planning Process (TPP). The RPS Calculator should provide accurate and timely information to the Commission's LTPP and the CAISO's TPP, to promote transmission planning that effectively meets ratepayers' needs. ORA recommends that efforts be coordinated with other proceedings¹ at the Commission so that ratepayer impacts are equally captured across these proceedings.

Based on current information, ORA lists the following recommendations including issues that should be further addressed in the February 2015 RPS Calculator workshop:

Renewable Net Short

- CPUC-approved PPAs should automatically be included in the policy-preferred portfolio for the CAISO's TPP;
- Risk-adjustment factors should reflect the likelihood of Renewable Portfolio Strategy project failure in various stages of development;
- The RPS Calculator should compare renewable projects with expiring contracts to new potential renewable resources, to identify the most cost-effective resources;

¹ Other proceedings include, Resource Adequacy proceeding (R.14-10-010), distributed Resources Plan proceeding (R.14-08-013), Interconnection proceeding (R.11-09-011), and Long Term Procurement Plan proceeding (R.13-12-010).

- Staff should analyze assigning capital costs for expiring contracts, and consider data provided by renewable technology developers, manufacturers, and suppliers documenting cost variables; and
- Staff should reach out to the Publicly Owned Utilities (POUs) and enter into a Memorandum of Understanding with the POUs on the exchange and treatment of data on current and future POU RPS projects.

Renewable Energy Resource Potential and Cost Update

- Super Competitive Renewable Energy Zone (CREZ) data should be considered in the February workshop;
- Capital costs, operating costs, and performance assumptions should be monitored and modified in the RPS Calculator as stakeholders identify and verify cost trends in the next Renewable Energy Transmission Initiative (RETI); and
- Staff should gather information from industry representatives regarding actual financing options available to project developers.

Levelized Cost of Energy

- Levelized Cost Of Energy should only model those tax credits in effect.

Treatment of Transmission Costs in Version 6.0

- Transmission costs should be addressed in the February workshop;
- The Commission should clarify the timing of the proposed iterative process, to ensure that it will occur in a timely manner to keep the releases of Versions 6.1 and 6.2 on track; and
- A project's capacity value should be compared to its transmission upgrade costs to determine if the project should be made energy only or fully deliverable.

Energy Values

- The RPS Calculator should allow for negative pricing when determining energy value.

Capacity Value

- The RPS Calculator should use Effective Load Carrying Capacity (ELCC) values instead of Net Qualifying Capacity (NQC) values to calculate capacity value;
- The set of resources to be considered for capacity valuation should be discussed at the February workshop;

- Staff should provide the source and rationale for the 60% assumption made with regards to out-of-state resources;
- Incremental capacity value for resources meeting Local Capacity Requirement (LCR) criteria should be consistent with those being developed in the Commission’s Resource Adequacy and Distributed Resource Plan proceedings;
- The RPS Calculator should reflect changes to the average Resource Adequacy contract price; and
- When ELCC values are developed in the Resource Adequacy proceeding, these should replace the ELCC values currently being used in the RPS Calculator.

Renewable Integration Adder

- The RPS Calculator should include the Integration Cost Adder developed in the RPS proceeding;
- The integration costs should not be double counted across variables in the Integration Cost Adder;
- Staff should review the operation flexibility work conducted in the LTPP proceeding before using it in developing a long-term Integration Cost Adder;
- Economic curtailment should be one option, not the default option, to address flexibility needs; and
- Staff should establish a curtailment cap by examining curtailment provisions in existing PPAs.

Treatment of Small Utility-Scale Resources

- Staff should coordinate treatment of small utility-scale resources with the Open Interconnection and Distributed Resource Plan proceedings.

Alignment and Generation Transmission Planning with Renewable Procurement

- Staff should re-examine the option of using the RPS Calculator’s Net Market Value (NMV) methodology to inform the NMV used in procurement once all updates to the RPS Calculator are complete.

The Staff Proposal (or the ALJ’s Ruling) poses 42 questions regarding the RPS Calculator. These questions are re-stated in bold type, with ORA’s responses below each question.

II. DISCUSSION

A. Renewable Net Short

- 1. Energy Division’s proposal that projects with CPUC-approved PPAs be automatically included in the policy-preferred portfolio, which is used in the CAISO’s TPP, is predicated on the assumption that projects with a CPUC-approved PPA are sufficiently viable for the purpose of long-term generation and transmission planning. If you do not agree with the above assumption, please identify the necessary changes to the RPS procurement process to make the above assumption true.**

Pacific Gas and Electric Company (PG&E)², San Diego Gas and Electric Company (SDG&E)³, and the California Wind Energy Association (CalWEA)⁴ agree that when a CPUC-approved Power Purchase Agreement (PPA) is sufficiently viable it should automatically be included in the policy-preferred portfolio for long term generation and transmission planning. However, the Joint Conservation Parties (JCP) state that project failure rate to date has proven that CPUC-approved PPAs have and continue to fail for a variety of reasons, including technology and inability to obtain financing or permitting. JCP further explains that automatically including CPUC-approved PPAs does not ensure progress towards comprehensive landscape-scale, generation, and transmission planning. Focusing solely on CPUC-approved PPAs can drive transmission planning decisions away from viable renewable resources that lack transmission capacity.⁵ TransWest Express LLC (TransWest) states that PPAs should be viewed as one indicator of project viability and recommends that the cost benefit ratio of each project is considered and that the RPS calculator should be revised to allow for development of policy-preferred portfolios which include projects that do not have a commission approved PPA.⁶

² PG&E, Opening Comments Appendix 1 at 3.

³ SDG&E Opening Comments at 3.

⁴ CalWEA Opening Comments at 7.

⁵ JCP Opening Comments at 3.

⁶ TransWest Opening Comments at 4.

ORA disagrees with JCP and Transwest and agrees with PG&E, SDG&E and CalWEA that projects with CPUC-approved PPAs are sufficiently viable for long term generation and transmission planning. As ORA explained in opening comments, Decision (D.) 14-11-042 adopted uniform Standards of Review for all Renewables Portfolio Standard (RPS) transactions, including an assessment of project viability. D.14-11-042 also requires that RPS project bids have achieved the ‘application deemed complete’ (or equivalent) status under the land use entitlement process. Therefore, ORA reiterates its recommendation that based on this comprehensive review process, CPUC-approved PPAs are sufficiently viable and should automatically be included in the policy-preferred portfolio for the CAISO’s TPP.⁷

2. Assuming a CPUC-approved PPA is not an appropriate indicator of project viability for purposes of long-term generation and transmission planning, how should the Energy Division staff determine which “commercial projects” to include in the policy-preferred portfolio that the CAISO studies in its TPP?

