

STAFF DRAFT GUIDEBOOK

RENEWABLES PORTFOLIO STANDARD ELIGIBILITY

Sixth Edition

Staff Draft Guidebook



CALIFORNIA
ENERGY COMMISSION

Edmund G. Brown Jr., Governor

AUGUST 2012

CEC-300-2012-006-ED6-SD

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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, December 15, 2010, May 9, 2012, and August 9, 2012.

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 eligible renewable energy resources for California's Renewables Portfolio Standard (RPS) and describes the California Energy Commission's accounting system to verify compliance with the RPS. California's RPS has a target of obtaining 33 percent of the state's electricity from eligible renewable energy resources by 2020. This guidebook outlines eligibility and legal requirements, describes reporting requirements, and includes necessary forms and instructions for program participants. This 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, multifuel, 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 credits, TRECs, water supply or conveyance system, wind, Western Renewable Energy Generation Information System, WREGIS, WREGIS Certificates

Please use the following citation for this guidebook:

Staff Draft, Renewables Portfolio Standard Eligibility Guidebook, Sixth Edition.
California Energy Commission, Efficiency and Renewable Energy Division. Publication
Number: CEC-300-2012-006-ED6-SD.

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For a Glossary of Terms please refer to the *Overall Program Guidebook for the Renewable Energy Program*. California Energy Commission, Efficiency and Renewable Energy Division.

I. Introduction

The California Energy Commission developed this 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 Senate Bill 107,⁴ and Senate Bill X1-2.⁵ These laws require set a goal for retail sellers of electricity and local publicly owned electric utilities (POUs) to increase the amount of renewable energy they procure until 33 percent of their retail sales are served with renewable energy by December 31, 2020. Under these laws, the Energy Commission is required to certify electrical generation facilities as eligible renewable energy resources that may be used by retail sellers of electricity and POUs to satisfy their RPS procurement requirements, develop an accounting system to verify retail sellers' and POUs' compliance with the RPS and adopt regulations specifying procedures for the enforcement of RPS procurement requirements of POUs. This guidebook describes the requirements and process for certifying electrical generation facilities as eligible renewable energy resources for the RPS and describes how the Energy Commission will track and verify compliance with the RPS. The Energy Commission is addressing its responsibilities for adopting regulations for enforcement provisions for POUs in a separate process.

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) and the California Air Resources Board (ARB) also have key RPS implementation and enforcement roles.

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.⁶ Although the law assigns

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 X1-2 (Chapter 1, Statutes of 2011, First Extraordinary Session). SB X1-2 amends pertinent provisions in Public Resources Code sections 25740 through 25751, and amends and/or adds Public Utilities Code Sections 399.11 through 399.31.

6 SB X1-2 modifies the roles and responsibilities of each agency in implementing the 33 percent RPS requirement, now assigned to all of California's load-serving entities. Both the CPUC and the Energy Commission will implement SB X1-2 through public processes that will define these roles and provide

lead roles for specific implementation efforts to each agency, the roles of the two agencies are interrelated. The Energy Commission is responsible for certifying electrical generation facilities as eligible renewable energy resources and tracking the procurement of such resources to ensure compliance with the RPS. With the passage of SB X1-2, the Energy Commission is also responsible for adopting regulations specifying the enforcement provisions for the POUs. Under SB X1-2, the Energy Commission must refer violations by the POUs to the ARB, which may apply penalties for noncompliance. The CPUC is responsible for establishing compliance targets for the amount of eligible renewable energy resources retail sellers of electricity must procure and determines compliance with the RPS. Retail sellers include electrical corporations,⁷ 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 collaboratively with the CPUC.

While this guidebook reflects current requirements, the Energy Commission recognizes that it may need to revise program guidelines periodically 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. This fifth edition of the guidebook incorporates changes in law resulting from the following legislation:

- Assembly Bill 920,⁸ 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 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 determined by the CPUC. The utility may count this surplus generation toward its RPS obligation.
- Assembly Bill 1954,⁹ signed into law on September 29, 2010, directs the Energy Commission to set a de minimis¹⁰ quantity of nonrenewable fuels that may be used for each renewable

details of the rules and requirements for compliance. To the extent the requirements in this new law are clear and straightforward, they are implemented with the adoption of this fifth edition of the guidebook. Many provisions, however, require further exploration by the agencies and stakeholders before being finalized, and the Energy Commission will incorporate those provisions in future editions of this guidebook. In the meantime, many requirements remain unchanged in this guidebook even though they are changed or new in the law.

⁷ Also referred to as investor-owned utilities (IOUs) in this guidebook.

⁸ Assembly Bill 920 (Chapter 376, Statutes of 2009). AB 920 amends Section 2827 of the Public Utilities Code. AB 920 does not apply to electric service providers or to publicly owned electric utilities that serve more than 750,000 customers and convey water to their customers.

⁹ Assembly Bill 1954 (Chapter 460, Statutes of 2010). AB 1954 amends Section 399.2.5 and 399.12 of the Public Utilities Code.

technology at no more than 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.

- Senate Bill X1-2, signed into law on April 12, 2011, establishes the California Renewable Energy Resources Act and modifies and/or adds provisions in Public Resources Code Sections 25740 through 25751 and Public Utilities Code Sections 399.11 through 399.31. SB X1-2 increases the RPS procurement goal from 20 percent by 2010 to 33 percent by 2020, expands these requirements to include POUs, revises the responsibilities of the CPUC with respect to retail sellers of electricity, and gives the Energy Commission new regulatory responsibilities with respect to POUs. SB X1-2 also makes other changes to the RPS, including replacing the annual procurement targets with compliance periods, replacing the market price referent (MPR) with new cost containment provisions, and creating renewable energy product categories with specific procurement requirements for each compliance period.

