

**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  
(Filed May 5, 2011)

**COMMENTS OF THE COUNTY SANITATION DISTRICTS OF LOS  
ANGELES COUNTY ON THE ADMINISTRATIVE LAW JUDGE'S  
RULING REQUESTING COMMENTS ON IMPLEMENTATION OF  
NEW PORTFOLIO CONTENT CATEGORIES FOR THE  
RENEWABLES PORTFOLIO STANDARD PROGRAM**

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**I. INTRODUCTION**

*The Administrative Law Judge's Ruling Requesting Comments On Implementation Of New Portfolio Content Categories For The Renewables Portfolio Standard Program* (Ruling) was issued on July 12, 2011. The County Sanitation Districts of Los Angeles County (Sanitation Districts) respectfully submit the following comments in response to the Ruling.

The primary recommendation of the Sanitation Districts is that renewable energy credits (RECs) associated with renewable energy produced by facilities meeting the requirements of the first portfolio content category (Category One) described in § 399.16(b)(1) and consumed onsite should count as Category One products, as addressed in Issue Ten of the Ruling. This recommendation is consistent with the language of SB 2 (1x) and the intent of the legislation.

**II. DESCRIPTION OF THE SANITATION DISTRICTS**

The Sanitation Districts are an organization of 23 independent special districts that provide wastewater treatment and solid waste management for 5.7 million residents of Los Angeles County. The Sanitation Districts treat approximately 460 million gallons per day of wastewater at 11 wastewater treatment plants and accept 8,500 tons per day of solid waste at three active landfills. These facilities, along with three closed landfills, produce biogas as a natural byproduct of the wastewater treatment and solid waste management processes. This

biogas is captured and used to produce electricity. Currently, the Sanitation Districts produce 86 MW of RPS-eligible electricity from biogas at six power plants. Of this amount, 63 MW are sold under contract to Southern California Edison, Noble Americas Energy Solutions, and Bear Valley Electric Service, and 23 MW are consumed onsite at the Sanitation Districts' facilities. In addition, three wastewater treatment plants that do not currently produce electricity have the potential to produce an additional one to two MW for use onsite.

The Sanitation Districts have been innovators in renewable energy generation long before the renewable portfolio standard program existed. In 1938, the Sanitation Districts installed their first biogas-fueled generator at the Joint Water Pollution Control Plant in Carson, California. In the 1980s, the Sanitation Districts led the nation in developing landfill gas-to-energy generation facilities. Later, the Sanitation Districts installed one of the nation's first fuel cells running on digester biogas.

The statutory purposes of the Sanitation Districts include the construction and operation of facilities that protect public health and the environment. The Sanitation Districts accomplish these purposes in part by converting waste into resources, including energy. The Sanitation Districts' pioneering efforts in renewable energy development have been born out of their commitment to these goals. As public entities, the revenues generated by energy projects, including REC sales, are passed on to the public through decreased service fees. Such revenues help justify additional investment in renewable energy development.

Two of the Sanitation Districts' renewable generation facilities that provide 23 MW for onsite use have been registered with the Western Renewable Energy Generation Information System (WREGIS) since 2009 to track the renewable energy generation and create marketable RECs. The California Public Utilities Commission REC decision in January 2011<sup>1</sup> created a market for the sale of these tradable RECs. However, the decision limited IOU and ESP use of tradable RECs to no more than 25 percent of their annual RPS procurement targets. As it turned out, existing contracts placed most IOUs and ESPs at or over the tradable REC cap, and very little demand was created by the decision for new tradable REC purchases. In turn, the value of the Sanitation Districts' unbundled RECs has fallen far below earlier projections and great uncertainty exists as to their value going forward.

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<sup>1</sup> See D.11-01-025.

Based upon this experience and the declining limits placed on Category Three transactions, the Sanitation Districts anticipate that there will be little interest from retail sellers to purchase Category Three RECs. Therefore, restricting all unbundled REC transactions to Category Three would create uncertainty as to the long-term value of these RECs. Such uncertainty conflicts with the long-term financial commitment required for investing in a renewable energy project. In contrast, including qualifying REC-only transactions in Category One would create certainty as to the sustained value of such RECs and would thereby provide a secure revenue stream that would help justify further investment in additional renewable generation by the Sanitation Districts and other public wastewater entities across the state.

### **III. COMMENTS**

The Sanitation Districts will limit their comments to a few of the issues posed in the Ruling.

#### ***A. Issue 1***

The Sanitation Districts support the proposed interpretation of “electricity products” as meaning “RPS procurement transactions” if this term includes transactions for energy and associated renewable attributes (RECs), which may be sold either separately or together in a bundle.