See response to Question (Q) #1.

3. Should a project with a Commission-approved PPA be included in the policy preferred portfolio sent to the CAISO for TPP purposes even if it will trigger the need for a major new transmission project? Why or why not?

PG&E,⁸ SDG&E,⁹ and the Large-scale Solar Association (LSA)¹⁰ agree that all approved projects including those that trigger the need for a major new transmission project should be included in the policy preferred portfolio. PG&E and SDG&E explain that the project review and approval process already considers transmission costs. The City and County of San Francisco (CCSF)¹¹ states that projects that trigger major new construction without any cost/benefit analysis do not protect ratepayers and should not be

⁷ ORA Opening Comments at 2.

⁸ PG&E, Opening Comments Appendix 1 at 4.

⁹ SDG&E Opening Comments at 4.

¹⁰ LSA Opening Comments at 10.

¹¹ CCSF Opening Comments at 3.

included in the policy preferred portfolio. JCP states that projects that trigger major upgrades should require additional analysis that evaluates the ability of the transmission to serve multiple values including transmission capacity, congestion, transmission limited grid services, and storage.¹²

ORA disagrees with CCSF and JCP, and agrees with PG&E, LSA, and SDG&E. The review and approval process for projects considers transmission costs. Utilities are required to perform least cost best fit (LCBF) analysis in their solicitation process. The Net Market Value which is the LCBF evaluation equals benefits minus costs. Benefits include energy and capacity values whereas costs include contract payment and transmission and distribution costs. ORA reiterates its recommendation stated in its opening comments, that all CPUC-approved projects should be included in the policy-preferred portfolio.¹³

4. Do you agree with the concept of risk-adjusting commercial projects in the RPS Calculator to derive a renewable net short consistent with RPS need authorization approved in the IOUs' annual RPS procurement plans?

ORA agrees with PG&E's¹⁴, SDG&E's¹⁵, and LSA's¹⁶ comments that commercial projects in the RPS calculator should be risk adjusted to derive a renewable net short consistent with RPS need. CalWEA agrees with risk-adjustment, but recommends that PPAs executed prior to 2013 be risk-adjusted consistent with their current scores from the utilities' project viability calculator.¹⁷ The Green Power Institute (GPI) supports risk-adjustment but finds the 84% risk-adjustment factor to be too high and requests supporting documentation for the 84% number and recommends performing

¹² JCP Opening Comments at 3 and 73.

¹³ ORA Opening Comments at 2.

¹⁴ PG&E, Opening Comments Appendix 1 at 4.

¹⁵ SDG&E Opening Comments at 4.

¹⁶ LSA Opening Comments at 10.

¹⁷ CalWEA Opening Comments at 8.

a sensitivity analysis.¹⁸ Calpine Corporation (Calpine) states that risk-adjustment could lead to unnecessary investment in transmission.¹⁹

ORA disagrees with CalWEA's statement that PPAs executed prior to 2013 be risk adjusted consistent with their current scores from the project viability calculator because the project viability calculator does not currently include metrics that fully reflect the potential for project success. ORA disagrees with Calpine and agrees with PG&E, SDG&E, GPI, and LSA that projects should be risk-adjusted and with GPI that the 84% risk-adjustment factor is too high. ORA reiterates its recommendation stated in its opening comments that the risk-adjustment factor should reflect the likelihood of RPS project failure in various stages of development (e.g., the percentage of CPUC-approved RPS projects that have failed due to lack of a completed Phase 2 interconnection study) and technology type (e.g., wind, solar PV, biomass, geothermal, etc.). These additional factors would provide a more accurate assessment of project risk.²⁰

5. Should the generation from generic projects be risk-adjusted to reflect their potential failure?

For the reasons stated in the response to Q4, ORA supports the risk-adjustment of CPUC-approved and generic projects to reflect their potential failure

6. Do you agree with the proposal that projects with expiring contracts in the RPS Calculator (Version 6.0) should be treated in the same manner used by the IOUs when developing long-term RPS procurement plans (See D.13-11-024)? If not, how should RPS facilities with expiring contracts be treated in the RPS Calculator? Explain why the same or different approach is preferred.

SDG&E²¹ and CalWEA²² agree that projects with expiring contracts should be added back to the pool of all projects. PG&E states that transmission capacity should be

¹⁸ GPI Opening Comments at 3.

¹⁹ Calpine Opening Comments at 2.

²⁰ ORA Opening Comments at 3.

²¹ SDG&E Opening Comments at 5.

²² CalWEA Opening Comments at 9.

freed up from projects that are not re-contracted, that re-contracted projects are assigned the correct Portfolio Content Category, and those facilities that stand idle for greater than two years be re-classified as new resources.²³

ORA disagrees with PG&E that facilities which stand idle for more than two years should be re-classified as new resources because capital costs of re-contracted projects vary greatly depending on the technology type. ORA agrees with SDG&E and CalWEA that projects with expiring contracts should be added back to the pool of all projects. ORA reiterates its recommendation stated in its opening comments that the RPS Calculator should compare renewable projects with expiring contracts to new potential renewable resources, to identify the most cost-effective resources.²⁴

7. For the purposes of resource ranking and selection, existing RPS projects with expiring contracts are assigned 25% of the capital costs of a new project (assuming some additional capital expenditures would be needed to prolong the economic lifetime of the plant). Is this an appropriate assumption? If not, what methodology should be used to assign costs to RPS projects with expiring contracts in the resource ranking and selection process of the RPS Calculator?

LSA²⁵ and SDG&E²⁶ suggest that Energy and Environmental Economics (E3) provide a basis for assigning expiring contracts 25% of the capital costs of new projects. TransWest explains that 25% is not an appropriate assumption since projects with expiring contracts are generally at or near the end of their economic life and equipment would need to be replaced. ORA agrees with LSA, SDG&E and TransWest on assigning 25% of the capital costs toward expiring contracts. ORA reiterates its recommendation stated in its opening comments that Staff analyze the assignment of capital costs for

²³ PG&E Opening Comments, Appendix 1 at 5.

