Decision **DRAFT DECISION OF ALJ ALLEN (Mailed 3/7/2005)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement the California Renewables Portfolio Standard Program.	Rulemaking 04-04-026 (Filed April 22, 2004)

OPINION CLARIFYING PARTICIPATION OF RENEWABLE DISTRIBUTED GENERATION IN THE RENEWABLE PORTFOLIO STANDARDS PROGRAM

Summary

In this decision we address the issue of the participation of renewable distributed generation (DG) in the Renewable Portfolio Standards (RPS) program, and spell out the general principles that will guide that participation.[1] Based on the comments of the parties,[2] we must answer three questions: (1) who owns the Renewable Energy Credits (RECs) associated with the generation of

[1] As used in this decision, DG is a parallel or stand-alone electric generation unit generally located within the electric distribution system at or near the point of consumption (Commission Order Instituting Rulemaking (R.) 04-03-017, March 16, 2004). Eligible renewable DG technologies include photovoltaic, solar thermal electric, wind, and fuel cells using renewable fuels.

[2] Comments were received from: Green Power Institute, the Commission's Office of Ratepayer Advocates, the Center for Energy Efficiency and Renewable Technologies (CEERT), the Union of Concerned Scientists, Prevalent Power, Inc., Independent Energy Producers Association (IEP), The Utility Reform Network (TURN), the Center for Resource Solutions, Southern California Edison (SCE), PowerLight Corporation, Clean Power Markets, Inc., San Diego Gas & Electric Company (SDG&E), Bonneville Environmental Foundation, the Vote Solar Initiative, the California Solar Energy Industry Association (Cal SEIA), Pacific Gas & Electric (PG&E), RWE Schott Solar, and Central California Power. Reply comments were received from: Green Power Institute (Green Power), R. Thomas Beach, City of San Diego, the CEERT and the Cal SEIA (jointly), the Union of Concerned Scientists, SCE, the Vote Solar Initiative, Prevalent Power, Inc., (Prevalent Power) PG&E, and Central California Power.

energy from renewable DG facilities; (2) who gets the RECs associated with the generation of energy from renewable DG facilities; and (3) who can do what with the RECs they own. The short answers to these questions are that the owner of the renewable DG facilities owns the RECs associated with the generation of electricity from those facilities, those RECs may be used to satisfy the utilities' RPS targets, and the RECs stay bundled with the associated electricity.

While we hope that this enunciation of policy will clarify the ground rules for DG participation in the RPS program, we acknowledge that we can improve our policies regarding DG in ways that may have future impacts on RECs from DG facilities. For example, in R.04-03-017 we will be investigating modifications to our Self Generation Incentive Program (SGIP) (such as developing a DG cost-benefit methodology) that will better reflect the role of ratepayer-funded incentives in supporting the installation of DG facilities.[3] We do not, however, take any action here that will have any retroactive effect on ownership of RECs. Until we design a method of DG incentives that explicitly connects funding levels to the specific ratepayer benefits these incentives procure, ownership of RECs will remain with the DG owner.[4]

Our decision today does not prejudge any REC issues associated with qualifying facilities currently under litigation at the Federal Energy Regulatory Commission and in the federal Court of Appeals.

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[3] The future creation of a tradable REC market would also impact RECs associated with generation from renewable DG facilities.

[4] To be clear, owners of eligible DG facilities installed under the present (and previous) subsidy regime will retain ownership of their RECs, absent the legitimate sale or transfer of those RECs.

Background

The starting point for our analysis is our prior decision on this issue, Decision (D.) 02-10-062, which stated:

> We include in our definition of renewable generation, for purposes of compliance with both D.02-08-071 [establishing pre-RPS targets for renewable procurement] and SB 1078 [the RPS statute], renewable distributed generation (DG) on the customer side of the meter…
>
> Including renewable DG as part of our definition will serve to encourage its installation, regardless of whether the utility purchases the output or whether it serves to meet on-site load. The full output of renewable DG should be credited to meeting the RPS or D.02-08-071 requirements, but only new renewable DG installations are to be credited (existing renewable DG does not count toward the utility's RPS baseline calculation). (*Id.*, p. 21.)

Subsequently, in D.03-06-071, we assumed (in the context of central-station generation) that RECs from renewable generation facilities were the property of the owner of the facility, but if that facility participates in the RPS program the RECs associated with the electrical output of that facility are transferred to the utility and retired. (See, *Id.*, pp. 8-15.) In other words, REC ownership and possession was not unbundled from the underlying electricity.