#### ***B. Issue 2***

The Sanitation Districts support the proposed clarification of the first sentence of § 399.16(b)(1) as meaning: “The RPS-eligible generation facility producing the electricity has a first point of interconnection with a California balancing authority, or has a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area, or the electricity produced by the RPS-eligible generation facility is scheduled from the eligible renewable energy resource into a California balancing authority without substituting electricity from another source.” The underlined phrases added by the Ruling provide clarification as to what the “eligible renewable energy resource electricity products” actually are that must meet the criteria listed in § 399.16(b)(1). Clearly, it is a “generation facility” that has a first point of interconnection, and it is the “electricity produced” that is scheduled into a California balancing authority.

For facilities that qualify for the first Category because of their interconnections, the RPS-related products should also be classified as Category One products. In particular, RECs from facilities with a first point of interconnection with a California balancing authority or with distribution facilities used to serve end users within a California balancing authority area should retain the Category One status of the facilities, whether they are sold with or without the associated energy.

***C. Issue 9***

The Sanitation Districts support the proposed interpretation of “unbundled renewable energy credits” (RECs) to mean, “a renewable energy credit [as defined in new § 399.12(h)] that is procured separately from the RPS-eligible energy with which the REC is associated”. RECs produced by facilities that qualify for the first Category because of their interconnections should be classified as Category One products. All other RECs should be classified as Category Three products.

***D. Issue 10***

For Issue 10, the Ruling asks, “Does § 399.16(b)(1) include any transactions that transfer only RECs but not the RPS-eligible energy with which the RECs are associated (for example, a transaction in which an RPS-eligible generator having a first point of interconnection with a California balancing authority sells unbundled RECs to a California retail seller)?”

The short answer is “Yes.” Most transactions involving RPS-eligible facilities that are interconnected to a California balancing authority or a distribution system within a California balancing authority deliver power to the grid and do not have a need to separate the REC from its associated energy, and consequently most such transactions consist of a bundle of energy and the associated RECs. However, RPS-eligible facilities that use the energy onsite to meet their own needs will have excess or “stranded” RECs that have value to retail sellers and can be sold without the associated energy. Sales of RECs generated from RPS-eligible facilities that have a first point of interconnection to a California balancing authority or a distribution system within a California balancing authority should retain the § 399.16(b)(1) characteristic of the facility.

Several points support this interpretation.

## 1. Legislative Language and Intent

SB 2 (1x) includes a portfolio content requirement set forth in Public Utilities Code

§ 399.16. Products from the first portfolio content category, defined in § 399.16(b)(1) and referred to as Category One, must make up an increasing percentage of retail sellers' purchases under contracts executed after June 1, 2010.

Four types of “eligible renewable energy resource electricity products” are included in Category One:

- Products supplied by resources that “have a first point of interconnection with a California balancing authority”;
- Products supplied by resources that “have a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area”;
- Products that “are scheduled from the eligible renewable energy resource into a California balancing authority without substituting electricity from another source”;
- and
- Products supplied by resources that “have an agreement to dynamically transfer electricity to a California balancing authority.”

The first product type—suppliers with a first point of interconnection with a California balancing authority—are resources that are located within California or near to a delivery point of a California balancing authority. However, some eligible renewable resources located within California are interconnected at lower distribution-level voltage, rather than the higher-voltages controlled by California balancing authorities, and would not qualify for the first product type. The second product type was included in SB 2 (1x) to make it clear that in-state renewable resources, including renewable energy that is consumed on the site of the resource consistent with Public Utilities Code Section 218(b)(1) and that connect at distribution-level voltages should also be included in Category One. Renewable resources that “have a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area” fall into the second product type, and therefore belong in Category One.

Section 399.16(b)(1) does not make any reference either to RECs or bundled power in specifying the products that qualify for Category One. If the power is generated by a facility that has its first point of interconnection to a California balancing authority or a distribution system within a California balancing authority, it is irrelevant whether the power is bundled or not.

Furthermore, while the language describing Category Three in § 399.16(b)(3) refers to RECs, this does not mean that REC-only transactions are excluded from Category One. The Category Three language refers to “Eligible renewable energy resource electricity products . . . that do not qualify under the criteria of paragraph (1) or (2).” As discussed above, RECs from a facility that has its first point of interconnection to a California balancing authority or a distribution system within a California balancing authority should retain the Category One status of the facility.

## **2. Renewable Onsite Generation Provides the Benefits that Are the Purpose of SB 2 (1x) and Supports California’s Localized Generation Goals**

The portfolio content requirements are designed to ensure that California receives the benefits of the RPS program listed in § 399.11. Renewable resources that produce energy that is consumed onsite and that are interconnected with a California balancing authority at the transmission or distribution level provide the following listed benefits:

- Displace fossil fuel consumption within the state;
- Reduce emissions of greenhouse gases associated with electrical generation;
- Help meet the state’s need for a diversified and balanced energy generation portfolio;
- Help meet the state’s resource adequacy requirements; and
- Contribute to the safe and reliable operation of the electrical grid.