²⁴ ORA Opening Comments at 4.

²⁵ LSA Opening Comments at 11.

²⁶ SDG&E Opening Comments at 5-6.

expiring contracts, and consider data provided by renewable technology developers, manufacturers, and suppliers documenting cost variables.²⁷

8. Additional RPS procurement by publicly owned utilities (POUs) identified in the RPS Calculator may trigger additional transmission upgrades in the CAISO balancing authority area. Currently, the Renewable Net Short methodology in the RPS Calculator does not account for generation associated with RPS projects under contract with, or owned by, POU's in CAISO's service territory. Because POU's are not regulated by the CPUC, generation data for POU projects in the CAISO control area will need to be collected. In addition, if the RPS Calculator will be developing greater than 33% RPS portfolios for the CAISO control area, future POU/RPS projects in the CAISO control area will need to be accounted for in the RPS Calculator's RNS. How should the RPS Calculator account for future generation in the CAISO balancing authority area that POU's may procure to meet current and future RPS requirements?

ORA agrees with PG&E²⁸ and SDG&E²⁹ that the CPUC should work with the California Energy Commission (CEC) to obtain the needed POU data. As ORA explained in opening comments, the generation associated with RPS projects under contract with, or owned by, POU's in CAISO's service territory may affect the RPS Calculator's RNS. Therefore, ORA reiterates its recommendation stated in its opening comments that Staff should reach out to the POU's and enter into a Memorandum of Understanding with the POU's on the exchange and treatment of data on current and future POU RPS projects.³⁰

B. Renewable Energy Resource Potential and Cost Update

9. Do you agree with the methodology taken to expand the original competitive renewable energy zones or CREZs? Is the methodology used for the renewable resource assessment reasonable for generation and transmission planning purposes?

²⁷ ORA Opening Comments at 4-5.

²⁸ PG&E Opening Comments, Appendix 1 at 6.

²⁹ SDG&E Opening Comments at 6.

³⁰ ORA Opening Comments at 5-6.

LSA³¹ and CalWEA³² agree with the Super CREZ methodology. LSA further recommends that if renewable technologies evolve to increase renewable resource potential, the Super CREZ methodology should be revised annually.³³ PG&E explains that expanded CREZs may be too inclusive and include areas with differing transmission conditions and costs.³⁴ JCP states that Super CREZs do not take into account relative economic and environmental considerations.³⁵ TransWest states that the Super CREZ methodology must be updated to better assess out-of-state resources and identify lower cost zones.³⁶ SDG&E suggests that the Super CREZ data be vetted in workshops.³⁷ ORA agrees with LSA and CalWEA and supports the Super CREZ methodology because as ORA explains in opening comments, Super CREZs are created by incorporating existing CREZ and non-CREZ renewable resources with newly identified areas of renewable resource potential beyond the boundaries of original CREZs.³⁸ However, ORA also agrees with PG&E, JCP, and TransWest's statements that there may be some limitations with using Super CREZs. Therefore, ORA agrees with SDG&E and recommends that Super CREZs data be reviewed in the February workshop.

10. Has the methodology taken to expand the original CREZs failed to identify any RPS resources that should be included in the RPS Calculator?

PG&E states that the CREZ expansion has not missed any resources.³⁹ CalWEA states that transmission planning resulting from Super CREZs should be broad enough to

³¹ LSA Opening Comments at 12.

³² CalWEA Opening Comments at 10.

³³ LSA Opening Comments at 12.

³⁴ PG&E Opening Comments at 7.

³⁵ JCP Opening Comments at 9.

³⁶ TransWest Opening Comments at 6.

³⁷ SDG&E Opening Comments at 7.

³⁸ ORA Opening Comments at 6.

³⁹ PG&E, Opening Comments Appendix 1 at 7.

benefit renewable development even if it is not identified in a CREZ.⁴⁰ JCP states that it is important for the RPS Calculator to have functionality to study the land use implications of higher penetrations of renewable energy, and the functionality to create an environmentally preferred scenario.⁴¹ TransWest states that the methodology failed to identify out of state zones.⁴² ORA disagrees with JCP and Transwest and agrees with PG&E. ORA is not aware of any RPS resources that should be included in the RPS Calculator that were not included in expanding the original CREZs. However, ORA recommends that Black and Veatch (B&V) verify this by providing complete references for the data used in its study.

11. Do you agree that the capital cost, operating costs, and performance assumptions are reasonable for this level of analysis? If not, please specify the inputs and assumptions that you believe need to be revised and provide a rationale.

PG&E states that capital costs, operating costs, and performance assumptions should be updated on an on-going basis.⁴³ TransWest states that the long term process should include a review of data against other sources, and that the selection analysis should include a sensitivity analysis that includes a range of data for the main cost drivers.⁴⁴ ORA agrees with the revisions proposed by PG&E and TransWest because these costs will change over time. ORA reiterates its recommendation in opening comments⁴⁵ that these costs be monitored and modified in the RPS Calculator as stakeholders identify and verify cost trends in the next Renewable Energy Transmission

⁴⁰ CalWEA Opening Comments at 10.

⁴¹ JCP Opening Comments at 10.

⁴² TransWest Opening Comments at 6.

⁴³ PG&E Opening Comments, Appendix 1 at 7.

⁴⁴ TransWest Opening Comments at 7.

⁴⁵ ORA Opening Comments at 7.

Initiative (RETI).⁴⁶

C. Levelized Cost of Energy

12. Do you agree with each of the assumptions made in the LCOE calculations, including assumptions related to state and federal tax incentives and the cost of capital? What assumptions, if any, should be modified and on what basis? Recommended changes should be supported with publicly available information, to the greatest extent possible.

PG&E states that the financing assumptions are not consistent with actual renewable project finance used today.⁴⁷ ORA agrees with PG&E because different technology types have access to different types or levels of financing. ORA recommends that Staff gather information from industry representatives regarding actual financing options available to project developers. SDG&E recommends that the Levelized Cost of Energy (LCOE) only model those tax credits in effect and account for differences in economic lifetimes of both resources and the transmission upgrades supporting these resources.⁴⁸ ORA agrees with SDG&E that the LCOE only model those tax credits in effect. As ORA states in opening comments, the LCOE model states that the Renewable Electricity Production Tax Credit (PTC) will expire at the end of 2016 when in fact it is set to expire at the end of 2014. ORA reiterates its recommendation from opening comments that Staff review the current assumption regarding PTC expiration and only model those tax credits in effect.⁴⁹

D. Treatment of Transmission Costs in Version 6.0

13. What information should be used to update transmission cost estimates associated with Super CREZs? Provide

⁴⁶ The Renewable Energy Transmission Initiative (RETI) is a statewide initiative to help identify the transmission projects needed to accommodate renewable energy goals, support future energy policy, and facilitate transmission corridor designation and transmission and generation siting and permitting. RETI will be an open and transparent collaborative process in which all interested parties are encouraged to participate (CEC webpage: <http://www.energy.ca.gov/reti/>).

