gobBEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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

COMMENTS OF SIERRA CLUB CALIFORNIA ON THE ADMINISTRATIVE LAW JUDGE'S RULING ISSUING STAFF PROPOSAL AND REQUESTING COMMENT ON THE SECTION 399.20 PROGRAM

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Table of Contents

I.	Introduction	4
II.	Comments on Procedural Background	4
III.	Comments on Proposal Purpose	5
IV.	Comments on Overview of Existing FIT Price and Party Proposals for Amended FIT Program	5
V.	CPUC Staff Interpretation of Legislative Guidance	11
VI.	Guiding Principles	13
VII.	Program Elements of Staff Proposal	13
VIII.	Proposal Questions	23
IX.	Conclusion	31

SB_GT&S_0736505

Table of Authorities

Federal Statutes

16 U.S.C. Section 824a-3(b)(2) (PURPA)	6, 13

Federal Cases

Montclair v. Ramsdell, 107 U.S. 147, 152 (1883)	17
Boise Cascade Corp. v. U.S. EPA, 942 F.2d 1427, 1432 (9th Cir.1991).	17

FERC Rulings

134 FERC 61,044	6
133 FERC 61,059	6
133 FERC 61,059	6
47 FERC 61,161	6

California Constitution

Cal. Const. Art XII, § 6.	7

California Statutes

Public Utilities Code § 399.15	16
Public Utilities Code § 399.20	4
Public Utilities Code § 399.20(a)(1)	17
Public Utilities Code § 399.20(b)(3)	22, 29
Public Utilities Code § 399.20(d)	5
Public Utilities Code § 399.20(i)	27
Public Utilities Code § 399.26	28

California Cases

Imperial Merchant Services, Inc. v Hunt (2009) 47 Cal. 4th 381	17
Irvine Company v. California Emp. Com. (1946) 27 Cal.2d 570	18

Other Authorities

R.I. Gen. Laws § 39-26.2	6

SB_GT&S_0736506

I. Introduction

Sierra Club California respectfully submits the following Comments in accordance with the October 13, 2011 Administrative Law Judge's Ruling (1) Issuing Staff Proposal, (2) Entering Staff Proposal and Other Documents into the Record, and (3) Setting Comment Dates (Ruling). In the Ruling, ALJ DeAngelis requested that parties comment on the staff proposal following the same numbering format as the staff proposal.

Sierra Club California is comprised of more than 150,000 members and ratepayers throughout California. Sierra Club California supports successful implementation of effective feed-in tariffs (FITs) that can help meet California's targets for renewable energy.

II. Comments on Procedural Background

Sierra Club California has urged in its previous filings for the implementation of Section 399.20 to proceed steadily, because Sierra Club views FITs as an important tool to achieve the 33% Renewables Portfolio Standard (RPS), and the Governor's goal of 12,000 MW of renewable distributed generation. FITs as a policy tool offer streamlined processing, reduced transactional costs, transparency, and if set at appropriate prices, regulatory certainty to deliver a sustainable market and market transformation.

While the Commission should still proceed steadily toward implementation of Section 399.20, Sierra Club California additionally cautions the Commission not to rush completing the necessary work needed to implement a program that can be successful and an expandable tool for meeting RPS goals.

SB_GT&S_0736507

III. Comments on Proposal Purpose

The revised staff proposal focuses nearly entirely on staff's proposal, and provides scant analysis on parties' proposals, which deserve transparent feedback in the record. While the proposal meets its purpose in providing an outline of a comprehensive Renewable FIT program, the proposal focuses on analyzing only the chosen alternative, rather than providing adequate attention to parties' proposals.

IV. Comments on Overview of Existing FIT Price and Party Proposals for Amended FIT Program

a. Party Proposals

i. Option 1: Set Price at MPR

The staff proposal correctly notes that Sierra Club California opposes this option. For extensive comments on why this proposal is inconsistent with Section 399.20(d) and inappropriate for renewable energy policy objectives, see Sierra Club California Opening Comments.[1]

ii. Option 2: Set Price at MPR Plus Adders

iii. Option 3: Set Technology-Specific Prices Based on the Technology Costs

The brief analysis of pros and cons enumerated in the staff proposal accurately states the primary advantage of a cost-based FIT, but misstates the disadvantages.[2]

[1] Comments of Sierra Club California on the Administrative Law Judge's Ruling Setting Forth Implementation Proposal for SB 32 and SB 2 1X Amendments to Section 399.20, at 13-20 (hereafter cited as Sierra Club Opening Comments). Available at: http://docs.cpuc.ca.gov/efile/CM/139902.pdf

[2] Staff Proposal at 5. Available at http://docs.cpuc.ca.gov/efile/RULINGS/145433.pdf

SB_GT&S_0736508

First, Commission staff asserts that the price is vulnerable to litigation, which would delay the program. Similarly, the fourth asserted disadvantage is that some parties state that this approach is not compliant with state and federal law. Sierra Club California does not believe that the staff proposal approach is more or less immune from litigation than any of the options except Option 1, which is essentially the prior existing program. In addition, some parties raised legal objections to options 2 and 3, despite explicit statutory authority for the Commission to pursue the elements of options 2 or 3.

