

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

Order Instituting Rulemaking to Promote Policy	)	
and Program Coordination and Integration in	)	Rulemaking 04-04-003
Electric Utility Resource Planning.	)	
_____	)	
	)	
Order Instituting Rulemaking to Promote	)	
Consistency in Methodology and Input	)	
Assumptions in Commission Applications of	)	Rulemaking 04-04-025
Short-run and Long-run Avoided Costs,	)	
Including Pricing for Qualifying Facilities.	)	
_____	)	
	)	
Order Instituting Rulemaking Into	)	
Implementation of Pub. Util. Code § 390.	)	Rulemaking 99-11-022
_____	)	

**Comment of Davis Hydro**

**I. INTRODUCTION AND SUMMARY**

Pacific Gas and Electric Company (PG&E) and the Independent Energy Producers Association have filed a settlement agreement addressing some of the issues being addressed in these dockets. Pursuant to Rule 51.4 of the Commission’s Rules of Practice and Procedure (Rules), Davis Hydro comments on the Settlement Agreement and the contract amendments (Amendment) executed by the owners and/or operators of Qualifying Facilities (QFs) that currently have power purchase agreements (PPAs) with PG&E.

However, Davis Hydro has no objections to the Settlement going in to effect for the purpose to which it is written, so long as the ideas in its elements are not later extended to non-existing contracts, and that a new path for new contracts and new QF's be afforded. Further, in the interest of expediting these hearings, Davis Hydro does not seek any process under Rule 51.6(a), but rather pursuant to Rule 51.6(b){not material}, or 51.6(c) {ALJ may wave rules} asks only that this Comment be made part of the record and considered in the eventual comprehensive R.04-04-025 Rulemaking.

Davis Hydro commends the parties in working out a compromise on some of the difficult issues of market index for SRAC. With a dysfunctional energy market in California, agreeing on the factor market (gas) for price signals is the best alternative choice and one that leads to correct price signals to all parties.

## II. A Question Of Scope

The settlement appears to be only amendments to existing contracts or expired contracts. No inference is to be made to new contracts. The Commission is requested to put blinders on and issue a decision on the proposed settlement and associated amendments separate from the decision that will resolve only certain contested issues in R.99-11-022, R.04-04-003, and R.04-04-025<sup>1</sup> for those contractors who participate in this settlement. However, certain language suggests a wider scope of the Settlement<sup>2</sup>. Specifically, Section III.A: **Issues Settled** states:

### A. Issues Settled.

*If the Commission adopts the Settlement Agreement and the associated Amendments as presented, PG&E and IEP agree that, for all QFs that execute an Amendment, the issues contested in the recent hearings in R.04-04-003 and R.04-04-025 would be resolved, as well as*

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<sup>1</sup> Joint Motion on Settlement at page 2 ¶ 3.

<sup>2</sup> *ibid* p.3 ¶2 “R.04-04-003 to address issues [] including long term policy for new QF contracts and for QFs whose existing contracts expire.”

*the issues involving those QFs who elected the PX market-clearing price as their SRAC payment pursuant to Decision 99-11-025. Specifically, the issues relating to QFs that are settled in Rulemakings 04-04-003 and 04-04-025 are: (a) the methodology for determining SRAC energy payments including proposed “adders”; (b) the determination of As-Delivered Capacity Payments; (c) the methodology for deriving energy Line Loss Factors as applicable to energy deliveries; (d) the determination of Time of Delivery factors; and (e) policy issues regarding expiring QF contracts and new QF contracts as addressed in Rulemakings 04-04-003 and 04-04-025<sup>3</sup>. {Emphasis added}*

Davis Hydro offers no comment about private agreements made between PG&E and some QFs, but when agreement signed by PG&E refers to new QF contracts, there are forebodings that the suggested methodology might be construed as relevant for new QF contracts who for now cannot enter a solicitation due to size, type, or acceptability. Therefore the following remarks are applicable only to the scope that these ideas are extended into decisions on **new** contracts.

The inclusion of the Renewable Energy Credits (RECs) in the settlement aggregates raises an interesting issue. If they could enter and lose the competitive solicitation, they could not get an avoided cost contract because they bid too high. On the other hand, if they could enter the competitive solicitation and win, they would not get the avoided cost revealed by the solicitation because they must pay PG&E a sweetener<sup>4</sup> of the RECs which have their own market.

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<sup>3</sup> This is reiterated numerous times in the attached settlement agreement with Sierra Pacific. See Recital C on page 1, Settled Issues (2) page 6.

