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RENEWABLES PORTFOLIO STANDARD ELIGIBILITY

Draft Committee Guidebook

Fourth Edition

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CALIFORNIA ENERGY COMMISSION

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This guidebook was formally adopted by the Energy Commission on April 21, 2004, pursuant to former Public Utilities Code (PUC) Section 383.5, Subdivision (h), and subsequently revised pursuant to this authority and Public Resources Code (PRC) Section 25747, Subdivision (a), on May 19, 2004; August 11, 2004; May 21, 2005; April 26, 2006; March 14, 2007; December 19, 2007 and December 15, 2010.

The requirements in this guidebook are based on applicable law, the Renewables Portfolio Standard Decision on Phase 1 Implementation Issues (Publication Number CEC-500-03-123F), the Renewables Portfolio Standard Decision on Phase 2 Implementation Issues (Publication Number CEC-500-03-049F), staff analysis, advice from the Energy Commission's technical support contractor, and public input.

ABSTRACT

The *Renewables Portfolio Standard Eligibility Guidebook* describes the eligibility requirements and process for certifying renewable resources as eligible for California's Renewables Portfolio Standard (RPS) and describes the Energy Commission's accounting system to verify compliance with the RPS. California's ~~Renewables Portfolio Standard~~ (RPS) has a goal of obtaining 20 percent of the state's electricity from renewable resources by 2010. This ~~Guidebook~~guidebook outlines eligibility and legal requirements, describes reporting requirements and includes necessary forms and instructions for program participants. This ~~Guidebook~~guidebook also describes the Energy Commission's system for tracking and verifying compliance with the RPS.

Keywords: Biodiesel, biogas, biomass, biomethane, certificates, certification, conduit hydroelectric, digester gas, electrolysis, eligibility, fuel cell, gasification, geothermal, hydrogen, landfill gas, multi-fuel, municipal solid waste, ocean wave, photovoltaic, pipeline biomethane, power purchase agreement, Qualified Reporting Entity, RECs, renewable energy, renewable energy credits, Renewables Portfolio Standard, repowered, retail sales, small hydroelectric, Self-Generation Incentive Program, solar thermal, supplemental energy payments, tradable renewable energy ~~certificates~~credits, TRECs, wind, Western Renewable Energy Generation Information System, WREGIS, WREGIS Certificates

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Note: New text is indicated by a single underline, and deleted text is indicated with a single strikeout. Moved text is indicated by a double strikeout where the text was previously located, and by a double underline at its new location. See examples below:

New text. ~~Deleted text.~~ ~~Text moved from this location.~~ Text moved to this location.

I. Introduction

The California Energy Commission (Energy Commission) developed this ~~Guidebook~~ guidebook to implement and administer its responsibilities under California's Renewables Portfolio Standard (RPS) under Senate Bill 1038,¹ Senate Bill 1078,² Senate Bill 1250,³ and Senate Bill 107.⁴ These laws require retail sellers of electricity to increase the amount of renewable energy they procure each year by at least 1 percent until 20 percent of their retail sales are served with renewable energy by December 31, 2010. Under these laws, the Energy Commission is required to certify eligible renewable energy resources that may be used by retail sellers of electricity to satisfy their RPS procurement requirements, develop an accounting system to verify a retail seller's compliance with the RPS, and award supplemental energy payments (SEPs) to cover the above-market cost of procuring eligible renewable energy resources. ~~Senate Bill 1036,⁵ passed in October 2007, repeals the provisions for awarding SEPs and requires the Energy Commission to terminate production incentives awarded as of January 1, 2002, unless the facility began generating electricity by January 1, 2007. SB 1036 also requires the Energy Commission to transfer remaining unencumbered funds to the retail sellers~~

1 SB 1038, Chapter 515, Statutes of 2002. The pertinent provisions of SB 1038 were formerly codified in Public Utilities Code Sections 383.5 and 445, but are now codified in Public Resources Code Sections 25740 through 25751 as a result of Senate Bill 183 (Chapter 666, Statutes of 2003).

2 SB 1078, Chapter 516, Statutes of 2002. The pertinent provisions of SB 1078 are codified in Public Utilities Code Section 399.11 through 399.15. This law was subsequently amended to add Sections 399.16, 399.17, and 399.12.5 under Senate Bill 67 (Chapter 731, Statutes of 2003), Assembly Bill 200 (Chapter 5, Statutes of 2005), and Assembly Bill 2189 (Chapter 747, Statutes of 2006), respectively.

3 SB 1250, Chapter 512, Statutes of 2006. SB 1250 amends pertinent provisions in Public Resources Code Sections 25740 through 25751.

4 SB 107, Chapter 464, Statutes of 2006. SB 107 amends pertinent provisions in Public Resources Code Sections 25740 through 25751 and Public Utilities Code Sections 399.11 through 399.16.

~~5 SB 1036, Chapter 685, Statutes of 2007. SB 1036 amends pertinent provisions in Public Resources Code Sections 25740 through 25751.~~

by March 2008. This Guidebook describes the requirements and process for certifying eligible renewable energy resources for the RPS and describes how the Energy Commission will track and verify compliance with the RPS.

This Guidebook establishes efficient and effective processes to encourage participation in California's RPS and assure program credibility to benefit stakeholders, regulators, and consumers. Although this Guidebook addresses the Energy Commission's role in implementing the RPS, the Energy Commission recognizes that the California Public Utilities Commission (CPUC) also has a key RPS implementation role.

The enabling legislation established specific roles for the Energy Commission and the CPUC and directs the two agencies to work together to implement the RPS. Although the law assigns lead roles for specific implementation efforts to each agency, the roles of the two agencies are interrelated. The Energy Commission is responsible for certifying eligible renewable resources and tracking the procurement of such resources to ensure compliance with the RPS. The CPUC is responsible for establishing targets for the amount of eligible renewable energy resources that retail sellers of electricity must procure to comply with the RPS and verifies compliance with the requirements.⁶ Retail sellers include investor-owned utilities (IOUs), electric service providers (ESPs), and community choice aggregators (CCAs).

In February 2003, the CPUC issued a ruling formalizing collaboration on RPS issues, and in March 2003, the Energy Commission adopted a reciprocal agreement. The Energy Commission subsequently developed this ~~Guidebook~~guidebook collaboratively with the CPUC.

While this ~~Guidebook~~ reflects current requirements, the Energy Commission recognizes that it may need to periodically revise program guidelines to reflect market, regulatory, and legislative developments as well as incorporate the lessons learned from experience implementing the RPS. For example, various laws enacted since the original adoption of this guidebook have triggered the need for guidebook revisions.

- Senate Bill 1036,⁷ passed in October 2007, repeals the provisions for awarding SEPs and requires the Energy Commission to terminate production incentives awarded as of January 1, 2002, unless the facility began generating electricity by January 1, 2007.

⁶ The enabling legislation also required the CPUC to adopt rules for flexible compliance. These rules permit a retail seller load-serving entity (LSE) to apply excess procurement to subsequent years or to make up inadequate procurement in one year within no more than the following three years. LSEs are also subject to penalties for failure to comply with the RPS. SB 107 added that flexible rules for compliance apply to all years, including years before and after a retail seller meets its 20 percent RPS target. This modification by SB 107 was implemented by the CPUC in Decision 08-02-008, February 14, 2008.

⁷ SB 1036, Chapter 685, Statutes of 2007. SB 1036 amends pertinent provisions in Public Resources Code Sections 25740 through 25751.

SB 1036 also requires the Energy Commission to transfer remaining unencumbered funds to the retail sellers by March 2008. The Energy Commission transferred the remaining unencumbered SEP funds to the retail sellers in March 2008. To implement SB 1036, the CPUC adopted Resolution E-4160 on April 10, 2008 and E-4199 on March 12, 2009. Resolution E-4199 developed the Above-Market Price Referent Fund (Above MPR Fund or AMF) program and established eligibility criteria and guidelines for approving requests for costs above the market-price referent (MPR) of renewable energy contracts negotiated through a competitive solicitation. The resolution also set a limitation on total costs expended above the AMF for Bear Valley Electric Service,⁸ Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE), and requires the latter three large investor-owned utilities (IOUs) to submit a confidential AMF calculator to the CPUC to determine the amount of remaining funds. Each of the three large IOUs submitted AMF calculators to the CPUC, and in May 2009 the CPUC determined that there were no remaining AMF balances for these utilities. Resolution E-4160 directed the IOUs to amortize funds transferred from the Energy Commission and make other adjustments to their rate components.

Because no AMF funds remain for the large IOUs, they are no longer obligated to procure renewables priced above the Market Price Referent (MPR), although they may do so voluntarily. According to Public Utilities Code Section 399.15 (d)(3):

(3) If the cost limitation for an electrical corporation is insufficient to support the total costs expended above the market prices determined in subdivision (c) for the procurement of eligible renewable energy resources satisfying the conditions of paragraph (2), the commission [CPUC] shall allow the electrical corporation to limit its procurement to the quantity of eligible renewable energy resources that can be procured at or below the market prices established in subdivision (c).

- Assembly Bill 1969⁹ added Public Utilities Code (PUC) Section 399.20, authorizing tariffs and standard contracts for the purchase of eligible renewable generation from public water and wastewater customers. In July 2007, the CPUC implemented AB 1969, creating a feed-in tariff (FIT) up to 1.5 MW, and expanded the FIT to cover non-water and wastewater customers in the PG&E and SCE territories.¹⁰ All generation procured under this program counts towards the RPS target.

8 A division of Golden State Water Company.

9 Assembly Bill 1969 (Chapter 731, Statutes of 2006).

10 CPUC Decision 07-07-027.

- Assembly Bill 3048¹¹ and Senate Bill 380¹² were passed into law in 2008. AB 3048 addresses the RPS eligibility of existing renewable generation owned by or under contract with a local publicly-owned electric utility (POU), and SB 380 expands feed-in tariffs for small renewable generators in the service territories of the large IOUs and raised the program cap from 250 MW to 500 MW.
- Assembly Bill 1351¹³ was signed into law in 2009. AB 1351 requires that hydroelectric facilities must be owned by a retail seller or publicly owned electric utility for their incremental generation due to eligible efficiency improvements to count as eligible for the RPS. AB 1351 also expands eligibility for such facilities located outside California.
- Assembly Bill 920,¹⁴ signed into law in 2009, requires electric utilities to develop a tariff to compensate wind and solar net energy metering customers for electricity they produce in excess of their on-site load at the end of a 12-month true-up period (net surplus generation). An eligible customer-generator with a facility no more than 1 megawatt in capacity that elects to participate in the tariff will be compensated by the utility for the facility's net surplus generation at a rate to be determined by the CPUC. The utility may count this surplus generation toward its RPS obligation.
- Senate Bill 32,¹⁵ signed into law in 2009, further modifies Public Utilities Code 399.20. It expands the eligible project size of the feed-in tariff from 1.5 MW to 3 MW in size, raises the program cap from 500 MW to 750 MW, and requires the municipal utilities to comply with this statute. SB 32 must be implemented through a CPUC proceeding before projects can utilize the new tariff.
- Senate Bill 1247,¹⁶ signed into law on September 29, 2010, as an urgency bill, modifies Public Utilities Code Section 399.12.5. SB 1247 ensures that for a hydroelectric

11 AB 3048, Chapter 558, Statutes of 2008. AB 3048 amends pertinent provisions in Public Resources Code 25741 and 25742 and Public Utilities Code Sections 399.12 and 399.12.5.

12 SB 380, Chapter 544, Statutes of 2008. SB 380 amends Section 399.20 of the Public Utilities Code.

13 AB 1351, Chapter 525, Statutes of 2009. AB 1351 amends Section 399.12.5 of the Public Utilities Code.

14 AB 920, Chapter 376, Statutes of 2009. AB 920 amends Section 2827 of the Public Utilities Code. The CPUC must adopt a net surplus electricity compensation rate before this law can be further implemented.

15 SB 32, Chapter 328, Statutes of 2009. SB 32 amends section 399.20 of, and adds section 387.6 to, the Public Utilities Code.

16 SB 1247, Chapter 488, Statutes of 2010. SB 1247 amends Section 399.12.5 of the Public Utilities Code.

generation facility certified as of January 1, 2010, its RPS eligibility will not be revoked if the facility causes a change in the volume or timing of streamflow that is required by license conditions approved pursuant to the Federal Power Act (Chapter 12 (commencing with Section 791a) of Title 16 of the United States Code) on or after January 1, 2010.

- Assembly Bill 1954 (statutes of 2010, chapter 460) directs the Energy Commission to set the de minimis quantity of nonrenewable fuels that may be used for each renewable technology at 2 percent, but permits the Energy Commission to adjust this de minimis quantity to a maximum of 5 percent for individual facilities if certain conditions are satisfied as specified in AB 1954.

A. Related ReportsGuidebooks

This ~~Guidebook~~guidebook is one of several guidebooks the Energy Commission has adopted to implement and administer the various program elements of its Renewable Energy Program. The Energy Commission's *Overall Program Guidebook for the Renewable Energy Program (Overall Program Guidebook)* describes how the Renewable Energy Program will be administered and includes information and requirements that apply overall to the Renewable Energy Program and the program elements. To qualify for certification as a renewable energy resource eligible for the RPS, an applicant must satisfy the requirements specified in this *Renewables Portfolio Standard Eligibility Guidebook* and the *Overall Program Guidebook*.

Please note that the Energy Commission provides production incentive payments to eligible existing renewable resources, but ~~the facilities they~~ must also be eligible for the RPS. For more information, refer to the *Existing Renewable Facilities Program Guidebook*.¹⁷ For general information on the process of creating, appealing, and implementing RPS guidelines, please refer to the *Overall Program Guidebook*.¹⁸ Program guidebooks are available on-line at the Energy Commission's website at: <http://www.energy.ca.gov>.

B. Outstanding Issues

There are several outstanding issues that could affect these guidelines. Brief discussions follow regarding the major issues facing the Energy Commission and the CPUC as the RPS is implemented. The Energy Commission will continue to address these issues collaboratively with the CPUC.

¹⁷ California Energy Commission, CEC-300-2009-001-CMF, January 2009.

¹⁸ www.energy.ca.gov/2007publications/CEC-300-2007-003/CEC-300-2007-003-CMF.PDF
California Energy Commission, CEC-300-2010-008-CDT, December 2010.

1. Renewable Energy Credits or Certificates (RECs) Trading

Renewable Energy ~~Credits~~Certificates (also termed “renewable energy ~~certificates~~credits” or RECs) represent renewable and environmental attributes associated with renewable energy production. Public Utilities Code Section 399.12, Subdivision (g)(1), defines a REC for California RPS purposes to mean a certificate of proof, issued through the accounting system established by the Energy Commission under Public Utilities Code Section 399.13, that one unit of electricity was generated and delivered by an eligible renewable energy resource.

Public Utilities Code Section 399.12, Subdivision (g)(2), specifies that a REC includes all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource, except for an emissions reduction credit issued under Section 40709 of the Health and Safety Code and any credits or payments associated with the reduction of solid waste and treatment benefits created by the use of biomass or biogas fuels.

In addition, Public Utilities Code Section 399.12, Subdivision (g)(3), specifies that no electricity generated by an eligible renewable energy resource attributable to the use of nonrenewable fuels, beyond a de ~~minimis~~minimum quantity as determined by the Energy Commission, shall result in the creation of a REC.

In August 2008, the CPUC adopted a decision defining a renewable energy credit (REC) for purposes of the RPS as one megawatt-hour of renewable energy generated and delivered by an eligible renewable energy resource.¹⁹ The decision also clarified what attributes associated with renewable energy generation must be included in a REC for compliance with the RPS.

RECs and energy procured together as a “bundled” commodity are eligible for the California RPS. RECs sold separately from the underlying energy are termed ~~“unbundled tradable”~~ and are not currently eligible toward California RPS procurement requirements. The term “tradable RECs” refers to a concept wherein the renewable attributes may be procured unbundled from the renewable generator as a separate commodity from the underlying energy and then can be subsequently sold to other buyers. In place of the term “REC,” the Energy Commission’s generation tracking system, the Western Renewable Energy Generation Information System (WREGIS), uses the term “WREGIS Certificate.”

The law as amended by Senate Bill 107, however, authorizes the CPUC to rule that tradable RECs (TRECs) associated with energy produced from RPS-eligible resources qualify toward RPS procurement requirements ~~in the future, once certain conditions have been met. Tradable RECs may be allowed for RPS compliance after the CPUC and Energy Commission conclude that the tracking system developed by the Energy Commission is operational, is capable of independently verifying delivery of renewable~~

19 CPUC Decision 08-08-028, August 21, 2008.

energy to a retail seller, and can assure that RECs are not double counted by any seller within the Western Electricity Coordinating Council (WECC). The CPUC and the Energy Commission adopted such a conclusion in November 2008 and December 2008, respectively, in the Joint Commission Staff Report on Tracking System Operational Determination.²⁰

~~Also, the~~ The CPUC may limit the amount of tradable TRECs that a retail seller may procure to satisfy its RPS requirements. The CPUC is addressing RECs and other RPS implementation issues in its Rulemaking 06-02-012²¹ and Rulemaking 08-08-009²² and subsequent RPS Rulemakings. Since October 2008, the CPUC has released three proposed decisions authorizing TRECs for purposes of the RPS,²³ with the third proposed decision being adopted in March 2010.²⁴ Following several petitions to modify the decision, however, the CPUC stayed its TRECs decision on May 6, 2010.²⁵

A preliminary discussion of eligibility requirements and tracking requirements for tradable RECs is provided in this ~~Guidebook~~ guidebook in anticipation of their possible use for California RPS compliance.

~~2. Determining How Customer-Side Renewable Distributed Generation Resources Fit Into the RPS~~

The passage of SB 32 and AB 920 allows the Energy Commission to expand the RPS eligibility of distributed generation for some facilities that have received ratepayer-funded incentives in the past or are participating in a net metering tariff. Senate Bill 32 creates a new tariff for facilities up to 3 MW and provides for generation from such facilities to be RPS eligible. Facilities that participated in an SB 32 Tariff and have received ratepayer-funded incentives may now be RPS eligible if it has been demonstrated to the CPUC, or applicable authority, that the facility has provided sufficient benefit to the ratepayers or has repaid the funds it has received, and it enters

²⁰ CPUC, Resolution E-4178, November 2008, and California Energy Commission, CEC-300-2008-001-SF, December 2008.

²¹ The CPUC's Assigned Commissioner's Ruling on April 3, 2009, transferred consideration of certain issues from Rulemaking 06-02-012 to Rulemaking 08-08-009.

²² On August 26, 2008, the CPUC issued Rulemaking 08-08-009, which is a successor to and thereby closed Rulemaking 06-05-027.

²³ The CPUC released proposed decisions on tradable RECs for RPS on October 29, 2008, March 26, 2009, and December 23, 2009.

²⁴ CPUC Decision 10-03-021, March 11, 2010.

²⁵ The CPUC Decision 10-05-018 issued on May 6, 2010, stayed Decision 10-03-021 pending resolution of the petitions of parties for its modification. On August 25, the CPUC issued a proposed decision to modify Decision 10-03-021. The CPUC issued a revision to its proposed TRECs decision on October 14, 2010. As of this writing, the CPUC has not adopted Decision 10-03-021.

into a new tariff or standard contract after exiting its net-metering tariff, if applicable. Once the CPUC has provided guidance for reimbursement of ratepayer funds or on how it will determine that the facility has provided sufficient benefit to the ratepayers, the Energy Commission will address the eligibility of these facilities in a future revision to this guidebook.

Assembly Bill 920 requires electric utilities to compensate wind and solar net energy metering customers for electricity they produce in excess of their on-site load at the end of a 12-month true-up period (net surplus generation). The utility will pay an eligible customer-generator for the facility's net surplus at a rate that will be determined by the CPUC. Although AB 920 allows for the utility to count this surplus generation toward its RPS obligation, the certification of these facilities will be addressed in future revisions to this guidebook and after the CPUC has adopted rules for net surplus metering compensation. RPS eligibility will be awarded to these facilities in accordance with the calendar year(s) it participates in the program

The law includes solar energy as an eligible resource for the RPS. The CPUC Rulemaking 06-03-004 ~~has been addressing~~ addressed if and how output from renewable distributed generation may be counted toward a retail seller's RPS obligations. ~~In January 2007 the CPUC adopted~~ issued a final decision²⁶ (D.07-01-018) ~~on January 11, 2007,~~ that allows distributed generation system owners to retain 100 percent of the RECs associated with the distributed generation energy produced. ~~Similarly~~ As in that decision, the Energy Commission does not require participants of its New Solar Homes Partnership program to relinquish their claims of RECs or to transfer ownership of any RECs to the Energy Commission or any other entity as a condition of receiving New Solar Homes Partnership program funding. This ~~Guidebook~~ guidebook describes distributed generation issues in the section on eligibility requirements.

Other than the exception noted below, the Energy Commission will certify distributed generation facilities as RPS-eligible only if and when the CPUC authorizes applying tradable RECs toward RPS obligations.

The Energy Commission will certify facilities that might otherwise be considered distributed generation facilities if some or all of the energy produced is sold through a standard contract/tariff executed pursuant to Public Utilities Code 399.20, as implemented through the CPUC Decision 07-07-027 (R.06.05.027).²⁷ Similarly, the Energy Commission may certify a facility if the energy generated is sold through a comparable

²⁶ CPUC Decision 07-01-018, January 11, 2007.

²⁷ CPUC Decision 07-07-027 adopts tariffs and standard contracts for water, wastewater, and other customers to sell electricity generated from RPS-eligible renewable resources that are up to 1.5 megawatts in size to electrical corporations, for a cumulative statewide total of 250 megawatts.

standard contract/tariff approved by a local publicly owned electric utility or if the facility is owned by a utility and meets other requirements.

2. Defining fuel-specific issues:

~~The Energy Commission anticipates that new issues may arise that will need to be addressed as implementation continues.~~

~~The Energy Commission recognizes that some parties may be interested in using hydrogen fuel to generate electricity but recommends deferring the development of implementation guidelines for such facilities. The Energy Commission recommends, however, that only eligible RPS fuel stock may be used to produce hydrogen for use at an RPS-eligible facility.~~

- ~~Multiple fuel technologies:~~

~~A multiple fuel facility that uses a combination of fuels that includes renewable fuels or resources and fossil fuel may qualify for the RPS under the scenarios described in Section II (B) (6), with the exception of facilities that meet the criteria described in “Fossil Fuel Use at Qualifying Small Power Production Facilities.”~~

~~The Energy Commission may adopt mechanisms to account for the renewable generation from multi-fuel technologies as appropriate. For example, the Energy Commission has developed a method to account for the amount of RPS-eligible energy generated from a multi-fuel technology that uses a mix of natural gas and biogas injected into a gas transportation pipeline. Applicants seeking RPS certification or pre-certification for multi-fuel facilities must propose a method to the Energy Commission on how the generation from the renewable fuel will be measured. See Section II.6 Facilities Using Multiple Fuels.~~

[The information in this subsection has been moved to the subsection titled, *Renewable Facilities Using Multiple Energy Resources*.]