A cost-based FIT can be accomplished in compliance with state and federal law. In Sierra Club's Opening Comments, we explain how FERC has held that California may adopt a multi-tiered avoided cost rate structure,[3] but that the Commission would need to adopt targets to procure technology-specific energy resources to set avoided costs based on these differentiated technologies.[4] FERC has previously explained that "states are allowed a wide degree of latitude in establishing an implementation plan for section 210 of PURPA,"[5] and that FERC's "role is generally limited to ensuring that the plans are consistent with section 210 of PURPA."[6] Indeed, the state of Rhode Island has recently enacted authority to establish a cost-based FIT, through legislation delegating "highly differentiated" ratesetting to a new Distributed Generation Standard Contract Board.[7]

FERC has only stated that "a state" must adopt differentiated targets to set multi-tiered avoided costs for each technology, FERC did not specify whether a state's policy must be in

[3] 134 FERC 61,044 (CPUC Docket No. EL10-64-002 issued January 20, 2011); 133 FERC 61,059 (CPUC Docket No. EL10-64-001 issued October 21, 2010).
[4] Sierra Club Opening Comments at 7-9.
[5] 16 U.S.C. Section 824a-3(b)(2)
[6] 133 FERC 61,059 at para 24, citing American REF-FUEL Company of Hempstead, 47 FERC 61,161 at 61,533(1989).
[7] R.I. Gen. Laws § 39-26.2.

SB_GT&S_0736509

statute, or by delegation to an administrative or constitutional agency. In California, the Commission has broad constitutional and legislated authority to regulate public utilities,[8] is required to implement the Renewables Portfolio Standard, and is not precluded from setting procurement targets based on differentiated renewables technologies. Indeed, the Commission has already established on its initiative specific procurement targets for a specific renewable technology in the IOU solar photovoltaic program, under the broader legislated authority of implementing the RPS program. Furthermore, the RAM program creates a fixed procurement target of 1000 MW based upon a differentiation by size of projects (i.e., under 20 MW) from the broader RPS program which has no project size limitation. Given this legal rationale, and the example of another U.S. state pursuing a cost-based FIT, a statement that "some parties raised legal objections" is a weak and cursory reason to reject designing the program for cost-based FIT pricing.

Second, staff believes that the price under a cost-based FIT would be vulnerable to industry lobbying, which could lead to overpayment. The analysis provided assumes that the price would be set by lobbying and is insufficient to reject this option. The staff proposal did not discuss how such price setting would be accomplished in a manner that would enable parties to comment on this assumption. Sierra Club California proposes a process in which Parties have the opportunity to comment and introduce evidence into the record. FIT rate setting processes are generally regarded worldwide as among the most transparent and straightforward rate setting process utilized today.[9] The staff proposal did not examine a process that could safeguard against, or adequately reduce the potential risk, of this assumed effect. Sierra Club California

[8] Cal. Const. Art XII, § 6.
[9] Policy Makers Guide to Feed-in Tariff Design, Couture, Toby et. al., Technical Report NREL/TP-6A2-44849 July 2010 Pg. 3. See also, Paying for Renewable Energy: TLC at the Right Price, December 2009, DB Climate Change Advisors, Deutsche Bank, Pg. 3&4.

SB_GT&S_0736510

recommended in its opening comments to contract with one of many independent consultants used by the Commission and the California Energy Commission (CEC) to gauge renewable energy market trends and costs.[10] These firms include, but are not limited to, KEMA, Aspen, E3, Black & Veatch, and Navigant Consulting.

Process options could range from: (1) contracting with a qualified firm to recommend cost-based prices, and a ruling soliciting comment on the record on the study recommendations, to (2) evidentiary hearings, or (3) a modified approach where discovery and interrogatories on the report may be entered into the record for an expedited evidentiary process. To the extent that a draft report recommends levels indicating overpayment, Sierra Club California, ratepayer interests, and utilities would in most cases oppose payments that cannot be justified as a necessary expense as "overpayment," and the Commission could provide a process for comments to adjust prices based on evidence of technology-specific costs in the record.

Third, the staff proposal assumes that calculating the price is complex to administer and complicated if a separate price is needed for each project attribute. While it is true that cost-based pricing involves study of specific market segments based on a reasonable range of project attributes such as technology and size, by comparison this option is equally if not less complex and complicated than the staff proposal. The cost-based price requires only a study of costs observed in the market, and trends to indicate likely degression rates where applicable. The resulting FIT schedules are generally a simple table of prices for each technology that are adjusted periodically, using calculations that are far simpler than the Market Price Referent or the RPS Calculator, tools that the Commission has already used, without any apparent concern

[10] Sierra Club Opening Comments at 21-22.

SB_GT&S_0736511

for their "complexity". Indeed, we are concerned that cost-based FITs should not be unfairly rejected in this regard.

