**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

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

COMMENTS OF FUELCELL ENERGY, INC. ON PROPOSED DECISION OF ALJ DEANGELIS

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COMMENTS OF FUELCELL ENERGY, INC. ON PROPOSED DECISION OF ALJ DEANGELIS

In accordance with Rule 14.3 of the California Public Utilities Commission ("Commission") Rules of Practice and Procedure, FuelCell Energy, Inc. ("FCE") submits the following comments on the Proposed Decision Revising Feed-in Tariff Program, Implementing Amendments to Public Utilities Code Section 399.20 enacted by Senate Bill 380, Senate Bill 32, and Senate Bill 2 1x and Denying Petitions for Modification of Decision 07-07-027 by Sustainable Conservation and Solutions for Utilities, Inc. ("PD").

FCE's comments focus on its fundamental concern with the PD's proposal of a new "Renewable Auction Market Adjusting Tariff" ("Re-MAT") pricing mechanism. FCE reserves the right to address other issues and aspects of the renewable FIT program in reply comments, and the absence of comment on any issue does not imply agreement.

I. Introduction and Summary of Position

FCE has participated throughout these proceedings, including briefing on jurisdictional and pricing issues; providing a proposal for technology-specific pricing including detail on the avoided cost of renewable fuel cell projects; laying out conditions in which product-based pricing and a Market Price Referent ("MPR") based price could meet statutory requirements; and offering detailed comments on FIT contract terms.[1] Together with other stakeholders concerned

[1] *See* Comments of FuelCell Energy on Energy Division's Feed-In Tariff Proposal (April 10, 2009); Brief of FuelCell Energy, Inc. and California Solar Energy Industries Assn. Regarding Jurisdiction in the Setting of Prices

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with ensuring a place for baseload distributed resources in this program, FCE has offered information on obstacles specific to renewable fuel cells and digester gas projects and offered recommendations for addressing such obstacles. Regrettably, little of this information from the record is reflected in the PD, which categorically rejects all proposals for setting FIT prices according to technology or product attributes because such proposals allegedly would not meet all of five "policy guidelines" established in the PD.[2]

Recent staff proposals have focused exclusively on using auction results from the Renewable Auction Mechanism ("RAM") to set the renewable feed-in tariff price, and the PD introduces for the first time a new Renewable Auction Market Adjusting Tariff ("Re-MAT") approach, in which an average bid price from a handful of RAM auction winners representing mostly larger solar projects will be used as the base price for all renewable FIT resources, regardless of generating profile or attributes.[3] The PD admits that this starting price may initially overpay some resources and fail to induce others to sign a PPA at all, and so has added an adjustment mechanism to raise and lower the price within product categories.[4]

The adjustment mechanism is intended to gradually adjust prices for different products until each product is priced at a market rate used as proxy for avoided cost. However, it is unclear whether this will actually occur before the program capacity limit is reached, because the adjustment mechanism is deliberately constrained by several controls, including: 1) a

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for a Feed-In Tariff (June 18, 2009); Reply Brief of FuelCell Energy and California Solar Energy Industries Assn. (July 10, 2009); Comments of FuelCell Energy, Inc. Regarding Pricing Approaches for a Feed-In Tariff (October 19, 2009); FuelCell Energy Inc. Reply Comments Regarding Pricing Approaches and Structures for a Feed-In Tariff (October 26, 2009); Brief of FuelCell Energy, Inc. on Implementation of Senate Bill 32 (March 7, 2011); Reply Brief of FuelCell Energy, Inc. on Implementation of Senate Bill 32 (March 22, 2011); FuelCell Energy, Inc. Comments to Sec. 399.20 Ruling of June 27, 2011 (July 21, 2011); FuelCell Energy, Inc. Reply Comments to Sec. 399.20 Ruling of June 27, 2011 (August 26, 2011); Initial Comments of FuelCell Energy Inc. on October 13, 2011 Staff Proposal (November 2, 2011); Reply Comments of FuelCell Energy, Inc. on October 13, 2011 Staff Proposal (November 14, 2011).

[2] PD at 35.

[3] PD at 42-44.

[4] PD at 44-46.

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requirement that at least five projects sponsored by different developers have qualified and signed up for the "queue" in a product category; 2) a $4.00/MWh limit on each "adjustment" step; 3) a provision that no upward adjustment will be made in any month in which a single contract is signed, and no downward adjustment will be made in any month in which less than five contracts are signed; and 4) "re-allocation" from an unsubscribed (or undersubscribed) product category after 12 months.