⁴⁷ PG&E Opening Comments, Appendix 1 at 7.

⁴⁸ SDG&E Opening Comments at 7.

⁴⁹ ORA Opening Comments at 13.

recommendations on how the Energy Division staff can improve upon its processes for updating the cost estimates for existing and new transmission included in the RPS Calculator.

PG&E recommends that the CAISO provide information regarding transmission upgrades and their associated costs for anticipated transmission needs for various amounts of generation within each Super CREZ. SCE states that the CAISO's per unit cost guides provide appropriate cost categories to consider in updating transmission cost estimates. SDG&E recommends that transmission cost estimates be developed for a wide range of transmission expansion options. LSA encourages ED to engage the CAISO in updating delivery network upgrade costs annually. Starwood Energy Group Global, Inc. (Starwood) recommends that "transmission costs in the RPS Calculator should be updated to better reflect actual transmission costs." The Bay Area Municipal Transmission Group (BAMx) suggests that publicly available data from CPCN applications, the CAISO's TAC Estimation Model, and the Request Window Applications in the CAISO's 2014 TPP be used to update transmission cost estimates. TransWest recommends that cost estimates from existing and planned CAISO approved policy transmission projects be included. ORA believes that each of these suggestions may have merit, and recommends that transmission costs be addressed in the February workshop. At that time, parties can discuss and decide which values to include in the transmission cost estimates, and identify the best data sources for those values.

14. Is the proposed iterative process between the CPUC and CAISO (outlined in seven steps in the above section, Development of Additional Transmission Costs for Version 6.1) for identifying major and minor transmission upgrade costs in areas where CAISO has not conducted many interconnection studies (e.g., the Sacramento River Valley Super CREZ) reasonable? If not, explain how these estimates should be developed and specify whether or not your proposal can meet the Track 1 and Track 2 schedules outlined in this Energy Division staff proposal.

PG&E expresses concern regarding the timing of the proposed iterative process between the CPUC and the CAISO to develop transmission cost estimates for Super

CREZs.⁵⁰ ORA agrees and recommends that the Commission clarify the timing of the proposed iterative process, and ensure that it will occur in a timely manner in order to keep the releases of Versions 6.1 and 6.2 on track.

15. The WECC Environmental Data Task Force (EDTF) has been collecting environmental data that may be useful for identifying potential new transmission routes. Should this information be considered when estimating costs for major upgrades not identified by the CAISO? If so, how can this be incorporated into the RPS Calculator's transmission cost assumptions?

TransWest states that the EDTF has found that environmental related costs for transmission are a relatively small percentage of the overall transmission cost, and therefore this data should not be incorporated into the RPS Calculator. ORA disagrees with TransWest, because the data provides important information beyond cost. PG&E recommends that the WECC EDTF data could be used in parallel to the RPS Calculator. ORA disagrees with PG&E because this data can and should be incorporated into the RPS Calculator. SCE recommends that the data be used in the RPS Calculator's environmental scoring methodology. ORA agrees with SCE that this data should be considered when creating the environmental scoring methodology in Track 2b. SDG&E recommends that the data be used to determine line lengths for transmission expansion options, and that those values should be an input into the RPS Calculator. JCP believes the data can be useful for identifying lower-risk transmission proposals. ORA is interested to learn more about SDG&E and JCP's proposals in the February workshop, as these proposals may be useful for creating environmental risk scores for CREZs or Super CREZs.

16. The RPS Calculator currently assumes that all new renewable generation must be made fully deliverable. Should the RPS Calculator be capable of evaluating energy only and/or partially deliverable projects? If so, how should the resource ranking and selection methodology be adjusted to reflect the impacts of such projects?

⁵⁰ PG&E Opening Comments, Appendix 1 at 11.

There is broad consensus among parties that the Calculator should be capable of evaluating energy only and partially deliverable projects.⁵¹ Many parties also suggest that the selection of energy only versus fully deliverable should be based on an evaluation of the difference between a project's capacity value and its transmission upgrade costs to achieve full capacity deliverability status.⁵² ORA agrees with this recommendation because it accurately weighs the costs and benefits of achieving full capacity deliverability status. If a project's capacity value is greater than its transmission upgrade costs, the project should be made fully deliverable. If a project's capacity value is less than its transmission upgrade costs, the project should be made energy only or partially deliverable.

E. Energy Values

17. Is the approach described above to calculating Energy Value using a simplified generation "stack" model appropriate? Are there other methodologies that should be considered that would incorporate saturation effects, such as declining energy value and increased curtailment with higher penetration?

ORA, PG&E, SCE, SDG&E, CalWEA, and TransWest all state that the simplified generation "stack" model is appropriate for calculating the Energy Value.⁵³ SDG&E and Calpine point out that in cases of over-generation, the RPS Calculator assumes an energy price of \$0/MWh; in reality, over-generation can cause prices to go negative, as low as negative \$300.⁵⁴ ORA agrees with SDG&E and Calpine, and recommends that the RPS

⁵¹ PG&E Opening Comments , Appendix 1 at 12, SCE Opening Comments at 16, SDG&E Opening Comments at 10, CalWEA Opening Comments at 11, JCP Opening Comments at 12, LSA Opening Comments at 15, IEP Opening Comments at 9, CCSF Opening Comments at 5, BAMx Opening Comments at 9, Calpine a Opening Comments t 4.

⁵² PG&E Opening Comments , Appendix 1 at 12, CalWEA Opening Comments at 14, CCSF Opening Comments at 7, BAMx Opening Comments at 10.

⁵³ ORA Opening Comments at 11, PG&E Opening Comments , Appendix 1 at 3, SCE Opening Comments at 16, SDG&E Opening Comments at 11, CalWEA Opening Comments at 15, TransWest Opening Comments at 12.