Discussion and Analysis

Our decision today is consistent with our prior decisions. We find that the "guiding principle" offered by the Green Power provides the most reasoned, neutral, and fair approach. As Green Power states:

> While some of the RPS compliance rules that pertain to grid-distributed renewable electricity may have to be modified for customer-side renewable DG, the principle should be that the RPS program should avoid developing rules for DG renewables that confer any advantage or disadvantage to these systems compared with grid-distributed systems. There may be valid reasons why DG

> systems may deserve different levels of public support than grid-distributed renewables in programs like the CEC's PGC-funded renewables programs, and that can be expected to continue to be the case into the future. Nevertheless, the RPS program itself is the wrong place to target specific renewable technologies. RPS program rules should strive to provide equal treatment for renewables that are grid distributed, and renewables on the customer side of the meter, even when the rules specific to these two different types of renewables have to be different. (Green Power Comments, p. 2.)

Using this approach, we hold that the RECs associated with renewable distributed generation on the customer side of the meter should be treated equivalently to the other types of renewable generation we addressed in D.03-06-071. Since in that case we held that the RECs belonged to the generation owner, but were transferred to the utility along with the electricity under a standard RPS contract, it is most consistent for us to hold the same thing with regard to DG facilities. Such a holding would also be consistent with D.02-10-062, which allowed for certain DG facilities' output to count towards meeting RPS requirements.

Consistency is particularly important in the definition of "counting" for RPS purposes. Not only do we need to see if the energy from a particular renewable facility is transferred to the utility, we need to consider whether the RECs associated with that energy (whether under our current "bundled" system or in a possible future "unbundled" system) are also transferred to the utility. This is consistent with our treatment of central station facilities in D.03-06-017– if a facility does not participate in the RPS program, then its output cannot be counted for RPS purposes, and its RECs are not required to go to the utility to which it is supplying energy. If the energy and associated RECs are to be counted for RPS purposes, then they must be transferred. If, on the other hand, they do not count for RPS purposes, there does not appear to be any reason to require the transfer of RECs to the utility.

As Cal SEIA puts it: "There is no justification for discriminatory policies regarding REC ownership based upon size or location on the grid. Distributed generation facilities are no less renewable than central station facilities. They provide all the public benefits that the RPS program was created to encourage (as well as additional benefits due to their location at load)." (Cal SEIA Comments, p. 9.)

Subsidies

As pointed out by a number of parties, however, renewable DG facilities have received significant ratepayer subsidies, and the existence of those subsidies must be taken into consideration. The parties have tended to take all-or-nothing positions on this issue, resulting in a sharp disagreement as to how the subsidies should be considered.

In general, the utilities assert that if a DG facility receives a ratepayer subsidy, the utility should be able to use all of the RECs associated with the energy generated by the facility towards its RPS compliance. (See, e.g. SDG&E Comments, p. 2.) In essence, the utilities argue that if renewable attributes are created in association with the power generated by renewable DG facilities, the economic value of those attributes should be dedicated to the economic benefit of utility ratepayers, who subsidized the facilities (SCE Comments, p. 3), and accordingly ratepayers should not have to expend even more money than they already have in order to receive credit for the output of the renewable DG facilities. (PG&E Comments, p. 8.) In short, the utilities believe that all RECs associated with renewable DG that has received any form of ratepayer subsidy are to be automatically counted toward the utilities' RPS targets.

In contrast, most other parties assert that RECs are the property of the owner of the generation facility. (See, e.g., IEP Comments, p. 1, Cal SEIA Comments, p. 1, CEERT Comments, p. 4.) Some parties take another step, and argue that the owners of renewable DG facilities are free to sell the RECs separately from the associated electricity generated by the DG facilities.

(See, e.g. Center for Resource Solutions Comments, p. 4, Cal SEIA Comments, pp. 1-2.)

While both sides raise valid points, both also take their arguments too far. While the utilities are correct that ratepayers have in fact subsidized renewable DG, and should not have to "pay twice" for the same benefits, it does not necessarily follow that all RECs from all DG that received any subsidy automatically become the property of the utility or its ratepayers. SGIP subsidies do not fund the entirety of a DG facility. Likewise, even though the various renewables advocates are correct that any RECs associated with renewable DG are (at least initially) the property of the generation owner, it does not follow that generation owners interconnected to the utility grid have complete free rein to do as they please with those RECs.[5]

It appears that the central question we have posed – what portions of a REC, if any, do public subsidies purchase – is difficult if not impossible to answer, as most of the comments dodge the question in favor of more categorical (and self-serving) assertions of exclusive possession.