Dozens of jurisdictions throughout the world have successfully calculated differentiated cost-based FITs over many years. These jurisdictions include both developed and developing countries such as China, Germany, Portugal, Denmark, the Canadian Province of Ontario, Greece, Lithuania, Slovenia, Czech Republic, and Uganda. Rhode Island, implementing statute signed by the Governor on June 29, 2011, determined a methodology for calculating the tariffs, held four public hearings, and posted findings by the statutory deadline at the end of September.[11]

The Commission has experience in cost-based calculations and pricing. The Commission has applied cost plus reasonable profit-based pricing methodologies for decades to determine whether proposed utility conventional generation projects are reasonably priced. The Commission has also calculated the Market Price Referent (MPR) through thorough research on a wide array of data. The CEC has also published excellent studies on costs of energy using cost based methodologies.[12] The CEC study on comparative costs of central station electricity generation is an example of an excellent report calculating the levelized cost of energy (LCOE) for various conventional and renewable resource types. Also, during the RETI project the CPUC and CEC retained Black and Veatch to conduct cost-based analysis of various types of renewable projects.

[11] Paul Gipe, "Rhode Island Posts Proposed Tariffs--Meets Deadline" October 3, 2011 Wind-works.org
[12] Klein, Joel. 2009. *Comparative Costs of California Central Station Electricity Generation Technologies*, California Energy Commission, CEC-200-2009-017-SD. Available at http://www.energy.ca.gov/2009publications/CEC-200-2009-017/CEC-200-2009-017-SF.PDF

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There are also calculator tools in the public domain to assist PUCs in setting cost-based FIT rates. For example, the National Renewable Energy Laboratory (NREL) has developed The Cost of Renewable Energy Spreadsheet Tool (CREST).[13] Cost based FITs are a tested, proven and well understood pricing method used around the world.

On the other hand, the staff proposal relies on complex and unproven projections involved in calculating value adders, and requires adjusting the RAM market clearing price for an equivalent 3 MW program capacity, among other needed adjustments. Setting the tariffs for this proceeding using a best practices cost-based method would be much more straightforward, easier and less risky than the untried and complex methods in the staff proposal.

iv. Option 4: Set Price Based on Market Benchmarks

The staff proposal correctly acknowledges that "since [the] price is not based on the actual project's cost, the price may be too high or too low for a specific project," and "could result in an unsubscribed program or overpayment."[14] Sierra Club California stated in Opening Comments that the price structure of the RAM program is biased toward larger projects and may not translate well to an under 3 MW project capacity.[15] Adjustments are likely to require collecting similar data, and performing similar analysis, that would be required for a cost-based FIT. Among the factors also built into the RAM market clearing price are that the competitive auction is an incentive for bidders to bid too low, and that projects accepted into the program could fail to secure financing or pencil out, and the market clearing price would have actually been higher, but for the capacity of projects that won the auction but do not complete. In current

[13] https://financere.nrel.gov/finance/content/crest-cost-energy-models
[14] Staff Proposal at 4.
[15] Sierra Club Opening Comments at 24.

SB_GT&S_0736513

RPS IOU solicitations, the contract failure rate is about 30%, with the largest reason being inability to secure financing.[16]

The staff proposal identifies pros and cons associated with a "value-based FIT," but these assertions are not necessarily correct. The proposal claims that Option 4 protects ratepayers by not paying more than the cost of other procurement options, but as stated, this is overbroad, because "other procurement options" is subject to a wide range of policy factors. To be accurate, this should be re-stated in reference to existing prices and programs. Indeed, because the staff proposal sets the base price based on the RAM, but then adds value adders, it is likely that some projects would receive overpayment, while others could receive underpayment. The staff proposal also states that this option can be derived from market data, but this is also an attribute of cost-based FITs, where a cost study considers what the market price of required renewable resources are.

V. CPUC Staff Interpretation of Legislative Guidance

a. Market price and "general procurement activities"

The Commission should consider the IOU's general procurement activities, as authorized and directed by the Commission.

b. Market price and "long-term… costs associated with fixed-price electricity…"

The Commission should consider all of the costs associated with new fixed-price generating facilities. The full lifecycle costs and capacity factor (or specific yield) need to be integrated into the calculation.

[16] *Staff Draft Report on Renewable Power in California: Status and Issues*. California Energy Commission, August 2011, CEC-150-2011-002, at 6. Available at http://www.energy.ca.gov/2011publications/CEC-150-2011-002/CEC-150-2011-002.pdf

SB_GT&S_0736514

c. "Value of different electricity products including baseload, peaking, and as-available electricity."