⁵⁴ SDG&E Opening Comments at 12, Calpine Opening Comments at 5.

Calculator should allow for negative pricing, as this represents the opportunity cost associated with curtailing renewable resources.

18. Is the data used for the resource production profiles granular enough for the purposes of the RPS Calculator? If not, what additional information is needed?

PG&E, SCE, and SDG&E all state that using month-hour average production profiles is reasonable.⁵⁵ ORA disagrees and reiterates its recommendation from its opening comments that the model should be run for multiple days within a month in order to more accurately estimate the Energy Value.⁵⁶ SCE and GPI point out that using two profiles for each month, one for weekdays and one for weekends/holidays, would be more accurate.⁵⁷ SCE suggests that a fundamental modeling approach would capture these differences. ORA agrees with SCE and GPI that the model should capture the differences between weekdays and weekends/holidays because this would more accurately reflect a resource's contribution to net load. ORA recommends that parties discuss different modeling options in the February workshop.

PG&E argues that curtailment should only affect the Energy Value, since the costs incurred by curtailment only result from lost MWh of RPS-eligible energy. PG&E cautions against double counting the effects of curtailment in LCOE, Capacity Value and Integration Cost.⁵⁸ ORA recommends that curtailment and its effects be discussed further in the February workshop.

F. Capacity Value

19. Is it appropriate to use ELCC values instead of NQC for planning purposes in the RPS Calculator?

⁵⁵ PG&E Opening Comments , Appendix 1 at 14, SCE Opening Comments at 17, SDG&E Opening Comments at 11.

⁵⁶ ORA Opening Comments at 11.

⁵⁷ SCE Opening Comments at 17, GPI Opening Comments at 4.

⁵⁸ PG&E Opening Comments , Appendix 1 at 13.

There is broad consensus that the RPS Calculator should use Effective Load Carrying Capacity (ELCC) values instead of the Net Qualifying Capacity (NQC).⁵⁹ ORA agrees because ELCC values more accurately represents a resource's contribution towards meeting system need.

20. Is this set of seven resources listed above reasonable for capacity valuation within the context of long-term renewable resource planning?

PG&E states that the RPS Calculator may need additional resource profiles to reflect the impacts of procuring geographically diverse RPS resources.⁶⁰ SCE recommends that the resources considered in E3's RECAP model should match the resource types identified in the Resource Adequacy proceeding.⁶¹ SDG&E points out that there is lots of variability even within a resource type.⁶² CalWEA recommends that solar PV should be distinct from inland solar PV.⁶³ GPI recommends that the model should also account for storage, electric vehicles and smart-grid technologies.⁶⁴ LSA recommends that technological differences such as fixed-tilt and tracking solar PV should be considered, and that solar PV with co-located with storage be modeled separately.⁶⁵ TransWest states that coastal wind and inland wind are not representative of wind resources in interior states.⁶⁶ ORA agrees that all of these recommendations may have merit, and recommends that the list of resources be discussed in the February workshop.

⁵⁹ ORA Opening Comments at 12, PG&E Opening Comments , Appendix 1 at 14, SCE Opening Comments at 17, SDG&E Opening Comments at 12-13, CalWEA Opening Comments at 15, LSA Opening Comments at 17, CCSF Opening Comments at 7, BAM x Opening Comments at 10-11, Calpine Opening Comments at 6.

⁶⁰ PG&E Opening Comments , Appendix 1 at 15.

⁶¹ SCE Opening Comments at 17.

⁶² SDG&E Opening Comments at 14.

⁶³ CalWEA Opening Comments at 16.

⁶⁴ GPI Opening Comments at 5.

⁶⁵ LSA Opening Comments at 17-18.

⁶⁶ TransWest Opening Comments at 20.

If the RECAP model does not have the computational power to consider additional resource categories,⁶⁷ then ORA recommends that Staff consider using the Strategic Energy and Risk Valuation Model (SERVM) model because it can model a broader range of variability in inputs and outcomes. Using the SERVM model will promote consistency with the Resource Adequacy (RA) proceeding because that proceeding uses the SERVM model to develop ELCC values.

21. When evaluating the capacity value of new out-of-state resources that require new transmission, the RPS Calculator assumes that new transmission lines contribute 60% of their rated capacity to the state's planning reserve margin. The 60% assumption is derived from the LTPP's load-resource balance calculation, where the assumed contribution of imports to the reserve margin is roughly 60% of the total physical impact capacity. Is this assumption reasonable? If not, what alternative assumption should be made?

PG&E states that the 60% assumption may overestimate the contribution of out-of-state resources to the state's planning reserve margin and recommends that the percentage contribution be limited to the ELCC value of the resource.⁶⁸ SDG&E, on the other hand, states that 60% may be overly conservative and states that the RPS Calculator should instead count 100% of the nominal import capability of a new intertie as providing RA counting rights.⁶⁹ LSA states that each resource should begin with 100% of contract capacity value and then be adjusted according to its ELCC value as long as it has firm transmission rights.⁷⁰ ORA reiterates its request stated in its opening comments that Staff provide the source and rationale for the 60% assumption.⁷¹ Only then can parties discuss its merit and consider the alternate proposals from PG&E, SDG&E and LSA.

⁶⁷ Staff Proposal Opening Comments at 28.

⁶⁸ PG&E Opening Comments, Appendix 1 at 15.

⁶⁹ SDG&E Opening Comments at 14.

⁷⁰ LSA Opening Comments at 18.

⁷¹ ORA Opening Comments at 13.

22. Is the proposed approach used to forecast the avoided cost of system capacity appropriate for calculating capacity value? Please provide any recommendations for improving the methodology or alternative assumptions that should be used. (The methodology is explained in the RPS_CalcV6.0_CapacityValue.ppt)

There is broad consensus that the proposed approach to forecast the avoided cost of system capacity is appropriate for calculating capacity value.⁷² However, PG&E cautions that care must be taken to estimate the transition year from short-run to long-run avoided cost.⁷³ As this is an assumption taken from the Commission's LTPP proceeding, ORA recommends that parties participate and provide comments in that proceeding regarding their concerns with that assumption. SDG&E states that this approach may require revision as flexibility requirements are implemented in the RA proceeding.⁷⁴ ORA agrees and recommends that the approach be modified in future versions of the RPS Calculator to account for these requirements.