Legislation incorporated into previous editions of the *RPS Eligibility Guidebook* includes:

- Senate Bill 1038 (Chapter 515, Statutes of 2002).
- Senate Bill 1078 (Chapter 516, Statutes of 2002).
- Senate Bill 1250 (Chapter 512, Statutes of 2006).
- Senate Bill 107 (Chapter 464, Statutes of 2006).
- Senate Bill 1036 (Chapter 685, Statutes of 2007).
- Assembly Bill 1969 (Chapter 731, Statutes of 2006).
- Assembly Bill 3048 (Chapter 558, Statutes of 2008).
- Assembly Bill 1351 (Chapter 1351, Statutes of 2009).
- Senate Bill 32 (Chapter 328, Statutes of 2009).
- Senate Bill 1247 (Chapter 488, Statutes of 2010).

Additional information on historical legislation is provided in Appendix C.

A. Related Guidebooks and Regulations

This 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 an eligible renewable energy resource for the RPS, electrical generation facilities (that is, power plants) must satisfy the requirements

¹⁰ "De minimis – insignificant; minute, frivolous. Something or some act which is 'de minimis' in interest is one which does not rise to a level of sufficient importance to be dealt with judicially..." Gifis, Steven H. Law Dictionary. Fourth Edition. 1996.

specified in this *Renewables Portfolio Standard Eligibility Guidebook* and the *Overall Program Guidebook*. For general information on the process of creating, appealing, and implementing the RPS guidelines, please refer to the *Overall Program Guidebook*.¹¹

Additionally, information for all retail suppliers of electricity on reporting disclosures and specific purchase claims to customers and the Energy Commission for the Power Source Disclosure Program can be found in the California Code of Regulations, Title 20, Article 5, Sections 1390-1394.

Program guidebooks and regulations are available online 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.

1. Storage Facilities

Assembly Bill 2514¹² 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.

The only energy storage technologies, not integrated into an electrical generation facility, currently eligible for the RPS are pumped-storage hydroelectric and fuel cell facilities 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 energy 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.

Methods of storing renewable energy that are integrated into the electrical generation facility as part of the generation process, such as thermal energy storage at a solar thermal facility, are considered part of the electrical generation facility and not a separate, independent storage facility for the purpose of RPS eligibility.

2. 33 Percent RPS by 2020 Implementation

SB X1-2 establishes the RPS target of 33 percent by 2020 for investor-owned utilities (IOUs), POU, ESPs, and CCAs. In his signing speech, Governor Jerry Brown noted that this target will

11 California Energy Commission, CEC-300-2012-003-LCD, May 2012., .

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

be a milestone, adding, “Our state has enormous renewable energy potential. I would like to see us pursue even more far-reaching targets.”¹³

SB X1-2 directs the CPUC to oversee retail sellers’ procurement of eligible renewable energy resources and to assess retail sellers’ compliance with procurement quantity requirements over three compliance periods, ending with 33 percent eligible renewable energy resource procurement by December 31, 2020, and annually thereafter. (Please see Section II A: Renewables Portfolio Standard Targets of this guidebook for more information on RPS targets.) The law also directs the Energy Commission to establish regulations specifying RPS enforcement procedures for POU’s and to issue notices of violation for a POU’s failure to comply, which would then be referred to the ARB for possible imposition of penalties.

The CPUC issued an Order Instituting Rulemaking (OIR) for the 33 percent RPS proceeding¹⁴ for retail sellers on May 5, 2011, and held a prehearing conference on June 13, 2011. All load-serving entities, including POU’s, are encouraged to participate in the CPUC’s proceeding. To receive information on this proceeding, stakeholders must sign up for the R11-05-005 service list by completing the Addition/Change to Service List Form¹⁵ on the CPUC’s website.

The Energy Commission hosted a scoping workshop on June 17, 2011, in collaboration with the CPUC, to launch the implementation of SB X1-2 and to gather public input on issues and concerns, as well as suggestions for transitioning to the new procurement requirements law to meet the 33 percent RPS requirement by 2020. The Energy Commission issued its own OIR¹⁶ on July 13, 2011, to develop regulations governing enforcement of the 33 percent RPS for POU’s. These regulations are expected to be adopted by the end of 2012. All POU’s are encouraged to sign up for the Energy Commission’s “renewable” listserv¹⁷ to receive updates on upcoming meetings and publications.

With implementation of SB X1-2, the Legislature intends that the RPS will provide unique benefits to California, including the following, as identified in Section 399.11(b) of the Public Utilities Code:

- 1) Displace fossil fuel consumption within the state
- 2) Add new electrical generating facilities in the transmission network within the Western Electricity Coordinating Council (WECC)
- 3) Reduce air pollution within the state
- 4) Meet the state's climate change requirements by reducing emissions of GHGs associated with electrical generation

¹³ www.jerrybrownnews.com. Accessed April 21, 2011.

¹⁴ Rulemaking (R) 11-05-005. This is a successor proceeding to Rulemakings (R) 08-08-009 and (R) 06-02-012, which are now closed.

¹⁵ This form is available at: http://www.cpuc.ca.gov/forms/service_list_addition_change.pdf.

¹⁶ Order Instituting a Rulemaking (OIR) number 11-0713-04.

¹⁷ To sign up for the renewable listserv, visit the Energy Commission’s website at: <http://www.energy.ca.gov/listservers/index.html>.

- 5) Promote stable retail rates for electric service
- 6) Meet the state's need for a diversified and balanced energy generation portfolio
- 7) Assist with meeting the state's resource adequacy requirements
- 8) Contribute to the safe and reliable operation of the electrical grid
- 9) Implement the state's transmission and land use planning activities related to development of eligible renewable energy resources.