Given recent valuable guidance by the Federal Energy Regulatory Commission regarding permissible approaches to FIT pricing, and many months of effort by interested parties, the PD's recommendation of a RAM-based pricing mechanism is disappointing. FCE recognizes and appreciates that by proposing an adjustment mechanism and initially allocating program capacity equally into program categories, the PD is trying to find a way to ensure resource diversity. However, given the design of the adjustment mechanism and the 12 month limit, this goal may not be achieved. In addition, the Re-MAT mechanism proposed in the PD does not appear to meet certain requirements established in Section 399.20 of the California Public Utilities Code ("Section 399.20"), which may result in further litigation.

If the Commission adopts the PD, it should include a timely and comprehensive program review process, and ensure that program modifications can be fully implemented before allowing the IOUs to shift program capacity between product groups. Otherwise the class of participants harmed by flaws in program design may be deprived of the benefit of corrective program changes.

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II. The proposed Re-MAT Mechanism does not meet applicable and state statutory requirements.

A. The PD fails to establish that the Re-MAT pricing mechanism reflects the avoided cost of distributed baseload renewable resources.

The PD acknowledges the need to establish a renewable FIT price that conforms to the Public Utility Regulatory Policies Act of 1978 ("PURPA").[5] However, instead of addressing PURPA requirements, the PD relies on conclusions:

> … Starting with the existing RAM Program to establish the baseline for pricing is a reasonable starting point to determine avoided cost for the §399.20 FiT Program.[6]
> … we find using RAM contracts to set the §399.20 FiT Program starting price, which includes these product types, is the most reasonable alternative to determining the cost of the resources being avoided.[7]
> … while not identical, the RAM Program presents the closest comparison and, as such, we find it reasonable to define Re-MAT, which includes the market adjustment mechanism, as an avoided cost, as required under federal law.[8]

Claiming that the proposed Re-MAT pricing mechanism is "an avoided cost" does not result in compliance with PURPA and the PURPA regulations, which require that QFs be paid rates that are just and reasonable, in the public interest, non-discriminatory, and reflective of the nature of the product purchased.[9] The PD's frank acknowledgement that the Commission does not expect entire classes of QF projects to "gain the opportunity" to participate in the FIT programs until Month 5 seems to be an admission that the Re-MAT, by design, discriminates against these QFs. PURPA offers the states significant discretion in setting avoided cost rates, but it does not authorize the Commission to adopt discriminatory avoided cost rates.

[5] PD at 39.
[6] Id.
[7] Id. at 39-40.
[8] Id. at 40.
[9] See 18 C.F.R. §292.304.

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B. The Re-MAT pricing mechanism violates key requirements of Section 399.20.

Section 399.20 establishes a number of specific guidelines for pricing. The PD asserts that the Re-MAT mechanism is in compliance with all applicable statutory requirements, but this does not appear to be the case.

First, the proposed Re-MAT pricing mechanism violates Section 399.20(d)(1), as it does not "include all current and anticipated environmental compliance costs, including but not limited to, mitigation of emissions of greenhouse gases and air pollution offsets associated with the operation of new generating facilities in the local air pollution control or air quality management district where the electric generation facility is located." The PD admits this deficiency:

> Re-MAT includes, as embedded within it, general costs associated with producing renewable energy since our goal is to pay generators the price needed to build and operate the generation facility. We do not find, however, that specific costs, such as compliance costs in a particular air quality management district, are necessarily captured by the RAM methodology.[10]

The PD does not attempt to explain or justify its failure to conform to a very specific statutory requirement, but instead offers that "No party presented data on such costs."[11] This statement is not true. FCE provided the Commission detailed alternative approaches to determining avoided environmental costs on an air district- specific basis, and provided links to data sources that could be used to develop a pricing mechanism that meets the requirement in Section 399.20(d)(1).[12] However, even if no party had presented data on local environmental

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[10] PD at 42.

[11] Id. The PD makes a similar misrepresentation on page 34: "No party presented evidence that their proposals addressed specific environmental compliance costs."