The statute does not preempt the Commission from further differentiating these categories. Of concern is the potential for the FIT program price to bias in favor of one specific application. For example, baseload technologies may vary by feedstock, and peaking power and other product costs vary by size (projects less than 1 MW are more expensive per kWh than 3 MW projects). The Commission may recognize the value of a diverse portfolio for market transformation and a portfolio balanced with a wider range of renewable resources. The statute also does not prevent the Commission from recognizing these benefits even if not as a conclusion based on this section of the statute. We recommend that the Commission further differentiate the tariffs by technology within each of the three product type categories and further differentiate by project size.

d. Adjustment for time-of-delivery basis

The Commission may adjust the payment rate to reflect the value of electricity generated on a time of delivery basis.[17]

e. Ratepayer indifference

Sierra Club California stated in Opening Comments that market prices that are equivalent to avoided costs are ratepayer indifferent because a ratepayer would pay an equivalent cost but

[17] As Sierra Club California has stated previously, the conventional methods of deriving time-of-delivery grossly understate the long-term future cost of generation, particularly from resources providing power during peak hours. The CEC's most recent cost of generation study shows lifecycle levelized costs of energy from new simple cycle natural gas plants ranging from 25.6 cents to a dollar, and averaging near 80 cents, per kilowatt-hour. See Comparative Costs of California Central Station Electricity Generation, California Energy Commission, January 2010, p.34. While we are not advocating paying 80 cents per kilowatt-hour, we do urge the Commission to recognize more fully the value of distributed generation against the real lifecycle costs of new natural gas generation.

SB_GT&S_0736515

for the FIT program.[18] To ensure ratepayer indifference, the market price should not exceed avoided costs consistent with the Public Utility Regulatory Policies Act of 1978 (PURPA), which has been clarified by FERC to allow states broad discretion, including the setting of multi-tiered tariffs by technology.

f. Value for offset of peak demand on the distribution circuit

Sierra Club California agrees that the statute allows the Commission to include in the price a value for the peak demand on the distribution circuit.

VI. Guiding Principles

VII. Program Elements of Staff Proposal

a. Pricing

i. Determining the FIT Base Price

The staff proposal calls for three market prices based on the RAM market clearing price for three renewable product categories: baseload, peaking as-available, and non-peaking as-available.

A. Adjusting the RAM Price for a 3 MW Project Capacity

As stated above, the price structure of the RAM program is biased toward larger projects and may not translate well to a 3 MW project capacity.[19] Sierra Club California has proposed a well differentiated price structure to be set through a cost study and the regulatory process, but at a minimum notes that the 3 MW project capacity is set in statute and is a statutory basis for

[18] Sierra Club Opening Comments at 28.
[19] Sierra Club Opening Comments at 24.

SB_GT&S_0736516

justifying an adjustment if the Commission continues to pursue the staff proposal. If the Sierra Club proposed cost-based pricing methodology is used, the tariff is directly set for the project technology and size and no adjustment is needed. Should the Commission continue to pursue the staff proposal, then the Commission should conduct a cost-based study on the costs of the representative RAM projects in comparison to expected typical FIT projects (e.g. 1 MW). As an alternative, the Commission could extrapolate a cost curve using all statewide RAM bids to estimate the ratio between a smaller project and a larger project, and multiply the FIT base price by that scaling factor to provide a more accurate cost basis for the program.

B. Adjusting for RAM Project Failure / Financing Obstacles

Among the factors also built into the RAM market clearing price are that the competitive auction is an incentive for bidders to bid too low, and that projects accepted into the program could fail to secure financing or pencil out, and the market clearing price would have actually been higher, but for the capacity of projects that won the auction but either do not complete construction or fail at other stages of the contract. The Commission should adjust the market clearing price for a projected failure rate based on observed 30 percent failure rates of RPS solicitations.[20] The most common reason for project failure is inability to secure financing,[21] a problem that the RAM is unlikely to overcome. The market clearing price would thereby incorporate the incremental capacity for the next highest bidders to account for the forecasted failed capacity, to more accurately translate the auction result to project delivery. Should the

[20] 2011. *Staff Draft Report on Renewable Power in California: Status and Issues*. California Energy Commission, August 2011, CEC-150-2011-002, at 6. Available at http://www.energy.ca.gov/2011publications/CEC-150-2011-002/CEC-150-2011-002.pdf

[21] Id, at 193, citing *Green Rush, Investor-Owned Utilities' Compliance with the Renewables Portfolio Standard*, February 2011, CPUC, Page 9.

SB_GT&S_0736517

actual failure rate increase or decline, the price for new FIT contracts should be adjusted commensurately for new contracts.

ii. Locational Adder

Under a cost-based approach, a locational adder would not be necessary to add to the price, which should be set at a cost-based rate. On the other hand, a locational adder to the cost-basis is not precluded by this approach, should the Commission choose to include this feature. Within the framework of the staff proposal, the locational adders proposed by staff and E3 represents modest avoided costs representing deferred upgrades to distribution circuits, modest avoided costs associated with transmission and line losses. To manage the complexity of the program, it is reasonable to limit the cost findings to two categories of "hot spots," and "non hot-spots." It is a concern that the evaluation of locational benefits was very conservative, examining only the benefits associated with 750 MW of distributed generation, and not the benefits that would be associated with up to 12,000 MW of distributed generation proposed by the Governor, and under consideration by the CEC for the 2011 Integrated Energy Policy Report.[22] At full implementation, the much larger benefits of avoided costs of natural gas generation infrastructure, some avoided transmission lines, and much greater avoided transmission line losses would be realized. The Commission should engage in an avoided cost study of scenarios for implementation of 12,000 MW of distributed generation.

iii. Price Adjustment

The price adjustment is a crucial element of the staff proposal for both ensuring that the program can adjust in reaction to market response. Sierra Club California is concerned that the

[22] CEC Docket No. 11-IEP-1G, 11-IEP-1H (2011 IEPR).