<sup>4</sup> It is unclear to us if we would be breaking the law, with the Commission as a party, if we paid this sweetener for a federally mandated price contract.

**III. Factual Issue: Renewable Energy Credits have nothing to do with QF issues**

It is inappropriate to discuss Renewable Energy Credits in a QF hearing. This docket is all about QF power and price. QF power is defined by PURPA and under various sections of California Law, notably in the implementation of Pub. Util. Code § 390. Under Federal and State Statutes, all QF energy is treated equally. However, under this proposed settlement, renewable energy is reduced in value by the value of the RECs. Requiring renewable QFs to supply RECs<sup>5</sup>, along with energy, lowers the value of their power relative to non-renewable QF energy. This is a clear statement by the parties, and the Commission if this is accepted that renewable power is not as valuable as fossil fired power in California. We do not believe that either PG&E or the Commission wish to denigrate and ascribe renewable power to be less valuable than fossil based generation, thus we find the settlement inherently flawed as a potential template or model for renewable power.

PURPA requires paying avoided cost for power; yet in the proposed settlement PG&E is offering to pay their version of avoided cost, less the value of the RECs<sup>6</sup>. If the utility wants to buy RECs with their power, then the avoided cost of the power would be the avoided cost of their power plus the cost of the RECs, since that is what they would avoid paying elsewhere. The inclusion of the Renewable Energy Credits (RECs) in the settlement aggregates raises an interesting issue. If a producer could enter and lose the competitive solicitation, they could not get an avoided cost contract because they bid too high. On the other hand, if they could enter the competitive solicitation and win, they would not get the avoided cost revealed by the solicitation because they must pay PG&E

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<sup>5</sup> *ibid* pages 7, 8,10,13,14, etc.

<sup>6</sup> This party does not pretend to understand or represent the law, but identifying-the-avoided-cost-then-knowingly-paying-less appears to be blatantly illegal.

a sweetener<sup>7</sup> of the RECs which are a separate tradable product that has, or will have, a market value.

#### **IV Factual issue: The settlement calls for a 95 % line loss factor for renewables<sup>8</sup>.**

There is nothing in being renewable that will influence line losses. Small hydro, big wind, biogas, surplus urban solar, and desert solar arrays may all be renewable, but have dramatically different line loss characteristics. Avoided line losses go up with transportation distance from load, transformation, and the square<sup>10</sup> of the loading. In general, small projects deliver power at distribution voltages. The power will typically<sup>9</sup> be used locally at the same distribution voltages thus avoiding marginal losses by bringing power from other places and voltages. If there is a correction for line losses for small projects, it should be by interconnection voltage, and should offset all marginal line losses except for those of the final service transformer and “iron” losses of the final substation transformer. The small QF supplying power into a distribution system should generally command a line-loss savings premium equal to the marginal<sup>10</sup> (not average) system losses less (final customer service and substation transformer iron losses)<sup>11</sup>.

#### **V. No Transition To Non-Avoided Cost Pricing**

Legal Issue: There is no apparent path to a guaranteed Avoided Cost based contract as required under PURPA. Rather, it is suggested in Section 8<sup>12</sup>, which addresses Expired

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<sup>7</sup> It is unclear to us if we would be breaking the law, with the Commission as a party, if we paid this sweetener for a Federally mandated price contract.

<sup>8</sup> *ibid* p.8¶2

<sup>9</sup> This will vary from site to site. However distribution lines exist to serve load, thus supplying load into distribution lines serves load on those lines.

<sup>10</sup> Avoided costs are marginal costs and marginal losses vary with the square of the load. A discussion of this is found on Page 23 of a recent unbiased work in Canada. See: [http://www.powerauthority.on.ca/Storage/21/1686\\_SOP\\_Report\\_to\\_Minister\\_-\\_Final.pdf](http://www.powerauthority.on.ca/Storage/21/1686_SOP_Report_to_Minister_-_Final.pdf)

<sup>11</sup> Roughly 5-6% on average losses, which would equate to about 10 % marginal (avoided) benefit. (The calculus is offset by the fixed iron losses in transformers)

<sup>12</sup> Page 16 of Appendix A: Settlement Agreement

Standard Offer Agreements, that QF will transition to (1) participation<sup>13</sup> in PG&E's all source or renewable solicitations or; (2) an alternative purchase agreement<sup>14</sup> with PG&E at market-based pricing is offered. This is not an Avoided Cost contract and whether the RECs would have to be paid to get the contract also is unclear. In this case in Section 8 is not a specific amendment to a live contract<sup>15</sup>; rather it addresses a supplied with no active contract not unlike a **new** QF such as Davis Hydro<sup>16</sup>. Section (8)<sup>12</sup> then forms the basis of an "accepted" idea on how to form a market for future new and renewing contracts. It is deficient, as has been discussed at length in earlier briefs and comments; the energy prices are not based on avoided costs, but rather on the distorted CAISO day-ahead market that is devoid of key expensive marginal contracts. The distortions of this market are the very reason this proposed settlement has gone to the gas market for an index of market price variability.

