

5. Distributed Generation (DG) RECs

As will be shown below, the provisions of S.B. 107 do not expressly apply to RECs from a particular class of electricity generators: renewable Distributed Generation. Thus, the disposition of RECs resulting from renewable DG must be determined from other sources of state law. DG is generally defined to be small grid-connected electric generation facilities, usually located near the point of consumption of the electricity, such as at residential homes, or commercial or public buildings.¹⁵⁶

S.B. 107 expressly excludes DG or cogeneration from the definition of a utility or “retail seller” of electricity under the RPS.¹⁵⁷ Also, DG cannot reasonably be considered as a generator operating under an RPS “electricity procurement agreement” as defined under S.B. 107.¹⁵⁸ This is because, unlike the generators contemplated by S.B. 107 which operate under contracts to sell electricity, renewable DG usually connects to the grid under a net metering arrangement.¹⁵⁹

Net metering is a program authorized by statute to encourage private investment in small renewable energy resources.¹⁶⁰ Net metering allows a consumer-generator to send electricity to the grid at times when an excess is being produced, while at other times consume needed electricity from the grid, thus allowing an electric meter to run both backwards and forwards.¹⁶¹ The consumer only pays for any net electricity consumption over the course of a twelve month period, plus any usual non-energy items billed to any electric consumer.¹⁶² A net metering arrangement with a utility may be reached through two contractual steps or in some cases through a single combined contractual agreement.¹⁶³

Current net metering agreements do not refer to the requirements of the RPS.¹⁶⁴ Nor does the authorizing statute for net metering refer to the RPS.¹⁶⁵ Since S.B. 107 specifically applies to the generation of RECs in the RPS compliance market, it thus does not encompass RECs from DG operating under net metering agreements. Further, the net metering statute does not require a utility to pay any compensation to the DG owner, if at the end of 12 months the generator is a net energy producer, unless a *separate* electricity purchase agreement has been entered.¹⁶⁶ Given this, DG net metering agreements cannot reasonably be considered RPS electricity purchase agreements, and so any DG RECs are not obligated to utilities as per the requirements of S.B. 107 applicable to generators operating under RPS procurement contracts.¹⁶⁷ Thus, the disposition of DG RECs is governed by other state law, in particular several CPUC decisions on the matter discussed below.

5.1. Ownership of Renewable DG RECs

While the presumption has long been established in California that DG owners also own any RECs produced,¹⁶⁸ DG REC ownership has continued to be uncertain due to the possible effect of ratepayer subsidies supporting the purchase of the DG system, which may overcome the presumption of ownership by the DG owner.¹⁶⁹ **However, a January 2007 CPUC decision has now resolved this long-standing issue in favor of DG owners retaining all RECs.**¹⁷⁰

Currently the two largest state subsidy programs paid to purchasers of renewable DG are the Self Generation Incentive Program (SGIP)¹⁷¹ and the newer California Solar Initiative (CSI).¹⁷² SGIP agreements are silent as to the disposition of RECs, and refer to RECs only to require that other possible agreements for their sale or trade be disclosed.¹⁷³ However, it has been asserted in CPUC proceedings on the issue that ratepayers could pay twice for an environmental benefit, first by subsidizing the purchase of renewable DG, and then again by paying for utility purchases of RECs from those same DG systems.¹⁷⁴ Thus, it has been suggested that subsidy agreements should imply-

in-law that some or all renewable DG RECs transfer to the utility to avoid unjust enrichment of DG owners at ratepayer expense.¹⁷⁵

The possible effect of DG subsidies has been further complicated by the suggestion that a DG owner may receive an additional subsidy due to participation in a net metering agreement.¹⁷⁶ At first glance this seems unlikely, since the DG owner merely sends and receives electricity from the grid, and pays for any net usage.¹⁷⁷ However, the credit for electricity sent to the grid from the DG system is given at retail rates, which are typically more than a utility might pay to purchase the equivalent electricity from a central station or other generator at wholesale tariffs.¹⁷⁸ This difference in cost to ratepayers may arguably be a subsidy to DG owners, in that the credit to net metered DG owners exceeds what a wholesale generator would receive for supplying the same electricity. Others have reasoned that DG is already providing ratepayers with return benefits to compensate for this value by allowing utilities to avoid expensive additional peak capacity,¹⁷⁹ and by supplying environmental, health, and economic benefits via a stimulated local renewable energy sector.¹⁸⁰

The CPUC resolved this ownership debate in a decision published shortly after the enactment of S.B. 107.¹⁸¹ First, the CPUC decided that renewable DG RECs should not be divided or apportioned between the DG system owner and the utility, based on a partial subsidy paid to the DG owner toward the purchase of the generator.¹⁸² Further, renewable DG owners should retain ownership of all RECs generated, as the existence of ratepayer subsidies does not justify the transfer of any RECs to utilities on behalf of ratepayers.¹⁸³

Second, the CPUC held that while net metering does provide a benefit to renewable DG owners, it is irrelevant whether or not it may be considered a “subsidy.” Net metering benefits do not justify the transfer of RECs to the utilities, just as direct subsidies do not justify the transfer of RECs.¹⁸⁴ In addition, the CPUC found that the sale of RECs by a DG owner does not act to make the DG system subsequently ineligible for participation in the net metering program.¹⁸⁵

This CPUC decision is consistent with stated legislative goals underlying use of the ratepayer funds for renewable energy subsidies, specifically the public goods charge used for the Renewable Energy Resources Program, which funds some renewable DG subsidies.¹⁸⁶ “Awards made pursuant to this chapter are grants . . . any actions taken by an applicant to apply for, or become or remain eligible . . . shall not constitute the rendering of goods, services, or a direct benefit to the commission.”¹⁸⁷ A reasonable inference is that since the CPUC receives no goods (such as RECs) as a condition of giving subsidies, neither should ratepayers.