SB_GT&S_0736518

initial price will be too low for most projects, and that the Commission should adjust the price upwards as needed to achieve the intended subscription rates. Likewise, if the program becomes rapidly subscribed, the Commission should gradually decrease the price to ensure overpayment, and to facilitate market transformation to the extent possible. Additional detail is provided in the answer to Section VIII, Question 7, below.

b. Program Cap

i. Calculating the IOU Share of the Program Cap

Sierra Club California has no comment on this issue at this time.

ii. Program Cap Limit

See our answer to VII, b, 3 below.

iii. Increasing the Program Cap

Sierra Club California strongly supports increasing the program cap as needed to achieve a significant portion of the Governor's goal of 12,000 MW of distributed generation. The appropriate limitation on the Commission's authority is Public Utilities Code 399.15, directing the Commission to establish a cost limitation for the RPS program as a whole. However, the staff proposal indicates for the IOUs to raise the FIT program cap. Instead, the Commission should initiate the proposed planning process to assess increases to the program cap.

The staff proposal identifies R.11-05-005 implementation of 399.15 as a potential forum, but the Commission should not restrict which "track" of the RPS proceeding the expansion of the FIT program will appear in. The July 8 Scoping Memo by Commissioner Ferron projects an amended scoping memo on the next round of issues in early 2012, and did not discuss the

SB_GT&S_0736519

relationship between the FIT program and the implementation of the cost limitation. Tracks within the proceeding may continue, or may fall off, so to the extent that the Commission does specify an appropriate track, the FIT track should remain open.

c. Project Size Limit

Public Utilities Code § 399.20(a)(1) states that an "electric generation facility" is defined as a facility with an "*effective* capacity of not more than three megawatts."[23] The Commission should clarify the staff proposal such that the project size limit is an *effective* capacity of not more than three megawatts.

A basic principle of statutory interpretation is that courts should "give effect, if possible, to every clause and word of a statute, avoiding, if it may be, any construction which implies that the legislature was ignorant of the meaning of the language it employed."[24] A statute must be interpreted "as a whole, giving effect to each word and making every effort not to interpret a provision in a manner that renders other provisions of the same statute inconsistent, meaningless or superfluous."[25] It would be an absurd result for the legislature to have included the modifier "effective," in the statute, yet not have intended for this to be given effect. The Commission should give effect to the word "effective" because it is in the plain language of the statute.

The Commission must look to the statute's words and give them their usual and ordinary meaning.[26] It is a "settled principle of statutory construction that a Legislature in legislating with regard to an industry or an activity must be regarded as having had in mind the actual conditions to which the act will apply; that is, the customs and usages of such industry or

[23] Public Utilities Code § 399.20(a)(1) (Emphasis added).
[24] *Montclair v. Ramsdell*, 107 U.S. 147, 152 (1883).
[25] *Boise Cascade Corp. v. U.S. EPA*, 942 F.2d 1427, 1432 (9th Cir.1991).
[26] *Imperial Merchant Services, Inc. v Hunt* (2009) 47 Cal. 4th 381, 387-388.

SB_GT&S_0736520

activity."[27] In general, "effective generation capacity" means the amount of generating capacity that can be reliably generated. The "rated" or "nameplate capacity" multiplied by the fraction of capacity considered to be reliable for that type of generation will equal the effective generation capacity. The term "effective capacity" appears in existing standard tariffs, including those associated with SCE Advice Letter 2554-E,[28] SDG&E Advice Letter 20429-E,[29] PG&E Advice Letter 28026-E,[30] and the guidelines for the SCE CREST Program.[31] To the extent that the Commission, or the utilities by advice letter, has adopted a method for determining effective capacity, this method should remain unchanged.

d. Product Categories

The staff proposal delegates to the IOUs the determination of how much of each product category to contact with based on the product's value to the utility. The Commission should take a greater role in determining minimum amounts for each product category. While it may be reasonable to allow for a utility to justify through Advice Letter and the opportunity for protest why there should be a product category preference, the Commission should not allow such a preferred capacity to remain unfilled for an extended period of time. After no later than one year from the start of the program, either unsubscribed capacity should be opened up to all product categories or the price for the tariff should be increased to attract sufficient capacity to fulfill the unmet need in that category. The Commission should retain oversight regarding the IOU

[27] *Irvine Company v. California Emp. Com.* (1946) 27 Cal.2d 570, 581.
[28] http://www.sce.com/NR/sc3/tm2/pdf/CE315.pdf
[29] http://www.sdge.com/tm2/pdf/ELEC_ELEC-SCHEDS_WATER.pdf
[30] http://www.scribd.com/doc/53485465/Untitled
[31] http://asset.sce.com/Documents/Shared/100125_CRESTFAQs.pdf