[12] Brief of FuelCell Energy, Inc. on Implementation of Senate Bill 32 (March 7, 2011) at 17-18. FCE's brief incorporated by reference a UC-Irvine fuel cell study that included statewide data on avoided environmental costs. Noting explicitly the obligation to incorporate air quality management district-specific values, FCE discussed options such as separating costs by air district or identifying a statewide average price for emissions reduction credits for each pollutant with a multiplier to capture the estimated difference between statewide average and district-specific values. To assist the Commission, FCE provided links to multiple public sources of California-

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compliance costs, the Commission would still have an obligation to establish a FIT price that meets this statutory requirement. Since the PD by its own admission does not, the PD should not be adopted.

The Re-MAT mechanism also does not establish a price in consideration of "the long-term ownership, operating, and fixed-price fuel costs associated with fixed-price electricity" from distributed baseload resources as required under Section 399.20(d)(2)(B). The PD claims that the RAM contract prices "include such costs" but, in fact, they do not. While information regarding the RAM contracts used to set the Re-MAT price is limited and incomplete, it is clear that the proposed Re-MAT price is derived almost entirely from contracts with larger solar projects located in southern California, and *not* the long-term ownership, operating, and fixed-price fuel costs associated with other resources. Notably, there are *no* renewable fuel cell projects or digester gas projects among the contracts identified in the RAM advice filings recently submitted by Southern California Edison Company ("SCE") and Pacific Gas and Electric Company ("PG&E").[13]

The Re-MAT mechanism likewise does not establish a price that considers "the value of different electricity products, including baseload, peaking, and as-available electricity" as required under Section 399.20(d)(2)(C). As discussed above, the proposed Re-MAT "starting price" does not reflect the avoided cost of different electricity products. It is an averaged price derived from limited auction results and does not reflect any "consideration" of the different value offered by different electricity products as required by the Legislature.

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specific emissions credit pricing data (Id., fn. 27) and suggested that midpoints of trading ranges for each pollutant over the prior 12 month period could be averaged from different sources and used to set the multiplier for each district. FCE also indicated its willingness to discuss other reasonable approaches to implementing Section 399.20(d)(1).

[13] See SCE Advice 2712-E at 7-8; PG&E Advice 4020-E at 8.

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The PD, by its own admission, does not offer a pricing mechanism that complies with Section 399.20. For this reason alone, the PD should be rejected and the Commission should establish further procedures for identifying a FIT pricing mechanism that complies with the law.

III. The proposed Re-MAT Mechanism does not take into account realities of project development

FCE is struck by the PD's confidence that market participants wishing to develop projects using "more expensive technologies" will be willing to invest up front the money and effort necessary to meet screening criteria simply in order to wait in a queue and hope that the FIT price will one day be adjusted to a point that makes project development a viable possibility. In FCE's experience, most DG project developers and lenders will not put up funds for interconnection studies and site leases on pure speculation. As noted above, FCE appreciates the PD's good intention in the initial allocation of program capacity and allowance for price adjustment, but the many conditions and uncertainties attached to the operation of the price adjustment mechanism make predicting when and if a project might ever qualify for a PPA at a price that works for a project extremely challenging. These "real world" considerations are not mentioned anywhere in the PD and appear not to have been considered.

By setting up terms that require some classes of resources to apply up front and then wait for price adjustment, the PD is picking winners and losers. Digester gas projects that rely on institutional lending or public financing instruments will effectively be excluded from the program. That result is antithetical to the Legislature's intention to reduce barriers to participation for <3 MW resources, and it is inconsistent with the requirement under Section 399.20(f) that the FIT be available to all eligible resources on a "first-come-first-served basis."

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IV. Significant pricing and program administration elements are not addressed in the PD.

In addition to discussing what *is* addressed in the PD, it is also important to note that some key program elements are not substantively dealt with in the PD, and instead simply left to future advice filings.

For example, the IOUs are authorized to determine "two sets of time-of-delivery factors: one for generators that do not provide resource adequacy and another for generators that do provide resource adequacy."[14] The PD contains no guidance or parameters for setting these TOD factors, and so it is impossible to guess at how they will affect pricing. Similarly, the PD declines to provide any guidance regarding when or under what circumstances an IOU may deny service pursuant to Section 399.20(n), instead leaving this to the discretion of the IOUs, subject to a written notice requirement.[15] The PD errs in failing to address all program elements mandated in Section 399.20.