LSA questions whether it is appropriate to use short-term avoided capacity cost for long-term forecasting, given their volatility.⁷⁵ ORA appreciates LSA's concern, but agrees with BAMx that, given the difficulty in quantifying future marginal capacity value, using the current average RA contract price is reasonable.⁷⁶ In addition, CCSF recommends that the RPS Calculator reflect updates to the average RA contract price in order to ensure that RA value aligns with current market prices.⁷⁷ ORA agrees because the adjustment would help account for the volatility in short-term capacity costs.

⁷² PG&E Opening Comments , Appendix 1 at 16, SDG&E Opening Comments at 16, CalWEA Opening Comments at 17, CCSF Opening Comments at 8, BAMx Opening Comments at 11.

⁷³ PG&E Opening Comments , Appendix 1 at 16.

⁷⁴ SDG&E Opening Comments at 16.

⁷⁵ LSA Opening Comments at 19.

⁷⁶ BAMx Opening Comments at 11.

⁷⁷ CCSF Opening Comments at 8.

23. As this methodology is based on the ability of renewable generation to provide system capacity, it does not currently account for additional value that a resource located in a capacity-constrained local area might provide. Should Energy Division staff consider updating the RPS Calculator to reflect incremental capacity value that resources located in areas with Local Capacity Requirements (LCR)? If so, what methodology should be used to determine this value? What capacity credit should be applied to resources located in LCR areas? What avoided cost of capacity should be assumed?

PG&E and SCE do not believe that including incremental capacity value for resources meeting LCR criteria adds value to the model results.⁷⁸ However, SDG&E, CalWEA and LSA state that incremental capacity value for resources meeting LCR criteria should be included in the RPS Calculator.⁷⁹ ORA agrees with SDG&E, CalWEA and LSA because resources meeting LCR criteria may help avoid transmission and distribution upgrade costs and this represents a real ratepayer value. ORA reiterates its recommendation from opening comments that these values should be consistent with those being developed in the Commission's RA and Distributed Resource Plan (DRP) proceedings.⁸⁰

24. Is the ELCC work initiated in the Commission's Resource Adequacy proceeding (R.11-10-023) and the subject of an Energy Division Staff Proposal, relevant for the purposes of the RPS Calculator? Why or why not?

There is broad consensus that the ELCC work initiated in the RA proceeding is relevant for the purposes of the RPS Calculator.⁸¹ Some parties⁸² also recommend that once the ELCC values have been developed in the RA proceeding, these should replace

⁷⁸ PG&E Opening Comments, Appendix 1 at 16, SCE Opening Comments at 18.

⁷⁹ SDG&E Opening Comments at 16, CalWEA Opening Comments at 17, LSA Opening Comments at 19-20.

⁸⁰ ORA Opening Comments at 14.

⁸¹ ORA Opening Comments at 14, PG&E Opening Comments, Appendix 1 at 16, SCE Opening Comments at 17, SDG&E Opening Comments at 12-13, CalWEA Opening Comments at 17, LSA Opening Comments at 20, Calpine Opening Comments at 8.

⁸² *Id.*

E3's ELCC values currently being used in the RPS Calculator. ORA agrees because it will ensure that capacity value is treated consistently across regulatory programs.

G. Renewable Integration Costs

25. In light of the potential for increased renewable penetration beyond 33%, is it important for the RPS Calculator to have an Integration Cost Adder?

PG&E, SCE, and CalWEA support the inclusion of a Renewable Integration Cost adder (RICA) in RPS Calculator Version (V.) 6.0.⁸³ Several parties recommend that the interim RICA approved in the 2014 IOU RPS Procurement Plans should be utilized.⁸⁴ However, LSA contends that the RICA should only be included when it has been developed and adopted in another track of the RPS proceeding.⁸⁵ The Independent Energy Producers Association (IEP) suggests that the nine categories of impact listed in the table on pages 30-31 of the Staff proposal might more effectively characterize renewable integration costs.⁸⁶

ORA agrees with PG&E, SCE, and CalWEA that RPS Calculator V. 6.0 should include a RICA to address additional flexibility costs associated with grid integration of renewable generation.⁸⁷ ORA does not support or necessarily refute IEP's proposal and suggests that it be addressed in the upcoming RPS Calculator workshop. Since the elements of a RICA will be evaluated in a future track of the RPS proceeding in 2015,⁸⁸ ORA supports inclusion of the interim RICA in the IOU's RPS procurement plans until a modified version is adopted. This will ensure that RPS Calculator V. 6.0 reflects current estimates of flexibility costs until a more robust RICA methodology has been developed.

⁸³ PG&E Opening Comments, Appendix 1 at 7, SCE a Opening Comments t19, CalWEA Opening Comments at 17.

⁸⁴ PG&E, Opening Comments Appendix 1at 17, SCE Opening Comments at 19, SDG&E Opening Comments at 17, CalWEA Opening Comments at 18, GPI Opening Comments at 6.

⁸⁵ LSA Opening Comments at 20.

⁸⁶ IEP Opening Comments at 9.

⁸⁷ D.14-11-042 at 54.

⁸⁸ D.14-11-042 at 57.

26. Are the costs categories that are proposed to be included in the Integration Cost Adder methodology appropriate?

In Staff's Proposal, Energy Value (EV), Capacity Value (CV), Energy Value Saturation Effects (EVSE), and Capacity Value Saturation Effects (CVSE) are listed as the first four potential cost categories that could be included in a RICA.⁸⁹ According to Staff's Proposal, the RPS Calculator V. 6.0 currently accounts for these costs. Based upon this observation, PG&E, SDG&E, and LSA cautioned that potential double counting of these cost categories could occur if a RICA were included.⁹⁰

If EV, CV, EVSE, and CVSE costs are already embedded in RPS Calculator V. 6.0, then ORA agrees that there is a potential for double counting them if a RICA is included. One way to minimize this impact is to comparatively assess how these costs are reflected in a proposed RICA versus in the cost categories currently in the RPS Calculator V. 6.0. This exercise will determine if the first four cost categories should be excluded from a RICA that is included in future versions of the RPS Calculator.

27. The discussion above in the Renewable Integration Costs section identifies a number of effects of renewable generation on system operations that could be included in a renewable integration cost adder, all of which result from limitations on the flexibility of the power system and the need to carry additional operating reserves. What methodology should Energy Division staff use to evaluate these costs?

See response to Q25.