To implement SB X1-2, the Energy Commission and the CPUC are collaboratively revising and establishing their respective rules and guidelines. On a parallel path with the CPUC's rulemaking process, the Energy Commission is working with the POUs and other interested stakeholders to further revise this guidebook and establish new regulations. As the Energy Commission modifies the RPS program due to implementation of SB X1-2 and regulations for the POUs are developed and incorporated into RPS policies, revisions requiring further exploration will be incorporated in a future edition of this guidebook.

3. Pipeline Biomethane

The Energy Commission is re-examining the eligibility requirements for pipeline biomethane that are specified in this guidebook. At its March 28, 2012, Business Meeting, the Energy Commission adopted Resolution No. 12-0328-3,¹⁸ which suspended RPS eligibility related to biomethane and put certain conditions of suspension and eligibility limitations in place. The suspension, which took effect on March 28, 2012, was adopted to provide the Energy Commission additional time to evaluate issues surrounding the continued eligibility of biomethane as a result of changes in law under SB X1-2. Language in this guidebook directly pertaining to biomethane is highlighted in gray to indicate that those provisions are subject to the conditions set forth in Resolution No. 12-0328-3 as adopted or subsequently amended. The suspension will remain in effect until the Energy Commission takes subsequent action to lift the suspension.

4. Precertification

Staff continues to be interested in exploring options to revise the RPS precertification process for renewable projects that are in development and not yet commercially operational. Many stakeholders submitted comments in response to questions regarding precertification in the Energy Commission's notice for the October 21, 2011, workshop for revising the fifth edition of this guidebook. Staff will continue working with interested stakeholders in efforts to reach consensus on how the Energy Commission can provide a measure of regulatory certainty for projects in development.

5. Facilities Previously Eligible Under the Existing Renewable Facilities Program

¹⁸ Resolution No. 12-0328-3, as adopted or subsequently amended, can be found at <http://www.energy.ca.gov/portfolio/notices/index.html#resolution>.

The Existing Renewable Facility Program (ERFP) provided funding in the form of production incentives to qualifying electrical generation facilities that used renewable energy resources. Production incentives were provided only for eligible electrical generation, through December 31, 2011, and after this date ceased providing production incentives. Facilities that participated in the former ERFP were also required to be RPS-eligible. If the facility met the conditions to count 100 percent of the generation as eligible for funding in the ERFP, then the entire output of the facility could be counted as RPS-eligible. For biomass facilities, this level of nonrenewable fuel use was 5 percent of the total annual energy input; for solar thermal facilities this level was 25 percent of the total annual energy input. Under the fourth edition of the *RPS Eligibility Guidebook*, facilities that ceased to be eligible for the ERFP must meet the Energy Commission's requirements for a de minimis level of nonrenewable fuel to count 100 percent of its generation as RPS-eligible. The Energy Commission will consider how to treat the use of nonrenewable fuel for the RPS at facilities previously eligible for the ERFP in a future revision of this guidebook. Information regarding current treatment of nonrenewable fuel use at these facilities is provided in Section II C: Renewable Facilities Using Multiple Energy Resources.

C. Guidebook Organization

This guidebook is organized as follows:

- I. Introduction
 - II. Eligibility Requirements
 - III. Certification Process
 - IV. RPS Tracking, Reporting, and Verification System
- Appendix A: WREGIS Reporting Instructions
- Appendix B: Forms
- Appendix C: Legislative History
- Appendix D: List of Acronyms

Section II covers eligibility requirements for generators interested in producing electricity that can be procured by retail sellers and POUs to comply with the RPS. For this 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 IOUs¹⁹ such as PacifiCorp and CalPeco,²⁰ small IOUs such as Bear Valley Electric Service (a division of Golden State Water

¹⁹ Multijurisdictional IOUs are electrical corporations that had 60,000 or fewer customer accounts in California as of January 1, 2010, and that satisfy the requirements of Public Utilities Code Section 399.17.

²⁰ Sierra Pacific Power Company was a multijurisdictional utility serving California customers and doing business as NV Energy. On January 1, 2011, NV Energy completed the sale of its California electric

Company), and ESPs and CCAs. SB X1-2 requires POUs to procure electricity products from eligible renewable energy resources that meet the same RPS-eligibility requirements as resources retail sellers use to meet their RPS procurement requirements.

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

- Precertification application process for developers of renewable electrical generation facilities that are not on-line, who are seeking a preliminary determination that their facility may be eligible for the RPS. Facilities that have been precertified by the Energy Commission must meet the requirements of the *RPS Eligibility Guidebook* that are in effect at the time the Energy Commission receives the application for certification.
- Certification application process for owners or agents of on-line renewable electrical generation facilities who are interested in selling renewable electricity to meet an RPS obligation.
- Process to amend certification or precertification.

Section IV discusses the RPS tracking, reporting, and verification processes the Energy Commission uses to verify retail sellers’ and POUs’ compliance with the RPS and to verify that generation is counted only once in California or any other state.

II. Eligibility Requirements

This section describes eligibility requirements for the RPS, including eligibility for electrical generation facilities with the first point of interconnection outside California. In general, a facility is eligible if it uses an eligible renewable resource or fuel, satisfies resource-specific criteria, and is either:

- located in the state, or
- near the border of the state with the first point of connection to the transmission network of a balancing authority area primarily located within the state,²¹ or

distribution and generation assets to California Pacific Electric Company (CalPeco), doing business as Liberty Energy, which is now the successor to Sierra Pacific Power Company.

21 On December 15, 2011, the CPUC adopted Decision 11-12-052, which identified five California balancing authorities “primarily located within the state” as follows: the California Independent System Operator (California ISO), the Balancing Authority of Northern California (BANC, formerly SMUD), Imperial Irrigation District (IID), the Los Angeles Department of Water And Power (LADWP), and Turlock Irrigation District (TID).