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determination of value of each product category, and require justification in an Advice Letter filing for review and comment.

e. Contract

Sierra Club California has no comment on this issue at this time.

f. Contract Terms and Conditions

i. Development Deposit

Sierra Club California has no comment on this issue at this time.

ii. Performance Standards

Sierra Club California has no comment on this issue at this time.

iii. Telemetry

The staff proposal for the IOUs to specify the needed communications data, not to exceed the CAISO's requirements, is a reasonable step forward at this time, especially for projects exceeding 1 MW in size. Telemetry is important to manage real time response for operations of the grid, but the cost has been reported to be a significant obstacle and cause of uncertainty for project proponents. The Commission, through the proceeding regarding modifications to Rule 21, should consider opportunities to reduce or reallocate telemetry costs and uncertainties. If telemetry is required by the IOU, either the FIT price should be adjusted to account for the extra cost, or the IOU should be allowed to own the telemetry equipment and to recover the cost in rates.

iv. Other Modifications to PG&E's Contract

SB_GT&S_0736522

Sierra Club California has no comment on this issue at this time.

g. Transition from Existing FIT to Amended FIT

Sierra Club California has no comment on this issue at this time.

h. Interconnection

i. Interconnecting Tariff

ii. Expedited Interconnection

The Commission should encourage and require streamlined interconnection through the appropriate proceedings considering modifications to Rule 21. The Commission, through the proceeding regarding modifications to Rule 21, should consider opportunities to reduce or reallocate interconnection costs and uncertainties.

i. Project Viability and Queue Management

i. Bid fee

Sierra Club California agrees that this proposal is reasonable.

ii. Interconnection

Sierra Club California has no comment on this issue at this time.

iii. Site Control

Sierra Club California agrees that this proposal is reasonable.

iv. Development Experience

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Sierra Club California cautiously agrees that this proposal is reasonable, because a project proponent may qualify by including an experienced individual as a member of the development team. The FIT program should generally be accessible to a greater range of potential project developers, including ratepayers. The Commission should clarify that a commercial installer or a consultant may qualify for development experience.

v. Commercialized Technology

Sierra Club California agrees that this proposal for at least two installations in the world is reasonable.

vi. Online Date

Sierra Club California agrees that the proposal for an online date within 18 months with one 6-month extension for regulatory delays is reasonable.

vii. Seller Concentration

Sierra Club California prefers the CALSEIA/PG&E approach of 10 MW per seller rather than the staff proposal of 25% of an IOU's total capacity cap, which is too large and could limit the benefits of the program to just a few participants. If the more restrictive level is causing undersubscription after one year, the FIT prices should be increased sufficiently to subscribe the full program within a reasonable time.

j. Program Location Restrictions

The statutory criterion for an electrical generation facility to be "strategically located" does not require a strict screening approach, as suggested by the staff proposal. The locational adders in the staff proposal provide a meaningful incentive for projects that meet the statutory

SB_GT&S_0736524

objective of a facility that "optimizes the deliverability of electricity generated at the facility to load centers."[32] Sierra Club California is concerned about further restricting access to the program, and recommends that program location restrictions be accomplished through variable pricing of "hot spots," and not by prohibiting participation in areas not deemed "hot spots." To ensure that program location requirements are not overrestrictive, the Commission should consider a test where one of three factors is required: (1) located in a "hot spot" (2) the project does not exceed the minimum load at the substation, or (3) the distribution circuit has been upgrades to support two-way power flow. This third option is recommended because determining "strategically located" zones is a moving target. As IOUs continue to make progress on the implementation of their state required SmartGrid plans and make other infrastructure upgrades, additional locations will gain the ability to support two-way power flow and increased renewable capacity and may then become "strategic".

k. Data Reporting

Sierra Club California has no comment on this issue at this time.

l. Other Issues

i. Inspections

Sierra Club California has no comment on this issue at this time.

ii. Dispute Resolution

Sierra Club California agrees that this proposal is reasonable.

[32] Public Utilities Code § 399.20(b)(3).

SB_GT&S_0736525

VIII. Proposal Questions

a. RAM Pricing

i. How should the CPUC set the price if an IOU does not execute any contracts in one or more product categories? For example, the IOU could use the price from another one of its product categories.

The CPUC should set the price based on a cost study, as described earlier. The CPUC may also look to the prices set in the service territories of other utilities, but may need to adjust these according to variations in resource levels.

ii. How should the CPUC adjust the transmission part of the total RAM price if the generator only has a Phase I or System-Impact Study, since the results of these studies are usually an overestimate of actual transmission costs?

Sierra Club California has no comment on this issue at this time.

b. Pricing Adders

3. If the CPUC adopts the locational adder, what should the CPUC do to increase the probability that a distribution system upgrade will be deferred?

The Commission should to ensure that distributed generation and project location data is accounted for and integrated into all planning processes of the Commission, both with respect to its capacity as well as its location on the distribution grid.