28. Can the operation flexibility work underway in LTPP phase 1A and 1B (R.13-12-010) inform the development of an Integration Cost Adder for the RPS Calculator? Explain why or why not.

SDG&E, LSA, and IEP suggest that a long-term RICA *could* be adopted from work in the LTPP proceeding⁹¹ while PG&E and CalWEA advocate that it *should* be

⁸⁹ Staff Proposal at 30.

⁹⁰ PG&E Opening Comments , Appendix 1 at17, SDG&E Opening Comments at18, LSA Opening Comments at 21.

⁹¹ SDG&E Opening Comments at 19, LSA Opening Comments at 22, IEP Opening Comments at 1.

adopted from this work.⁹² However, LSA claims that it may be premature to determine if LTPP operational flexibility work can inform the development of a RICA since cost causation has not been addressed.⁹³ In addition, SCE states that it is unclear if RICA-related work is within the scope of the LTPP proceeding.⁹⁴

While current efforts to address operational flexibility in the LTPP proceeding could be valuable and relevant, ORA recommends that Staff should evaluate its usefulness in a long-term RICA prior to including it in the RPS Calculator.⁹⁵ This is particularly important if cost causation has not or will not be addressed in this proceeding.

29. Allowing for economic curtailment of renewable generation can provide additional operational flexibility on a system seeking to integrate high penetrations of renewable generation by providing operators with a tool to control “net load” (load minus renewable generation). Should the RPS Calculator consider using renewable curtailment as the “default” solution to power system flexibility limitations for the purpose of renewable resource planning? If not, explain why not and whether an alternative approach should be used?

Most parties indicate that economic curtailment should not be the default option to address flexibility concerns. PG&E states that curtailment is a reasonable starting point to address flexibility issues, but it is one among many tools that could be used.⁹⁶ SDG&E indicates that RPS PPAs may not include curtailment rights,⁹⁷ while CalWEA

⁹² PG&E Opening Comments , Appendix 1 at 18, CalWEA Opening Comments at 19.

⁹³ LSA Opening Comments at 22.

⁹⁴ IEP Opening Comments at 11.

⁹⁵ ORA Opening Comments at 16.

⁹⁶ PG&E , Opening Comments Appendix 1 at 19.

⁹⁷ SDG&E Opening Comments at 20.

notes that cost-effective RA capacity may be available.⁹⁸ LSA claims that energy storage (ES) and the Energy Imbalance Market (EIM) could obviate the need for curtailment.⁹⁹

ORA agrees with PG&E and LSA that curtailment is one among several tools, including ES and EIM, that could be utilized to address flexibility requirements. For example, ES devices may be able to absorb energy during periods of over generation and reduce flexibility requirements. ORA recommends that the RPS Calculator workshop address SDG&E's concern that RPS PPAs may not include curtailment rights and CalWEA's claim that cost-effective RA capacity could be utilized as a tool to address over generation. As stated in its opening comments, ORA recommends clarification on whether default curtailment would be capped. If this option were to be selected, then Staff should identify a realistic percentage of facilities that can be curtailed and by how much.¹⁰⁰

30. Are there any additional system costs imposed by higher penetrations of renewable resources that are not included in the table above?

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

H. Treatment of Small Utility-Scale Resources

31. Identified above are five categories of direct incremental value that small utility-scale renewable projects located close to load might provide (relative to large-scale renewable resources). Are there any additional ratepayer realized values that should be considered? If so, please describe how that value can be quantified in the RPS Calculator.

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

⁹⁸ CalWEA Opening Comments at 9.

⁹⁹ LSA Opening Comments at 23.

¹⁰⁰ ORA Opening Comments at 17.

32. Is it realistic to assume that each of these values might be realized by the small-scale projects that could theoretically provide them? If not, what barriers prevent the realization of those values? How can these barriers be overcome?

Several parties¹⁰¹ indicate how small utility-scale resources (SUR) may not realize values that could be theoretically provided by them. CalWEA suggests that the benefits, including reduced transmission line losses and avoided congestion costs, could be variable.¹⁰² LSA states that the value of SUR close to load is difficult to measure. For example, LSA suggests that integration of distributed solar PV systems could result in avoided distribution infrastructure costs but increased interconnection costs.¹⁰³ PG&E claims that distributed generation (DG) would more than likely not defer transmission costs but could increase distribution upgrades¹⁰⁴ or should be discounted based upon resource location and level of interconnection.¹⁰⁵

ORA agrees that SUR may not provide theoretical benefits in all scenarios. In some instances, as PG&E and LSA suggest, grid integration of these projects could result in increased costs. Currently, the Rule 21 proceeding, R.11-09-011, and the DRP proceeding, R.14-08-013 are considering how to remove barriers associated with SUR interconnection and distribution infrastructure requirements. Given these efforts, ORA recommends that results or conclusions from the Rule 21 and DRP proceedings inform the value of SUR in the RPS Calculator.

33. Locational value for small-scale resources may in many cases be site specific. For example, not every distribution feeder has a deferrable distribution investment, and many distribution feeders have peak loads that occur after sundown when PV resources are

¹⁰¹ PG&E Opening Comments, Appendix 1 at 20, SCE Opening Comments at 22, SDG&E Opening Comments at 20, LSA Opening Comments at 24.

¹⁰² CalWEA Opening Comments at 20.

¹⁰³ LSA Opening Comments at 24.

¹⁰⁴ PG&E Opening Comments, Appendix 1 at 19.

¹⁰⁵ SDG&E Opening Comments at 20, PG&E Opening Comments, Appendix 1 at 20, SDG&E Opening Comments at 22.

not producing. How, if at all, should the RPS Calculator incorporate location-specific values to ensure that small-scale projects are appropriately valued?

Some parties imply that small-scale utility resources could actually increase ratepayer costs¹⁰⁶ attributed to distribution upgrades¹⁰⁷ or interconnection¹⁰⁸ based upon location and amount.¹⁰⁹ To quantify location-specific benefits, parties recommend studying utility-scale solar photovoltaics (PV) resources at the distribution substation¹¹⁰ or the feeder¹¹¹ level or coordinating with the DRP proceeding¹¹² to develop these values.

Given the continued deployment of small-scale utility resources, ORA recognizes the need to accurately value their associated ratepayer costs and benefits. Parties have stated that these costs and benefits depend upon a variety of factors including the level of resource interconnection and location.¹¹³ Since the DRP proceeding is currently evaluating the impact of these factors on the value of small-scale utility resources, ORA recommends that locational costs and benefits developed in the DRP proceeding inform future updates to the RPS Calculator. This will ensure consistency between the locational values for SUR developed and utilized in these regulatory venues.