3. Storage

The only energy storage technologies currently eligible for the RPS are pumped-storage hydroelectric and fuel cells using a renewable fuel. (See the sections on eligibility of hydroelectric and fuel cell facilities, respectively.) The Energy Commission recognizes the importance of storage technologies for renewable resources, and anticipates that new issues may arise or new technologies may develop (such as compressed air storage) that will need to be addressed in future guidebook revisions.

Assembly Bill 2514,²⁸ passed in 2010, requires the CPUC to determine appropriate targets, if any, for each load-serving entity to “procure viable and cost-effective energy storage systems” by December 31, 2015, with a second target to be achieved by December 31, 2020.

²⁸ Assembly Bill 2514, Statutes of 2010, Chapter 469.

4. 33 Percent RPS by 2020 Implementation

On September 15, 2009, Governor Schwarzenegger signed Executive Order S-21-09 directing the California Air Resources Board (ARB) to enact regulations that will achieve the goal of having 33 percent of electricity used in California come from renewable sources by 2020. Under Executive Order S-21-09, the ARB will work with the Energy Commission and the CPUC to ensure that regulations adopted under authority of AB 32 encourage the creation and use of renewable energy sources built upon the RPS Program and will regulate all California load-serving entities, including IOUs, POU's, ESPs, and CCAs. The ARB adopted the Renewable Electricity Standard (RES) regulations on September 23, 2010, at which time the ARB directed its staff to consider amending the RES to harmonize with the CPUC's anticipated decision to allow the use of renewable energy credits, including the use of TRECs, for the RPS.

The RES regulations set forth compliance intervals for achieving the 33 percent target with an obligation of procuring RECs to meet 20 percent of retail sales by 2014, 24 percent by 2017, 28 percent by 2019, and 33 percent by 2020 and annually thereafter. A partial exemption from the RES is provided for regulated parties with annual retail sales less than 200,000 MWh averaged during 2007 through 2009. Compliance with the RES can only be met with RECs acquired from a facility eligible for the RPS program, a facility that meets the RPS requirements (excluding delivery requirements) as determined by the ARB, or a resource that meets the definition of an RES Qualifying POU resource. The regulations provide, with some exceptions, for the RES eligibility of renewable energy resources that are owned by or under contract with a POU before September 15, 2009, to count toward the POU's RES obligations if the generation was both approved by the POU's Governing Board and reported to the Energy Commission as contributing towards the POU's RPS eligible generation on or after January 1, 2003, and before September 15, 2009. The regulations require RECs to be retired in WREGIS, including those retired for the RPS, within three years from the date of issuance for compliance with the RES.

ARB staff has proposed several modifications to the RES regulations, most notably to: 1) clarify that the RES does not modify any provisions of the RPS; 2) to allow regulated parties that exceed their RPS requirements for 2010 and 2011 to carry over their excess procurement to the RES; 3) to modify the enforcement provisions to avoid dual penalties by the ARB and CPUC for potential violations; and 4) to specify how violations will be assessed. The ARB is expected to issue the modified regulations for public comment and finalize the regulations by the end of 2010. The Energy Commission will continue to work with the ARB and the CPUC to define each agency's roles in implementing the RES.

C. Guidebook Organization

This ~~Guidebook~~guidebook is organized as follows:

I. Introduction

II. Eligibility Requirements

III. Certification Process

IV. ~~RPS Generation~~Tracking, Reporting and Verification System

V. Publicly Owned Electric Utilities

Appendix A. ~~Forms~~WREGIS Reporting Instructions

Appendix B. ~~List of Acronyms~~Forms

Appendix C. ~~Summary Table of RPS Reporting Requirements~~List of Acronyms

Appendix D. Summary Table of RPS Reporting Requirements

Section II covers eligibility requirements for generators interested in producing electricity that can be procured by retail sellers to comply with the RPS. For this ~~Guidebook~~guidebook, “retail sellers” is defined in the *Overall Program Guidebook* and includes California’s three largest IOUs (~~Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E),~~ multijurisdictional IOUs²⁹ such as PacifiCorp and Sierra Pacific Power Company (~~electrical corporations with 60,000 or fewer customer accounts in California that also serve retail end-use customers outside California under Public Utilities Code Section 399.17,~~ small IOUs such as Mountain Utilities and Bear Valley Electric Service (a division of Golden State Water Company), and ESPs and CCAs.

Section III discusses the Energy Commission’s certification process, including the following:

- Pre-certification application process for developers of renewable facilities that are not on-line, ~~with some exceptions, but~~ who are seeking a preliminary determination that their facility will be eligible for the RPS.
- Certification application process for generators with renewable facilities that are on-line who are interested in serving energy to meet an RPS obligation.
- Process to amend certification or pre-certification.

Section IV discusses the data submission requirements for ~~the interim~~a generation tracking and verification system and WREGIS that will be used to verify retail sellers’

²⁹ Multijurisdictional IOUs are electrical corporations with 60,000 or fewer customer accounts in California that also serve retail end-use customers outside California as provided in Public Utilities Code Section 399.17.

compliance with the RPS and to verify that generation is counted only once in California or any other state.

Section V addresses participation of local publicly owned electric utilities in the RPS.

II. Eligibility Requirements

This section describes eligibility requirements for the RPS, including eligibility for out-of-state facilities. In general, a facility is eligible if it uses an eligible renewable resource or fuel, satisfies resource-specific criteria, and is either located within the state or satisfies applicable requirements for out-of-state and out-of-country facilities.

The generation from facilities certified as RPS eligible may qualify for funding under the Energy Commission's Existing Renewable Facilities Program. To receive funding, eligible facilities must satisfy the requirements specified in the Energy Commission's *Existing Renewable Facilities Program Guidebook*.

A. Renewables Portfolio Standard Targets

The CPUC sets annual procurement targets (APTs) for the amount of RPS-eligible energy each retail seller must procure. Public Utilities Code Section 399.15, Subdivision (b)(1), requires the retail sellers to annually increase their renewable procurement by at least 1 percent of retail sales per year so that 20 percent of their retail sales is procured from RPS-eligible resources not later than December 31, 2010. Retail sellers must maintain a minimum of 20 percent renewables in their portfolios after 2010. The CPUC sets an "incremental procurement target" (IPT) for this 1 percent or greater annual increase and sets the APT for total annual RPS-eligible procurement requirements. The first year in which PG&E, SCE, and SDG&E were subject to an APT and IPT was 2004.³⁰ ~~The first year ESPs were subject to an APT was 2006.~~³¹ On May 29, 2008, the CPUC issued a decision that completed the incorporation of the small and multijurisdictional utilities (SMJUs)³² into the rules governing the RPS Program.³³

~~30 CPUC Decision 06-10-050, Rulemaking 06-05-027, Opinion on Reporting and Compliance Methodology for Renewables Portfolio Standard Program, October 19, 2006.~~

~~31 Public Utilities Code Section 399.12, Subdivision (h)(3). The CPUC is setting procurement targets for ESPs, CCAs, and multi-jurisdictional utilities. The CPUC defined targets for these entities in the Interim Opinion, Decision 06-10-019, Rulemaking 06-02-012, October 5, 2006. On July 26, 2007, Decision 06-10-019 was modified by Decision 07-07-025, Rulemaking 06-02-012, which changed the formula for calculating the baseline amounts of renewable energy for ESPs to be consistent with the formula adopted in Decision 07-03-046 for IOUs.~~

32 The SMJUs include Mountain Utilities and Bear Valley Electric Service, and PacifiCorp and Sierra Pacific Power Company, respectively.

33 With Decision 08-05-029, the CPUC determined that the RPS annual procurement requirements, reporting requirements, and flexible compliance rules apply to the SMJUs in the same way as to other load-serving entities in the RPS program. However, noting the special rules for MJUs set by the Legislature for calculating their RPS procurement targets and reviewing their planning procedures, this decision provides an extended period for SMJUs during which they may defer their annual procurement obligations.

That decision confirmed that the RPS procurement obligations of all electrical corporations, including SMJUs, commenced January 1, 2004. The first year ESPs were subject to an APT was 2006 and the first year the SMJUs had an APT was 2007.³⁴

CPUC Decision 06-10-050 (Rulemaking 06-05-027) determined that “any RPS-eligible procurement may be used to satisfy any portion of the APT.”³⁵ Further, any RPS-eligible procurement may be used to satisfy the IPT.³⁶ When a retail seller procures energy and the associated renewable and environmental attributes from a facility that is RPS-certified, then the procurement may count toward the retail seller’s APT, including its IPT, assuming the transaction meets applicable delivery requirements and other eligibility criteria.³⁷ The Energy Commission verifies RPS procurement, and the CPUC determines whether a retail seller is in compliance with its procurement targets, consistent with CPUC rules for flexible compliance.³⁸

The Energy Commission’s RPS certification identifies if a facility is RPS eligible. The methodology to account for and verify RPS-eligible procurement is discussed in this ~~Guidebook~~guidebook under Section IV, ~~RPS Generation Tracking, Reporting and Verification System.~~

34 Public Utilities Code Section 399.12, Subdivision (h)(3). The CPUC defined targets for these entities in the Interim Opinion, Decision 06-10-019, Rulemaking 06-02-012, October 5, 2006. On July 26, 2007, Decision 06-10-019 was modified by Decision 07-07-025, which changed the formula for calculating the baseline amounts of renewable energy for ESPs to be consistent with the formula adopted in Decision 07-03-046 for IOUs. The CPUC set procurement targets for ESPs and CCAs in Decision 06-10-019, and multijurisdictional utilities in Decision 08-05-029 on October 19, 2006.

35 CPUC Decision 06-10-050, as modified by Decisions 07-03-046 and 09-11-014. Rulemaking 06-05-027.

36 The CPUC is refining its definitions and compliance rules through Rulemaking 06-02-012 and Rulemaking 08-08-009. ~~R-06-05-027.~~

37 Under Public Utilities Code Section 399.16, Subdivision (a)(5) and (a)(6), RECs shall not be created for electricity generated under contract with a retail seller or a local publicly owned electric utility executed before January 1, 2005, unless the contract contains explicit terms and conditions specifying the ownership or disposition of those credits, and shall not be created for contracts with ~~Q~~qualifying ~~F~~facilities under the federal Public Utility Regulatory Policies Act executed after January 1, 2005. Deliveries under those contracts shall be tracked through WREGIS and automatically retired as counting toward the retail seller’s baseline for pre-January 1, 2005 contracts, and counting toward the retail seller’s RPS obligations for qualifying facility contracts executed after January 1, 2005. This is discussed in the section on “Eligibility of Tradable Renewable Energy Certificates or Credits.”

38 Public Utilities Code Section 399.14 (a)(2)(C).

B. Eligibility for the Renewables Portfolio Standard

The Energy Commission has determined that it is appropriate to define eligible renewable energy resources by renewable resource or fuel, rather than by the specific technology used. For certain eligible renewable energy resources, however, the law contains specific requirements, and the Energy Commission must consider both the resource or fuel and the technology to determine RPS eligibility.

To qualify as eligible for California's RPS, a generation facility must use one or more of the following renewable resources or fuels (see the *Overall Program Guidebook* for full definitions):

- Biodiesel
- Biogas (including pipeline biomethane)
- Biomass
- Conduit hydroelectric
- Digester gas
- Fuel cells using renewable fuels
- Geothermal
- Hydroelectric incremental generation from efficiency improvements
- Landfill gas
- Municipal solid waste
- Ocean wave, ocean thermal, and tidal current
- Photovoltaic
- Small hydroelectric (30 megawatts or less)
- Solar thermal electric
- Wind

Table 1 summarizes the requirements for a facility to qualify for the RPS and provides information on the appropriate forms and additional required information to submit for facilities seeking RPS certification or pre-certification. The table does not reflect any additional requirements that may apply to facilities located out-of-state or out-of-country.

Facilities using biodiesel, biogas, biomass, small hydroelectric or conduit hydroelectric ~~or~~ municipal solid waste (MSW) resources, or fuel cell technologies are subject to the additional resource or fuel-specific requirements described below. Also addressed below are requirements for photovoltaic renewable distributed generation facilities, as well as those for multi-fuel and other facilities that use a combination of fuels, including those that operate in part by using fossil fuels or other nonrenewable fuels ~~fossil fuels, and~~ facilities located out-of-state or out-of-country.

Please note that, in some cases, the criteria for RPS eligibility depend on the date that a facility begins commercial operations. If a facility shuts down and later recommences operations, it is subject to the eligibility requirements that apply to the original operation date. If a facility is repowered as provided in this ~~Guidebook~~ guidebook, however, its

commercial operation date may be considered its repowering date. Alternatively, a facility that began commercial operations before September 26, 1996, and later repowered as provided in this ~~Guidebook~~guidebook, may opt to use the date the facility began commercial operations if the facility is also seeking funding under the Energy Commission's Existing Renewable Facilities Program. Please see the *Existing Renewable Facilities Program Guidebook* for eligibility information. These facilities must also be RPS certified.

All facilities must be located in California or satisfy the out-of-state or out-of-country eligibility requirements discussed later in this guidebook. As of January 1, 2009, the generation of all operational facilities must be tracked in WREGIS according to the provisions and exceptions described in this guidebook for the generation to be counted as an RPS-eligible resource for RPS compliance.

Table 1: Summary of Renewables Portfolio Standard Eligibility and Additional Required Information and Forms

NOTE: Either a CEC-RPS-1A (certification) form or CEC-RPS-1B (pre-certification) forms must be submitted for all eligible resources, in addition to supplemental forms or information, as applicable. All forms can be found in Appendix B.

Resource	RPS Eligibility	Additional Required Information	Supplemental Form
Biodiesel (derived from biomass or MSW Conversion)	Yes, with fuel restrictions	Submit additional required information regarding the feedstock used to derive biodiesel. Refer to Section III.	CEC-RPS-1A/B:S1 and 1A/B:S5
Biogas Injected into Natural Gas Pipeline (including pipeline biomethane)	Yes, with fuel restrictions	Submit additional required information regarding the feedstock used to derive biogas, and <u>delivery of the biogas if applicable.</u> Refer to Sections II and III.	CEC-RPS-1A/B:S1 and 1A/B:S5
Biomass	Yes, with fuel restrictions	Yes, refer to Section III	CEC-RPS-1A/B:S1 and 1A/B:S5
Conduit Hydroelectric	Yes, with restrictions	Yes, refer to Section III	CEC-RPS-1A/B:S2
Digester Gas	Yes	N/A	CEC-RPS-1A/B:S1 and 1A/B:S5
Fuel Cell	Yes, only if renewable <u>with fuel restrictions</u> is used	Submit material required for the feedstock or technology used for generation, if applicable. Refer to Section III.	CEC-RPS-1A/B:S1 and 1A/B:S5 Submit the supplemental form corresponding to the feedstock or technology used for generation, if applicable.
Geothermal	Yes	N/A	N/A
Incremental Hydroelectric	Yes, with restrictions	Yes, refer to Section III	CEC-RPS-1A/B:S2
Landfill Gas	Yes	N/A	CEC-RPS-1A/B:S1

Resource	RPS Eligibility	Additional Required Information	Supplemental Form
			<u>and 1A/B:S5</u>
MSW Combustion	Yes, with restrictions	Yes, refer to Section III	CEC-RPS-1A/B:S1
MSW Conversion	Yes, with fuel restrictions	Yes, refer to Section III	CEC-RPS-1A/B:S1
Ocean Thermal	Yes	N/A	N/A
Ocean Wave	Yes	N/A	N/A
Photovoltaic	Yes	N/A	N/A
Small Hydroelectric	Yes, with restrictions	Yes, refer to Section III	CEC-RPS-1A/B:S2
Solar Thermal	Yes	N/A	N/A
Tidal Current	Yes	N/A	N/A
Wind	Yes	N/A	N/A
Characterization			
<u>Out-Of-State/</u> <u>Out-of-Country</u>	Yes, with restrictions	Yes, refer to Section III	CEC-RPS-1A/B:S3
Repowered	Yes, with restrictions	Yes, refer to Section III	N/A

Source: California Energy Commission

1. Biodiesel

The electricity produced from combusting biodiesel is eligible for the RPS if the biodiesel is derived from the following fuel sources and complies with the requirements for these fuel sources and multi-fuel technologies:

1. A biomass feedstock such as “agricultural crops and agricultural wastes and residues,” including but not limited to animal waste, remains and tallow, food waste, recycled cooking oil, and pure vegetable oil, and consistent with the applicable requirements for multi-fuel technologies, (~~Refer to the guidelines requirements for biomass eligibility and for multi-fuel technologies below.~~) or
2. An eligible “solid waste conversion” process using MSW and consistent with applicable requirements for multi-fuel technologies, (~~Refer to the guidelines requirements for MSW eligibility and for Multi-fuel technologies below.~~). ~~The facility must also be located in California or satisfy the out-of-state eligibility requirements discussed later in this Guidebook.~~

~~In addition to the certification or pre-certification application, applicants for biodiesel facilities must complete a supplemental application form.~~

When applying for RPS pre-certification or certification, the applicant must complete the biopower supplemental application form, CEC-RPS-1A/B:S1, and the supplemental attestation form, CEC-RPS-1A/B:S5, which can be found in Appendix B.

2. Biogas (including pipeline biomethane) ~~Injected into a Natural Gas Pipeline~~

~~RPS-eligible biogas is a (gas derived from RPS-eligible fuel including such as biomass, or digester gas, and/or landfill gas). Biogas may be converted to electricity in a RPS certified electric facility located at the fuel processing site or it may be transported to an RPS-eligible electric generating facility. If the biogas is used to generate electricity at the same site no information on the delivery of the biogas from the processor to the generator is required. If, however, the fuel is used to generate electricity at a different site, then the biogas must be delivered to the electric generating facility by one of the following methods:~~

1. Fuel container: The biogas is injected into a fuel container containing only biogas and then the container is transported to the generation site by a vehicle; or
2. Dedicated pipeline: The biogas is injected into a pipeline running from the fuel processing facility to the generation facility with no possibility of mixture with non-RPS-eligible gas; or
3. Natural gas pipeline: The biogas is conditioned to become pipeline biomethane, injected into a natural gas pipeline, and withdrawn at the designated RPS-eligible electric generation facility. See below for additional instructions regarding delivery of pipeline biomethane.

As part of the RPS eligibility requirements no party may sell, trade, give away, claim, or otherwise dispose of any of the attributes that would prevent the resulting electricity

from being compliant with the definition of “green attributes” as defined in the *Overall Program Guidebook for the Renewable Energy Program*. For biogas that is delivered from the production facility to the electric generating facility applying for certification, these necessary attributes must be conveyed along with the biogas and sold for the purpose of use at the electricity generating facility such that RECs generated would be eligible to meet the RPS.³⁹

In addition to the certification or pre-certification application, applicants for biogas facilities must complete the Biopower supplemental application form, CEC-RPS-1A/B:S1, and the supplemental attestations form, CEC-RPS-1A/B:S5, which can be found in Appendix B.

The amount of RPS-eligible electricity produced shall be calculated by multiplying the generation of the facility in megawatt-hours (MWh) by the ratio of the biogas (measured in BTUs) delivered to the total gas (measured in BTUs) used by the facility. The consumption of the delivered gas and the corresponding generation of the electricity that is delivered to the procuring entity must occur within a single WREGIS reporting period for the facility generating electricity from that gas (such as MWh produced per month and gas [BTU] used in the same month). See Section II 8: Renewable Facilities Using Multiple Energy Resources, for more information on how to measure the renewable generation from multi-fuel facilities.

Pipeline Biomethane Delivery via Injection ~~not~~ into a Natural Gas Pipeline

RPS-eligible pipeline biomethane, also referred to as biomethane, may be injected into a natural gas transportation pipeline system and delivered into California (or delivered to the electric generation facility if the electric generation facility is located outside of California) for use in an RPS-certified multi-fuel facility. The resulting generation will be considered ~~may result in the generation of~~ RPS-eligible electricity, if all other eligibility requirements have been met. It should be noted that ~~The biomethane~~biogas must meet strict heat content and quality requirements within a narrow band of tolerance to qualify as pipeline-quality~~grade~~ gas.

Quantifying RPS-eligible energy production requires accurate metering of the volume of ~~the biomethane~~biogas injected into the transportation pipeline system and the measured heat content of the injected ~~biomethane~~gas. Although blending the ~~biomethane~~biogas into the transportation pipeline system mixes the ~~biomethane~~biogas with other pipeline gas, ~~natural gas regulations require biomethane~~gas entering the system must be designated to be “nominated” for use at a specific power plant or designated to a pipeline system owned by ~~the~~a local publicly owned electric utility (POU) or other load-serving entity (LSE) procuring the biomethane, with the POU or LSE then designating

39 Green attributes that must be conveyed to the electric generating facility and associated with the production of electricity are included in a renewable energy credit, as defined by the CPUC in Decision 08-08-028 on August 21, 2008.

which facility will consume the biomethane. Consequently, the amount and energy content of the biogas or other RPS-eligible gas produced can be measured and either nominated for use at a specific power plant or nominated to a pipeline system owned by an LSE. If the biogas is nominated to a pipeline system, the owner of the system must designate the facility in which the biogas will be used.

The operator of a facility to which biomethane biogas is nominated (or designated must be certified by its facility as RPS-eligible, recognizing that the facility may will use a blend of RPS-eligible and ineligible fuels.

As described in Section II.B.8: Renewable Facilities Using Multiple Energy Resources, certain renewable facilities may use a de minimis amount of fossil fuel and count 100 percent of the generation for RPS. For facilities that use biomethane and fossil fuel or other nonrenewable fuel inputs but exceed the applicable de minimis amount of nonrenewable fuel that would allow them to count 100 percent of the electricity generated as RPS-eligible, only the portion of generation attributable to biomethane will count as RPS eligible.⁴⁰ The amount of RPS-eligible electricity produced shall be calculated by multiplying the generation of the facility (in MWh) by the ratio of the energy of the biomethane biogas injected and delivered to used and the total energy of the gases, biomethane biogas and natural gas, used by the facility, in BTUs. The electricity generated and gas used must be measured over an equal and overlapping period (such as electricity (MWh) produced per month and gas (BTU) used in the same per month), see Section II C for more information on how to measure the renewable generation from multi-fuel facilities.

Any production or acquisition of biogas biomethane that is directly supplied to the gas transportation pipeline system and used to produce electricity may generate RPS-eligible electricity as follows:

1. The biomethane gas must be produced from an RPS-eligible resource, such as biomass, or digester gas, or landfill gas.
2. The gas biomethane must be injected into a natural gas pipeline system that is either within the WECC region or interconnected to a natural gas pipeline system located in the WECC region that delivers gas into California (or delivers to the electric generation facility if the electric generation facility is located outside California) and the gas is delivered as specified below.
3. The applicant, or authorized party, must enter into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California (or to the electric generation facility if the electric generation facility is located outside of California).