- the facility has its first point of interconnection to the transmission network outside the state, but within the WECC service area and satisfies applicable requirements for such facilities ~~or for out of country facilities, as applicable.~~

A facility that was approved before June 1, 2010, by the governing board of a POU to meet its procurement obligations pursuant to former Public Utilities Code Section 387 may be certified by the Energy Commission as RPS-eligible if the facility meets the eligibility requirements set forth in the edition of this guidebook that was in place at the time of the facility's approval by the POU governing board for its RPS under former PUC Section 387. For a facility not meeting the eligibility requirements set forth in the current *RPS Eligibility Guidebook*, but having met the requirements in the guidebook in place at the time of the POU's approval of the facility, as described above, an applicant must submit documentation to the Energy Commission that verifies the POU board's approval and the approval date, with the application for certification.

A. RPS Procurement Targets and Procurement Content Categories

The following discussion on the RPS targets and procurement content categories is provided for informational purposes only and does not supersede any CPUC decision or any requirements adopted as part of the Energy Commission's regulations pertaining to enforcement of the RPS for POUs. The Energy Commission verifies RPS procurement for retail sellers and POUs. The Energy Commission determines whether a POU is in compliance with its procurement targets and procurement content categories; the CPUC determines whether a retail seller is in compliance with its RPS procurement targets and procurement content categories.

As established by SB X1-2, eligible renewable energy resources must be procured consistent with portfolio content categories with the following criteria:

Portfolio Content Category Number 1. A: Have a first point of interconnection with a California balancing authority, or with distribution facilities used to serve end users with a California balancing authority area, or are scheduled from the eligible renewable energy resource into a California balancing authority without substituting electricity from another source. The use of another source to provide real-time ancillary services required to maintain an hourly or sub hourly import schedule into a California balancing authority shall be permitted, but only the fraction of the schedule actually generated by the eligible renewable energy resource shall count toward this portfolio content category.

Portfolio Content Category Number 1. B: Have an agreement to dynamically transfer electricity to a California balancing authority.

Portfolio Content Category Number 2: Firmed and shaped eligible renewable energy resource electricity products providing incremental electricity and scheduled into a California balancing authority.

Portfolio Content Category Number 3: Eligible renewable energy resource electricity products, or any fraction of the electricity generated, including unbundled renewable energy credits that do not qualify under the criteria of Portfolio Content Category Number 1. A or 1. B above.

Retail Sellers

SB X1-2 directs the CPUC to set, by January 1, 2012, a minimum quantity of eligible renewable energy resources to be procured by each retail seller for each of the following compliance periods:

- January 1, 2011, to December 31, 2013, inclusive
- January 1, 2014, to December 31, 2016, inclusive
- January 1, 2017, to December 31, 2020, inclusive

For the January 1, 2011, to December 31, 2013, compliance period, SB X1-2 directed the CPUC to establish procurement targets equal to an average of 20 percent of retail sales. For the second and third compliance periods, the targets shall reflect reasonable progress in each of the intervening years sufficient to ensure the procurement of electricity products from eligible renewable energy resources achieves 25 percent of retail sales by December 31, 2016, and 33 percent of retail sales by December 31, 2020.²²

For the first compliance period, retail sellers must procure at least 50 percent, 65 percent for the second compliance period, and 75 percent thereafter of the eligible renewable energy resource electricity products associated with contracts executed after June 1, 2010, from Portfolio Content Category Number 1.

Retail sellers shall not procure more than 25 percent for the first compliance period, 15 percent for the second compliance period, and 10 percent thereafter of the eligible renewable energy resource electricity products associated with contracts executed after June 1, 2010, from Portfolio Content Category Number 3.

Local Publicly Owned Electric Utilities (POUs)

The state's RPS requirements are expanded to include POUs under SB X1-2. The law requires each POU to adopt and implement a renewable energy resources procurement plan that requires the utility to procure a minimum quantity of electricity products from eligible renewable energy resources, including renewable energy credits, as a specified percentage of total kilowatt-hours sold to the utility's retail end-use customers, for each of the following compliance periods:

- January 1, 2011, to December 31, 2013, inclusive
- January 1, 2014, to December 31, 2016, inclusive
- January 1, 2017, to December 31, 2020, inclusive

²² Public Utilities Code Section 399.15, Subdivision (b)(2)(A,B). On December 1, 2011, the CPUC adopted its Decision Setting Procurement Quantity Requirements for the Retail Sellers in D. 11-12-020.

For the January 1, 2011, to December 31, 2013, compliance period, SB X1-2 directs the governing board of each POU to ensure that the quantities of eligible renewable energy resources procured by the POU are equal to an average of 20 percent of retail sales. For the second and third compliance periods, the targets must reflect reasonable progress in each of the intervening years sufficient to ensure that the procurement of electricity products from eligible renewable energy resources achieves 25 percent of retail sales by December 31, 2016, and 33 percent of retail sales by December 31, 2020.²³ The local governing board shall require each POU to procure not less than 33 percent of retail sales of electricity products from eligible renewable energy resources in all subsequent years. POU's must adopt procurement requirements consistent with requirements established for retail sellers in Public Utilities Code Section 399.16.

For a POU's that ~~are~~ is a joint powers ~~authorities~~ authority established on or before January 1, 2005, provides electric services to nonresidential customers, and ~~are~~ is formed pursuant to the Irrigation District Law,²⁴ ~~the governing boards~~ the governing board must calculate ~~their~~ its procurement requirements based on average retail sales over the past seven years. If the utility has not been providing electric service for seven years, then the calculation will be based on average retail sales over the number of years the utility has provided electric service.²⁵

A POU receiving all of its electricity pursuant to a preference right under Section 4 of the Trinity River Division Act²⁶ is considered already in compliance with RPS procurement requirements.²⁷

A POU in a city and county receiving more than 67 percent of its procured electricity from hydroelectric generation facilities that it owns and operates, that are located in the state and that do not meet the definition of an RPS-eligible facility in this guidebook, must procure eligible renewable energy resources to meet only the demands unsatisfied by its hydroelectric generation in any given year to satisfy its renewable energy procurement requirements.²⁸

The Energy Commission will determine compliance with the RPS for all obligated POU's and will adopt regulations specifying procedures for enforcement. Any violations will be referred to the ARB to determine potential penalties.