The discussion in this 2007 CPUC decision on DG RECs provides useful insight into the policies underlying the trading of RECs in California. As mentioned, an earlier CPUC decision established a presumption that a renewable DG owner also owns any RECs created by the generator, unless the RECs have been sold or transferred by agreement to another party.¹⁸⁸ At the time, a concern was acknowledged that ratepayers could be paying twice for the same environmental benefit, first as subsidies to DG owners, and then again later through utility purchases of RECs.¹⁸⁹ In its 2007 decision, the CPUC states that it had originally considered accommodating this concern by dividing and apportioning the RECs between utilities (on behalf of ratepayers) and DG system owners, but now rejects that approach on the grounds that it adds too much complexity to accounting and tracking.¹⁹⁰

Since RECs will not be apportioned, the issue then becomes all-or-nothing: either the DG owner retains all RECs despite any subsidies, or all RECs transfer to utilities for their use in satisfying RPS goals because of the subsidies. As stated above, the CPUC decision is that DG owners retain all RECs.¹⁹¹ The rationale given for this begins with the “overriding goal” of the California Solar

Initiative (CSI), which is to “achieve a self-sustaining solar market.”¹⁹² This drives CPUC policy to calibrate subsidies and other incentives to the market, and so reduce subsidies over time as the economics of renewable solar become more attractive, eventually achieving a market that requires no subsidies.¹⁹³ The CPUC views all DG purchase incentives as means to “fill the value gap” for potential owners and so encourage investment in solar DG systems.¹⁹⁴ If RECs become valuable, they could become another factor that affects the economics of renewable DG, and may help “drive the deployment of solar DG in such a way that S.B. 1 [CSI] objectives can be achieved with less ratepayer support.”¹⁹⁵ In other words, as RECs go up in value, other ratepayer incentives may potentially be reduced, as long as the DG owner retains ownership of the RECs.¹⁹⁶

Several ways in which RECs might become valuable to a DG system owner are identified in this decision. RECs may “enable customers to make green claims” even if they have no cash resale value.¹⁹⁷ Also, RECs may be sold for value subject to the “level of demand for RECs in the voluntary market.”¹⁹⁸ And finally, RECs may be sold for value in a compliance market depending “whether California migrates to an unbundled REC-based RPS regime” as authorized in S.B. 107.¹⁹⁹

Because of this potential value, allowing DG owners to retain their RECs results in three primary benefits to the state. First, valuable RECs will impact the decision to invest in renewable DG, thus likely encouraging more renewable DG installations.²⁰⁰ Second, since RECs are only created over time by ongoing operation of the generator, RECs align with the preferred ongoing performance-based incentive model of the CSI.²⁰¹ Third, valuable RECs provide a means of financing additional renewable DG, thus supporting the long-term goal of the CSI of making the solar industry self-sufficient.²⁰²

5.2. Outstanding DG REC Issue – Metering for the RPS Compliance Market

A remaining question concerning renewable DG RECs is how they might become eligible for sale into the RPS compliance market?²⁰³ The CPUC has made clear that, in theory, DG RECs are RPS-eligible “if and when the Commission adopts an unbundled REC regime for RPS compliance.”²⁰⁴ However, S.B. 107 imposes a requirement upon any tradable RECs in the compliance market that they must be issued and tracked by the Energy Commission tracking system, WREGIS.²⁰⁵ Yet no infrastructure exists today for metering or account management sufficient to ensure that the output of each renewable DG system is accurately reflected in WREGIS. Thus, new meters or other measurement procedures may be required to facilitate the sale of DG RECs into the RPS compliance market.²⁰⁶

In its 2007 decision on DG RECs, the CPUC acknowledged the possible need for more advanced measurement of DG consistent with WREGIS, to enable the sale of RECs into the RPS compliance market. However, action was deferred since the RPS compliance market for tradable RECs has itself not yet been adopted.²⁰⁷

A related concern with DG RECs is that S.B. 107 states that RECs are only created when the associated electricity is delivered to the grid (as under an RPS procurement contract).²⁰⁸ But as discussed above, renewable DG is not operating under an RPS electricity procurement contract. Further, any electricity used in-house is being consumed by a California retail customer, and so is meeting the intent of the statute. In 2002, the CPUC was clear in a decision to initiate implementation of the RPS, where it held that all production from renewable DG was RPS-eligible, including output “on the customer side of the meter.”²⁰⁹ Now in its 2007 decision following the enactment of S.B. 107, the CPUC referred to that earlier 2002 decision when affirming that renewable DG is an RPS-eligible resource.²¹⁰ Thus, the entire output of a renewable DG system may