40 Refer to Section IIB8: Renewable Facilities Using Multiple Energy Resources for RPS eligibility requirements.

- Delivery contracts with the pipeline operators may be for delivery with or against the physical flow of the gas in the pipeline.
4. The energy content produced and supplied to the transportation pipeline system must be measured on a monthly basis and reported annually, illustrated by month. Reporting shall be in units of energy (for example, MMBtu) based on metering of gas volume and adjustment for measured heat content per volume of each gas). In addition, the total amount of gas used at the RPS-eligible facility must be reported in the same units measured over the same period, and the electricity production must be reported in MWh.
 5. The gasbiomethane must be used at a facility that has been certified as RPS-eligible. As part of the application for certification, the applicant must attest that the RPS-eligible gasbiomethane will be ~~nominated~~ designated to that facility or ~~nominated~~ to the LSE-owned pipeline serving the designated facility.
 6. In its annual RPS Procurement Verification report,⁴¹ the Energy Commission will calculate the RPS-eligible energy produced using the same methodology discussed above, if it determines this is necessary.

In addition to the attestations described above, applications~~When applying for RPS pre-certification or certification, or renewal~~must include a completed “Pipeline Biomethane Delivery Attestation” found in the attestations supplemental form, CEC-RPS-1A/B:S5, for each entity responsible for the delivery of the pipeline biomethane. The supplemental forms can be found in appendix B. the application must include the following: 1) an attestation from the multi-fuel facility operator of its intent to procure biogas fuel that meets RPS eligibility criteria, and 2) an attestation from the fuel supplier that the fuel meets eligibility requirements.

~~In addition to the certification or pre-certification application, applicants for biogas facilities must complete a supplemental application form.~~

2-3. Biomass

The generation from a biomass facility is eligible for the RPS provided the facility uses a “biomass” fuel as defined in the *Overall Program Guidebook*.

If the facility is seeking RPS eligibility and funding under the Existing Renewable Facilities Program, its biomass fuel must be limited to the biomass fuels specified in the *Existing Renewable Facilities Program Guidebook*. Facilities receiving funding from the Existing Renewable Facilities Program that use ~~fossil~~ nonrenewable fuel must not exceed a ~~de minimus~~ de minimis amount of nonrenewable fuel annually for 100 percent of the generation to be eligible for funding from that program. For the Existing Renewable Facilities Program, ~~de minimus~~ de minimis is defined as 5 percent of all fuels used and

⁴¹ While not legally mandated, RPS Procurement Verification Reports are prepared as part of the Energy Commission’s RPS responsibilities.

measured on an annual total energy input basis. (¶Refer to the *Existing Renewable Facilities Program Guidebook* for further information about eligibility for funding.)

~~In addition to the certification or pre-certification application, applicants for biomass facilities must complete a supplemental application form.~~

Applications for RPS pre-certification or certification must include a completed attestation from the facility owner or operator of the intent to procure and utilize biomass fuel that meets RPS eligibility requirements. The owner/operator attestation can be found on the attestations supplemental form, CEC-RPS-1A/B:S5. Failure to utilize eligible biomass fuel will jeopardize the RPS-eligibility of the facility. Applicants for biomass facilities must also complete and submit the Biopower supplemental application form, CEC-RPS-1A/B:S1, with the application for certification or pre-certification. The supplemental forms can be found in appendix B.

4. Fuel Cell Facilities Using Renewable Fuel

The RPS eligibility of fuel cell facilities that generate electricity through an electrochemical reaction using a renewable fuel is limited to fuel cell technologies using one or more of the following fuel sources:

- Landfill gas, digester gas, or other gases that meet the definition of an “eligible renewable energy resource” as defined in Public Utilities Code Section 399.12(c) with reference to Public Resources Code Section 25741(b).
- Hydrogen or hydrogen-rich gases derived from a non-fossil fuel or feedstock through a catalytic or electrolytic process that is energized using power generated by an “eligible renewable energy resource.” Note that the generation from a fuel cell using this source of fuel is limited to the electricity output; the power from the eligible renewable energy resource that is used to energize the electrochemical reaction does not count toward RPS compliance. If the source of eligible renewable electricity used in this process is located at another site, the facility generating that electricity must be certified as California RPS eligible.⁴²

Applicants for RPS pre-certification or certification must complete the Biopower and attestations supplemental application form, CEC-RPS-1A/B:S1 and CEC-RPS-1A/B:S5 respectively, which can be found in appendix B.

42 An example of an eligible renewable fuel for a fuel cell is hydrogen derived from water through a catalytic or electrolytic process that is energized with electricity generated by a solar photovoltaic system. In this example, the hydrogen is derived from water (a non-fossil fuel or feedstock) through a process energized with electricity from an eligible renewable energy resource (a solar photovoltaic system). The electricity used to energize the process must be bundled with the RECs so that it is renewable energy that is used to produce the hydrogen. If the renewable attributes are unbundled from the electricity and disposed of separately, the hydrogen will be produced with null power and will not be considered a renewable fuel for purposes of fuel cell eligibility under the RPS.

35. Hydroelectric Facilities

The RPS eligibility of small hydroelectric facilities, conduit hydroelectric facilities, and incremental generation from eligible efficiency improvements of hydroelectric facilities regardless of their overall generating capacity are addressed separately in Subsections (a), (b) and (c) below, respectively.

With exceptions for eligible efficiency improvements, an RPS-eligible small hydroelectric facility or conduit hydroelectric facility must not exceed 30 ~~megawatts~~ (MW). However, the law allows such a facility to retain its RPS eligibility if efficiency improvements cause the facility to exceed 30 MW. The Energy Commission interprets the 30 MW size limit such that if a 30 MW small hydroelectric or conduit hydroelectric facility had an eligible 5 MW energy efficiency increase, energy from the 35 MW capacity would be RPS-eligible.

Under certain circumstances, the incremental generation from eligible efficiency improvements to a hydroelectric facility of any generating capacity may qualify for the RPS, although the generation net of the incremental increase does not qualify.⁴³ For example, if a 50 MW hydro facility increased its capacity to 55 MW due to eligible energy efficiency measures, the incremental increase of 5 MW would qualify for the RPS, but the initial 50 MW would not qualify for the RPS because the original size of the facility exceeded 30 MW. Eligibility requirements for efficiency improvements are discussed at the end of this section.

In addition to the certification or pre-certification application, some applicants for small hydroelectric facilities or conduit hydroelectric facilities with eligible incremental efficiency improvements must complete ~~a~~ the hydroelectric supplemental application form, CEC-RPS-1A/B:S2, which can be found in appendix B, and provide additional required information (see Section III: “Additional Required Information” ~~section~~).

a. Small Hydroelectric (~~not conduit~~)

The RPS eligibility of small hydroelectric facilities depends in part on whether the facility was operational before or after January 1, 2006, and whether energy efficiency improvements were made after January 1, 2008.

- Pre-January 1, 2006 (Existing Facility): Generation from a small hydroelectric facility that commenced commercial operations before January 1, 2006, is eligible for the California RPS if the facility meets all of the following criteria:

⁴³ Assembly Bill 809 (Chapter 684, Statutes of 2007) amended Section 399.12 of the Public Utilities Code and changed the definition of conduit hydroelectric facility, revised the RPS-eligibility requirements for small hydroelectric and conduit hydroelectric facilities, and added as RPS-eligible the incremental increase in electricity generation due to efficiency improvements, regardless of the electrical output of the facility.

1. The facility is 30 MW or less, with an exception for eligible efficiency improvements made after January 1, 2008, as discussed below.
 2. The facility is located in-state or satisfies the out-of-state requirements.
 3. The facility was under contract to, or owned by, a retail seller or local publicly owned electric utility prior to January 1, 2006.⁴⁴
- Post-January 1, 2006 (New Facility): Generation from a small hydroelectric facility that commences commercial operations or is repowered on or after January 1, 2006, is eligible for the California RPS if the facility meets all of the following criteria:
 1. The facility is 30 MW or less, with an exception for eligible efficiency improvements made after January 1, 2008, as discussed below.
 2. The facility is located in-state or satisfies the out-of-state requirements.
 3. The facility does not “cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.”⁴⁵

Eligible Efficiency Improvements: A small hydroelectric facility shall not lose its RPS eligibility if efficiency improvements undertaken after January 1, 2008, cause it to exceed 30 MW and “the efficiency improvements do not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.”⁴⁶ The entire generating capacity of the facility shall be RPS-eligible.

b. Conduit Hydroelectric

To be eligible for the RPS, a conduit hydroelectric facility must use for its generation only the hydroelectric potential of an existing⁴⁷ pipe, ditch, flume, siphon, tunnel, canal, or other manmade conduit that is operated to distribute water for a beneficial use.⁴⁸ A conduit hydroelectric facility may be considered a separate project even

⁴⁴ Assembly Bill 3048 revised the definition of an “eligible renewable energy resource” to include small hydroelectric facilities under contract with or owned by a local publicly owned electric utility.

⁴⁵ Public Utilities Code Section 399.12(c)(1)(A).

⁴⁶ Public Utilities Code Section 399.12.5(a).

⁴⁷ “Existing” is defined as built before January 1, 2008, the effective date of Assembly Bill 809. If the conduit hydroelectric facility is built in a new pipe, ditch, flume, siphon, tunnel, canal, or other manmade conduit, it may apply as a small hydroelectric facility if it meets all the eligibility requirements of a small hydroelectric facility.

⁴⁸ “Beneficial use” shall be defined consistent with the California Code of Regulations, Title 23, Sections 659 through 672, to include the following uses of water: domestic use, irrigation use, power use, municipal use, mining use, industrial use, fish and wildlife preservation and enhancement use, aquaculture use, recreational use, and heat control use.

though the facility itself is part of a larger hydroelectric facility. The RPS eligibility requirements for conduit hydroelectric facilities depend in part on whether the facility was operational before or after January 1, 2006, and whether eligible energy efficiency improvements were made after January 1, 2008. A discussion of eligible efficiency improvements can be found at the end of this section.

- Pre-January 1, 2006 (Existing Facility): Generation from a conduit hydroelectric facility that commenced commercial operations before January 1, 2006, is eligible for the RPS if the facility meets all of the following criteria:
 1. The facility is 30 MW or less, with the exception of eligible efficiency improvements made after January 1, 2008, as discussed below.
 2. The facility is located in-state or satisfies the out-of-state requirements.
- Post-January 1, 2006 (New Facility): Generation from a conduit hydroelectric facility that commences commercial operations or is repowered on or after January 1, 2006, is eligible for the California RPS if the facility meets all of the following criteria:
 1. The facility is 30 MW or less, with the exception of eligible efficiency improvements made after January 1, 2008, as discussed below.
 2. The facility is located in-state or satisfies the out-of-state requirements.
 3. The facility does not cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.

Eligible Efficiency Improvements: A conduit hydroelectric facility shall not lose its RPS eligibility if efficiency improvements undertaken after January 1, 2008, cause it to exceed 30 MW and do not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow. The entire generating capacity of the facility shall be RPS-eligible.

A conduit hydroelectric facility may be associated with or part of a larger existing hydroelectric facility and separately certified as RPS eligible if the facility meets the following criteria:

1. The existing hydroelectric facility commenced commercial operations before January 1, 2006.
2. The conduit hydroelectric facility commenced commercial operations on or after January 1, 2006.
3. The existing hydroelectric facility and conduit hydroelectric facility are separately metered to identify their respective generation.

c. Incremental Hydroelectric Generation from Efficiency Improvements Regardless of Facility Output

The incremental increase in generation that results from efficiency improvements to a hydroelectric facility, regardless of the electrical output of the facility, is eligible for the RPS if ALL of the following conditions are met:

1. The facility is owned by a retail seller or a local publicly owned electric utility.⁴⁹
- ~~4~~2. The facility was operational before January 1, 2007.
- ~~2~~3. The efficiency improvements are initiated on or after January 1, 2008, are not the result of routine maintenance activities, and were not included in any resource plan sponsored by the facility owner before January 1, 2008.
- ~~4~~3. The facility meets one of the following conditions:
 - a. For a facility located in California, the facility has, within the immediately preceding 15 years from the date the efficiency improvements are initiated, received certification from the State Water Resources Control Board (SWRCB) pursuant to Section 401 of the Clean Water Act (33 U.S.C. Sec. 1341), or has received certification from a regional board to which the SWRCB has delegated authority to issue certification, unless the facility is exempt from certification because there is no potential discharge into waters of the United States, or;
 - b. For a facility not located in California, the certification pursuant to Section 401 of the federal Clean Water Act (33 U.S.C. Sec. 1341) may be received from the applicable state board or agency, as determined by the Energy Commission, or from a regional board to which the state board has delegated authority to issue the certification,⁵⁰ or;
 - c. The facility meets the requirements of the Public Utilities Code 399.12.5(b)(2)(C).
- ~~5~~4. The incremental increase is the result of efficiency improvements from a retrofit, and the efficiency improvements do not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.

49 Assembly Bill 1351 (Chapter 525, Statutes of 2009). AB 1351, amended Section 399.12.5 of the Public Utilities Code to require that a hydroelectric facility, regardless of output, be owned by a retail seller or local publicly owned electric utility for the facility's incremental generation from efficiency improvements to be eligible for the RPS, and to authorize the applicable state board, agency, or regional board outside California to issue a certification to the facility pursuant to the federal Clean Water Act.

50 Assembly Bill 1351.

65. All of the incremental increase in electricity generation resulting from the efficiency improvements must be demonstrated to result from a long-term financial commitment by the retail seller or local publicly owned electric utility.⁵¹

General Requirements for Hydroelectric Facilities Located Within California

A new or repowered small hydroelectric facility, conduit hydroelectric facility or incremental generation from eligible efficiency improvements located within California, is NOT eligible for the RPS if it results in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.⁵² A facility ~~may~~ could have an adverse impact on the instream beneficial uses if it causes an adverse change in the chemical, physical, or biological characteristics of water, including a change in the volume, rate, timing, temperature, turbidity, or dissolved oxygen content of the stream water.

If a new or repowered small hydroelectric facility, conduit hydroelectric facility, or incremental generation from eligible efficiency improvements to a hydroelectric facility, can demonstrate that it can operate without adversely impacting the instream beneficial uses or causing a change in the volume or timing of streamflow, it may be eligible for the RPS.

General Requirements for Hydroelectric Facilities Located Outside California

A new or repowered small hydroelectric facility, conduit hydroelectric facility, or incremental generation from eligible efficiency improvements to a hydroelectric facility located outside California may be eligible for the RPS if it can demonstrate that it may operate without adversely impacting the instream beneficial uses or causing a change in the volume or timing of streamflow.⁵³ A facility ~~may~~ could have an adverse impact on the instream beneficial uses if it causes an adverse change in the chemical, physical, or biological characteristics of water, including a change in the volume, rate, timing, temperature, turbidity, or dissolved oxygen content of the stream water.

Eligible Efficiency Improvements

Eligible efficiency improvements to hydroelectric facilities are limited to those improvements that make more efficient use of the existing water resource and equipment, rather than increase the storage capacity or head of an existing water

51 “Long-term financial commitment” means either new ownership investment in the facility by the retail seller or local publicly owned electric utility or a new or renewed contract with a term of 10 or more ~~than 10~~ years, which includes procurement of the incremental generation. [Public Utilities Code Section 399.12.5(b)(4).]

52 A hydroelectric generation facility that is certified as eligible for the RPS as of January 1, 2010, shall not lose its eligibility if the facility causes a change in the volume or timing of streamflow required by license conditions approved pursuant to the Federal Power Act (Chapter 12 (commencing with Section 791a) of Title 16 of the United States Code) on or after January 1, 2010.

53 See footnote 52.

reservoir. Efficiency improvements do NOT include regular or routine maintenance activities. Eligible efficiency improvements may include the following measures:

- Rewinding or replacing the existing turbine generator.
- Replacing turbines.
- Computerizing control of turbines and generators to optimize regulation of flows for generation.

The applicant is responsible for showing that its facility qualifies for the RPS. Additional information required of applicants for small hydroelectric, conduit hydroelectric facilities and incremental generation regardless of output is discussed in the section on certification.

Pumped Storage Hydroelectric

A pumped storage hydroelectric facility may qualify for the RPS if: 1) the facility meets the eligibility requirements for small hydroelectric facilities, and 2) the ~~energy~~electricity used to pump the water into the storage reservoir qualifies as an RPS eligible resource. The amount of energy that may qualify for the RPS is the amount of electricity dispatched from the pumped storage facility.

Pumped storage facilities qualify for the RPS on the basis of the renewable ~~electricity~~energy used for pumping water into the storage reservoir, but the storage facilities will not be certified for the RPS as separate or distinct renewable facilities. A facility certified as RPS-eligible may include an electricity storage device if it does not conflict with other RPS eligibility criteria.

46. Municipal Solid Waste

~~Applicants representing f~~Facilities using municipal solid waste (MSW) as defined in the Overall Program Guidebook fall into two categories:

1. Solid Waste Combustion Facilities: A facility that directly combusts MSW to produce electricity is only eligible for the RPS if it is located in Stanislaus County and was operational before September 26, 1996. ~~An applicants for a combustion facilities~~ facility must submit documentation to the Energy Commission demonstrating that the ~~facilities~~ facility meets these requirements.
2. Solid Waste Conversion Facilities: A facility is eligible for the RPS if 1) it uses a two-step process to create energy whereby in the first step (gasification⁵⁴ conversion) a non-combustion thermal process that consumes no excess oxygen is used to convert

⁵⁴ "Gasification" is the terminology used in Public Resources Code Section 40117 as implemented by the California Department of Resources Recycling and Recovery (CalRecycle). The requirements of Section 40117 mirror the requirements of Public Resources Code Section 25741(b)(3), as applicable to solid waste conversion.

MSW into a clean burning gaseous or liquid fuel, and then in the second step this clean-burning fuel is used to generate electricity, 2) it is located in-state or satisfies the out-of-state requirements, and 3) ~~it~~ the facility and conversion technology meets all of the following applicable criteria in accordance with Public Resources Code Section 25741, Subdivision (b)(3):

- a. The technology does not use air or oxygen in the conversion process, except ambient air to maintain temperature control.
- b. The technology produces no discharges of air contaminants or emissions, including greenhouse gases as defined in Section ~~42801.138505~~ of the Health and Safety Code.
- c. The technology produces no discharges to surface or groundwaters of the state.
- d. The technology produces no hazardous wastes.
- e. ~~As much as possible~~ To the maximum extent feasible, the technology removes all recyclable materials and marketable green waste compostable materials from the solid waste stream before the conversion process, and the owner or operator of the facility certifies that those materials will be recycled or composted.
- f. The facility at which the technology is used complies with all applicable laws, regulations, and ordinances.
- g. The technology meets any other conditions established by the ~~State Energy Resources Conservation and Development Commission~~ (formal name of the Energy Commission).
- h. The facility certifies that any local agency sending solid waste to the facility diverted at least 30 percent of all solid waste it collects through solid waste reduction, recycling, and composting.

In addition to the certification or pre-certification application, applicants for MSW facilities must complete the supplemental application form for ~~Biofuels-Biopower~~, CEC-RPS-1A/B:S1, which can be found in Appendix B, and provide additional required information (see Section III: "Additional Required Information" section).

57. Solar Energy and Distributed Generation

~~Generation from facilities using solar energy is technically eligible for the RPS. Solar thermal-electric central station facilities delivering electricity to the grid are relatively straightforward to integrate into RPS implementation because the generation can be readily measured and procured toward meeting RPS requirements. A photovoltaic (PV) central station facility could also produce electricity that is eligible for the RPS with standard metering employed for central station facilities.~~

Distributed generation PV facilities and other distributed renewable energy technologies ~~however~~, have qualities that make them more difficult than central station facilities to integrate into RPS implementation. For example, distributed PV facilities are typically small-scale applications designed to meet a consumer's on-site energy demands. In

addition, generation from distributed generation PV may be metered differently than central station facilities or not metered at all.

Both the Energy Commission and the CPUC have roles in determining RPS implementation for renewable distributed generation facilities. The CPUC has addressed whether and how output from renewable distributed generation may be counted toward a retail seller's RPS obligations. The CPUC issued a decision on January 11, 2007, which allows distributed generation system owners to retain 100 percent of the RECs associated with the distributed generation energy produced.⁵⁵ As in that decision, the Energy Commission does not require participants of its New Solar Homes Partnership program to relinquish their claims of RECs or to transfer ownership of any RECs to the Energy Commission or any other entity as a condition of receiving New Solar Homes Partnership program funding. In January 2007, the CPUC determined that owners of renewable distributed generation facilities could maintain ownership of the RECs attributed to their system's generation. However, the Energy Commission will not certify distributed generation PV and other forms of customer-sited renewable energy into the RPS at this time, with the following exception.

The Energy Commission ~~certifies~~will certify facilities that might otherwise ~~would~~ have been considered distributed generation facilities, except that they are participating in a standard contract/tariff executed pursuant to Public Utilities Code 399.20, as implemented through the CPUC Decision 07-07-027 (R.06.05.027), executed pursuant to a comparable standard contract/tariff approved by a local publicly owned electric utility (POU), or if the facility is owned by a utility and meets other requirements, to become certified as RPS-eligible. If the energy is sold under contract to a retail seller (or POU that may have a similar standard contract/tariff structure), then the energy sold may be RPS-eligible. To qualify as RPS-eligible, the facility must not receive (or have received or be planning to receive) benefits from the CPUC-approved Self Generation Incentive Program or California Solar Initiative, the Energy Commission's Emerging Renewables Program, New Solar Homes Partnership, or Pilot Performance Based Incentive Program, or any other similar ratepayer-funded program. Similarly, the facility must not receive or plan to receive benefit from net metering programs or net metering tariffs approved by the CPUC or any POU. If the facility is currently receiving benefits through net metering, it may apply for pre-certification and subsequently apply for certification once it has exited any net metering agreements.

The Energy Commission will not certify distributed generation facilities as RPS-eligible unless the CPUC authorizes tradable RECs to be applied toward the RPS. If the CPUC authorizes the use of tradable RECs, it may revisit the metering requirements for DG

⁵⁵ Decision 07-01-018, Rulemaking 06-03-004, January 11, 2007. On March 13, 2008, the CPUC closed Rulemaking R.06-03-004 and opened a new Rulemaking, R.08-03-008, to address and refine policies, rules and programs for the California Solar Initiative (CSI) and the Self-Generation Incentive Program (SGIP).

systems consistent with the measurement requirements adopted for grid connected renewable facilities and the Energy Commission's tracking system. Facilities that receive funding under the Energy Commission's New Solar Homes Partnership program, Emerging Renewables Program, or Pilot Performance-Based Incentive Program, under the CPUC-approved Self Generation Incentive Program or California Solar Initiative, or any similar ratepayer-funded program, and facilities that benefit from net metering programs or tariffs approved by the CPUC or any POU, are considered distributed generation and may not be certified as RPS-eligible at this time.⁵⁶

When applying for RPS pre-certification or certification, the applicant must complete the Distributed Generation supplemental application form, CEC-RPS-1A/B:S4, which can be found in appendix B.