Retail Sellers' Procurement From POU's

A retail seller may procure RECs associated with deliveries of electricity by an eligible renewable energy resource to a POU, for purposes of the RPS, if the Energy Commission determines that both of the following conditions are met:^{29,30}

23 Public Utilities Code Section 399.30, Subdivisions (c)(1) and (c)(2).

24 Division 11, commencing with Section 20500, of the Water Code.

25 Public Utilities Code Section 399.30, Subdivision (j).

26 Public Law 84-386, adopted August 12, 1955.

27 Public Utilities Code Section 399.30, Subdivision (h).

28 Public Utilities Code Section 399.30, Subdivision (k).

29 Public Utilities Code Section 399.25, Subdivision (d).

30 Public Utilities Code Section 399.31.

- 1) The POU has adopted and implemented a renewable energy resources procurement plan that complies with the RPS adopted pursuant to Public Utilities Code Section 399.30.
- 2) The POU is procuring sufficient eligible renewable energy resources to satisfy the target standard, and will not fail to satisfy the target standard in the event that the REC is sold to the retail seller.

In making its determination, the Energy Commission will:

- 1) Verify that the POU has adopted and implemented an RPS procurement plan.
- 2) Verify that the electrical generation associated with the RECs is from an electrical generation facility that has been certified for the RPS by the Energy Commission.
- 3) Require the REC to be tracked in WREGIS.
- 4) Verify that the quantity of RECs procured by the retail seller will not impede the POU from meeting its target standard.

B. Eligible Resources for the Renewables Portfolio Standard

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

An eligible renewable energy resource for the RPS means a facility that meets the definition of a "renewable electrical generation facility" subject to certain restrictions and criteria, as described in this section.³¹ 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 for the facility that uses them for electricity generation.

To qualify as eligible for California's RPS, an electrical 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

³¹ Public Resources Code Section 25741, Subdivision (a).

- Geothermal
- Hydroelectric incremental generation from efficiency improvements
- Landfill gas
- Municipal solid waste
- Ocean wave, ocean thermal, and tidal current
- Photovoltaic
- Small hydroelectric
- 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 precertification. The table does not reflect any additional requirements that may apply to facilities located out-of-country or with a first point of interconnection to a non-California Balancing Authority (non-CBA) within the WECC located outside California.

Facilities using biodiesel, biogas, biomass, small hydroelectric or conduit hydroelectric resources, 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 renewable distributed generation facilities, as well as those for multifuel and other facilities that use a combination of fuels, including those that operate in part by using fossil fuels or other nonrenewable fuels, and facilities located out-of-country or with a first point of interconnection to a non-CBA within the WECC located outside California.

In some cases, the criteria for RPS eligibility depend on the date 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, however, its commercial operation date may be considered its repowering date.

As of January 1, 2009, the generation of all facilities serving retail sellers 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. A facility serving a POU must be registered with and approved by WREGIS by October 1, 2012, for its generation to count toward a utility's RPS requirements. Generation from a facility serving a POU may be tracked and reported using the Interim Tracking System (ITS) for 2011 and part of 2012. Additional requirements regarding generation from facilities serving POUs are discussed in later sections of this guidebook.

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

NOTE: A CEC-RPS-1 Form must be submitted for each electrical generation facility seeking certification or precertification, in addition to supplemental forms or information, as applicable. All forms can be found in Appendix B. Facilities required to supply supplemental forms in the certification application must apply using the CEC-RPS-1 form. Facilities not required to submit any supplemental forms may apply using either the CEC-RPS-3 or CEC-RPS-4 form, if the facility meets all requirements necessary to use the specific form used.

Resource Used by Facility	Facility 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 II.	CEC-RPS-1:S1
Biogas (including pipeline biomethane)	Yes, with fuel restrictions	Submit additional required information regarding the feedstock used to derive biogas, and delivery of the biogas if applicable. Refer to Section II.	CEC-RPS-1:S1
Biomass	Yes, with fuel restrictions	Yes, refer to Section II	CEC-RPS-1:S1
Conduit Hydroelectric	Yes, with restrictions	Yes, refer to Section II	CEC-RPS-1:S2
Digester Gas	Yes	N/A	CEC-RPS-1:S1
Fuel Cell	Yes, with fuel restrictions	Submit material required for the feedstock or technology used for generation, if applicable. Refer to Section II.	CEC-RPS-1:S1
Geothermal	Yes	N/A	N/A
Incremental Hydroelectric	Yes, with restrictions	Yes, refer to Section II	CEC-RPS-1:S2
Landfill Gas	Yes	N/A	CEC-RPS-1:S1
MSW Combustion	Yes, with restrictions	Yes, refer to Section II	CEC-RPS-1:S1

Resource Used by Facility	Facility RPS Eligibility	Additional Required Information	Supplemental Form
MSW Conversion	Yes, with restrictions	Yes, refer to Section II	CEC-RPS-1: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 II	CEC-RPS-1:S2
Solar Thermal	Yes	N/A	N/A
Tidal Current	Yes	N/A	N/A
Wind	Yes	N/A	N/A
Characterization			
Interconnection <u>to a non-CBA</u> Outside CA/Out-of-Country	Yes, with restrictions	Yes, refer to Section II	CEC-RPS-1:S3
Repowered	Yes, with restrictions	Yes, refer to Section II	N/A

Source: California Energy Commission

1. Biodiesel

The electrical generation produced by a facility that uses biodiesel is eligible for the RPS if the biodiesel is derived from one or both of the following fuel sources and complies with the requirements for these fuel sources and multifuel technologies:

- a) 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 multifuel technologies. (Refer to the requirements for biomass eligibility and for multifuel technologies below.)
- b) An eligible “solid waste conversion” process using MSW and consistent with applicable requirements for multifuel technologies. (Refer to the requirements for MSW eligibility and for multifuel technologies below.)