We believe a more nuanced approach more accurately reflects the reality of the situation. While the subsidies paid for DG installation do overlap the goals of (and subsidies paid for) the RPS program, there is not a precise match. In other words, some of the money paid by ratepayers to subsidize DG installation may have paid for the same benefits as those sought by the RPS program, but not all of it did. (See, e.g., Reply Comments of R. Thomas Beach, pp. 3-5; Comments of Prevalent Power, p. 2.) In fact, it is not even clear exactly which benefits the DG subsidies are paying for, "[W]ithout quantifying how each benefit contributes to the total value of DG energy production." (Comments of

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[5] We do not agree with TURN's recommendation that, based on the applicable utility tariffs, we should presume a transfer of renewable attributes to the utility (Comments of TURN, p. 5), but we note that those tariffs may appear to assume the transfer of some portion of those attributes.

Prevalent Power, p. 3.) No such quantification has occurred, and the problem is exacerbated by the fact that the DG subsidies tend to pay for the equipment and capital costs of a renewable DG system, while the RPS program pays for generation. Trying to make comparisons is difficult when one program is basically buying capacity, while the other is buying energy.

Given this mismatch, it does not appear readily possible to determine what portion of a REC from a given DG facility was actually supported by ratepayer subsidies. For example, an expensive photovoltaic installation installed in a very foggy area may have received a substantial ratepayer subsidy, but would generate relatively few RECs, while a cheaper photovoltaic system in a much sunnier area would have received less ratepayer subsidy, but would likely generate more RECs. If RECs are considered to be compensation for the subsidies paid by ratepayers, the first system would result in ratepayers overpaying in comparison to the number of RECs they get in return, while the second system could result in ratepayers being overcompensated in RECs relative to their payment.

While it is not possible to fairly and accurately account for this mismatch under the past and current structure of the subsidies for DG and RPS, there are ways that the mismatch can be resolved on a going-forward basis. One possible approach would be to spell out precisely what the DG subsidies are paying for, identifying each component of the anticipated benefits that are being subsidized, and quantifying the costs and benefits accordingly. Prospective DG installers would then face a choice: receive the full value of the subsidy and surrender their RECs on behalf of ratepayers, or receive a smaller subsidy – reflecting all the non-environmental benefits associated with DG – and dispose of their RECs as they see fit. The California Energy Commission (CEC) has initiated another possible approach, which would move away from capacity-based subsidies for

DG, and toward generation-based subsidies, which would be much more readily comparable to RPS payments.[6]

While these two approaches would clarify exactly what ratepayers are paying for when they pay for DG and RPS programs, and would ameliorate concerns about ratepayers paying twice for the same benefits, making such a fundamental change in the structure of the existing DG program is beyond the scope of this proceeding. The Commission may, however, consider in our ongoing DG R.04-03-017 whether these or other approaches are feasible, and how we could better link DG benefits with ratepayer-funded DG incentives.

Measurement

A related problem that hinders DG participation in the RPS program is the measurement of electric production from DG units. As Green Power characterizes the issue: "RPS compliance is predicated on actual renewable energy production, not on the amount of renewable generating capacity that is installed. RECs will only be issued for actual, metered output for grid-distributed renewables, regardless of the size of the generating unit." (Green Power Comments, p. 5.) Similarly, IEP argues, "If DG is going to be "counted" for purposes of RPS compliance, it must be treated in a comparable manner to other eligible renewable generation. Importantly, it must be measured and tracked to ensure that actual energy generation is being counted for purposes of RPS compliance. "(Comments of IEP, p. 4.) Again, this is an issue that we do not have the record to resolve here, but it can and will be addressed in R.04-03-017.

While it is desirable to keep the RPS rules consistent for all technologies, it may not be feasible to establish metering requirements for all of the DG systems we wish to see participating in the RPS program. For larger DG systems that

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[6] See http://www.energy.ca.gov/renewables/02-REN-1038/documents/2004-11-19_DECISION_DOCUMEN.PDF.

utilize sophisticated meters, it may be feasible to measure the exact output of renewable generation to arrive at a precise number of associated RECs, much like is done for central station renewable facilities. It may be appropriate to require that this level of metering sophistication be present before RPS-eligible RECs can be produced by DG facilities. Alternatively, we may wish to establish a separate standard for smaller or less sophisticated DG facilities that could provide a reasonable approximation of those facilities' renewable output. We will address this issue further in R.04-03-017, where we will develop rules to measure renewable output from DG systems of all sizes, and modify the SGIP program accordingly.