8.6-Renewable Facilities Using Multiple Energy Resources Fuels

~~The Energy Commission will allow options for the RPS-eligibility of renewable facilities that use multiple energy resources fuels or resources to generate electricity are eligible for the RPS, such as co-fired fuels or . These renewable facilities are referred to as "multi-fuel" facilities and use a mix of fuels or energy resources that includes fossil fuels, other nonrenewable energy resources, or multiple RPS eligible renewable energy resources to generate electricity.~~

~~To count 100 percent of the electricity generated toward RPS obligations from such a multi-fuel facility that uses fossil fuel or other nonrenewable energy inputs fuels toward RPS obligations, one of the following three conditions must be met:~~

- ~~1. If the total annual amount of nonrenewable energy resources fossil fuel use at the facility does NOT exceed a de minimis de minimis amount as defined in this guidebook, then 100 percent of the electricity production from the facility may count as RPS-eligible. De minimis de minimis for facilities seeking RPS eligibility is 2 percent of all energy inputs fuels used and measured on an annual total energy input basis.~~⁵⁷

⁵⁶ Once the CPUC authorizes TRECs for the RPS or implements AB 920 or SB 32 (including determining if facilities that have received benefits from a rate-payer funded incentive program have provided sufficient benefit to the rate-payers or have repaid the funds they received), then the Energy Commission will address these restrictions on RPS eligibility.

⁵⁷ In early 2011 the Energy Commission will revise the de minimis quantity of nonrenewable energy resources that may be used by facilities. The revisions will be made in accordance with AB 1954, which takes effect on January 1, 2011, and directs the Energy Commission to set the de minimis quantity of nonrenewable fuels that may be used for each renewable technology at 2 percent, but permits the Energy Commission to adjust this de minimis quantity to a maximum of 5 percent for individual facilities if certain conditions are satisfied as specified in AB 1954. The Energy Commission's revisions to these guidelines will describe the criteria and process for an individual facility to seek an increase in the 2 percent de minimis quantity of nonrenewable fuels a facility may use up to the maximum 5 percent permitted by AB 1954. In addition, the guideline

Note that the ~~de minimis~~ de minimis amount of nonrenewable energy resources eligible for the RPS for facilities ~~seeking eligible for or receiving RPS eligibility and funding~~ under the Energy Commission's Existing Renewable Facilities Program is 5 percent of all ~~energy inputs~~ fuels used and measured on an annual energy input basis, as long as the facility remains eligible for the Existing Renewable Facilities Program. If the facility ceases to be eligible for the Existing Renewable Facilities Program, it must meet the 2 percent de minimis level to count 100 percent of its generation as RPS eligible.

2. In the past, the Energy Commission's Renewable Energy Program provided that renewable facilities using ~~nonrenewable energy resources~~ fossil fuels were eligible for funding as long as the percentage of ~~nonrenewable energy resources~~ fossil fuel used did not exceed 25 percent of the total energy input of the facility during a given calendar year. The Energy Commission will provide the same treatment under the RPS for renewable facilities that commenced commercial operations before January 1, 2002, were certified and operational as a renewable qualifying small power production facility (QF)⁵⁸ pursuant to the federal Public Utility Regulatory Policies Act⁵⁹ before January 1, 2002, and are currently certified by the Federal Energy Regulatory Commission (FERC) as a renewable QF facility.
3. Any facility that ~~was developed and~~ awarded a renewable power purchase contract as a result of a 2002/2003 Interim RPS procurement solicitation approved by the CPUC under Decision 02-08-071 and Decision 02-10-062 may use up to 25 percent ~~nonrenewable energy resources~~ fossil fuel, measured on an annual total energy input basis, and count 100 percent of the electricity generated as RPS-eligible.

The Energy Commission may allow multi-fuel facilities that use fossil fuel or other nonrenewable energy resources, but that do not meet one of the above criteria, to be certified as RPS-eligible, but only the renewable portion of their generation will count as RPS eligible, and only when the Energy Commission approves a method to measure the renewable portion (see Measuring the Renewable Generation from Multi-Fuel Facilities below). ~~An application for RPS pre-certification or certification of such a facility must submit with its application for RPS pre-certification or certification a proposal for an~~

revisions will clarify the extent to which facilities may use nonrenewable fuels during periods when the facility is not generating electricity and have such fuel use excluded for purposes of the de minimis limits for nonrenewable fuel use. The revised guidelines may include specific metering requirements to properly measure the quantity and time of use of renewable and nonrenewable energy resources and the corresponding amounts of electricity generated, and may include other criteria to ensure a facility's use of nonrenewable energy resources is not inappropriately credited as renewable electricity generation that is eligible for the RPS.

58 A QF is a qualifying small power production facility eligible for certification pursuant to Section 292.207 of Title 18 of the Code of Federal Regulations.

59 Section 1253 of the Energy Policy Act of 2005 ("EPAAct") added Section 210(m) to Public Utility Regulatory Policies Act of 1978 ("PURPA").

~~appropriate method to measure the renewable fraction of the facility's generation. The measurements should be based on the total annual energy input of the fuels. The Energy Commission will evaluate and consider the proposed method as part of the facility's application for pre-certification or certification.~~

If a facility meets the above criteria, the Energy Commission will certify or pre-certify the facility ~~as by the fuel technology type of the primary renewable fuel technology~~ used. For example, if a solar thermal electric facility is currently a renewable QF certified under the Public Utility Regulatory Policies Act (PURPA) co-fired with less than 25 percent natural gas on an annual basis and was a certified renewable QF before January 1, 2002, (fossil fuel use must meet the criteria of the Public Utility Regulatory Policies Act [PURPA] including not to exceed 25 percent of the fuel use), then the facility will be certified as "solar thermal electric" and all generation may be considered RPS eligible. The certificate issued will note both the annual nonrenewable energy used and the eligibility of the renewable and nonrenewable portions of the generation.

Measuring the Renewable Generation from Multi-Fuel Facilities

The Energy Commission will allow one of the methods provided below for measuring the fraction of a multi-fuel facility's electricity output that is attributable to renewable energy resources. An application for RPS pre-certification or certification of a multi-fuel facility must indicate which of these methods will be used to measure the renewable fraction of the facility's generation. Alternatively, an applicant may submit an alternative measurement method if it can be demonstrated to the Energy Commission's satisfaction that the method is superior to the methods discussed below and is the most appropriate method for that technology or fuel. The measurements shall be based on the total annual energy input of the energy resources and be measurable on a monthly basis. The Energy Commission will evaluate and consider the proposed measurement method as part of the facility's application for pre-certification or certification. The applicant shall report the fraction of renewable energy relative to total electricity generation from a multi-fuel facility to WREGIS on a monthly basis.

1. Combustion technologies and fuel cell technologies: For eligible renewable resources using the combustion of renewable fuels to generate electricity, such as biomass or digester gas, the percentage of the total generation attributable to the RPS-eligible source shall be determined by the ratio of the eligible renewable energy input (MMBTU) to the total energy input (MMBTU) contributing thermal energy to generate electricity or improve the efficiency by adding heat to the system, given by the following equation:

Percent Renewable

$$= \frac{\sum(\text{MMBTU})_{\text{RPS}}}{\sum(\text{MMBTU})_{\text{RPS}} + \sum(\text{MMBTU})_{\text{non-RPS}} + \sum \left((\text{MWh})_{\text{grid}} \cdot \frac{3.413 \text{ MMBTU}}{1 \text{ MWh}} \right)}$$

$(MWh)_{grid}$ = Grid Electricity adding heat to the system (MWh)

$(MMBTU)_{RPS}$ = RPS Eligible Renewable Fuel(s) (MMBTU)

$(MMBTU)_{non-RPS}$ = Non – Renewable Fuel(s) (MMBTU)

4.2. Non-combustion, thermal technologies: Renewable technologies that do not use a combustion process to generate RPS-eligible electricity, such as solar thermal and geothermal technologies, have two possible methods to measure the renewable contribution to the total generation.

a. The first option takes the ratio of the total nonrenewable energy (grid electricity and nonrenewable energy inputs) contributing thermal energy to the system compared to the total generation of the facility, and subtracts it from one. The contribution of the nonrenewable fuel will be measured by the generation that an equivalent amount of MMBTUs of natural gas would produce at a combined cycle natural gas facility. The result of the equation, provided below, is the contribution attributable to the non-combustion renewable technology.⁶⁰

$$\text{Percent Renewable} = 1 - \frac{\left[(MMBTU)_{non-RPS} \cdot \frac{1 \text{ MWh}}{3.413 \text{ MMBTU}} \cdot 0.425 + (MWh)_{grid} \right]}{(MWh)_{Total}}$$

—(MWh)_{Total} = Total electrical generation of all generators,
not the net electrical output of the facility (MWh)

b. The second option for non-combustion, thermal renewable technologies is to measure the change in the heat content of the medium used to collect the heat attributable to the thermal contribution of the renewable technology. This is done by measuring the heat content of the medium before the heat energy from the renewable source is absorbed and after that heat is absorbed. To use this method, the applicant must provide a single line drawing of the electric generating system identifying every heat source and the proposed points to measure the change in the heat content of the medium. If multiple mediums are used to collect heat at the facility from the thermal sources, the heat added to the system shall be measured using the medium that turns the electric

⁶⁰ In accordance with Public Utilities Code Section 216.6, this efficiency standard is “at least 5 percent of the facility's total output must be in the form of useful thermal energy. Where useful thermal energy follows power production, the useful annual power output plus one-half the useful annual thermal energy output must equal no less than 42.5 percent of any natural gas and oil energy input.”

generating turbine. For this option, the applicant may use the following Percent Renewable equation.

Percent Renewable

$$= \frac{\sum(\text{MMBTU})_{\text{RPS}}}{\sum(\text{MMBTU})_{\text{RPS}} + \sum(\text{MMBTU})_{\text{non-RPS}} + \sum \left((\text{MWh})_{\text{grid}} \cdot \frac{3.413 \text{ MMBTU}}{1 \text{ MWh}} \right)}$$

Where the non-combustion, thermal renewable contribution is defined by:

$$(\text{MMBTU})_{\text{RPS}} = (\text{MMBTU})_{\text{medium}_{\text{out}}} - (\text{MMBTU})_{\text{medium}_{\text{in}}}$$

$(\text{MMBTU})_{\text{RPS}}$ = The Heat Contribution of the RPS eligible Technology (MMBTU)

$(\text{MMBTU})_{\text{medium}_{\text{out}}}$

= The Heat Content of the heated medium Exiting the Solar Boiler (MMBTU)

$(\text{MMBTU})_{\text{medium}_{\text{in}}}$

= The Heat Content of the heated medium Entering the Solar Boiler (MMBTU)

In the event that any thermal renewable facility uses a nonrenewable energy input to add heat to the system through a non-combustion, thermal process, the contribution of that fuel shall be accounted for in a similar method to the second option for non-combustion, thermal renewable technologies.

2.3. Non-thermal electric generating technologies (except fuel cell technologies): Some renewable technologies, such as solar photovoltaic and wind, are non-thermal electricity generation technologies. Therefore, measurement of total annual energy input is not appropriate for these technologies. Instead, a facility incorporating one or more of these technologies must have internal metering to measure the electrical generation directly associated with that specific technology. The internal metering shall be compared to the total output of the facility to determine the percentage attributable to any non-thermal renewable technology, if applicable. The percentages attributable to the technology shall be recorded monthly and reported to WREGIS on a monthly basis.

To participate in the RPS, ~~at~~ the multi-fuel facility must be registered in the WREGIS accounting system and comply with WREGIS' requirements, including the requirements ~~those~~ for metering, ~~and for reporting,~~ and updating the renewable portion of the fuel mix for multiple fuel facilities. These provisions are required regardless of whether the facility satisfies one or more of the Energy Commission's three criteria for allowing 100 percent of the generation to be counted toward RPS obligations.

C. Out-of-State Facilities

This section applies to renewable facilities that are located out-of-state and have their first point of interconnection to the WECC transmission system outside the state, as defined in the *Overall Program Guidebook*. Facilities that are physically located in

California or have their first point of interconnection to the WECC transmission system within the state are considered to be in-state facilities and are not subject to the requirements of this section for RPS eligibility. Similarly, facilities that are physically located outside California but have their first point of interconnection to the WECC transmission system within California are not subject to the requirements of this section; such facilities must submit documentation to verify the location of their first point of interconnection with their application for pre-certification or certification.

Out-of-state facilities that are not or will not be interconnected to the WECC transmission system are not eligible for the RPS.

Procurement by multijurisdictional retail sellers that serve end-use customers outside California and have 60,000 or fewer customer accounts in California pursuant to Public Utilities Code Section 399.17, such as PacifiCorp and Sierra Pacific Power Company, that is counted toward meeting the RPS ~~target~~-obligation of the multijurisdictional purchasing utility (and subject to Public Utilities Code Section 399.17) is not subject to the ~~above~~ eligibility requirements for out-of-state facilities. In lieu of the above criteria, the energy procured must meet all of the following criteria to be eligible for the RPS:

1. The generation must be procured by the multijurisdictional retail seller subject to Public Utilities Code Section 399.17 on behalf of its California customers and not used to fulfill its renewable energy procurement requirements in other states or for any other renewable energy retail claim.
2. The facility is connected to the WECC transmission system.
3. ~~The facility and multijurisdictional retail seller must participate in WREGIS under the provisions in this guidebook an RPS tracking and verification system approved by the Energy Commission.~~

~~Note that the delivery requirements described here for out of state facilities do not apply to electric corporations that serve retail end-use customers outside California and have 60,000 or fewer customer accounts in California under Public Utilities Code Section 399.17. Section 399.17 modifies the definition of an eligible renewable energy resource to include out of state facilities for multijurisdictional electric corporations, such as PacifiCorp and Sierra Pacific Power Company, which serve customers both in and outside California. This exception only applies to situations wherein these multijurisdictional utilities procure energy to meet their own RPS obligations. In the event that these facilities are located out of state and their generation is procured to meet the RPS targets of another retail seller, the facility would be subject to all out-of state eligibility requirements, including delivery requirements.~~

Generation from a renewable facilities facility located out-of-state is ~~potentially eligible~~ can qualify for the RPS. ~~To qualify for the RPS, generation from an out of state facility must if it meets the RPS eligibility requirements described above in this guidebook and must satisfy~~ all of the following criteria.

1. Facility is located so that it is or will be connected to the WECC transmission system.

2. Facility commences initial commercial operations ~~on or~~ after January 1, 2005.
3. Energy is delivered ~~Retail seller, or procurement entity of the procured generation demonstrates delivery of its generation to an in-state market hub or in-state location, as specified in the delivery requirements in the next section below.~~
4. Facility does not cause or contribute to any violation of a California environmental quality standard or requirement within California.
5. If located outside the United States, the facility is developed and operated in a manner that is as protective of the environment as would a similar facility be if it were located in California.
6. Facility, ~~and~~ retail seller, ~~and~~ third parties participate in ~~an RPS tracking and verification system approved by the Energy Commission~~ WREGIS.

If the facility meets all of the above criteria ~~for out-of-state facilities~~ except it commenced commercial operations on or before January 1, 2005 (criterion "~~b2~~" above), then it may be RPS-eligible if it meets one of the following ~~two~~ criteria:

1. The electricity is from incremental generation resulting from project expansion or repowering of the facility ~~on or~~ after January 1, 2005; or
2. The facility ~~was~~ is part of ~~a the initial existing~~ baseline procurement portfolio of a retail sellers⁶¹ or of a local publicly owned utility.⁶²

Note that the delivery requirements described here in the next section for out-of-state facilities do not apply to facilities whose generation is procured by multijurisdictional electric corporations that serve retail end-use customers outside California and have 60,000 or fewer customer accounts in California under Public Utilities Code Section 399.17. The application for certification of such a facility must indicate it is applying under this rule and the subsequent certification will indicate the special conditions of the certificate.⁶³ ~~Section 399.17 modifies the definition of an eligible renewable energy resource to include out-of-state facilities for multijurisdictional electric corporations, such as PacifiCorp and Sierra Pacific Power Company, which serve customers both in~~

61 Pursuant to paragraph (2) of subdivision (b) of Section 399.15 of the Public Utilities Code, the CPUC established an initial baseline for each retail seller based on the actual percentage of retail sales procured from eligible renewable energy resources in 2001, and to the extent applicable, adjusted going forward pursuant to Section 399.12 of the Public Utilities Code.

62 Pursuant to Section 387 of the Public Utilities Code, each governing body of a local publicly owned electric utility shall be responsible for implementing and enforcing a renewables portfolio standard that recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvement.

63 Public Utilities Code Section 399.17 modifies the definition of an eligible renewable energy resource to include out-of-state facilities for multijurisdictional electric corporations, such as PacifiCorp and Sierra Pacific Power Company, which serve customers both in and outside California.

and outside California. This exception to the delivery requirements only applies to situations wherein these multijurisdictional utilities procure energy to meet their own RPS obligations. In the event that these facilities are located out-of-state and their generation is procured to meet the RPS targets obligations of another retail seller, the facility would be subject to all out-of-state eligibility requirements, including delivery requirements.

~~Procurement by retail sellers that serve end-use customers outside California and have 60,000 or fewer customer accounts in California pursuant to Public Utilities Code Section 399.17, such as PacifiCorp and Sierra Pacific Power Company, that is counted toward meeting the RPS target of the purchasing utility (and subject to Public Utilities Code Section 399.17) is not subject to the above delivery requirements. In lieu of the above criteria, the energy procured must meet all of the following criteria to be eligible for the RPS:~~

~~4.3. The generation must be procured by the retail seller subject to Public Utilities Code Section 399.17 on behalf of its California customers and not used to fulfill its renewable energy procurement requirements in other states or any other renewable energy retail claim.~~

~~5.4. The facility is connected to the WECC.~~

~~6.5. The facility and retail seller must participate in an RPS tracking and verification system approved by the Energy Commission.~~

In addition to the certification or pre-certification application, applicants for out-of-state facilities must complete a supplemental application form and provide additional required information (see Section III: “Additional Required Information” section).

D. Energy Delivery Requirements

For RPS compliance, electricity is deemed delivered if it is either generated at a location within the state or is scheduled for consumption by California end-use retail customers as specified in Public Resources Code Section 25741, Subdivision (a). Consequently, electricity generated by facilities located in-state or having their first point of interconnection to the WECC transmission system in-state satisfies California RPS delivery requirements. Note that the energy delivery requirements described in this section do not apply to facilities whose generation is procured by multijurisdictional electric corporations that serve retail end-use customers outside California and have 60,000 or fewer customer accounts in California under Public Utilities Code Section 399.17. The applicant seeking such certification must indicate that it is applying under this rule and the subsequent RPS certification will indicate the special conditions of the certificate.⁶⁴ This exception to the delivery requirements only applies to situations

⁶⁴ See footnote 632.

wherein these multijurisdictional utilities procure energy to meet their own RPS obligations. In the event that these facilities are located out-of-state and their generation is procured to meet the RPS obligations of another retail seller, the facility would be subject to all out-of-state eligibility requirements, including energy delivery requirements.

Electricity may be delivered into California at a different time than when the RPS-certified facility generated electricity, pursuant to Public Resources Code Section 25741, Subdivision (a). Further, the electricity delivered into California may be generated at a different location than that of the RPS-certified facility. In practical terms, out-of-state energy may be “firmed” or “shaped” within the calendar year. FIRMING and SHAPING refers to the process by which resources with variable delivery schedules may be backed up or supplemented with delivery from another source to meet customer load.^{65 66} For contracts that require CPUC approval, the Energy Commission will provide written documentation addressing whether a proposed contract delivery structure would be eligible for the RPS. For details, see Section III, Certification Process, in this guidebook.

To count generation from out-of-state facilities for RPS compliance, the RPS-certified facility must enter a power purchase agreement with a retail seller, procurement entity, or third party. The power purchase agreement must include both the RECs and electricity generated by the facility as a bundled commodity, and a matching quantity of electricity must be delivered to an in-state market hub (also referred to as “zone”) or in-

65 For further information refer to the CPUC staff white paper *Renewable Energy Certificates and the California Renewables Portfolio Standard Program*, April 20, 2006, [www.cpuc.ca.gov/word_pdf/REPORT/55606.doc]

66 Below are examples of contracting structures that would meet the RPS-delivery requirements; these examples are not exhaustive, and other contracting structures could also qualify. These examples do not constitute tradable RECs or authorize tradable RECs for RPS compliance.

1. The facility could provide firming and shaping services. For example, the retail seller could enter into a power purchase agreement (PPA) with an RPS-eligible facility and, as part of the PPA, the facility would provide firming and shaping to deliver a firm or non-firm product into California.
2. A third party could provide firming and shaping services. For example, a retail seller could buy energy and RECs from an RPS-eligible facility and execute a second PPA to resell the energy from the RPS-eligible facility, but not the RECs, to a third party that provides firming and shaping services. Then, the third party could provide the retail seller with a firm schedule for delivery into California.
3. The retail seller could provide firming and shaping services. The retail seller could buy energy and RECs from an RPS-eligible facility, sell the energy back to the facility, and “match” the RECs with energy delivery into California from a second PPA and/or with imports under a pre-existing PPA.

state point of delivery (also referred to as “node”) located within California.⁶⁷ The retail seller or procurement entity and seller may negotiate which party is responsible for securing transmission, as necessary, at any point along the delivery path as long as the energy is delivered into California.

The retail seller or procurement entity may document delivery of electricity from any control area operator (also referred to as “balancing authority”) in the WECC transmission system outside California, and the delivered electricity may originate from a control area that is different from that in which the RPS-certified facility is located. The electricity delivery may occur through typical delivery arrangements, such as through wheeling across multiple control areas, and the delivery may occur at any delivery point into California.

The Energy Commission will compare the amount of RPS-eligible electricity generated by the RPS-eligible facility per calendar year with the amount of electricity delivered into California for the same calendar year and the lesser of the two amounts may be counted as RPS-eligible procurement. ~~(For more discussion see the subsection on “Verification of Energy Delivery.”)~~ The electricity generated and associated RECs from the RPS-certified facility must be procured through a power purchase agreement with the retail seller or procurement entity. After January 1, 2008, the electricity and associated RECs may be purchased from a third party, provided the third party and all parties to the transaction are registered as account holders of WREGIS and use WREGIS as required by the Energy Commission as part of RPS compliance. The delivery of electricity to an in-state market hub or in-state point of delivery located within California must be made consistent with North American Electric Reliability Corporation (NERC) rules and documented with a NERC ~~E-tag~~ E-Tag as described below.

The following deliverability requirements were developed in consultation with the California ISO. These requirements must be satisfied for an out-of-state facility to qualify for the RPS (with the exception noted above for retail sellers subject to Public Utilities Code Section 399.17). More detailed instructions on using NERC e-Tags to verify energy delivery are provided in Appendix A. The delivery requirements do not apply to facilities located outside California whose first point of interconnection to the WECC transmission system is located in California.

1. The retail seller, procurement entity, facility representative, or third party must either (a) arrange for an interchange transaction with the California ISO to deliver

⁶⁷ Beginning January 1, 2008, it will be acceptable for an RPS-certified facility to sell power to a retail seller, procurement entity, or third party, pursuant to a PPA, ~~and provided~~ and provided all such parties ~~must use and be~~ must use and be registered as account holders with WREGIS as part of RPS compliance. A third party’s participation in out-of-state transactions is contingent upon all parties to that transaction (third party, generator, load serving entity, and California Independent System Operator – ISO or applicable QRE) participating in WREGIS to verify RPS compliance.