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

2. Biogas (including pipeline biomethane)

Note: As noted in the “Outstanding Issues” section of this guidebook, the Energy Commission suspended RPS eligibility related to biomethane and put certain conditions of suspension and eligibility limitations in place, as described in Resolution No. 12-0328-3. The suspension, which took effect on March 28, 2012, was adopted to provide the Energy Commission additional time to evaluate issues surrounding the continued eligibility of biomethane as a result of changes in law under SBX 1-2. Language in this guidebook directly pertaining to biomethane is highlighted in gray to indicate that those provisions are subject to the conditions and limitations set forth in the resolution as adopted or subsequently amended. The suspension will remain in effect until the Energy Commission takes subsequent action to lift the suspension.

The electrical generation produced by a facility that uses biogas is eligible for the RPS if the biogas is derived from an RPS-eligible fuel such as biomass, digester gas, and/or landfill gas. Biogas may be converted to electricity in an RPS-eligible electrical generation facility located at the fuel processing site, or it may be transported to an RPS-eligible electrical generation 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 electrical generation facility by one of the following methods:

- a) 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.
- b) Dedicated pipeline: The biogas is injected into a pipeline running from the fuel processing facility to the electrical generation facility with no possibility of mixture with non-RPS-eligible gas.
- c) Natural gas pipeline: The biogas is conditioned to become pipeline biomethane, injected into a natural gas pipeline, and withdrawn at the designated RPS-eligible electrical 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 delivered from the biogas production facility to the electrical generation facility, these necessary attributes must be conveyed along with the biogas and sold for the purpose of use at the electrical generation facility such that RECs generated would be eligible to meet the RPS.

Applicants for facilities using a mixture of RPS-eligible biogas and ineligible gas must certify as multifuel facilities, as described in Section II C: Renewable Facilities Using Multiple Energy Resources.

In addition to the certification or precertification application, applicants for electrical generation facilities using biogas must complete the Biopower supplemental application form, CEC-RPS-1:S1, which can be found in Appendix B.

Pipeline Biomethane Delivery via Injection 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 electrical generation facility if the electrical generation facility is located outside California) for use in an RPS-certified facility. The resulting generation will be considered RPS-eligible electricity, if all other eligibility requirements have been met. The biomethane must meet strict heat content and quality requirements within a narrow band of tolerance to qualify as pipeline-quality gas.

Quantifying RPS-eligible energy production requires accurate metering of the volume of the biomethane injected into the transportation pipeline system and the measured heat content of the injected biomethane. Although blending the biomethane into the transportation pipeline system mixes the biomethane with other pipeline gas, biomethane entering the system must be designated for use at a specific power plant or designated to a pipeline system owned by the local publicly owned electric utility (POU) or other load-serving entity (LSE) procuring the biomethane, with the POU or LSE then designating which facility will consume the biomethane. The facility to which biomethane is designated must be certified as RPS-eligible, recognizing that the facility may use a blend of RPS-eligible and ineligible fuels.

As described in Section II C: 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.³² The amount of RPS-eligible electricity produced shall be calculated by multiplying the generation of the facility (in megawatt hours) by the ratio of the energy of the biomethane injected and delivered to the total

³² Refer to Section II C: Renewable Facilities Using Multiple Energy Resources for RPS-Eligibility Requirements.

energy of the gases, biomethane and natural gas, used by the facility, in British Thermal Units (Btu). 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 month) See Section II C for more information on how to measure the renewable generation from multifuel facilities.

Any production or acquisition of 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 must be produced from an RPS-eligible resource, such as biomass, digester gas, or landfill gas.
2. The 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 electrical generation facility if the electrical 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 electrical generation facility if the electrical generation facility is located outside California). 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, Btu) 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 biomethane 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 biomethane will be designated to that facility or to the LSE-owned pipeline serving the designated facility.
6. In its annual *RPS Procurement Verification Report*, 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 for RPS precertification or certification must include a completed “Pipeline Biomethane Delivery Attestation” found in the attestations supplemental form, CEC-RPS-1:S1, for each entity responsible for the delivery of the pipeline biomethane. The supplemental forms can be found in Appendix B.

3. Biomass

The electrical generation produced by a facility that uses a “biomass” fuel as defined in the *Overall Program Guidebook*, is eligible for the RPS.

Applications for RPS precertification or certification must include a completed attestation form signed by the facility owner or operator stating the intent to procure and use biomass fuel that meets RPS eligibility requirements. Failure to use eligible biomass fuel will jeopardize the RPS eligibility of the facility. Applicants for biomass facilities must complete and submit the Biopower supplemental application form, CEC-RPS-1:S1, with the application for certification or precertification. The supplemental forms can be found in Appendix B.

4. Fuel Cell Facilities Using Renewable Fuel

The electrical generation produced by a fuel cell facility using renewable fuel is eligible for the RPS if the renewables fuel used is limited to 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, Subdivision (e) with reference to Public Resources Code Section 25741(a).
- Hydrogen or hydrogen-rich gases derived from a nonfossil fuel or feedstock through a catalytic or electrolytic process that is energized using power generated by an “eligible renewable energy resource.” The electrical generation from a fuel cell using this source of fuel is eligible for the RPS only if the electricity (that was used to make the renewable fuel) is not also counted toward an RPS compliance obligation, or claimed for any other program as renewable generation. If the source of electricity used to make the renewable fuel is located at another site, the facility generating that electricity must be certified as California RPS-eligible.³³

Applicants for RPS precertification or certification must complete the Biopower supplemental application form, CEC-RPS-1:S1, which can be found in Appendix B.