34. Is there a need to perform a more comprehensive assessment of small utility-scale solar PV resources in urban areas? If so, what level of granularity is appropriate for generation and transmission resource planning?

¹⁰⁶ SCE Opening Comments at 22.

¹⁰⁷ PG&E Opening Comments at 19.

¹⁰⁸ LSA Opening Comments at 24.

¹⁰⁹ SDG&E Opening Comments at 20.

¹¹⁰ CalWEA Opening Comments at 22.

¹¹¹ Calpine Opening Comments at 11.

¹¹² SCE Opening Comments at 22.

¹¹³ PG&E Opening Comments, Appendix 1 at 19-21, SCE Opening Comments at 22, SDG&E Opening Comments at 20

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

I. Aligning Generation and Transmission Planning with Renewable Procurement

35. What modifications, if any, are necessary to the generation and transmission planning and procurement processes to ensure that in-state and out-of-state renewable resources, and associated transmission, are selected in a manner that minimizes net costs of delivered renewable energy while ensuring system reliability? What role should the RPS Calculator have in this process, if any, or is another process needed?

In opening comments, PG&E, CalWEA, and IEP highlight the need to ensure that RPS Calculator updates do not delay and consequently outdate the CPUC's LTPP or CAISO's TPP.¹¹⁴ They suggest updates to include incorporating data from existing or planned CAISO approved policy and potential regional transmission projects¹¹⁵ and monthly RPS projects.¹¹⁶ Aside from updating the RPS Calculator, parties suggest functional gaps that could impact the accuracy of the LTPP and TPP. For example, SCE questions the ability of the RPS Calculator V. 6.0 to capture impacts that transmission upgrades may have on CREZs or Super CREZs,¹¹⁷ whereas PG&E point out the absence of energy-only functionality.¹¹⁸

Based upon a review of parties' comments, ORA agrees that generation and transmission data updates to the RPS Calculator V. 6.0 should be performed in a timely fashion to more accurately inform CAISO's TPP and the CPUC's LTPP.

¹¹⁴ PG&E Opening Comments , Appendix 1 at 23, CalWEA Opening Comments at 22, IEP Opening Comments at 12.

¹¹⁵ TransWest Opening Comments 16-17.

¹¹⁶ PG&E Opening Comments, Appendix 1 at 23.

¹¹⁷ SCE Opening Comments at 25.

¹¹⁸ PG&E Opening Comments, Appendix 1 at 22.

36. What implementation issues or challenges, if any, do you foresee in the use of Version 6.0 of the RPS Calculator to inform planning in the CPUC’s LTPP and CAISO’s TPP?

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

37. Should the NMV methodology, as adopted in the IOUs’ annual RPS procurement plans, be informed by the NMV used for generation and transmission planning in the RPS Calculator? If so, please explain how.

PG&E, SCE, SDG&E, and LSA claim that the RPS Calculator Net Market Valuation (NMV) should not inform the NMV in the IOUs’ RPS procurement plans.¹¹⁹ Some parties point to gaps in the energy and capacity valuation in the RPS Calculator’s NMV methodology,¹²⁰ including the failure to account for saturation effects.¹²¹

Since elements of the RPS Calculator V. 6.0 NMV methodology, including energy and capacity saturation effects, have not been updated, it is not clear what added benefit it will provide to the NMV methodology utilized in RPS procurement. ORA recommends that if these updates are incorporated into RPS Calculator V. 6.1, Staff can consider aligning both NMV methodologies. If the RPS Calculator V.6.0 NMV methodology is not updated, then ORA recommends that it should not inform the NMV methodology used in RPS procurement.

J. Secondary Costs and Benefits

38. Is it appropriate to incorporate secondary values into the RPS Calculator, which develops RPS portfolios that will be used to inform the LTPP, the CAISO’s TPP, and potentially, the RPS need authorization in the IOU’s annual RPS procurement planning process? Explain why or why not.

¹¹⁹ PG&E Opening Comments, Appendix 1 at 23, SCE Opening Comments at 26, SDG&E Opening Comments at 24, LSA Opening Comments at 25.

¹²⁰ LSA Opening Comments at 26.

¹²¹ IEP Opening Comments at 12.

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

39. If yes, what secondary costs and benefits should be incorporated in the NMV calculation? Please explain how costs and benefits should be quantified and to what extent they are realized by ratepayers.

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

40. What data sources should be used to develop quantitative secondary benefit metrics?

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

41. How, methodologically, should secondary benefit metrics be incorporated into the RPS Calculator for RPS portfolio development?

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

42. How much weight should the RPS Calculator put on secondary benefit metrics within, or relative to, the NMV calculation?

ORA does not have a response at this time, but reserves the right to further address this issue in the February workshop or later in the proceeding.

III. CONCLUSION

ORA supports revising the RPS calculator for the purposes of developing policy-based portfolios to inform the LTPP proceeding and the CAISO's TPP. ORA respectfully requests the Commission consider the recommendations described above.

Respectfully submitted,

/s/ IRYNA A. KWASNY

Iryna A. Kwasny
Staff Counsel

Attorney for the Office of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Tel. (415) 703-1477
Fax: (415) 703-2262
Email: iryna.kwasny@cpuc.ca.gov

December 22, 2014

VERIFICATION

I, Iryna A. Kwasny, am counsel of record for the Office of Ratepayer Advocates in proceeding R.11-05-005, and am authorized to make this verification on the organization's behalf. I have read the **“REPLY COMMENTS OF THE OFFICE OF RATEPAYER ADVOCATES ON THE ADMINISTRATIVE LAW JUDGE’S RULING (1) ISSUING AN ENERGY DIVISION PROPOSAL ON THE RENEWABLES PORTFOLIO STANDARDS CALCULATOR, (2) ENTERING THE PROPOSAL INTO THE RECORD, AND (3) SETTING A COMMENT AND WORKSHOP SCHEDULE”** filed on December 22, 2014. I am informed and believe, and on that ground allege, that the matters stated in this document are true. I declare under penalty of perjury that the foregoing are true and correct.

Executed on December 22, 2014 at San Francisco, California.

/s/ IRYNA A. KWASNY

Iryna A. Kwasny