- the out-of-state facility's energy (or a matching amount of energy from another out-of-state source located within the WECC) to a point of delivery in California, or (b) arrange for an interchange transaction with another balancing authority outside California to deliver energy to the point of delivery in California. Under the policies of the NERC, the interchange transaction must be scheduled with what is commonly referred to as a "NERC ~~E-Tag~~-Tag."
2. The Source identified on the NERC ~~E-Tag~~-Tag may be a specific RPS-eligible facility registered as a unique source or may be any balancing authority located in the WECC outside California.
 3. The RPS certification number of the facility or facilities (or RPS pre-certification number, in the case of local publicly owned electric utilities) that is/are engaged in a power purchase agreement with a retail seller, procurement entity or third party (or for a local publicly owned electric utility implementing these delivery requirements as part of compliance with its RPS), must be shown on the Miscellaneous field of the NERC ~~e-Tag~~-Tag.
 4. The facility must provide the Energy Commission with its NERC identification (Source point name)⁶⁸ if it registers as a unique source, or the Source point name of the balancing authority in which it is located when it applies for RPS certification. (Providing this information does not restrict the eligibility of using other balancing authorities outside California to deliver energy into California.)
 5. The facility representative, retail seller, procurement entity or third party (or local publicly owned electric utility implementing these delivery requirements as part of compliance with its RPS) must request and receive acceptance of a NERC ~~e-Tag~~-Tag between a balancing authority in California and any balancing authority located in the WECC outside of California.
 6. On ~~May~~-June 1 of each year (or the next business day), the retail seller, procurement entity or third party must submit an annual report to the Energy Commission documenting compliance with this NERC ~~e-Tag~~-Tag requirement for the previous calendar year. The annual report to verify delivery from out-of-state must include the following NERC ~~e-Tag~~-Tag information:
 - a. The "Source" or "Point of Receipt" located outside California and within the WECC.
 - b. The final "Point of Delivery" or load center in California known as the "sink."
 - c. The California RPS-certification number of the facility or facilities with which the delivered energy is being "matched." The California RPS-certification number must be shown on the Miscellaneous field of the NERC ~~e-Tag~~-Tag.
 - d. The amount of electricity delivered per month.

68 The NERC identification is the Source point name, an alpha-numeric code the generator uses to identify itself when it registers with the Transmission Services Information Network (TSIN). Registration with TSIN is mandatory for participation in the NERC tagging system.

Additionally, the applicable parties (the Generation Providing Entity and Load Service Entities) must agree to make available upon request documentation of the NERC e-Tags ~~E-Tags~~ to the Energy Commission.

7. The facility must submit verification of its generation to the Energy Commission annually. Please refer to the section on the "~~Generation RPS~~ Tracking, Reporting and Verification System."

E. Eligibility of Tradable Renewable Energy Certificates or Credits

As noted in the section on "Outstanding Issues," RECs traded separately from energy (tradable RECs) do not qualify for the California RPS at this time.⁶⁹ The law, however, authorizes the use of RECs for RPS procurement requirements once: (1) the CPUC establishes rules for REC procurement, and (2) the CPUC and Energy Commission conclude that the tracking system is operational, capable of independently verifying delivery of renewable energy to a retail seller and can assure that RECs are not double counted by any seller within the WECC.

Tradable RECs that in the future may be counted toward California's RPS requirements may be created for electricity delivered from RPS-eligible resources to local publicly owned utilities, the California Independent System Operator, or a retail seller. RECs associated with energy delivered to publicly owned utilities may be certified by the Energy Commission as RPS-eligible if the Energy Commission determines that the publicly owned utility has satisfied certain conditions. For more information, see the section on "Publicly Owned Utilities" in this ~~Guidebook~~ guidebook.

No ~~tradable RECs~~ renewable energy credits shall be created for electricity generated pursuant to any electricity purchase contract with a retail seller or a publicly owned utility executed before January 1, 2005, unless the contract contains explicit terms and conditions specifying the ownership or disposition of those RECs. Deliveries under those contracts will be tracked through WREGIS and automatically retired as counting toward the retail seller's baseline.⁷⁰

Similarly, no ~~tradable RECs~~ renewable energy credits shall be created for contracts with QFs under the federal Public Utility Regulatory Policies Act executed after January 1, 2005. Deliveries of energy under these contracts will be tracked through WREGIS and will automatically be retired as counting toward a retail seller's RPS

⁶⁹ The CPUC is examining the issues surrounding authorizing tradable RECs for RPS compliance in its Rulemaking R.06-02-012.

⁷⁰ Public Utilities Code 399.16(a)(5).

procurement requirement.⁷¹ Please see Appendix A: WREGIS Reporting, for instructions on automatic retirement.⁷²

The Energy Commission will not allow electricity beyond a ~~de minimis~~^{minimum} quantity of fossil fuel to result in the creation of a tradable REC. The energy input of an RPS-eligible facility may use a de minimis amount of fossil fuel ~~for no more than 2 percent of its total annual fuel input~~ (on a BTU basis), and the Energy Commission's tracking system will issue RECs for the facility's entire energy output. ~~This provision will go into effect on January 1, 2008, when all generating facilities, retail sellers, procurement entities, and third parties participating in California's RPS must use and be registered as account holders with WREGIS as part of RPS compliance, with the exception of PG&E, SDG&E and SCE, which are required to register with and use WREGIS by May 1, 2008, as part of RPS compliance. See the "Tracking and Verification System" section for additional information.~~

As described above, however, the ~~2 percent de minimis~~^{de minimis} provision will not apply to RPS eligible generation from the following since tradable RECs will not be issued for:

- Facilities under contract with a retail seller or a local publicly owned utility if the contract was executed before January 1, 2005, unless the contract specifies the ownership or disposition of those RECs, and
- QFs under contracts executed on or after January 1, 2005.

A REC shall be counted only once for compliance with the California RPS and may not be also used to count toward the regulatory requirements of any other state or to satisfy any other retail product claims. RPS-eligible facilities, publicly owned utilities, and retail sellers who enter tradable REC transactions for RPS compliance purposes must participate in the RPS tracking and verification system approved by the Energy Commission.

RECs will be certified for generation only from an RPS certified facility that is also eligible to generate tradable RECs. If the facility loses its RPS certification status, any RECs produced will not be RPS certified, effective upon the date the facility becomes ineligible for the RPS.

⁷¹ Public Utilities Code 399.16(a)(6).

⁷² Multi-jurisdictional utilities with procurement from facilities under contracts that fall under Public Utilities Code 399.16(a)(5) or (6) that is claimed for both California and another jurisdiction are not required to automatically retire the RECs procured under those contracts, but must retire the RECs allocated to California from these facilities for purposes of California's RPS as soon as possible.

III. Certification Process

This section covers the process for pre-certification and certification of renewable facilities eligible for the RPS, including pre-approving contract delivery structures for both electricity and biogas, as RPS-eligible. This section also describes additional required information for renewable facilities using technologies that must meet special eligibility requirements. Although retail sellers are required to meet their annual procurement requirements with generation from RPS-certified facilities, the Energy Commission also certifies facilities as RPS-eligible if they serve a local publicly owned electric utility (POU), and encourages POUs to meet their RPS obligations with generation from certified facilities. ~~Also, the Energy Commission will pre-certify small hydroelectric facilities that intend to sell to a POU that would be otherwise eligible for certification except that the facility was owned by or under contract to a POU.~~

Electricity generation from a facility cannot be counted toward meeting a retail seller's RPS procurement requirement until the Energy Commission certifies the facility as a renewable supplier facility eligible for the RPS. Any facility operator who owns a facility or is interested in entering into a contract to generate electricity that will count toward a retail seller's RPS obligation must certify the facility with the Energy Commission before the generation may be counted toward a retail seller's RPS obligations. The Energy Commission may count generation that occurred before January 1, 2008, toward a retail seller's RPS obligation if the generating facility was RPS-certified at the time of procurement or if the Energy Commission receives an application for certification before March 1, 2011, and the facility is RPS-certified based on that application.

For generation that occurs after January 1, 2008, procurement may count toward a retail seller's RPS obligation if the generating facility was RPS-certified at the time of procurement or applied for RPS certification or pre-certification at the time of procurement.⁷³ Any generation that occurs before a facility is RPS-certified will be considered RPS-eligible only if the generation occurs ~~on~~ during or after the month and year that date the Energy Commission receives an application for certification (CEC-RPS-1A) or pre-certification (CEC-RPS-1B), and with some exceptions, the generation has been tracked in WREGIS.⁷⁴ In all cases, the electricity will not be considered eligible,

⁷³ The Third Edition of the *RPS Eligibility Guidebook* only allows generation to count toward a retail seller's RPS procurement obligation if it occurs after the Energy Commission receives the pre-certification or certification application. Earlier *RPS Eligibility Guidebook* editions did not contain this restriction and counted all generation toward a retail seller's RPS obligation so long as the facility eventually became certified. This Fourth Edition provides notice that going forward, the Energy Commission will no longer count pre-2008 procurement toward a retail seller's RPS obligation unless the facility was certified at the time of the procurement or the Energy Commission receives an application for certification before March 1, 2011.

⁷⁴ The ITS may be used to report generation occurring through 2009 and in some cases in 2010; for more information see Section IV: RPS Tracking, Reporting and Verification System.

~~however,~~ and will not be counted toward meeting an RPS obligation until the facility is actually certified by the Energy Commission as being eligible for the RPS, and the facility's historical generation is not ultimately disapproved for RPS eligibility. This applies to all facilities regardless of whether they previously registered with the Energy Commission's Renewable Energy Program.

Delivery from out-of-state facilities must meet specific delivery requirements, as previously noted, ~~for the generation to qualify for the RPS. Retail sellers IOUs seeking pre-approval from the Energy Commission staff for delivery from out-of-state delivery facilities~~ may submit a schematic diagram with a narrative description of a proposed contract delivery structure to the CPUC as part of the retail seller's advice letter or application process for which contract approval is being requested. The CPUC staff will submit the documentation to the Energy Commission staff for review. ~~If the Energy Commission staff determines that the proposed delivery structure meets the RPS delivery requirements, the staff will provide written documentation to the CPUC.~~ POUs or retail sellers whose contracts are not subject to CPUC approval may contact the Energy Commission staff directly with requests for pre-approval of their contract delivery structures. If the staff determines that the proposed delivery structure meets the RPS delivery requirements, the staff will provide written documentation to the CPUC (for IOUs) or to the electricity provider (for POUs and other retail sellers). Procurement may count toward a retail seller's RPS obligation if the generating facility was RPS certified at the time of procurement or applied for RPS certification or pre-certification at the time of procurement. The electricity will not be considered eligible, however, and will not be counted toward meeting an RPS obligation until the facility is actually certified by the Energy Commission as being eligible for the RPS. This applies to all facilities regardless of whether they previously registered with the Energy Commission's Renewable Energy Program.

In September 2009, the CPUC granted a petition to modify the Self-Generation Incentive Program (SGIP) to allow use of off-site renewable fuels that have been transported to the electric generating unit as allowed in the RPS program.⁷⁵ A party seeking pre-approval from the Energy Commission for delivery of biogas under the SGIP may submit the documentation described in the biogas section, Section II, B. 2, to the SGIP administrator as part of the party's SGIP application process. The SGIP administrator may submit the documentation to the Energy Commission staff for review and possible approval.

A party requesting pre-approval for adding a new fuel source for use at an electric generating facility that is already RPS-certified may submit the documentation directly to Energy Commission staff. Requests for approval of biogas sources or biogas delivery mechanisms must be submitted as part of an application packet for RPS certification or pre-certification of a specific electric generating facility.

⁷⁵ CPUC Decision 09-09-048, September 24, 2009.

In applying for certification, the facility operator, ~~or the IOU agent applying on the operator's behalf,~~ agrees to participate in the Energy Commission's generation tracking and verification system. For more information about the tracking and verification system, please refer to the section of this ~~Guidebook~~guidebook titled "RPS Tracking, Reporting and Verification System~~Generation Tracking and Verification System.~~"

A. Applying for RPS Certification and Pre-Certification

Facilities seeking certification as eligible for the RPS consistent with the eligibility requirements noted above must submit a completed application, along with any necessary supporting documentation, to the Energy Commission at the address shown on the form. Applicants must submit a hard copy of these materials with an original authorized signature (not a copy) on the appropriate application form. An electronic copy of the completed application in Excel® format must also be submitted the Energy Commission via email to RPSTrack@energy.state.ca.us with the RPS ID, if applicable, and the name of the facility in the subject line. Application forms can be found on the Energy Commission's website at <http://www.energy.ca.gov/renewables/documents/index.html#rps>. ~~An application may be submitted for a facility by the facility operator or its agent on the facility's behalf (CEC RPS 1A) or by the procuring retail seller on the operator's behalf (CEC RPS 2) for facilities under contract with the retail seller before April 21, 2004, the initial adoption date of this Guidebook. A publicly owned electric utility, for its RPS program, may certify a facility on the operator's behalf using form CEC RPS 2 for facilities under contract with the publicly owned electric utility and subject to the requirements applicable to retail sellers.~~

~~Except for CPUC ordered extensions to existing QF power purchase contracts, retail seller certification on the operator's behalf becomes void in the event that the facility's contract with the retail seller expires, or is voluntarily extended, or is otherwise renegotiated by the retail seller and the facility operator. Once the contract expires or is voluntarily renegotiated, the facility operator must apply for certification from the Energy Commission on its own behalf, and the retail seller may not recertify the facility on the operator's behalf. For CPUC ordered extensions, retail seller certification may continue until the extension expires. The Energy Commission will review the application to determine eligibility as a renewable supplier eligible for the RPS and will notify applicants once a determination of eligibility is made.~~

~~Facilities certified by a retail seller will be granted certification only for the generation procured under contract by that retail seller. The facility operator must separately certify any facility capacity that is not subject to the retail seller's procurement contract but is procured to satisfy the RPS targets of another retail seller. If a facility operator seeks certification on its own behalf, however, the facility operator need submit only one application per facility regardless of whether generation from the facility is sold to one or multiple retail sellers. When a retail seller or agent applies on a facility operator's behalf, the retail seller or agent must furnish all additional required information. The~~

Energy Commission may use any information or records submitted to the Energy Commission or obtained as part of any audit to determine eligibility and compliance with the RPS. The information and records include, but are not limited to, applications for RPS certification, documents submitted to substantiate procurement or generation claims, and any other documentation submitted upon request of the Energy Commission. This information and records may be disclosed to the public pursuant to the California Public Records Act (Government Code Section 6250, et seq.). If, as part of any audit, the Energy Commission requires the applicant to provide copies of records that the applicant believes contain proprietary information entitled to protection under the California Public Records Act or other law, the applicant may request that such records be designated confidential pursuant to the Energy Commission's regulations for confidential designation, Title 20, California Code of Regulations, Section 2505.⁷⁶

~~Provisional or "pre-certification" as an eligible renewable resource is available for applicants whose facilities are not yet on-line. Applicants seeking pre-certification must complete CEC RPS 1B. The information submitted by these applicants will be subject to further verification once the pre-certified facility comes on-line. Applicants must indicate their desire to be pre-certified on their completed CEC RPS 1B form and must submit all required supplemental information, as described below, to the extent that information is available. If the additional required information is not available at the time of pre-certification because of the facility's stage of development, then the applicant must explain this in its application and identify the missing information and the date(s) when the information is expected to be available. Facilities that are pre-certified must submit a complete and updated certification application (CEC RPS 1A) with all additional required information and be certified as RPS-eligible before any of its generation may be counted toward satisfying a retail seller's RPS procurement requirements. The Energy Commission will make every effort to notify applicants if their facility is eligible for the RPS as soon as possible. For facilities that are not required to submit additional information as described below, the Energy Commission expects to review and process applications for certification and pre-certification within 10-30 business days of their receipt, unless questions or concerns arise regarding the applications. For applicants that must submit additional required information, such as for biofuels, biopower, hydroelectric, repowered, or out-of-state facilities, the Energy Commission must conduct an extensive review of the additional data, which could take more than 60 days from . Review of these applications will require a minimum of 30-60 days from when the Energy Commission receives a complete application. The 30-day review clock starts on the date a complete application is date-stamped received by the Energy Commission as received and, if applicable, the Executive Director makes a determination on any related applications requests from the applicant for confidential designation. After completing its review, the Energy Commission will either notify the~~

⁷⁶ Please refer to the section on Use and Disclosure of Information and Records in the *Overall Program Guidebook* for more information.

applicant of its proposed determination or will request additional information from the applicant.

If questions arise, the applicant will be contacted and may be asked to submit additional information. A request for additional information will place a hold on the review process for that facility until the Energy Commission receives the requested information. If the applicant does not respond within 60 days to a request for clarification or additional information regarding the application, the application will expire without approval and be returned. The applicant must submit a new application with complete information to reinstate the certification request.

After completing its review, the Energy Commission will notify applicants in writing of its determination on the application for certification or pre-certification. If the application for certification or pre-certification is approved, the Energy Commission will issue a certificate stating that the facility is certified or pre-certified as eligible for the RPS. The certificate will list the Energy Commission-issued certification number for the facility as well as the size, fuel type or types, ~~and percentage of annual fossil fuel usage~~ annual percentage of non-renewable energy resources (if any), name, location, ~~and owner/operator of the facility, applicant or certifying agent, date RPS eligibility begins, and other information relevant to the facility's eligibility.~~ The certificate will also indicate whether the facility was certified by the facility owner/operator, an agent of the facility owner/operator, or a retail seller on the owner/operator's behalf. A copy of the certificate will also be sent to the owner/operator as indicated on the application form, if different than the applicant.

In addition, the certificate will identify any limits on certification or pre-certification. For example, a certificate issued for a multijurisdictional facility that has been certified pursuant to Public Utilities Code 399.17 will indicate that the generation of the facility is only eligible to be claimed for RPS compliance by the multijurisdictional utility identified in the application. ~~by a retail seller will indicate certification by the retail seller, rather than the facility operator, and will limit certification to the generation procured under contract by the retail seller.~~ The eRPS Eligibility Certificates issued will not include an expiration date and will remain in effect for the life of the facility.

Facilities that were assigned a pre-certification number with a "P" suffix are owned by or under contract with a local publicly owned electric utility (POU) rather than a retail seller. The "P" suffix indicates that these facilities met all RPS-eligibility requirements, except for limitations in the law that precluded POU-owned or contracted facilities from being RPS-eligible. Thus, the Energy Commission could only assign a pre-certification status to these facilities. A change in law has now removed this restriction and facilities that have been previously assigned a "P" suffix may now apply for RPS certification. Applicants from such facilities must reapply for RPS certification, and must provide all supporting documentation required by this guidebook. However, if the applicant previously provided such documentation and it remains accurate, the applicant may simply reference the documentation when submitting a new application for certification.

If certification is awarded to a facility that was previously awarded pre-certification with a "P" suffix, all generation from the date the pre-certification application was received will be considered RPS-eligible.

~~The Energy Commission encourages local publicly owned electric utilities to meet their RPS obligations through procurement from RPS certified (or pre-certified) facilities. However, for a small hydro facility to become RPS certified, it is eligible only if a retail seller owned or procured electricity from the facility as of January 1, 2006. By statute, the definition of a "retailer seller" excludes local publicly owned electric utilities. Consequently, a small hydro facility that is owned by or is selling its generation exclusively to a local publicly owned electric utility as of January 1, 2006, is not RPS eligible and may not apply for RPS certification but may apply for pre-certification. Similarly, if an out-of-state facility commenced commercial operations after January 1, 2005, and the energy from the facility is not incremental generation resulting from project expansion or repowering AND was not part of a retail seller's baseline because the energy was sold to (or the facility was owned by) a POU,⁷⁷ then the facility representative may apply for pre-certification. If the Energy Commission determines that the facility is eligible for pre-certification and is otherwise eligible for certification except that it was owned by or under contract to a publicly owned utility, then the Energy Commission will note this determination in the pre-certification notification upon an applicant's request. For applicants that must submit additional required information, such as biofuels, hydroelectric or out-of-state facilities, the Energy Commission must conduct an extensive review of the additional data. Review of these applications will require a minimum of 30 days from when the Energy Commission receives a complete application. The 30-day clock starts on the date a complete application is date-stamped by the Energy Commission as received and the Executive Director makes a determination on any related applications for confidential designation. After completing its review, the Energy Commission will either notify the applicant of its proposed determination or will request additional information from the applicant. If the applicant disagrees with the Energy Commission's determination on a certification or pre-certification application, the applicant may petition the Renewables Committee and the Energy Commission for reconsideration as described in the *Overall Program Guidebook*.~~

The Energy Commission will post information on its website listing those facilities that are certified or pre-certified as eligible for the RPS. Any changes in a facility's certification status will also be posted on the Energy Commission's website.

Consistent with the *Overall Program Guidebook*, the Energy Commission may conduct periodic or random reviews to verify records submitted for certification or pre-certification as a renewable supplier facility eligible for the RPS. Further, the Energy

⁷⁷ Public Resources Code 25741(b)(2)(C). For further information on eligibility requirements refer to the section of this Guidebook titled, "Eligibility of Out-of-State Facilities."

Commission may conduct on-site audits and facility inspections to verify compliance with the requirements for certification or pre-certification. The Energy Commission may request additional information it deems necessary to monitor compliance with the certification requirements specified in this ~~Guidebook~~guidebook.

To the extent that the facility's agent or a retail seller applies for certification on a facility's behalf, the agent or retail seller must secure and have available for inspection records to verify the application for certification or pre-certification. In addition, the agent or retail seller must possess documents to verify a facility's compliance with the requirements of certification and pre-certification. These documents must be available to the Energy Commission upon request for auditing purposes.

An application for certification may be submitted for a facility by the facility operator or its agent on the facility's behalf using form CEC-RPS-1A. Upon approval for certification, the Energy Commission will assign a certified facility a six-digit RPS identification number with an "A" suffix.

Provisional or "pre-certification" as an eligible renewable resource is available for applicants whose facilities are not yet on-line or not yet using an eligible renewable resource. Applicants seeking pre-certification must submit a completed form CEC-RPS-1B. If a pre-certification is awarded to the facility, it will be assigned a six-digit RPS identification number with a "C" suffix. A facility that was pre-certified will retain its RPS identification number, and only the suffix will change from a "C" to an "A" upon receiving certification status. The information submitted by these applicants will be subject to further verification once the pre-certified facility comes on-line. Applicants must indicate their desire to be pre-certified on their completed CEC-RPS-1B form and must submit all required supplemental information, as described below, to the extent that information is available. If the additional required information is not available at the time of pre-certification because of the facility's stage of development, then the applicant must explain this in its application and identify the missing information and the date(s) when the information is expected to be available. Facilities that are pre-certified must submit a complete certification application (CEC-RPS-1A) with all additional required information and be certified as RPS-eligible before any of its generation may be counted toward satisfying a retail seller's RPS procurement requirements. **An award of pre-certification status does not guarantee that a facility will be eligible for certification in the future, and the pre-certification certificate will indicate this on its face.**

The Energy Commission will no longer accept an application on the operator's behalf using a CEC-RPS-2 form from retail sellers or publicly owned electric utilities.⁷⁸
~~However,~~Instead, a retail seller or publicly owned electric utility must now use the CEC-

78 The Energy Commission developed the RPS-2 Form in 2004 to facilitate the initial application process for the RPS and to accommodate the retail sellers applying for a significant number of facilities on the facilities' behalf. The Energy Commission will no longer accept the RPS-2 Form for this purpose or any other purpose.