5. Hydroelectric Facilities

Electrical generation produced by the following types of hydroelectric facilities is eligible for the RPS:

- a) Small hydroelectric facilities 30 MW or less
- b) Conduit hydroelectric facilities 30 MW or less
- c) Existing hydroelectric generation units 40 MW or less and operated as part of a water supply or conveyance system
- d) Incremental generation from eligible efficiency improvements to hydroelectric facilities regardless of the facility’s overall generating capacity.

³³ 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.

The RPS eligibility requirements for each of these hydroelectric facilities are addressed separately in Subsections (a), (b), (c), and (d) below.

The maximum nameplate capacity of an RPS-eligible small hydroelectric facility or conduit hydroelectric facility is 30 MW. However, the law allows such a facility to retain its RPS eligibility if efficiency improvements cause the facility to exceed 30 MW. For example, the Energy Commission interprets the 30 MW size limit to mean that if a small hydroelectric or conduit hydroelectric facility with a nameplate capacity of 30 MW had an eligible 5 MW energy efficiency increase, the entire generation from the 35 MW capacity would be RPS-eligible. Small hydroelectric facilities and conduit hydroelectric facilities must meet the definition of “project,” as defined in the *Overall Program Guidebook*, to be eligible for the RPS.

The maximum nameplate capacity of an existing hydroelectric generation unit that is operated as part of a water supply or conveyance system is 40 MW; such units are not subject to the same “project” definition as small hydroelectric and conduit hydroelectric facilities to 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 that is net of the incremental increase does not qualify.³⁴ For example, if a 50 MW hydro facility increased its capacity to 55 MW due to eligible energy efficiency improvements, 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 in nameplate capacity. Eligibility requirements for efficiency improvements are discussed at the end of this section.

In addition to the certification or precertification application, some applicants for small hydroelectric facilities or conduit hydroelectric facilities with eligible incremental efficiency improvements must complete the hydroelectric supplemental application form, CEC-RPS-1:S2, which can be found in Appendix B, and provide additional required information described later in this section.

a. Small Hydroelectric

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:
 1. The facility has a nameplate capacity of 30 MW or less, with an exception for eligible efficiency improvements made after January 1, 2008, as discussed below.

³⁴ Assembly Bill 809 (Chapter 684, Statutes of 2007) enacted Public Utilities Code Section 399.12.5 and made RPS-eligible, the incremental increase in electricity generation due to efficiency improvements at the hydroelectric facility, regardless of the electrical output of the facility.

2. The facility was under contract to, or owned by, a retail seller or local publicly owned electric utility as of December 31, 2005.³⁵
- 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 has a nameplate capacity of 30 MW or less, with an exception for eligible efficiency improvements made after January 1, 2008, as discussed below.
 2. The facility does not “cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.”³⁶

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. 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 existing³⁷ pipe, ditch, flume, siphon, tunnel, canal, or other manmade conduit that is operated to distribute water for a beneficial use.³⁸ A conduit hydroelectric facility may be considered a separate project even 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 the following criterion:
 1. The facility has a nameplate capacity of 30 MW or less, with the exception of eligible efficiency improvements made after January 1, 2008, as discussed below.

35 Assembly Bill 3048 (Chapter 558, Statutes of 2008) 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.

36 Public Utilities Code Section 399.12, Subdivision (e)(1)(A).

37 “Existing” in this context 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.

38 “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.

- 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 has a nameplate capacity of 30 MW or less, with the exception of eligible efficiency improvements made after January 1, 2008, as discussed below.
 2. The facility does not “cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.”³⁹

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 associated 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. Existing Hydroelectric Generation Unit Operated as Part of a Water Supply or Conveyance System

The certification of an existing hydroelectric generation unit operated as part of a water supply or conveyance system⁴⁰ requires that the unit meet all of the following requirements:

1. The generation unit has a nameplate capacity of 40 MW or less.
2. Generation from the facility was under contract to, or owned by, a retail seller or local publicly owned electric utility as of December 31, 2005.
3. The unit is operated as part of a “water supply or conveyance system,” as defined in the *Overall Program Guidebook*.

³⁹ Public Utilities Code 399.12, Subdivision (e)(1)(B).

⁴⁰ Senate Bill X1-2 revised Public Utilities Code Section 399.12, Subdivision (e)(1)(A) to add existing hydroelectric generation units not exceeding 40 MW and operated as part of a water supply or conveyance system as an eligible renewable energy resource, if certain criteria are met.

d. 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.⁴¹
2. The facility was operational before January 1, 2007.
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. 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.
 - 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.⁴²
 - c. The facility meets the requirements of the Public Utilities Code 399.12.5, Subdivision (b)(2)(C).
5. 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.

41 Assembly Bill 1351 (Chapter 525, Statutes of 2009). AB 1351, amended then 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.

42 Public Utilities Code Section 399.12.5, Subdivision (b).

6. 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.⁴³

General Requirements for Hydroelectric Facilities

To be eligible for the RPS, a new or repowered small hydroelectric facility, conduit hydroelectric facility, or incremental generation from eligible efficiency improvements to a hydroelectric facility must demonstrate that it can operate without adversely impacting the instream beneficial uses or causing a change in the volume or timing of streamflow.⁴⁴

A facility 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 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 below.

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 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.

⁴³ “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 years, which includes procurement of the incremental generation. (Public Utilities Code Section 399.12.5, Subdivision [b][4].)

⁴⁴ 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.