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4. Does the technology have an incremental avoided cost compared to a RAM project in the same product category? If so, explain why.

RAM projects in the 5 to 20 MW range may often be connected at substations or locations that are not coincident with demand. In this way, RAM projects avoid transmission losses and some transmission costs. On the other hand projects smaller than 3 MW are much more suitable for being co-located at customer sites, with the possibility that the energy will be consumed at or very near the site of generation. This can avoid line losses and congestion in the distribution network, and in some cases may help support voltage on the distribution line. This gives smaller scale DG likelihood for higher avoided cost than a larger DG project in the RAM.

5. Is the adder avoiding a ratepayer cost? In staff's view, any additional FIT adder should avoid a ratepayer cost and not a more general societal cost since the statute requires that ratepayers be held indifferent to the FIT payments.
6. Can the adder be quantified? If so, suggest a method and the data sources for quantifying the adder.

The Commission should evaluate the avoided ratepayer costs of a sufficient amount of renewable distributed generation (RDG) where it can cumulatively make a difference, and not look at the 750 MW FIT program in isolation. The state has other RDG programs that cumulative equal nearly 6000 MW, and a new policy proposal to expand this to 12,000 MW. A number of benefits are only realized as a function of sufficient scale where, for instance, investment in transmission can be avoided. These benefits include avoided generation costs of fossil fuel generation, avoided transmission upgrades and line losses.

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Data sources should include the cost of real projects as well as cost of generation studies performed by the CEC.

c. Pricing Trigger

7. Identify the strengths and weaknesses for each party's proposal listed in the staff proposal, and make a recommendation addressing the following issues:

a. Level of subscription that triggers price decrease

This program needs to have a planned duration in order to assess whether the FIT program is being implemented at a reasonable rate or needs adjustment. Sierra Club California supports the allocation of total program capacity over a period of five quarters (CalSEIA) to eight quarters. By comparison, the RAM program, about twice the capacity of remaining available capacity in the FIT program, is targeted for a two year program period. The program capacity should reflect capacity available for new contracting and deduct the capacity for contracts already executed. Unused capacity in one quarter should roll over into the subsequent quarter. The price should be decreased if the program is at or above the program capacity for the calendar quarter, beginning at the end of the second quarter, to take account for early interest in the program. If the program is under-prescribed in a quarter, a cost study should be conducted and that the price should be adjusted to the findings of the price study. The problem with selecting a fixed percentage or price adjustment per quarter as suggested by several parties is that if the initial price is significantly below the needed price, it may take years to adjust up to an adequate level. In such an event, the inadequate price and low subscription levels would be replicating the failure of the current FIT program.

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The SCE proposal defines the cumulative procurement target at 1/48th of SCE's allocated share of the statewide program cap, a very small portion of a modest program. Under this approach, early project applicants could overwhelm the initial procurement targets, triggering an overactive price decrease that could stall the program in subsequent quarters.

The Clean Coalition proposal implements automatic declines as the IOU approaches increments of its share. The disadvantage of this proposal, besides referencing the MPR, is that it doesn't re-adjust to market response if the decrease overreacts. Furthermore the FIT Coalition proposal for automatic digression seems narrowly derived from the market history of solar photovoltaics, which may not be applicable to other renewable energy sources.

b. Amount that the price should be decreased

Sierra Club California recommends an incremental price decrease equivalent to 5% for the subsequent quarter if the quarterly capacity is exceeded, but only for peaking resources—which we expect to be solar PV. The SCE rate of increase and decrease is extremely slow, and at proposed rates of increase and decrease, needed corrections to the program could take over a year.

c. Time period without any of minimal subscription that the price should be increased

The price should be increased if the program is more than 33 percent below the program capacity for the calendar quarter. The Commission should prepare a cost study and adjust the price to increase to the levels indicated in the cost study within 90 days.

d. Definition of minimal subscription

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Sierra Club California defines "minimal subscription" as 33 percent below the incremental program capacity for the calendar quarter, taking into account a 5 – 8 quarter program, and deducting prior existing contracted capacity. This definition helps operationalize Vote Solar's goal of increasing the price "if the initial price were insufficient to stimulate demand."

d. FIT Contract

8. Do parties agree or disagree with the Agricultural Energy California Association's proposed modifications to PG&E's contract?

Sierra Club California has no comment on this issue at this time.

9. If you seek additional modifications to PG&E's contract or any other contract filed in the record, identify the term, proposed change, and rationale in a matrix format.

Sierra Club California has no comment on this issue at this time.

e. Resource Adequacy

10. How should the CPUC implement PU Code § 399.20 (i), which states: "The physical generating capacity of an electric generation facility shall count toward the electrical corporation's resource adequacy requirement for purposes of Section 380?"
11. Should this issue be addressed in other planning proceedings, such as the LTPP and RA proceedings? To what extent is there overlap with the Distribution Interconnection Settlement process? What is an appropriate interim approach. If you support addressing this issue in other, more

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appropriate proceedings, provide a rationale and an interim proposal to address this language before it is addressed elsewhere.