## VI CAPACITY CREDITS

Factual Issue: "As available" capacity is not firm capacity. Capacity value varies with probability of being on line when needed and location. This settlement doesn't mention that it may be possible for some small hydro to qualify for "firm" capacity. It is suggested in Section 8 of the agreement that a QF could seek relief by separately selling

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<sup>13</sup> "Participation" in a solicitation does not guarantee a subsequent contract unless the market clearing price is guaranteed to all QFs. Unfortunately, as has been pointed out, this guarantee leads to the moral hazard of everyone bidding high and defeating the purpose of the solicitation. Competitive solicitation process is prone to misuse by all parties (as is being pointed out in R.0602013) when there is a must-purchase mandate at the solicitation-defined market-clearing price.

<sup>14</sup> *ibid* page 8 ¶5, p.13 ¶4, p.9 ¶1 and most indicative for new contracts for expired contractors Page 16 ¶2.

<sup>15</sup> Although it is applied as an amendment to the PPA between Sierra Pacific Industries and PG&E at Section 7 on page 15.

<sup>16</sup> PG&E has made a positive suggestion at section XI(B) on page 36 of their March 17<sup>th</sup> Reply brief under R.04-04-025, as how to address these problems. Their ideas should be considered, although their 1 MW limit is a bit low (5 to 10 MW is suggested due to fixed costs of scheduling etc.). In that brief, the RPS proceeding is mentioned as a referent benchmark. This is a second positive step in that the RPS numbers include both the value of energy and the RPS credits, but not capacity. Alternatively, further guidance might be had from other entities addressing the same problems under different laws but very similar mandates such as:

[http://www.powerauthority.on.ca/Storage/21/1686\\_SOP\\_Report\\_to\\_Minister\\_-\\_Final.pdf](http://www.powerauthority.on.ca/Storage/21/1686_SOP_Report_to_Minister_-_Final.pdf).

its capacity into a nascent California capacity market. This is inefficient and not practical for small QFs, for the same reasons that they are excluded from the ISO and utility “All Party” solicitations.

The settlement agreement correctly identifies capacity (power) as a product isolated from PURPA-controlled energy. The settlement suggests the capacity can and should<sup>17</sup> be sold separately into a third market, if necessary. This is a similar but different conclusion from the renewable energy credits, which also are a separate and distinct product that has its own market<sup>18</sup>. The Commission might clearly identify the three products created here: Power, Energy, and RECs and clearly identify their relationship to PURPA, state law, and how they are to be handled in whatever options are created under these dockets.

## VII Summary

This settlement has some positive aspects, a SRAC pricing agreement for existing contracts using natural gas as an index. There is recognition that there are three products in play: power, energy, and RECs. But does not provide any useful information for new QF contracts, and leaves the flawed competitive solicitations and CAISO Day Ahead markets in place as elements of the solution.

Written on April 26th, 2006

By Richard D. Ely



Davis Hydro  
27264 Meadowbrook Drive  
Davis California 95616  
530 753-8864  
Hydro@davis.com

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<sup>17</sup> Last sentence Page 16 of the Agreement.

<sup>18</sup> In this settlement agreement, curiously RECs are generally attached to the sale of avoided energy cost, and capacity is valued as a line item. In Section 8 page 16 RECs are not mentioned, and capacity is clearly demarked as a separate marketable product. Davis Hydro would be grateful for an informal off-line explanation of the underlying economic theory or thinking.

## Certificate of Service

I hereby certify that I have this day served the foregoing document under CPUC Dockets R.0404003 and R0404025. Each person designated on the official service list, has been served via e-mail, to all persons on the CPUC service lists current on the CPUC Website for April 27th, 2006 for the proceedings, R.0404003 and R0404025, and mailed by US mail to ALJ Brown the CPUC Docket office in 4 copies, and other non-email members of the service list using First class mail.

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

Executed in Davis California, April 27, 2006.



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Richard D. Ely, Principal  
Davis Hydro