V. Program review

The PD provides that the IOUs shall:

> convene stakeholders within the first year of the §399.20 Feed-in Tariff Program to solicit market experience with the monthly pricing adjustment mechanism. To the extent that changes to the monthly price adjustment mechanism are needed to improve the program, PG&E, SCE, and SDG&E are permitted to file a joint Advice Letter seeking specific changes to the mechanism.[16]

If the Commission adopts the Re-MAT pricing mechanism, FCE strongly supports review within the first year. However, in order for review to be meaningful it needs to be timely, and it needs to be conducted on the record and pursuant to Commission oversight.

[14] PD at 52.
[15] PD at 87-89.
[16] PD at 116, Ordering Paragraph 3.

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A. Program review must be completed ***and*** implemented before any capacity re-allocation.

The PD requires program review "within" the first year. However, the PD does not coordinate the timing of that review process or implementation of necessary changes with the provision allowing the IOUs to "reassign capacity to the different product types after the expiration of 12 program months."[17] In order for "program review" to meaningfully address fundamental flaws in the program, the Commission needs to implement necessary program changes and allow those changes to work *before* the IOUs are allowed to re-allocate capacity between product groups as currently proposed.

To give a concrete example of why this is necessary, assume that for the first several months of the program only three projects owned by unrelated entities join the baseload product queue. As a result, the price remains at $89.23/MWh and no projects sign contracts. Assume that after 5 months, two additional unrelated baseload projects join the queue, bringing it up to the required 5 projects. When no project signs a contract in Month 6, the price is adjusted upward by $4/MWh. However, no project in the queue signs a contract for the next 3 months, and then one project drops out of the queue, bringing it again under the 5 project limit. If the Commission only acknowledges program failure in month 12 and implements changes in Month 14, the proposed "reassignment" mechanism could already be shifting capacity from the baseload class to the resource classes *not* harmed by program flaws.[18]

In order to avoid this result, re-allocation of capacity between product groups should not be permitted until twelve months *after* the first program review is completed and implemented.

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[17] PD at 49.

[18] It should be noted that the PD is not clear regarding the conditions triggering "reassignment." On page 49 the PD says that the utilities "may reassign any capacity from a product type that has received *minimal to no subscriptions*." But on page 75 the PD says that "The allocation will remain in the designated product type unless there is *no subscription* in that type for more than 12 months." Conclusion of Law 28 makes no reference to any conditions for re-assignment.

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Program review should be initiated in Month 9 at the latest, and earlier if there is evidence of significant program failure with respect to any of the three resource groups. In light of the fact that the Commission is adopting for the first time an untested Re-MAT pricing mechanism using RAM prices that are admittedly "insufficient" to represent all resources, allowing one round of program modifications before reassignment of capacity seems a minimal step to preserve at least the possibility of resource diversity.

B. The Commission should not leave program review up to the discretion of the IOUs.

As discussed above, FCE strongly supports the PD's recommendation to review the program within the first year. However, leaving the process and content of program review and modification to the discretion of the IOUs is inappropriate. To offer stakeholders meaningful relief if the program is not working or discriminating against a class of participants, program review must involve Commission oversight, and must offer stakeholders an opportunity on the record to propose program changes and comment on proposals by other parties.

C. Clean up QF references

The PD initially acknowledges that not all eligible generators are subject to FERC jurisdiction,[19] but then orders that all participants "must" obtain FERC certification or self-certify as a QF under PURPA regulations.[20] The Commission cannot and should not force a non-jurisdictional seller to become a QF as a condition of participation in the FIT program. This inconsistency should be corrected.

VI. Conclusion

For the reasons addressed above, FCE is concerned that the proposed Re-MAT pricing approach does not comply with applicable statutory requirements and will not enable

[19] PD at 11.
[20] See PD at 95; Conclusion of Law 50.

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participation by renewable ultra-clean baseload fuel cell technology projects. This is regrettable, because the Section 399.20 program could, if properly designed and implemented, be a vital tool for encouraging development of a diverse portfolio of new DG facilities, including clean and efficient combined heat and power projects that are not currently supported under other state programs.

Dated: April 9, 2012

Respectfully submitted,

By: ______________/s/______________

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VERIFICATION

I am the attorney representing FuelCell Energy, Inc. (FCE) in this proceeding. FCE is absent from Sacramento County, where my office is located, and under Rule 1.11(d) of the Commission's Rules of Practice and Procedure, I am submitting this verification on behalf of FCE for that reason. I have read the attached **COMMENTS OF FUELCELL ENERGY, INC. ON PROPOSED DECISION OF ALJ DEANGELIS.** 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 is true and correct.

Executed on this 9th day of April, 2012, at Sacramento, California.

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