The Commission should allow the generating capacity of participating facilities to count toward the electrical corporation's resource adequacy requirement. This is essential to avoid over-procurement and to realize the avoided cost savings of distributed generation. Sierra Club recommends that the Commission adopt effective capacity values for each type of distributed generation, which can be adjusted for each load serving entity. The physical capacity would thus "count" toward resource adequacy based upon its effective load carrying capacity (ELCC). This issue should be addressed in LTPP and RA proceedings, where Commission values for ELCC for RDG sources should be developed and these values should be consistently used in all Commission planning and proceedings. This is also consistent with the California Renewable Energy Resources Act (SBX1 2) requirement in 399.26 of the Public Utilities Code for wind and solar energy:

> (d) In order to maintain electric service reliability and to minimize the construction of fossil fuel electrical generation capacity to support the integration of intermittent renewable electrical generation into the electrical grid, by July 1, 2011, the commission shall determine the effective load carrying capacity of wind and solar energy resources on the California electrical grid. The commission shall use those effective load carrying capacity values in establishing the contribution of wind and solar energy resources toward meeting the resource adequacy requirements established pursuant to Section 380.

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f. Implementing "Strategically Located"

12. How should "strategically located" be defined and implemented?

The statutory criterion for an electrical generation facility to be "strategically located" does not require a strict screening approach, as suggested by the staff proposal. Some flexibility will allow the program as a whole to deliver benefits without every single project meeting a narrow requirement. Simply having the RDG on the distribution grid is itself a strategic location, to the extent that it avoids dependency upon transmission and provides generation in load centers. Further value may be added by encouraging RDG in specific locations of the distribution grid and this can carry further value adders. The locational adders provided for in the staff proposal provide a meaningful incentive for projects that meet the statutory objective of a facility that "optimizes the deliverability of electricity generated at the facility to load centers."[33]

13. Comment on the strengths and weaknesses of each option listed in the staff proposal. If you have an alternative proposal, explain the rationale and the data sources required to implement it.

Sierra Club California is concerned about further restricting access to the program, and recommends that program location restrictions be accomplished through variable pricing of "hot spots," and not by prohibiting participation in areas not deemed "hot spots." The next preferred alternative is the staff alternative option for the project not to exceed the minimum load at the substation. To ensure that program location requirements are not overrestrictive, the Commission should consider a test where one of three factors is required: (1) located in a "hot

[33] Public Utilities Code § 399.20(b)(3).

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spot" (2) the project does not exceed the minimum load at the substation, or (3) the distribution circuit has been upgrades to support two-way power flow. This third option is recommended because determining "strategically located" zones is a moving target. As IOUs continue to make progress on the implementation of their state required SmartGrid plans and make other infrastructure upgrades, additional locations will gain the ability to support two-way power flow and increased renewable capacity and may then become "strategic".

g. CSI/SGIP/NEM Refund Options

14. Over what time period should incentives be refunded? What is the rationale for your time period versus the alternatives presented in the record?

15. Which incentives should be refunded and why?

Sierra Club California supports the refund of incentives to the extent that they were not incorporated into a cost-based price. A refund should be required to the extent necessary to prevent overpayment. If the Commission pursues the staff proposal, refund requirements should be carefully designed so as not to disrupt the viability of projects and the success of the program. In particular, Sierra Club recommends that incentives should only be refunded for larger DG projects—over 1 MW—in order to allow smaller projects a better chance to participate in the program. Smaller projects are not likely to be able to match prices that have any connection to the RAM, or even an adjustment to the RAM scaled to the 1 to 3 MW market. Thus, the Commission should leave open the possibility for a supplemental subsidy for smaller projects until such time as the Commission approves paying sufficiently high FIT prices to cover the full cost plus a reasonable profit for projects in the smaller size category.

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16. At what interest rate should incentives be refunded and why?

IX. Conclusion

Sierra Club California urges the Commission to set the feed-in tariff price based on a cost study, which would include a sufficient rate of profitability to encourage investment. Cost-based FITs may be adopted in compliance with California and federal law, and offer the benefits of a price that is most likely to incur a successful program without overcompensating certain projects. Using the RAM price leaves the FIT program open to uncertainties and possible delay if the program remains undersubscribed because the price is too low. If the Commission proceeds initially with the staff proposal, the policy for adjusting the base price should bring the program in line with cost-based pricing. Meeting the challenge of achieving the 33 percent RPS and 12,000 MW of distributed generation is critical for reducing greenhouse gas emissions and protecting the climate, improving air and water quality, and phasing out use of fuel resources that are being depleted. Sierra Club California urges the Commission to implement the FIT in a way that will ensure success and further expansion.

November 2, 2011

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VERIFICATION

I am the Senior Advocate with Sierra Club California and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in this pleading are true.

I declare under penalty of perjury that the matters stated in this pleading are true and correct.

Executed on the **2nd day of November, 2011**, at Sacramento, California.

/s/ Jim Metropulos

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