RPS-1A/B form ~~may~~ to apply for certification or pre-certification as a facility's agent using the CEC RPS-1A form; in this instance, the generation would be eligible for use by any retail seller or publicly owned electric utility, subject to other applicable limitations.

Facilities that were certified by a retail seller or publicly owned electric utility using a CEC-RPS-2 form before the publication of the Fourth Edition of this guidebook were granted certification, but only for the generation procured under contract by that retail seller or publicly owned electric utility. In such a case, the facility operator must separately certify any facility capacity that is not subject to its procurement contract with the retail seller or publicly owned utility, but that is procured to satisfy the RPS targets of another retail seller. If a facility operator, or agent thereof, seeks certification on its own behalf using the CEC-RPS-1A form, however, the facility operator need submit only one application for that facility regardless of whether its generation is sold to one or multiple retail sellers.

Except for CPUC-ordered extensions to existing QF power purchase contracts, retail seller certification on the operator's behalf becomes void in the event that the facility's contract with the retail seller or publicly owned utility either expires, is voluntarily extended, or is otherwise renegotiated by the retail seller or the publically owned utility and the facility operator. Once the contract expires or is voluntarily renegotiated, the facility operator, or agent thereof, must apply for certification from the Energy Commission using a CEC-RPS-1A form, and neither the retail seller nor the publicly owned utility may recertify the facility on the operator's behalf using a CEC-RPS-2 form. ~~on its own behalf, and the retail seller may not recertify the facility on the operator's behalf.~~ For CPUC-ordered extensions, retail seller certification may continue until the extension expires.

B. Amending Certification and Pre-Certification

Representatives of certified and pre-certified facilities must notify the Energy Commission promptly of any changes in information previously submitted in an application for certification or pre-certification. A facility failing to do so risks losing its certification status. Any changes to a certification or pre-certification application should be reported on an amended CEC-RPS-1 form (CEC-RPS-1A to amend certification and CEC-RPS-1B to amend pre-certification). For example, if a facility's annual fossil fuel use changes from the percentage identified in its previous application for certification, the facility must submit an amended application. The Energy Commission will review the amended application and notify the applicant of any modifications to its certification status.

Also, any changes to the status of a facility's certification will be posted on the Energy Commission's website, and any affected retail seller contracting with that facility will be promptly notified.

C. Additional Required Information for BiofuelsHydroelectric, Municipal Solid Waste Conversion, Out-of-State, and Repowered Facilities

The following instructions apply to applications for ~~biofuels and hydroelectric, MSW conversion, out-of-state, and repowered~~ facilities. ~~Instructions are also included for applicants seeking certification or pre-certification of repowered facilities and facilities located outside California.~~ The additional required information described below must be submitted as an attachment to the applicant's completed CEC-RPS-1A or CEC-RPS-1B form, along with the appropriate supplement form, if applicable.

1. Instructions for Additional Required Information for Hydroelectric and Conduit Hydroelectric Facilities

An applicant must provide additional information to substantiate its ~~self-application for RPS pre-certification or~~ certification that a small hydroelectric facility, conduit hydroelectric facility, or incremental generation from efficiency improvements to hydroelectric facilities regardless of overall facility size ~~is eligible for the RPS if the~~ facility:

- Commenced commercial operations or was repowered on or after January 1, 2006, for small or conduit hydroelectric facilities.
- Commenced commercial operations before January 1, 2007, for incremental generation from efficiency improvements regardless of facility size.
- Was added to an existing water conduit on or after January 1, 2006, for conduit hydroelectric facilities.
- Was an existing small hydro or conduit hydro facility and made efficiency improvements after January 1, 2008, that caused it to exceed 30 MW.

Additional required water-use data and documentation described below must be attached to a completed CEC-RPS-1A (for certification) or CEC-RPS-1B (for pre-certification) form. These requirements apply to facilities located within California as well as those located out-of-state. Applicants possessing a permit or license from the State Water Resources Control Board (SWRCB) – or from another governing body, if ~~located in another state~~ out of state – must submit a copy of the permit or license as well as the application for the permit or license.

1. Name of the Facility

2. Ownership of the Facility

3. Source Water Description

The application must identify the source of the water for the hydroelectric project. The source must be characterized as surface, groundwater, or other (for example, recycled

water). For surface water sources, a map at a scale of 1:24,000 must be provided. The map should also identify the location of the diversion point and all other facilities. In addition, a written description of the location of the diversion should be provided (county and nearest city) as well as the name of the body of water at the point of diversion. For groundwater, the location of the well(s) and conveyance facilities shall be identified on a map of 1:24,000 scale. The applicant must also specify how much water is used for each of the identified beneficial uses.

4. Water Rights

Both in-state and out-of-state applicants must clearly establish their right to divert water by submitting all necessary information as well as all appropriate licenses or permits. Within California, this information must identify the permitted volume, rate, and timing of water diversions, the place of diversion, and beneficial uses. This may be achieved through submittal of the appropriate SWRCB appropriation permit or license, or the Statement of Water Diversion and Use filed with SWRCB. For diversions not subject to an appropriation permit or license, a copy of any Statement of Water Diversion and Use filed with SWRCB should be provided. Facilities located outside of California ~~Out-of-state facilities~~ must provide similar documentation of an existing water right for the water diversion of the project.

5. Hydrologic Data

The applicant must submit appropriation and/or diversion data for the last five years or for the period of operation if the project has been operating less than five years. Information contained in any legally required reports may be used to meet this requirement if sufficient information is included in the report. For other projects, the hydrologic data submitted must be accompanied by a description of how the data is collected. Flow data shall be provided at the frequency set forth in the applicable water appropriation permit; for example, if the permit specifies minimum and maximum flows on a monthly basis that is the level of information necessary to be submitted.

6. Other Permits

The applicant must submit all other applicable permits, including those permits and exemptions issued by the Federal Energy Regulatory Commission (FERC).

7. Environmental Documentation

The applicant must submit copies of any permits, agreements, contracts, or other requirements affecting the operation of the facility, especially those that affect the volume, rate, timing, temperature, turbidity, and dissolved oxygen content of the stream water before and after the points of diversion.

8. Capacity

For small and conduit hydroelectric facilities, the applicant must demonstrate how the project will comply with the 30 MW size limitations under the RPS and not cause an

adverse impact on instream beneficial uses or a change in the volume or timing of streamflow. For this purpose, a facility may have an adverse impact on the instream beneficial uses if it causes an adverse change in the chemical, physical, or biological characteristics of water.

9. Efficiency Improvements

Applicants seeking certification of small or conduit hydroelectric facilities that exceed 30 MW due to efficiency improvements are required to provide the following:

- a. Documentation that shows when the existing small or conduit hydroelectric facility commenced commercial operations.
- b. Documentation that describes the efficiency improvements and when they were initiated and completed.
- c. Documentation that demonstrates that the efficiency improvements are not the result of routine maintenance.
- d. Documentation that demonstrates that the efficiency improvements did not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow. For this purpose, an efficiency improvement ~~may~~could have an adverse impact on the instream beneficial uses if it causes an adverse change in the chemical, physical, or biological characteristics of water.

10. Incremental Hydroelectric Generation

Applicants seeking certification of incremental hydroelectric generation due to efficiency improvements regardless of facility output are required to provide the following:

- a. Documentation that shows when the existing hydroelectric facility commenced commercial operations.
- b. Documentation that describes the efficiency improvements and when they were initiated and completed.
- c. Documentation that demonstrates that the efficiency improvements are not the result of routine maintenance.
- d. Documentation that demonstrates that the efficiency improvements were not included in any resource plan sponsored by the facility owner before January 1, 2008. An example of this documentation is submission of pertinent sections of such a resource plan.
- e. A copy of certification from the State Water Resources Control Board (SWRCB) pursuant to Section 401 of the Clean Water Act (33 U.S.C. Sec. 1341) or the certification from a regional board to which the SWRCB has delegated authority to issue certification, unless the facility is exempt from certification because there is no potential discharge into waters of the United States. The certification must have been received within the immediately preceding 15 years of when the improvements were initiated, or:-

If the hydroelectric facility is located in a state in the United States other than California, the certification pursuant to Section 401 of the federal Clean Water Act (33 U.S.C. Sec. 1341) may be received from the applicable state board or agency or from a regional board to which the state board has delegated authority to issue the certification, or;

The facility meets the requirements of the Public Utilities Code 399.12.5(b)(2)(C).

~~e.f.~~ Documentation that demonstrates that the efficiency improvements did not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow⁷⁹. For this purpose, an efficiency improvement ~~may~~would have an adverse impact on the instream beneficial uses if it causes an adverse change in the chemical, physical, or biological characteristics of water.

~~f.g.~~ Documentation that demonstrates evidence that the efficiency improvements to the facility resulted from a long-term financial commitment by the retail seller.⁸⁰

~~g.h.~~ A calculation of the historical average annual production of the existing hydroelectric facility, including verifiable generation data for the 20 years preceding the efficiency improvements ~~(if the facility has not been operating 20 years, then provide data for the years it has been operational)~~, including supporting water flow data. If the facility has not been operating 20 years, then provide data for the years it has been operational.

~~h.i.~~ The actual or expected efficiency improvement and increase in production in MWh resulting from the efficiency improvement and a discussion of the method used to estimate increased energy production. The actual or expected efficiency improvement should be based on the same data that is used to calculate the historical average annual production of the existing hydroelectric facility. If production data are available for years following the efficiency improvement, please provide those data.

2. Instructions for Additional Required Information for Municipal Solid Waste Conversion Facilities

The requirements for Municipal Solid Waste Conversion facilities described below are for facilities located in California; the requirements for MSW conversion facilities physically located outside California are provided at the end of this subsection.

⁷⁹ The eligibility of a hydroelectric generation facility, certified as of January 1, 2010, shall lose its eligibility if the facility causes a change in the volume or timing of streamflow required by license conditions approved pursuant to the Federal power Act (Chapter 12 (commencing with Section 791a) of Title 16 of the United States Code) on or after January 1, 2010.

⁸⁰ "Long-term financial commitment" means either new ownership investment in the facility by the retail seller or local publicly owned electric utility or a new or renewed contract with a term of 10 or more ~~than 10 years~~, which includes procurement of the incremental generation.

MSW Conversion Facilities Located in California

Applicants for RPS certification of solid waste conversion facilities must provide copies of any solid waste facilities permits issued by the appropriate Enforcement Agency⁸¹ pursuant to regulations promulgated by the California Department of Resources Recycling and Recovery (CalRecycle) ~~California Integrated Waste Management Board (CIWMB).~~ These permits must be attached to the completed CEC-RPS-1A or CEC-RPS-1B form to verify compliance with the requirements specified above. Applicants seeking RPS pre-certification must attach copies of their Solid Waste Facilities Permit Application, as submitted to the Enforcement Agency. ~~application to CIWMB for a permit.~~ The Energy Commission will verify compliance in consultation with CalRecycle ~~the CIWMB and~~ based on ~~CIWMB's proposed or the~~ adopted regulations for ~~solid waste conversion technologies as set forth in Title 14, California Code of Regulations, Division 7, Chapter 3, Article 6.0, commencing with Section 17400. CIWMB is considering regulations for this purpose under Assembly Bill 2770 (Mathews, Chapter 704, Statutes of 2002), which establishes requirements for solid waste conversion technologies that mirror the requirements for these technologies found in Public Resources Code Section 25741, Subdivision (b)(3). The regulations being considered are part of CIWMB's Transfer/Processing Operations and Facilities Regulatory Requirements and will require facilities using solid waste conversion technologies to obtain a Conversion Technology Facility Permit. Pending the adoption of these regulations, the CIWMB may permit facilities using solid waste conversion technologies on a case by case basis following its existing regulations for the Transfer/Processing Operations and Facilities Regulatory Requirements.~~

To become certified as a renewable energy resource eligible for RPS, an applicant for a solid waste conversion facility must submit to the Energy Commission a copy of any applicable permits issued pursuant to the requirements of Title 14, CCR, Division 7, Chapter 3 Article 6.0, commencing with Section 17400. ~~its Conversion Technology Facility Permit approved by the CIWMB. In the event that CIWMB's regulations for solid waste conversion technologies are not adopted at the time the facility seeks RPS certification, the facility must request and obtain from CIWMB a Solid Waste Facility Permit under CIWMB's existing regulations for the Transfer/Processing Operations and Facilities Regulatory Requirements.~~ The Energy Commission will confirm that the permit is approved, active, and applicable to the facility seeking RPS certification. These permits must demonstrate the following:

1. The facility is using only a "gasification" conversion technology, as defined in Public Resources Code Section 40117.

⁸¹ Enforcement Agency as defined in Public Resources Code section 40130. A List of Enforcement Agencies can be found at <http://www.calrecycle.ca.gov/LES/Directory/>.

2. The facility accepts and processes “solid waste” as defined in Public Resources Code Section 40191 and is not limited to receiving and processing “source separated” waste as defined in Title 14, California Code of Regulations, Section 17402.5(b)(4).

3. The facility processes solid waste from which, ~~as much as possible to the maximum extent feasible~~, all recyclable materials and marketable green waste compostable materials have been removed before the solid waste conversion process.

In addition, an applicant for solid waste conversion facility must certify to the Energy Commission the following:

1. All recyclable materials and marketable green waste compostable materials that have been removed from solid waste prior to the conversion process ~~delivered to the facility~~ are recycled or composted.

2. Any local agency sending solid waste to the facility diverted at least 30 percent of all solid waste it collects through solid waste reduction, recycling, and composting. For purposes of this certification, “local agency” means any city, county, or special district, or subdivision thereof, that is authorized to provide solid waste handling services.

To become pre-certified as RPS-eligible, the applicant must submit to the Energy Commission ~~the information required to receive a Conversion Technology Facility Permit~~ copies of its Solid Waste Facilities Permit Application, as submitted to the Enforcement Agency (EA) or a letter from CalRecycle stating that the facility, if built and operated as proposed, is using a “gasification” conversion technology, as defined in Public Resources Code Section 40117. ~~from CIWMB. In the event that the Enforcement Agency determines that no permit is required~~ CIWMB’s regulations for solid waste conversion technologies have not been adopted at that time, then the applicant must submit to the Energy Commission the information provided to the Enforcement Agency and the Enforcement Agency’s official determination of the facility’s regulatory status. ~~required to receive a Solid Waste Facility Permit. This information is identified in Title 14, California Code of Regulations, Sections 18221.5 and 18221.6.~~ The Energy Commission will review this information and consult with ~~the CalRecycle~~ CIWMB to determine if the information is complete and satisfies the requirements specified in Public Resources Code Section 25741(a)(3). The Energy Commission will confer with CalRecycle to determine that the information included on any final approved solid waste facility permit is consistent with the requirements of the RPS eligibility criteria.

If a pre-certified applicant does not obtain an applicable solid waste facility Conversion Technology Facility Permit ~~from CIWMB~~, if such a permit is deemed necessary, by the time the project commences commercial operation, or if it is denied approval for a required permit, the Energy Commission will revoke the applicant’s pre-certification.

MSW Conversion Facilities Located Outside California

In the case of an MSW Conversion facility not physically located within California and thus not under the jurisdiction of CalRecycle or an EA, the facility must meet the same

requirements for in-state facilities, except that the Energy Commission will accept similar permits (as described above) from the corresponding local agency or agencies with the authority to award such permits. For RPS certification, the applicant must submit copies of the permit applications and all documentation required to receive the local equivalent of the required EA permits as well as any additional information that would be required to receive these permits from the EA.

For RPS pre-certification, the applicant must submit all available documentation required to receive the local equivalent of the EA permits, as well as the permits required by the local authority. If a pre-certified applicant does not obtain all required permits from the local authority or meet all standards placed on similar facilities located in California by the EA to receive the required permits by the time the project commences commercial operation, or if it is denied approval for a permit, the Energy Commission will revoke the applicant's pre-certification status.

3. Instructions for Additional Required Information for Out-of-State Facilities

All out-of-state facilities must provide additional required information when applying for certification as RPS-eligible. Further ~~reporting~~ requirements apply to facilities that commenced commercial operations before January 1, 2005, as described below. However, the additional reporting requirements for out-of-state facilities do not apply, to a facility that is either:

- Exclusively serving retail sellers subject to Public Utilities Code Section 399.17, or
- Seeking pre-certification and is not yet on-line.

1. Out-of-State Facilities: Representatives of all other out-of-state facilities seeking certification as RPS-eligible must submit the following additional information with a completed CEC-RPS-1A form ~~or CEC RPS-1B form~~.

Impact on California Environmental Quality Standards: The law requires a facility located out-of-state to demonstrate that it will not cause or contribute to a violation of a California environmental quality standard or ~~regulation~~ requirement.⁸² To meet ~~this~~ these criteria, the applicant must provide:

- a. A comprehensive list and description of all California environmental quality laws, ordinances, regulations, and standards (collectively referred to as "LORS") that may be directly or indirectly violated by the facility's development or operation, and
- b. An assessment as to whether the facility's development or operation will cause or contribute to a violation of any of these LORS in the region of California most likely to be affected by the facility's development or operation.
- c. Documentation that substantiates the applicant's assessment as required in b) above. For example, documentation could include environmental studies, permits, and

⁸² Public Resources Code Section 25741(b)(2)(B)(iv).

similar materials that demonstrate that the facility's development or operation will not cause or contribute to a violation of a California environmental quality standard or requirement in California.

At a minimum, the LORS described shall address the following environmental areas consistent with Appendix B, Section (g), of the Energy Commission's regulations for power plant certification, Title 20, California Code of Regulations, Sections 1701, et seq., to the extent that application of the Environmental Area Thresholds for Out-of-State Facilities set forth in Table 2 shows that the project has the potential to impact resources within California:

- Cultural Resources
- Land Use
- Traffic and Transportation
- Visual Resources
- Socioeconomics
- Air Quality
- Public Health
- Hazardous Materials Handling
- Workers' Safety
- Waste Management
- Biological Resources
- Water Resources
- Agriculture and Soil
- ~~Paleontology~~ Paleontological Resources
- Geological Hazards and Resources
- Transmission System Safety and Nuisance
- Noise

The assessment of the potential for an out-of-state facility to cause or contribute to any violation of a California environmental quality standard or requirement depends on the environmental resource area and the project's distance from the region in California most likely to be impacted by the facility's development or operation. The likelihood that a facility located outside California will affect California's environmental quality is primarily related to distance. For example, a project located in a state not adjacent to California is unlikely to contribute to a violation of a California Visual Resources LORS. The Out-of-State Supplemental Form, CEC-RPS-1A:S3, requires an applicant to identify the project's distance from California, as well as the location in California most likely to be impacted by the project.

The applicable LORS for a given facility will vary depending on the facility's location, since the LORS across California vary. For example, the air quality standards in Southern California may differ from the air quality standards in Northern California. Accordingly, for demonstrating whether the out-of-state facility will cause or contribute to a violation of any of these LORS in California, the applicant should select the region

in California that would most likely be affected by the facility's development or operation.

The Energy Commission will first consider the facility's technology and distance from the California region most likely to be impacted to assess the applicant's LORS documentation. Table 2 describes the thresholds the Energy Commission will apply when evaluating the likelihood of a project to cause or contribute to a violation of a California LORS, with projects located beyond those thresholds being unlikely to violate a California LORS. As shown in Table 2, some environmental areas have discrete distance limits beyond which the project is unlikely to impact California's environmental quality. Other environmental areas have conditional thresholds for which the potential impact depends on the nature of the facility and its location.

Table 2: Environmental Area Thresholds for Out-of-State Facilities

<u>Environmental Area</u>	<u>Threshold or Minimum Distance from California Border</u>
<u>Discreet Thresholds</u>	
<u>Agricultural and Soil</u>	<u>2 miles</u>
<u>Cultural Resources</u>	<u>Project viewshed/ 20 miles</u>
<u>Geological Hazards</u>	<u>2 miles</u>
<u>Land Use/ Recreation</u>	<u>Project viewshed/ 20 miles</u>
<u>Noise</u>	<u>2 miles</u>
<u>Paleontological Resources</u>	<u>Project viewshed/ 1 mile</u>
<u>Socioeconomics</u>	<u>2 hour commute distance</u>
<u>Visual Resources</u>	<u>Project viewshed/ 20 miles</u>
<u>Conditional Thresholds</u>	
<u>Air Quality</u>	<u>10 miles, or greater if there is potential for transportation or other emissions to impact California air quality</u>
<u>Biological Resources</u>	<u>10 miles, unless the project has the potential to impact a California migratory bird or animal population</u>
<u>Public Health</u>	<u>10 miles , or greater if there is potential for project-related wildfire risk</u>
<u>Traffic and Transportation</u>	<u>20 miles, or greater if the project could impact California air travel or traffic on California highways</u>
<u>Transmission System Safety and Nuisance</u>	<u>2 miles, although if the transmission line interconnection extends into California, the facility would be considered in state and an environmental review pursuant to the California Environmental Quality Act would be required</u>
<u>Waste Management / Hazardous Materials Handling</u>	<u>No distance limit if California disposal site is used or materials are transported through California.</u>
<u>Water Resources</u>	<u>2 miles, or further distance if project has the potential to impact a drainage flowing into California</u>

All applicants must submit a written explanation substantiating the claim that the project does not violate California LORS. For projects that are beyond the discrete thresholds, submission of a simple explanation documenting how the project's development and operation do not contribute to a violation of a California LORS is sufficient. For projects that are closer than the -discreet threshold for an environmental area, a detailed explanation documenting how the project's development and operation do not contribute to a violation of a California LORS for the environmental area is required. An applicant may submit a simple explanation for each environmental area with a conditional threshold if there is no potential for a violation of a California LORS. If, however, there is potential for such a violation for an area with a conditional threshold, a detailed explanation is required. For example, Traffic and Transportation is an area with a conditional distance of 20 miles. A project located in Wyoming, which is farther than 20 miles from the California border, could provide a simple explanation describing how its development and operation have no impact on California's LORS because its transportation activities do not involve California air travel or its highways. All LORS assessments and explanations should be submitted in a document to accompany the CEC-RPS-1A Form and Out-of-State Supplemental Form, along with documentation that substantiates the applicant's assessment as required above in 1.c.

As noted above, further reporting requirements apply to out-of-state facilities that commenced commercial operations before January 1, 2005. For such facilities, the applicant may qualify for RPS certification if either: 1) the facility was part of a retail seller's baseline, or 2) the facility produces incremental generation due to project expansion or repowering on or after January 1, 2005. The additional required information needed for each case is described below.

- 1-Baseline: If an out-of-state facility commenced commercial operations before January 1, 2005, the applicant must identify the retail seller that procured electricity from the facility, the baseline year, and the amount sold to the retail seller.
- 2-Incremental generation: The Energy Commission may certify incremental generation from out-of-state facilities as RPS-eligible if it finds that the incremental generation exceeds the project's historical production. The method for quantifying incremental generation from out-of-state facilities is described below in the "Generation Tracking and Verification System" section of this Guidebook. The applicant must provide the following information:
 - For small hydroelectric or conduit hydroelectric facilities, the applicant must provide verifiable generation data for the 20 years preceding project expansion or repowering. If the project has not been operational for 20 years, then provide generation data on all previous years to date. The applicant must also provide the information described in "Additional Required Instructions for Small Hydroelectric or Conduit Hydroelectric Facilities."