Once the above details relating to transaction rules and measurement are resolved, renewable DG will be eligible to produce RECs that comply with the requirements of the RPS program, consistent with our prior decisions.[7] In R.04-03-017, we hope to align SGIP incentives with these transaction and measurement rules to reflect the contribution of ratepayer funds to the creation of RPS RECs.

In implementing these DG rules, we intend to count the output consistently with Green Power's recommendation that RECs associated with DG energy can be counted for RPS compliance, but the associated energy produced by the DG facility must also be added to the utility's total retail sales. (Green Power Reply Comments, p. 4.)

Finally, we must establish eligibility for the RPS on the basis of when the facility was installed. In D.02-10-62, we held that "only new renewable DG installations are to be credited (existing renewable DG does not count toward the utility's RPS baseline calculation)." (*Id.*, p. 21.) Accordingly, all DG facilities

[7] Under today's decision, all eligible renewable DG facilities (theoretically) produce RECs that an RPS-obligated entity could purchase. At present, however, RECs and generation cannot be unbundled, which has the effect that those RECs – if they are to be counted in the RPS, and not for some other purpose - can only be sold to the utility to which the DG unit is interconnected.

installed after October 24th, 2002, the date of D.02-10-062, are eligible to generate RPS-eligible RECs.[8] Precisely how the amount of these RECs will be established – via metering of DG facilities or by some form of approximation – will be determined in R.04-03-017, along with the form of future SGIP subsidies. What we establish here is that technologies of this vintage are RPS-eligible, and the RECs they produce are the property of the DG owner.

Assignment of Proceeding

Michael R. Peevey is the Assigned Commissioner and Peter V. Allen and Julie M. Halligan are the assigned Administrative Law Judges (ALJ) for this proceeding.

Comments on Draft Decision

The draft decision of the ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g)(1) and Rule 77.7 of the Rules of Practice and Procedure. Comments were filed _____.

Findings of Fact

1. D.03-06-071 held that RECs belonged to the generation owner, but were transferred to the utility along with the electricity under a standard RPS contract.
2. D.02-10-062 held that only new renewable DG installations were to be eligible for the RPS program.
3. DG facilities have received ratepayer subsidies that typically cover part of their equipment and capital costs.
4. The electrical output of individual renewable DG facilities is not consistently measured.

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[8] "Installed" means that a facility has a signed interconnection agreement with the utility and it is operational (i.e. able to generate electricity).

Conclusions of Law

1. For purposes of the renewable portfolio standards program, eligible renewable DG facilities should be treated equivalently to other types of eligible renewable generation to the extent that is feasible.

2. For purposes of the renewable portfolio standards program, our treatment of eligible renewable DG facilities should be consistent with our prior decisions relating to the RPS program.

3. The existence of ratepayer subsidies for renewable DG complicates the propriety of renewable DG participation in the RPS program.

4. The lack of consistent, accurate metering of the electrical output of renewable DG facilities is a barrier to the participation of renewable DG in the RPS program.

5. The Commission currently has a Rulemaking open relating to DG, R.04-03-017.

O R D E R

IT IS ORDERED that:

1. Consistent with our prior Decisions (D.) 02-10-062 and D.03-06-071 and the recommendation of Green Power Institute, our general policy under the renewable portfolio standards (RPS) program is that eligible renewable distributed generation (DG) facilities should be treated equivalently to other types of eligible renewable generation to the extent that is feasible.

2. The owner of a renewable DG facility owns the renewable energy credits associated with the generation of electricity from that facility, consistent with D.03-06-071.

3. Renewable energy credits associated with generation from eligible renewable DG facilities may be used to satisfy the utilities' requirements under the RPS program, consistent with D.03-06-071.

4. Renewable energy credits associated with generation from renewable DG facilities remain bundled with the associated electricity, consistent with D.03-06-071.

5. Renewable energy credits from eligible renewable DG facilities installed after October 24, 2002 qualify to be counted for purposes of the RPS program.

6. To the extent that renewable energy credits from eligible renewable DG facilities are counted for purposes of the RPS the associated electrical generation will also be added to the applicable utility's total retail sales.

7. Renewable energy credits from eligible renewable DG facilities cannot be counted for purposes of the RPS program until issues relating to subsidies and measurement are resolved, as described above.

8. The issues relating to subsidies and measurement will be addressed in the Commission's DG Rulemaking 04-03-017.

This order is effective today.

Dated _____, in San Francisco, California.