By contrast, RECs in Category Three (*i.e.*, those from facilities that do not have their first point of interconnection to a California balancing authority or a distribution system within a California balancing authority) do not offer these benefits to California. That difference is precisely why transactions for RECs from facilities qualifying as Category One resources are grouped with other transactions that provide comparable benefits to California, and transactions for RECs from facilities that are not Category One resources are classified as Category Three transactions.

Furthermore, resources meeting the interconnection criteria for Category One provide many of the benefits listed in § 399.11 regardless of whether they sell unbundled RECs or RECs bundled with energy. It is possible for the same resource to produce unbundled RECs and RECs bundled with energy at the same time if production is greater than onsite demand. In this case, a REC-only transaction associated with onsite consumption is electrically identical to the sale of a REC bundled with energy. Since the products are electrically identical and both provide the benefits of § 399.11, there is no reason to treat the resource differently depending on how it markets its products.

Renewable resources that produce energy that is consumed onsite also contribute to Governor Brown's Clean Energy Jobs Plan (Plan), which calls for the state to produce an additional 12,000 MW of renewable "localized electricity generation", defined as onsite or small energy systems located close to where energy is consumed<sup>2</sup>. The Plan highlights the benefits of localized generation, stating that it "can be constructed quickly (without new transmission lines) and typically without any environmental impact." As a whole, it is stated that the plan "will produce a half a million new jobs in the next decade". Including renewable generation that is consumed onsite in Category One will help encourage the growth of localized generation, furthering the goals of Governor Brown's Plan and creating California jobs.

### **3. How to Characterize and Verify REC Transactions**

The Ruling also asks how unbundled REC transactions can be characterized and verified as belonging in a particular portfolio content category. The key to characterizing Category One REC transactions and Category Three REC transactions lies in the statutory language. In order to be eligible for Category One, the resource must meet one of the four product types described in § 399.16(b)(1) and listed above. Since an unbundled REC transaction does not include the transfer of electricity, the third and fourth product types do not apply. Therefore, for an unbundled REC transaction to be included in Category One, the generating facility that produced the energy associated with the REC must have a first point of interconnection either with "a California balancing authority", or with "distribution facilities used to serve end users within a California balancing authority area". All other REC transactions would be characterized as Category Three transactions.

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<sup>2</sup> See [http://www.jerrybrown.org/sites/default/files/6-15%20Clean\\_Energy%20Plan.pdf](http://www.jerrybrown.org/sites/default/files/6-15%20Clean_Energy%20Plan.pdf)



Furthermore, the existing system for REC verification can be used to verify REC transactions. Currently, in order for a REC to qualify for RPS compliance, the generator that produced the REC must be certified as renewable by the California Energy Commission and must also be registered with the Western Renewable Energy Generation Information System (WREGIS). WREGIS is specifically designed to track renewable energy generation and to record when RECs are “retired,” or counted for RPS compliance purposes. The same renewable verification and accounting systems can be used to verify REC transactions.

#### **4. Transaction Costs and Least Cost-Best Fit Procurement**

One of the guiding principles stated in the Ruling is, “Proposals should avoid creating unnecessary transaction costs for buyers and sellers in RPS procurement transactions and should encourage least-cost and best-fit procurement”.

Transaction costs for REC-only transactions would be minimal. Determining that a REC transaction is eligible for Category One requires only a verification that the facility producing the renewable energy and associated RECs has its first point of interconnection with a California balancing authority or a distribution system within a California balancing authority. In addition, the existing REC market that has begun to develop over the past several years has created efficient mechanisms for REC sales. The WREGIS accounting system is well established and charges minimal fees for system maintenance. Investor-owned utilities (IOUs) and energy service providers (ESPs) have developed efficient protocols for REC purchases. Brokers also offer to facilitate REC sales with competitive commission prices.

RECs from Category One resources can also encourage least-cost/best-fit procurement by providing a convenient and inexpensive way for retail sellers to fill gaps or unexpected shortfalls in their RPS procurement program. Including qualifying REC-only transactions in Category One provides the most flexibility to meet this need since there are no limits placed on Category One transactions.

#### **5. Onsite Renewable Energy Generation from Biogas Can Play a Significant Role in the Achievement of California’s RPS Goals**

Onsite renewable energy generation at the Sanitation Districts’ wastewater treatment plants and landfills has been a successful component of their power system for over 70 years. Over this time, the Sanitation Districts have extensively utilized their biogas resources to

produce onsite electricity. The use of this power has offset millions of megawatt hours of electricity that otherwise would have been purchased from the grid. Despite the Sanitation Districts' pioneering efforts and their commitment to making productive use of what would otherwise be wasted resources, the Sanitation Districts have three wastewater treatment plants that are flaring their biogas for lack of an economically viable option to produce electricity. The ability to sell the renewable attributes associated with renewable energy consumed onsite would help justify the addition of onsite renewable energy generation projects at these three facilities.