- For all RPS-eligible technologies except small hydroelectric or conduit hydroelectric, the applicant must provide data on annual generation for the 36 months preceding the project expansion or repowering (for example, if the project expansion comes on-line January 1, 2007, then generation data must be provided from January 1, 2004 through 2006). If the project has not been operational for 36 months, then provide generation data for all previous months to date.
- All applicants seeking certification of incremental generation must provide evidence that the incremental generation from the facility resulted (or will result if the applicant is seeking pre-certification) from a capital expenditure in the project. This information is needed to verify that the incremental production is not a result of weather fluctuations or some other recurring or random event. The capital investment must exclude monies that would have been spent on operation and maintenance in the normal course of doing business. The applicant must provide a brief description of each capital investment made for project expansion or repowering, including a discussion of the nature of the capital investments and how they resulted in the incremental generation. In substantiating an application to certify incremental production, the burden of proof will be on the applicant to submit compelling evidence to demonstrate the effect that capital expenditures had on production.

Quantifying Incremental Generation From Out-of-State Facilities

To determine the amount of incremental generation from a facility that qualifies as eligible for the RPS, the Energy Commission will first determine the historical baseline of the facility. For hydroelectric facilities, the baseline is the annual average generation calculated from 20 years before project expansion or repowering. For facilities that directly meter the project expansion of the facility separate from the existing portion of the facility, such as wind or solar photovoltaic expansions to facilities, the baseline is the capacity of the facility before the project expansion. For all other technologies, the baseline is the average annual generation calculated from the 36 months before project expansion or repowering. For projects that have not been operational for the specified period of time (for example, 20 years for hydroelectric facilities), the annual average generation for the project's operations to date must be provided.

The Energy Commission will certify the facility's annual production net of the baseline calculated for that facility. For example, if the facility produces 250 MWh in 2008 and its baseline is 150 MWh, then 100 MWh generated from the facility are RPS-eligible. For facilities directly measuring the project expansion's generation, any generation resulting from the capacity of the expansion will be considered eligible.

All data submitted are expected to be public. However, the Energy Commission is interested only in data with a direct bearing on the application. For example, although information on capital investments and the resulting production increases is expected to be submitted publicly, the Energy Commission has no interest in any proprietary

underlying economic analyses that may have led to the decision to make such an investment.

2. Out-of-Country Facilities: In addition to the above information for out-of-state facilities, an applicant for a facility located outside the United States must provide all of the following:

- a) A comprehensive list and description of all California environmental quality LORS that would apply to a similar facility located within California at a site designated by the applicant.
- b) An assessment as to whether the facility's development or operation will cause or contribute to a violation of any of these LORS. The applicant may select any region in California to demonstrate whether the facility's development or operation will cause or contribute to a violation of any of the LORS in California.
- c) An explanation as to how the facility's developer and/or operator will protect the environment to the same extent as provided by these LORS for a similar facility located in California in developing or operating the facility, including whether the developer and/or operator will secure and put in place mitigation measures to ensure that these LORS are followed.
- d) Documentation that substantiates the applicant's assessment as required in b) and c) above. For example, documentation could include environmental studies, permits, and similar materials that demonstrate that the facility's development or operation will not cause or contribute to a violation of a California environmental standard or regulation and will protect the environment to the same extent as provided by these LORS for a similar facility located in California.

4. Instructions for Additional Required Information for Repowered Facilities

To apply for certification or pre-certification as a repowered facility, an applicant must submit a completed CEC-RPS-1A or CEC-RPS-1B form, along with documentation confirming the replacement of the facility's prime generating equipment and the capital investments made to repower the facility as well as the value of those investments.

1. Prime Generating Equipment: The applicant must document that the facility's prime generating equipment is new and that the repowered facility re-entered commercial operations on or after January 1, 2005. Applicants for repowered small hydroelectric facilities and conduit hydroelectric facilities must document the facilities re-entered commercial operations on or after January 1, 2006.

a. The "prime generating equipment" for each renewable resource is defined as follows:

- Wind: the entire wind turbine, including the generator, gearbox (if any), nacelle, and blades.
- Biomass: the entire boiler. Stoker boilers may be replaced with boilers using improved stoker technology or fluidized bed technology.

- Geothermal: the entire steam generator, including the turbine rotors, shaft, stationary blades, and any gear assemblies.
- Small and conduit hydroelectric: the entire turbine and structures supporting the turbine.
- Solid waste conversion: the entire gasifier (gasifying equipment) and combustion turbine.
- Landfill gas: the entire internal combustion engine or combustion turbine as applicable.
- Digester gas: the entire digester unit and internal combustion engine or combustion turbine as applicable.
- Solar thermal: the entire steam turbine.

b. All prime generating equipment at the facility must be replaced with new equipment for the facility to qualify as a repowered facility. For example, a 25 MW wind facility consisting of 50 separate wind turbines must at a minimum replace each of the 50 wind turbines with new turbines of like or greater capacity for the entire 25 MW facility to qualify as a repowered facility. The Energy Commission recognizes that a wind facility owner may want or need to repower only a portion of the turbines owned at a site and does not exclude that option. In the event that a generator is interested in repowering a portion of a site, then it will need to re-certify the remaining portion of the site that is not being repowered.

2. Capital Investments: The applicant must document that the value of the capital investment made to repower the facility equals at least 80 percent of the total value of the repowered facility. In addition, the applicant must document that capital investments were made not more than two years before the date that the facility re-entered commercial operations. Capital investments may only be considered for meeting the 80 percent threshold if they were made for that portion of the facility that contributes directly to the production of electricity. This includes the prime generating equipment as well as the electricity generators and related equipment, fuel processing, enhancing, and delivery equipment, control equipment, and structures used to structurally support the aforementioned equipment. As discussed below, the electrical generators, fuel processing, enhancing and delivery equipment, control equipment, and related structures do not need to be replaced for the facility to qualify as a repower. However, if this equipment is replaced, the capital investment to do so may be considered for toward meeting the 80 percent threshold.

a. Electrical Generators and/or Fuel Processing, Enhancing, and Delivery Equipment: It is generally not necessary for a facility to replace its existing electrical generators or fuel processing, enhancing, and delivery equipment because replacing this equipment may produce little or no improvement to the facility's efficiency and, therefore, does not warrant the additional expense. Exceptions are cases in which the electrical generator is an integral part of the prime generating equipment, such as for wind facilities, or where the fuel processing, enhancing, and delivery equipment is

an integral part of the prime generating equipment via the fuel conversion process, such as for solid waste conversion facilities and digester gas facilities. The facility's environmental control equipment, such as air pollution control equipment, would not be considered toward meeting the 80 percent threshold, because such equipment does not contribute directly to electricity production.

b. Any associated process control equipment and structures used for structural support of the prime generating equipment, electrical generators, fuel processing, enhancing, and delivery equipment, and associated process control equipment, as appropriate, would also fall into this category and are generally not necessary to replace.

The applicant must provide documentation, such as invoice receipts, verifying the replacement of the old equipment, as well as other components of the technology relevant to the repowering application. The Energy Commission will confirm that the equipment listed is appropriate for certification as a repowered facility.

The applicant must document the value of the capital investments made to the facility and the total value of the repowered facility. The value of the capital investments must equal at least 80 percent of the total value of the repowered facility.

The "repowered facility" is defined as all of the new and/or existing prime generating equipment, electrical generators, fuel processing, enhancing, and delivery equipment, and any associated process control equipment and structures at the facility. The land on which the facility sits will not be considered part of the repowered facility for purposes of determining the 80 percent threshold. Similarly, intangibles such as the value of a facility's power purchase contract or its goodwill will not be considered part of the repowered facility.

The applicant may show that it has met the 80 percent threshold by submitting either tax records or an assessment of the "replacement value" of the facility along with documentation of the cost of the new equipment. The applicant must notify the Energy Commission which methodology it is using and provide the appropriate information as described below.

a. Tax Records Methodology:

The applicant must submit to the Energy Commission all relevant tax records needed to demonstrate that the capital investments made to repower the facility are equal to at least 80 percent of the value of the repowered facility.

- The applicant must document the value of the capital investments and the year the investments were made. In this case, the value of capital investments is the original tax "basis" declared to the Internal Revenue Service to calculate depreciation. The tax basis should reflect the value of the equipment the applicant has attested to purchasing. The tax basis is generally what a business pays for an item to be depreciated.

- The applicant must document the value of the repowered facility. In this case, the value of the repowered facility is based on the sum of the tax basis declared for all of the equipment and structures in the repowered facility as of the year the facility is repowered. For new equipment and structures, the value of the repowered facility is the original tax basis; for existing equipment and structures, the value of the repowered facility is the tax basis as adjusted for depreciation. For facilities financed using a sale/lease-back or similar structure, the original tax basis of the equipment and structures for both the lessor and lessee will be considered.
- The applicant must divide the total value of capital investments by the total value of the repowered facility. This calculation must show that the investment is equal to or greater than 80 percent of the total value of the facility for it to qualify as repowered.

b. Replacement Value Methodology:

This alternative approach may make it more difficult for a facility to meet the 80 percent repowering threshold, but it is a reasonable alternative for parties who are unable or unwilling to secure the necessary tax records to use the adjusted tax basis approach.

- The applicant must document the value of the equipment replaced in the facility. The replacement cost of new equipment is based on the equipment's purchase price and, consequently, is the same value when compared to the adjusted tax basis approach.
- The applicant must submit an independent evaluation of the replacement cost of existing, unreplaced equipment ("retained equipment"). The evaluation should be an estimate of the capital costs that would have to be incurred to replace the retained equipment. This estimate must be provided by an accountant in good standing with the American Institute of Certified Public Accountants or a member in good standing and certified as an internal auditor with the Institute of Internal Audits.
- The applicant must divide the total value of capital investments by the sum of the replacement cost of the new equipment and the independent estimate of the replacement cost of the retained equipment. This calculation must show that the investment is equal to or greater than 80 percent of the total value of the facility for it to qualify as repowered.

IV. Generation RPS Tracking, Reporting and Verification System

The Energy Commission is responsible for developing a tracking system to verify compliance with the RPS. The Energy Commission is required to:

Design and implement an accounting system to verify compliance with the renewables portfolio standard by retail sellers, to ensure that electricity generated by an eligible renewable energy resource is counted only once for the purpose of meeting the renewables portfolio standard of this state or any other state, to certify renewable energy certificates produced by eligible renewable energy resources, and to verify retail product claims in this state or any other state. In establishing the guidelines governing this accounting system, the Energy Commission shall collect data from electricity market participants that it deems necessary to verify compliance of retail sellers, in accordance with the requirements of this article and the California Public Records Act (Chapter 3.5 [commencing with Section 6250] of Division 7 of Title 1 of the Government Code). In seeking data from electrical corporations, the Energy Commission shall request data from the [California Public Utilities] commission.⁸³

Additionally, the Energy Commission must:

Establish a system for tracking and verifying renewable energy credits that, through the use of independently audited data, verifies the generation and delivery of electricity associated with each renewable energy credit and protects against multiple counting of the same renewable energy credit. The Energy Commission shall consult with other western states and with the Western Electricity Coordinating Council in the development of this system.⁸⁴

~~The CPUC may authorize the use of tradable RECs to satisfy the requirements of the RPS and may limit the quantity that may be procured separately from the underlying electricity generation by any retail seller to satisfy its RPS requirements. RECs may not be used to satisfy RPS procurement requirements, however, until such rules are established and not until the Energy Commission and the CPUC conclude that the Energy Commission's tracking system is "...operational, is capable of independently verifying the electricity generated by an eligible renewable energy resource and delivered to the retail seller, and can ensure that renewable energy certificates shall not be double counted by any seller of electricity within the service territory of the Western Electricity Coordinating Council (WECC)."~~⁸⁵

⁸³ Public Utilities Code, Section 399.13, Subdivision (b).

⁸⁴ Public Utilities Code, Section 399.13, Subdivision (c).

⁸⁵ Public Utilities Code, Section 399.16, Subdivision (a)(1).

The Energy Commission developed WREGIS, an electronic tracking system that covers the WECC territory, to meet its RPS tracking requirements, including the tracking of RECs, which, WREGIS was, launched in June 2007, WREGIS issues a REC, termed a WREGIS Certificate, for each reported megawatt-hour of eligible generation. WREGIS Certificates document the amount of energy generated by facilities certified as RPS-eligible by the Energy Commission, and can be retired to claim procurement for RPS compliance.

The Energy Commission used an interim generation tracking system to verify all RPS procurement through 2007 until the use of WREGIS. The Interim Tracking System (ITS) is based on self-reported data and data collected from various self-reported other sources to verify procurement claims and energy deliveries.

The RPS Eligibility Guidebook, Third Edition, states that Effective January 1, 2008, the Energy Commission requires RPS-certified facilities, retail sellers, procurement entities and third parties to participate in WREGIS as part of RPS compliance. except for PG&E, SDG&E and SCE, which must register with and use WREGIS by May 1, 2008, as part of RPS compliance. Consequently, 2008 is the first calendar year that data from the WREGIS will be reported to the Energy Commission to verify RPS procurement. In addition, it states that Qualified Reporting Entities (QREs)⁸⁶ must register with WREGIS before they can report generation data on the facilities' behalf. However, unforeseen issues faced by many of these companies delayed their registration with WREGIS until the fall of 2008 or later. To accommodate these delays, beginning with the 2008 compliance year and through the 2010 compliance year, the Energy Commission will allow limited use of the ITS to report RPS procurement claims, with the intention of phasing out the ITS by the 2011 compliance year.

As of this writing, the WREGIS system does not create RECs for generation that occurs before the month of a generating facility's commercial online date (COD). WREGIS will only create RECs for energy generated during and after the month of COD, which currently prevents RECs from being created for a facility's test energy that is produced before the month of COD.⁸⁷ This limitation is expected to be addressed in WREGIS by early 2011. For reporting test energy for years prior to 2011 that is unavailable in WREGIS, retail sellers may use the ITS, but only for generation that occurs on or after the date of RPS eligibility.

For the 2009 and 2010 compliance years, with the exception of reporting test energy, retail sellers planning to report to the Energy Commission using the ITS must receive

86 A Qualified Reporting Entity (QRE) is an individual or an organization providing renewable generation data to WREGIS on a unit-specific basis for the purpose of creating WREGIS Certificates.

87 Test energy in this guidebook refers to pre-production electricity generation that occurs during the testing period of a facility before it commences commercial operations.

pre-approval from Energy Commission staff to do so. Such pre-approval will be contingent on retail sellers providing written documentation from WREGIS staff that WREGIS cannot accommodate the tracking or reporting of specific monthly generation. Beginning with the 2011 compliance year, only the use of WREGIS will be allowed for reporting generation and procurement to the Energy Commission.

As discussed below, the WREGIS generation data for a given compliance year procurement will be reported annually to the Energy Commission on June 1 of the following year. For generation occurring on or after January 1, 2009, the Energy Commission will accept reports using the ITS only to report procurement of test energy, as discussed above. Beginning January 1, 2011, in calendar year 2008 will be reported to the Energy Commission on May 1, 2009. the Energy Commission will only accept procurement claims for generation that is tracked in WREGIS and reported to the Energy Commission using WREGIS State/Provincial/Voluntary Compliance Reports (Compliance Reports), with the exceptions noted above for test energy as determined by Energy Commission staff.

WREGIS also provides information to verify delivery of energy into California from out of state facilities. This service, which uses data from NERC e-Tags to report out of state delivery information, became available in WREGIS early 2009. However, WREGIS stakeholders identified a technical issue that precludes retail sellers from accessing the NERC e-Tag data in WREGIS if third party importers schedule delivery into California. For 2009 and 2010, WREGIS must be used for reporting out-of-state facilities' delivery data; however, where that service was not utilized or was not available to third party importers, Energy Commission staff may allow submission of NERC e-Tag information using the ITS by and the new CEC-RPS DELIVERY form. Beginning with the 2011 compliance year, retail sellers must use WREGIS for reporting energy deliveries into California from out-of-state facilities, with the exception noted above, until WREGIS is capable of verifying delivery scheduled into California by third parties.

A. Reports to the Energy Commission

Retail sellers must report annually to the Energy Commission on the amount of RPS eligible electricity they procure per facility, ~~called a "specific purchase."~~ Using the CEC RPS Track form, retail sellers must report the amount of energy they procured per ~~month and annually from each RPS eligible facility (or the amount generated if the facility is owned by the retail seller and the retail seller intends to apply all of the generation toward its RPS obligations), and provide various identification numbers for each facility. The CEC RPS Track form must be executed by an authorized agent of the retail seller who can attest that the specific purchases reported on the form were sold only once to retail consumer~~

PG&E, SCE, and SDG&E began reporting their procurement to the Energy Commission in 2005. ESPs, CCAs, and multijurisdictional utilities subject to Public Utilities Code

Section 399.17 were initially required to submit their procurement data for years 2005 and 2006 by May 1, 2007.⁸⁸ However, the CPUC adopted a decision on July 26, 2007, that modified the formula for calculating the baseline amounts of renewable energy for ESPs⁸⁹ to be consistent with the formula for IOUs. Consequently, ESPs, CCAs, and multijurisdictional utilities subject to Public Utilities Code Section 399.17 ~~must also~~ were required to submit procurement data for years 2001 through 2004.⁹⁰ In subsequent years, all retail sellers and multijurisdictional utilities subject to Public Utilities Code Section 399.17 will report their procurement to the Energy Commission in the following year; for example, 2010~~07~~ procurement will be reported in 2011~~08~~, 2011~~08~~ procurement in 2012~~09~~, and so on.

Load-serving entities may not retire WREGIS Certificates for non-eligible generation for California's RPS. As described in Section III.A, generation that is produced before the month in which the Energy Commission receives an application for the facility's certification or pre-certification would not be eligible for the RPS. However, such Certificates may be transferred to another party for other purposes.

The following pages describe the timing requirements and processes for reporting RPS generation, procurement, and delivery, where applicable, to the Energy Commission using the ITS and WREGIS. Table 3 summarizes these requirements by -reporting years.

88 SB 107 revised Public Utilities Code Section 399.12, Subdivision (h)(3) to establish January 1, 2006 as the first year of RPS obligations for ESPs. CPUC Decision 06-10-019, Rulemaking 06-02-012 sets 2005 as the baseline year and 2006 as the first year with an IPT for ESPs. For CCAs, the IPT and APT shall be determined based on the CCA's retail sales in its first year of operation and shall apply to the CCA's second year of operation.

89 CPUC Decision 07-07-025 (Rulemaking 06-02-012).

90 Multi-jurisdictional utilities must report 2001 total system retail sales and total system RPS-eligible procurement on the CEC-RPS-TRACK form. California's proportion of an MJU's 2001 system RPS eligible procurement is calculated by multiplying (2001 total CA retail sales/ 2001 total system sales) by their 2001 system RPS eligible procurement. Note that the CPUC staff has determined that the 2001 system RPS eligible procurement should include facilities that are not currently RPS certified, but that the MJU believes utilize potentially RPS-eligible technologies. CPUC staff have determined that this does not include facilities that are renewable but for which the MJU does not have a contractual right to the associated RECs.

Table 3. RPS Reporting Using the Interim Tracking System and/or WREGIS

<u>Reporting Year</u>	<u>Generation Tracking and Procurement Reporting</u>	<u>Out-of-State Delivery Information</u>
<u>2007 and earlier</u>	<u>Interim Tracking System⁹¹</u>	<u>Interim Tracking System</u>
<u>2008</u>	<u>WREGIS and/or Interim Tracking System</u>	<u>Interim Tracking System</u>
<u>2009 and 2010</u>	<u>WREGIS⁹²</u>	<u>WREGIS and/or Interim Tracking System</u>
<u>2011 and subsequent years</u>	<u>WREGIS</u>	<u>WREGIS⁹³</u>

Source: California Energy Commission

1. Reports Using the Interim Tracking System

a. Procurement Data

Beginning with the 2008 compliance year, WREGIS must be used to report all available data that are tracked in WREGIS. Procurement for generation in any month during the compliance year that is not tracked in WREGIS may be reported using the ITS, subject to the limitations set forth in this guidebook. Under the ITS, retail sellers submit to the Energy Commission the CEC-RPS-TRACK form for reporting procurement data on the amount of energy they procured per month and annually from each RPS eligible facility. In some cases, the amount generated by the facility (instead of the procurement amount) is reported if the retail seller owns the facility and intends to apply all of the facility's generation toward its RPS obligations. The

91 RPS procurement for 2007 and earlier should have been reported to the Energy Commission using the ITS; such procurement should not also be reported to and tracked in WREGIS. Procurement that was reported using the ITS and that is also tracked in WREGIS would lead to double counting. WREGIS Certificates that represent procurement already reported using the ITS should be retired. Please see Appendix A for details on how to retire WREGIS Certificates for 2007 and earlier or any procurement that has been reported using another tracking system for any other regulatory or voluntary program.

92 The Energy Commission will accept test energy procurement reported using the Interim Tracking System until WREGIS tracks test energy. Beginning with the 2009 compliance year, all other RPS procurement must be reported using WREGIS; any exceptions will only be considered on an individual basis as described in this section.

93 Beginning in 2011, WREGIS must be used for reporting all energy deliveries into California from out-of-state facilities, except in cases of third party schedulers. This exception only applies until WREGIS is capable of verifying delivery into California scheduled from out-of-state facilities by third-party entities.

CEC-RPS-TRACK form also provides various identification numbers for each facility, which allows staff to identify generation data as reported to various other programs within the Energy Commission and to outside agencies, such as the U.S. Energy Information Administration. The CEC-RPS-TRACK form must be executed by an authorized agent of the retail seller who can attest that the procurement reported on the form was sold only once to retail consumers.

Beginning with reports for the 2009 compliance year, the procurement reporting requirement is expected to be satisfied with Compliance Reports generated through WREGIS, unless data are unavailable in WREGIS. For months in which WREGIS data are unavailable, the ITS may be used with advance Energy Commission staff approval. The CEC-RPS-Track TRACK forms (and/or WREGIS Compliance Reports) are due to the Energy Commission on JuneMay 1 (or the next business day) of each year for reporting data for the previous calendar year. For the 2008 compliance year, these reports are due February 1, 2011 and for the 2009 compliance year, the reports are due May -1, -2011. until 2009, when WREGIS will have been operational for a full calendar year. By 2009, Beginning with reports for the 2009 compliance year, the CEC-RPS Track form procurement reporting requirement is expected to be satisfied with Compliance Reports reports generated through WREGIS, unless data are unavailable in WREGIS. For months in which WREGIS data are unavailable, the ITS may be used with advance Energy Commission staff approval.