The Sanitation Districts' Valencia Water Reclamation Plant had a 500 kW internal combustion engine that was shut down in 2009 due to the cost and uncertainty of complying with new South Coast Air Quality Management District Rule 1110.2 requirements. A replacement project has been sought since that time, however developing an economically viable project has proven to be difficult. The Sanitation Districts have recently received a proposal for a biogas-fired generation project that would provide power for onsite usage. The proposal includes an option for the developer to retain the unbundled RECs at a price that is far below the current market value for bundled renewable attributes. This lower price reflects the uncertainty that currently exists surrounding long-term unbundled REC sales, and at this price, the project economics are marginal. The creation of a robust REC market that includes long-term price certainty would increase the value of the RECs, likely enhancing the economic benefits of the project to the point that it would certainly be constructed.

Significant potential exists for the expansion of onsite renewable generation at wastewater treatment plants across California. A 2009 Staff Paper<sup>3</sup> from the California Energy Commission estimated that the existing biogas-fueled combined heat and power (CHP) renewable electricity generation capacity at California wastewater treatment plants is 35 MW. This renewable onsite generation capacity is almost entirely used onsite at the wastewater treatment plants to offset their power purchases from the electricity grid. The Staff Paper also estimated that about 90 MW of additional wastewater CHP capacity is possible based on the anaerobic digestion of conventional wastewater solids. This potential onsite renewable energy generation is from biogas that is currently being flared, or from treatment plants that do not currently have the technology in place to produce biogas. In addition, the Staff Paper identified

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<sup>3</sup> Kulkarni, Pramod. 2009. *Combined Heat and Power Potential at California's Wastewater Treatment Plants*. California Energy Commission. CEC-200-2009-014-SF.

up to 450 MW of additional capacity that might be achieved through co-digestion of other high-strength organic wastes, such as food and dairy waste. The creation of a robust REC market for in-state renewable energy generation that is consumed on the site of the resource will enable California wastewater treatment plants to tap into this unmet potential, significantly expand biogas-powered onsite renewable generation capacity, and help California meet its RPS goals.

Restricting all unbundled REC transactions to Category Three would inhibit the potential expansion of onsite renewable energy resources at wastewater treatment plants due to the decreasing limits placed on Category Three transactions. This decreasing cap would reduce the future value of such transactions. Since wastewater treatment plants are owned by cities and other public entities that are not able to take financial risks with the public funds that are collected for their services, the uncertain future value of Category Three RECs would inhibit investment in renewable generation at these facilities. Inclusion of qualifying REC transactions in Category One would create a more robust market for REC transactions and would produce greater certainty about the sustained value of RECs. This is the certainty that cities and other public entities need to invest public funds in renewable energy projects and would help spur the development of renewable energy resources at cities and other public entities.

#### ***E. Issue 19***

The portfolio content limitations set forth in § 399.16(d) should go into effect on January 1, 2011. This helps provide a smooth transition between the 20 percent by 2010 RPS program and the new 33 percent RPS program instituted with SB 2(1x).

#### **IV. CONCLUSION**

SB 2 (1x) places products from eligible renewable resources connected to California balancing authorities at the transmission or distribution level in Category One of the portfolio content categories. The Sanitation Districts respectfully urge the Commission to examine the statutory language carefully and to conclude that transactions for renewable energy and RECs associated with renewable energy that are produced by an RPS-eligible generator that is interconnected with a California balancing authority at the transmission or distribution level are Category One transactions, regardless of whether they are sold as a bundle or separately. This conclusion is consistent with the intent of the legislation and will ensure that eligible renewable energy that is consumed onsite has a mechanism to be counted for compliance with the new RPS

goals. Recognizing that renewable self-generation within the areas of the California balancing authorities provides the same benefits to California as bundled transactions will stimulate even more investment in biogas facilities by public entities, to the benefit of the entities' customers and to California at large.

Respectfully submitted this 8th day of August, 2011 at San Francisco, California.

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By */s/ Mark McDannel*  
Mark McDannel

## VERIFICATION

I am the Supervising Engineer for the County Sanitation Districts of Los Angeles County, and am authorized to make this verification on its behalf. I have read the attached “Comments of the County Sanitation Districts of Los Angeles County on the Administrative Law Judge’s Ruling Requesting Comments on Implementation of New Portfolio Content Categories for the Renewables Portfolio Standard Program,” dated August 8, 2011. 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 8th day of August, 2011, at Whittier, California.

*/s/ Mark McDannel*

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Mark McDannel

Mark McDannel, P.E. BCEE  
Supervising Engineer

COUNTY SANITATION  
DISTRICTS OF  
LOS ANGELES COUNTY