The CEC-RPS-TRACK form and instructions are provided in Appendix AB. See below for a discussion of using WREGIS to report procurement data; detailed instructions for reporting using WREGIS are found in Appendix A. PG&E, SCE, and SDG&E began reporting their procurement to the Energy Commission in 2005. ESPs, CCAs, and multijurisdictional utilities subject to Public Utilities Code Section 399.17 were initially required to submit their procurement data for years 2005 and 2006 by May 1, 2007.⁹⁴ However, the CPUC adopted a decision on July 26, 2007, that modified the formula for calculating the baseline amounts of renewable energy for ESPs⁹⁵ to be consistent with the formula for IOUs. Consequently, ESPs, CCAs, and multijurisdictional utilities subject to Public Utilities Code Section 399.17 must also to submit procurement data for years 2001 through 2004. In subsequent years, all retail sellers and multijurisdictional utilities subject to Public Utilities Code Section 399.17 will report their procurement in the following year; for example, 2007 procurement will be reported in 2008, 2008 procurement in 2009, and so on.

⁹⁴ SB 107 revised Public Utilities Code Section 399.12, Subdivision (h)(3) to establish January 1, 2006 as the first year of RPS obligations for ESPs. CPUC Decision 06-10-019, Rulemaking 06-02-012 sets 2005 as the baseline year and 2006 as the first year with an IPT for ESPs. For CCAs, the IPT and APT shall be determined based on the CCA's retail sales in its first year of operation and shall apply to the CCA's second year of operation.

⁹⁵ CPUC Decision 07-07-025 (Rulemaking 06-02-012).

~~A facility that certifies as RPS eligible with the Energy Commission must annually submit data on its monthly generation, including any generation sold to an entity that does not qualify as a retail seller under Public Utilities Code Section 399.12, Subdivision (c). These data must be reported on the CEC RPS GEN form by May 1 (or the next business day) until the reports from WREGIS are available in 2009 for 2008 calendar year generation.~~

b. Generation Data

~~Using the ITS, gGenerators (or retail sellers, if facilities are owned by the retail seller) must report monthly and annual generation data to the Energy Commission on the CEC-RPS-GEN form by June 1 (or the next business day) for the entire previous calendar year for which any WREGIS data are unavailable. generationThe CEC-RPS-GEN form and instructions are provided in Appendix B. To verify generation, The Energy Commission staff may request that the facility must additionally submit monthly payment statements from the retail seller, procurement entity or third party, showing the amount of energy procured from the facility, as an attachment to the CEC-RPS-GEN form showing the amount of energy procured from the facility. If the facility is serving an entity that does not qualify as a retail seller under Public Utilities Code Section 399.12, Subdivision (eg), and is participating in the Energy Commission's RPS tracking system, then the verification may be from that entity. If [The Energy Commission intends to simplify program implementation by using facility may useuses the retail seller's payment statement to serve as the verification rather than allowing alternate sources of data. The, and in such cases the facility should strike out any price or other data on the statement that it does not want to make publicly available. Beginning May 1, 2009, this reporting requirement is expected to be satisfied with reports generated through WREGIS. The CEC RPS GEN form and instructions are provided in Appendix A.~~

For cases in which the retail seller certifies a facility for the RPS on the facility's behalf, the retail seller is responsible for reporting the generation data for the facilities it certifies. This reporting requirement will be satisfied through the CEC-RPS-TRACK form for generation through 2008. for generation that occurred through December 31, 2007, for all retail sellers except PG&E, SCE and SDG&E, which may use the CEC-RPS Track form for generation that occurs through April 30, 2008Retail-Using the ITS System, retail sellers do not need to file separate CEC-RPS-GEN forms for the facilities they certify. Also, since the retail seller is providing the data, the retail seller does not need to separately provide third party verification of the generation.

Generation for 2009 and thereafter must be tracked and reported in WREGIS. Beginning in 2009, retail sellers will submit retail sellers report WREGIS Compliance Reports to the Energy Commission, which will provide facilities' generation data to the Energy Commission as well. using WREGIS Compliance Reports. However, forFor and 2010 for generation not tracked in WREGIS, however, the Energy Commission will require monthly and annual generation data to complete its

procurement verification analyses, as noted above. years, facilities certified
Regardless of whether generation is reported to the Energy Commission using the ITS
or WREGIS, the Energy Commission may conduct audits or request additional
information, including CEC-RPS-GEN forms in addition to WREGIS Compliance
Reports, as needed to verify compliance with the RPS.

c. Energy Delivery Data

Any RPS procurement from out-of-state facilities requires proof of compliance with
the Energy Commission's energy delivery requirements. In addition, a facility, or a
retail seller on the facility's behalf, must submit documentation verifying compliance
with the NERC E-Tag requirement (described under "Delivery Requirements" in the
"Eligibility of Out-of-State Facilities" section). delivery requirements outlined in
Section III D: "Delivery Requirements." This documentation is required annually
beginning in 2005 and is due to the Energy Commission by June May 1 (or the next
business day) each year to verify eligible deliveries for the previous year.⁹⁶ Beginning
with the 2008 compliance year, delivery documentation must be reported to the
Energy Commission using the new CEC-RPS-Delivery form (see Appendix B, unless
delivery is reported using WREGIS). Beginning with the 2009 compliance year, most
retail sellers must use WREGIS to report delivery of energy into California (see
Appendix A for detailed instructions). As noted above, WREGIS data for energy
deliveries may not be available to retail sellers using third party energy importers. In
such cases, the Energy Commission will accept delivery information using the ITS
until delivery data are available in WREGIS.

The Energy Commission intends to work with industry to establish a standardized,
annual summary report and a standardized format for supporting documentation.

If necessary, the Energy Commission will request that the CPUC direct the retail
sellers to submit the CEC RPS Track form data and documentation showing
compliance with the NERC E-Tag requirement if the Energy Commission does not
receive these data promptly.

2. Reports Using WREGIS

a. Generation and Procurement Data

Qualified Reporting Entities (QREs) report generation data to WREGIS. When one
megawatt-hour of reported generation is accumulated, WREGIS creates one WREGIS
Certificate (also termed a REC). For purposes of RPS compliance, retail sellers must
retire WREGIS Certificates to demonstrate procurement of the generation represented

⁹⁶ The delivery data for the 2008 Compliance Year are due February 1, 2011, and for the 2009
compliance year the data are due April 1, 2011.

in the WREGIS Certificate. In practical terms, WREGIS Certificates that are retired represent procurement data. As such, WREGIS Certificates represent both generation and procurement when they are retired for purposes of the RPS, and generation reports on the CEC-RPS-GEN form are not required for the months in a compliance year for which retail sellers submit a WREGIS Compliance Report.

As illustrated in Table 3, WREGIS Compliance Reports must be submitted to the Energy Commission for information that is available in WREGIS beginning with the 2008 reporting year. The use of the ITS will be allowed only for 2008 procurement not tracked in WREGIS. Beginning with the 2009 compliance year, with the exception of test energy as explained above, only procurement reported using WREGIS Compliance Reports will count toward a retail seller's RPS targets.

b. Energy Delivery Data

Because WREGIS did not provide an energy delivery tracking service in 2008, retail sellers reporting procurement from out-of-state facilities must use the ITS to report energy delivery information to the Energy Commission for 2008 and earlier compliance years. The WREGIS delivery service, which uses delivery information from NERC e-Tags, became available in WREGIS in early 2009. For 2009 and 2010, WREGIS must be used for reporting out-of-state facilities' energy delivery data; however, where that service was not utilized or was not available for those years, the Energy Commission will allow submission of out-of-state energy delivery data using the ITS. Beginning with the 2011 compliance year, WREGIS must be used for reporting all energy deliveries into California from out-of-state facilities, except in the cases of third party schedulers as described above, until WREGIS is capable of verifying third party deliveries.

Retail sellers must submit to the Energy Commission a hard copy and an electronic copy of the WREGIS report for RPS compliance, titled State/Provincial/Voluntary Compliance Report, which can be downloaded from the WREGIS website and printed. The hard copy State/Provincial/Voluntary Compliance Report must be submitted to the Energy Commission with an attestation containing an original authorized signature. The attestation form can be found in Appendix B of this guidebook and on the Energy Commission's website. See Appendix A for instructions on how to submit State/Provincial/Voluntary Compliance Reports and NERC e-Tag Summary Reports Using WREGIS from WREGIS to the Energy Commission.

B. Accounting for Out-of-State, Incremental Generation

[The text in this subsection has been moved and combined with the text from the subsection titled *Instructions for Additional Required Information for Out-of-State Facilities* in the *Certification Process* section.]

~~The incremental generation resulting from the expansion or repowering of an out-of-state facility that commences commercial operations before January 1, 2005, is eligible for the RPS. To determine the amount of energy from a facility that qualifies as~~

~~incremental, the Energy Commission will first determine the historical baseline of the facility. For hydro power facilities, the baseline is the annual average generation calculated from 20 years before project expansion or repowering. For all other technologies, the baseline is the average annual generation calculated from the 36 months before project expansion or repowering. If the project has not been operational for the specified period (for example, 20 years for hydro facilities), then the project must provide the annual average generation for its operation to date.~~

~~The Energy Commission will certify the facility's annual production net of the baseline calculated for that facility. For example, if the facility produces 250 MWh in 2008 and its baseline is 150 MWh, then 100 MWh generated from the facility are RPS-eligible.~~

CB. Energy Commission RPS Procurement Verification Reports

The Energy Commission intends to prepare an annual *RPS Procurement Verification Reports* (Verification Report) specifying the quantity of RPS-eligible energy each retail seller procured in the previous specified calendar year. ~~These~~is reports will be transmitted to the CPUC and ~~is~~are intended to help the CPUC determine RPS procurement targets and evaluate retail sellers' RPS compliance. The Energy Commission will account for procurement consistent with the requirements of this Guidebook and applicable CPUC decisions. ~~The Energy Commission anticipates adopting the Verification Report for 2006 procurement and subsequent reports by the end of each calendar year.~~⁹⁷

The *RPS Procurement Verification Reports* will be based on the results of the ITS interim tracking system for procurement through 2007 and for procurement and deliveries in 2008 and 2009 for which no WREGIS data are available. Beginning January 1, 2008, with the exception of procurement by PG&E, SDG&E and SCE, the WREGIS WREGIS data will replace the ITS interim tracking system for reporting procurement of RPS-eligible energy generated in 2008, procurement and deliveries, with the exception of test energy, as explained above. For these three retail sellers, however, the interim tracking system will continue to be used until May 1, 2008, when WREGIS data will replace the interim tracking system for procurement of RPS-eligible energy generated on or after May 1, 2008. The Verification Report that evaluates procurement in 2008 will be developed in 2009. Thus, 2009 is the first compliance year that the Energy Commission intends to publish an RPS Procurement Verification Report based primarily on data from the WREGIS.

⁹⁷ The second Verification Report is publicly available: California Energy Commission, August 2007, Renewables Portfolio Standard 2005 Procurement Verification Report, CEC 300 2007 001-CMF.

1. Verification of Energy Delivery

As part of ~~the its RPS procurement V~~ verification Report process, the Energy Commission will also annually verify compliance with energy delivery requirements for out-of-state facilities. ~~The Energy Commission will annually verify that the delivery requirements were satisfied for the previous calendar year.~~ Verification of delivery using either the ITS or WREGIS relies on data from NERC e-Tags. Beginning in early 2009, service became available in WREGIS to verify energy delivery.⁹⁸ For parties unable to use this service due to restrictions in the WREGIS system, the Energy Commission will accept the NERC e-Tag data using the ITS for deliveries through 2010. These restrictions are being addressed by WREGIS and Energy Commission staff and other interested parties. Once this service in WREGIS is available to retail sellers using third party importers, WREGIS reports will be required for all parties to verify the Energy Commission's delivery requirements from out-of-state facilities.

a. Verification of Delivery Using the Interim Tracking System

To verify energy deliveries from out-of-state facilities using the ITS, the Energy Commission ~~intends to~~ will compare the annual generation procured from an RPS-eligible facility with the annual ~~monthly~~ NERC e-Tag E-Tag data annually. Generation of RPS-certified facilities under power purchase agreements with a retail seller and NERC ~~e-Tag E-Tag~~ documentation of delivery must be reported annually, and the report must ~~to show~~ generation and delivery data per month for the entire calendar year. The NERC ~~e-Tag E-Tag~~ must reference the RPS certification number of the facility for which deliveries are being matched with generation. The Energy Commission will compare the total amount generated in the previous calendar year with the total amount delivered in the previous calendar year, and the lesser of the two may be accounted for as RPS-eligible. For example, if the annual energy delivery shown on the NERC ~~e-Tag E-Tag~~ exceeds the annual amount of energy generated, then the Energy Commission will count the amount generated as RPS-eligible. Conversely, if the amount generated exceeds the annual amount that was delivered as demonstrated by the NERC ~~e-Tag E-Tag~~, the Energy Commission will assume some of the generation was delivered elsewhere and will count as RPS-eligible only the amount of procurement supported by the NERC ~~e-Tag E-Tag~~ data.

On ~~June~~ May 1 of each year (or the next business day), the retail seller or procurement entity must submit an annual report documenting compliance with this NERC ~~e-Tag E-Tag~~ requirement for the previous calendar year to the Energy Commission. Beginning with the 2008 compliance year, delivery must be reported using the

⁹⁸ At the time of this writing, WREGIS does not provide delivery tracking service for third party importers. For verification of delivery using third party importers, the Energy Commission will accept NERC e-Tag data using the Interim Tracking System until WREGIS is capable of verifying deliveries scheduled into California by third parties.

reporting form CEC-RPS-Delivery, which is provided in Appendix B. The report should include all of the following:

1. The NERC e-Tag ~~E-Tag~~ data as follows:
 - a. The "Source" or "Point of Receipt" located outside California and within the WECC;
 - b. The final "Point of Delivery" or load center in California known as the "sink," and the LSE responsible for the consumption of electricity delivered;
 - c. The California RPS-certification number of the facility or facilities with which the delivered energy is being "matched," if relevant. The California RPS-certification number must be shown on the Miscellaneous field of the NERC e-Tag ~~E-Tag~~; and
 - d. The amount of energy delivered per month and per year.
2. The corresponding generation (or WREGIS certificate numbers for generation in 2008 and thereafter) for the facility or facilities identified by California RPS-certification number in the Miscellaneous field of the NERC e-Tag ~~E-Tag~~ for the corresponding months of the previous calendar year.

b. Verification of Delivery Using WREGIS

Beginning with the 2009 compliance year, WREGIS is designed to allow retail sellers to report energy delivery as part of their WREGIS Compliance Reports. Detailed instructions on using WREGIS to report energy delivery are found in Appendix A. Beginning with the 2011 compliance year, WREGIS must be used for reporting all deliveries into California from out-of-state facilities.⁹⁹

The Energy Commission will sum the monthly information on NERC e-Tag ~~E-Tag~~ data for each facility for the calendar year and will be compared the total annual deliveries to the summed monthly generation data for the same calendar year procured from an RPS-eligible facility per retail seller ~~LSE~~, with the lesser of the two sums considered to be eligible California RPS procurement, unless acceptable supporting documentation can be provided.

2. Verification Methodology Using the Interim Tracking System

As discussed above, the Energy Commission developed an interim accounting system for use until WREGIS became operational. Under the interim system, the Energy Commission first verifies that the RPS procurement reported in the CEC-RPS-Track TRACK form is certified as RPS-eligible. Also, to the extent possible, the Energy Commission ensures that RPS-eligible energy procured by retail sellers is counted only once in California or any other state. Until January 1, 2009~~8~~, ~~or until May 1, 2008, for~~

⁹⁹ For verification of delivery using third party importers, the Energy Commission will accept NERC e-Tag data using the ITS until WREGIS is capable of verifying delivery for retail sellers using third parties to schedule delivery into California.

~~PG&E, SDG&E and SCE,~~ when the use of WREGIS is required for tracking renewable generation as part of RPS compliance, the Energy Commission will conduct this verification by cross-checking RPS procurement with retail claims reported under the Energy Commission's Power Source Disclosure Program and other similar data sources. For facilities in which available generation data indicates that procurement exceeded generation by 5 percent or greater, the procuring utility must submit ~~invoices~~ supporting documentation to verify procurement from those facilities.

The Energy Commission will apply statutory provisions and CPUC rules to report on the amount of RPS-eligible procurement. The Energy Commission will verify the energy generation to the extent possible and will verify that the amount of RPS eligible procurement as reported to the Energy Commission in the CEC RPS Track form did not exceed the facility's total generation. ~~As part of the interim tracking system, the~~ The Energy Commission will check that if two or more retail sellers procured energy from the same facility, the cumulative amount of energy procured does not exceed the facility's total generation. If procurement exceeds generation, the Energy Commission will report the discrepancies.

The Energy Commission will collaborate with other state agencies to determine if generation from each facility is claimed in more than one of the states' regulatory programs. Additionally, the Energy Commission will monitor renewable energy claims on the voluntary market, where possible. For example, Green-e Energy and the Energy Commission are collaborating to help ensure against double-counting of the same renewable energy claims.

3. Verification Methodology Using WREGIS

Beginning with the 2008 compliance year, the Energy Commission will conduct its RPS procurement verification process by analyzing available WREGIS data, and will use WREGIS data to compile RPS Procurement Verification reports. As with the ITS, the Energy Commission will compare the reported energy generation with other available generation data and will verify that the amount of RPS eligible procurement as reported to the Energy Commission did not exceed each facility's total generation. Additionally, the Energy Commission will work with other western states and the voluntary market to ensure against double-counting of RECs.

In the case of a multi-jurisdictional utility that has retired RECs in a tracking system other than WREGIS (such as NVTREC), the utility may be required to provide a compliance report to the Energy Commission from such a system to assist staff in verifying against double-counting.

D. Accounting for Tradable Renewable Energy Credits or Certificates

[The information in this subsection has been moved to the subsection titled, Renewable Energy Credits or Certificates (RECs) Trading in the section titled, "Outstanding Issues."]

~~When the accounting system is determined to be operational and if the CPUC allows the procurement of tradable RECs for RPS compliance, the Energy Commission will track tradable RECs. The electronic accounting system, WREGIS, has been developed to satisfy current RPS tracking requirements and to be capable of tracking tradable RECs. Review the section "Eligibility of Tradable Renewable Energy Certificates or Credits" for a more detailed discussion about tradable RECs.~~

~~Any RECs procured to satisfy an RPS obligation must be "retired" such that the RECs may not be resold or used to meet any other regulatory requirement or any other market claim.~~

V. Publicly Owned Electric Utilities

Local Publicly owned utilities serve over 25 percent of the state's electricity load, and as such they have an important role in California's efforts to meet its statewide RPS goals.

Public Utilities Code Section 387, Subdivision (a) states:

Each governing body of a local publicly owned electric utility (POU), ~~as defined in Section 9604,~~ shall be responsible for implementing and enforcing a renewables portfolio standard that recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvement.¹⁰⁰

As noted in a previous section of this ~~Guidebook~~ guidebook, the Energy Commission encourages ~~local~~ POU~~s~~ to meet their RPS obligations through procurement from RPS-certified (~~or pre-certified~~) facilities and may certify facilities (~~with the exception of small hydroelectric and out of state facilities that commenced commercial operations before January 1, 2005~~) as RPS-eligible if they serve a POU ~~local publicly owned electric utility~~. ~~The Energy Commission will pre-certify small hydroelectric and applicable out of state facilities that intend to sell to a local publicly owned electric utility that would be otherwise eligible for certification except that the facility was owned by or under contract to a local publicly owned electric utility.~~ Please see the section "Applying for Certification and Pre-Certification" for additional discussion on the certification process for these utilities.

The law as amended by SB 107 requires POUs ~~publicly owned utilities~~ to report the following information to their customers and to the Energy Commission:

1. Expenditures of public goods funds for eligible renewable energy resource development (program descriptions, expenditures, and expected or actual results).
2. Resource mix used to serve customers by fuel type, including the contribution of each type of renewable energy resource, with separate categories for those fuels that are eligible renewable energy resources as defined in Public Utilities Code Section 399.12 and those fuels that would be eligible renewable energy resources as defined in Section 399.12, except that the electricity is delivered to the POU ~~publicly owned utility~~ and not a retail seller.
3. Its status in implementing a renewables portfolio standard.

The Energy Commission encourages POUs ~~publicly owned utilities~~ to send this information by ~~June~~ May 1 of each year (or the following business day). Receipt of the

¹⁰⁰ AB 3048, Chapter 558, Statutes of 2008, moved the definition of a local publicly owned electric utility from Public Utility Code Section 9604 to Section 224.3.

data by this date will allow for a full accounting of the publicly owned electric utilities' contributions toward meeting the statewide RPS goals and overall state progress. The Energy Commission requests that POUs ~~publicly owned utilities~~ use the ~~reporting form~~ POU reporting spreadsheet (CEC-REO-POU) form provided in Appendix BA.

The law also establishes new provisions for POUs ~~publicly owned utilities~~ that take effect if:

1. Tradable REC sales are approved for retail sellers to use toward their RPS compliance; and
2. ~~Aa POU publicly owned utility~~ seeks to sell RECs for a retail seller to use toward RPS compliance.

The law requires the Energy Commission to certify, for compliance with the RPS by a retail seller, the eligibility of tradable RECs that are created from electricity delivered to a publicly owned utility. The Energy Commission may certify as RPS-eligible tradable RECs associated with electricity delivered to a POU ~~publicly owned utility~~ only if the Energy Commission determines that the POU ~~publicly owned utility~~:

- Complies with the requirements of Section 387 of the Public Utilities Code.
- Has established annual procurement targets comparable to an electric corporation, is procuring sufficient RPS-eligible resources to satisfy the targets, and will not fail to meet its targets in the event that the RECs are sold to another retail seller.
- Seeks certification of RECs associated with energy produced from facilities the Energy Commission has certified as eligible for the California RPS.

In making its determination to certify RECs from electricity delivered to a publicly owned utility, the Energy Commission will:

1. Verify that the POU ~~publicly owned utility~~ complies with its RPS program and satisfies its RPS targets as reported to the Energy Commission.
2. Verify that energy generation associated with the RECs is from an RPS-eligible facility.
3. Require that RECs be tracked through WREGIS. Any RECs procured by retail sellers must be RPS-eligible, tracked through WREGIS, and retired for RPS compliance. Consequently, any RECs sold by a POU ~~publicly owned utility~~ to retail sellers must also satisfy these criteria.
4. The quantity of RECs certified will not impede the publicly owned utility from meeting its RPS targets.

If a POU ~~publicly owned utility~~ anticipates seeking RPS certification of tradable RECs, the utility must provide data to inform the Energy Commission's determination. The Energy Commission requests that such data be provided using the template provided in Appendix A. The Energy Commission will evaluate the quantity of tradable RECs associated with RPS-eligible delivery to the POU ~~publicly owned utility~~ that it does NOT need to maintain compliance with its own RPS target. The Energy Commission

will certify tradable RECs only for a quantity above any amount that may be needed to satisfy the POU's ~~publicly owned utility's~~ RPS targets.

Note that RECs will be certified only for generation from an RPS-certified facility that is also eligible to produce tradable RECs as described in the section "Eligibility of Tradable RECs." If the facility loses its RPS certification status, any RECs produced after the facility becomes ineligible will not be RPS-certified. After evaluating the application to certify RECs, the Energy Commission may proceed to certify RECs under the process discussed in this ~~Guidebook~~ guidebook.