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

Additional Required Information for Hydroelectric Facilities

An applicant must provide additional information to substantiate its application for RPS precertification or certification for a small hydroelectric facility, conduit hydroelectric facility, or incremental generation from efficiency improvements to hydroelectric facilities regardless of overall facility size 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 hydroelectric or conduit hydroelectric 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 included with a complete application for RPS precertification or certification. This information must be included in the CEC-RPS-1:S2 that accompanies a completed CEC-RPS-1 application form. Applicants possessing a permit or license from the SWRCB or from another governing body if located in another 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

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 California must provide similar documentation of an existing water right for water diversion.

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, then that is the level of information necessary to be submitted.

6. Other permits

The applicant must submit all other applicable permits, including those project licenses, permits and exemptions issued by the Federal Energy Regulatory Commission (FERC), if applicable, or the equivalent from another federal, state, or local government agency. If no FERC project licenses, permits, or exemptions were issued, the applicant must submit documentation explaining why the FERC project licenses, permits, or exemptions are not applicable to the facility.

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 nameplate capacity 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 must provide:

- a. Documentation showing when the existing small or conduit hydroelectric facility commenced commercial operations.
- b. Documentation describing the efficiency improvements and when they were initiated and completed.
- c. Documentation demonstrating that the efficiency improvements are not the result of routine maintenance.
- d. Documentation demonstrating 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 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:

- a. Documentation showing when the existing hydroelectric facility commenced commercial operations.
- b. Documentation describing the efficiency improvements and when they were initiated and completed.
- c. Documentation demonstrating that the efficiency improvements are not the result of routine maintenance.
- d. Documentation demonstrating 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. One of the following:
 - i. 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 before the improvements were initiated.
 - ii. 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.
 - iii. The facility meets the requirements of the Public Utilities Code Section 399.12.5, Subdivision (b)(2)(C).
- f. Documentation demonstrating 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 would have an adverse impact on instream

beneficial uses if it causes an adverse change in the chemical, physical, or biological characteristics of water.

- g. Documentation demonstrating that the efficiency improvements to the facility resulted from a long-term financial commitment by the retail seller or POU.⁴⁵
- 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, including supporting water flow data. If the facility has not been operating 20 years, then provide data for the years it has been operational.
- 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.

Additional Required Information for Existing Hydroelectric Generation Units 40 MW or Less and Operated as Part of a Water Supply or Conveyance System

Additional documentation described below must be included with a complete application for RPS precertification or certification. This information must be included in the CEC-RPS-1:S2 that accompanies a completed CEC-RPS-1 application form. An applicant must provide the following additional information to substantiate that the hydroelectric generation unit is operated as part of a water supply or conveyance system:

- Current water supply permit issued by the California Department of Public Health, if applicable, or its local equivalent from another state or local government agency.
- Current hydroelectric project license, permits, or exemption from licensing from the Federal Energy Regulatory Commission (FERC), if applicable, or the equivalent from another federal, state, or local government agency. If no FERC hydroelectric project licenses, permits, or exemptions were issued for the facility, the applicant must submit documentation explaining why the FERC project licenses, permits, or exemptions are not applicable to the facility.

6. Municipal Solid Waste

Electrical generation produced by a facility that uses municipal solid waste (MSW) as defined in the *Overall Program Guidebook* is eligible for the RPS. Two types of MSW facilities are eligible:

1. Municipal Solid Waste Combustion Facilities: A facility that directly combusts MSW to produce electricity is eligible for the RPS only if it is located in Stanislaus County and was

⁴⁵ “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 years or more, which includes procurement of the incremental generation. (Public Utilities Code Section 399.12.5, Subdivision (b)(4).

operational before September 26, 1996.⁴⁶ An applicant for a combustion facility must submit documentation to the Energy Commission demonstrating that the facility meets these requirements.

2. Municipal 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, gasification⁴⁷ conversion, a non-combustion thermal process that consumes no excess oxygen, is used to convert MSW into a clean-burning gaseous or liquid fuel, and then in the second step this clean-burning fuel is used to generate electricity, and 2) the facility and conversion technology meet 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 38505 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. 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 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 precertification application, applicants for MSW facilities must complete the supplemental application form for biopower, CEC-RPS-1:S1, found in Appendix B, and provide the additional required information described below.

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 located outside California are provided at the end of this subsection.

⁴⁶ Public Utilities Code Section 399.12, Subdivision (e)(2).

⁴⁷ This process is referred to as “gasification” 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, Subdivision (b), as applicable to municipal solid waste conversion.

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 Agency⁴⁸ (EA) pursuant to regulations promulgated by the California Department of Resources Recycling and Recovery (CalRecycle). These permits must be attached to the completed CEC-RPS-1A form to verify compliance with the requirements specified above. Applicants seeking RPS precertification must attach copies of their Solid Waste Facilities Permit Application, as submitted to the EA. The Energy Commission will verify compliance in consultation with CalRecycle based on the adopted regulations as set forth in Title 14, California Code of Regulations, Division 7, Chapter 3, Article 6.0, commencing with Section 17400.

To become certified as an eligible renewable energy resource for the 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, California Code of Regulations, Division 7, Chapter 3, Article 6.0, commencing with Section 17400. The Energy Commission will confirm that the permit is approved, active, and applicable to the facility seeking RPS certification. These permits must demonstrate:

1. The facility is using only a “gasification” conversion technology, as defined in Public Resources Code Section 40117.
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, Subdivision (b)(4).
3. The facility processes solid waste from which, 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 a solid waste conversion facility must certify to the Energy Commission that:

1. All recyclable materials and marketable green waste compostable materials removed from solid waste prior to the conversion process 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 precertified as RPS-eligible, the applicant must submit to the Energy Commission copies of its Solid Waste Facilities Permit Application, as submitted to the 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. In the event that the

⁴⁸ 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/>.

EA determines that no permit is required, then the applicant must submit to the Energy Commission the information provided to the EA and the EA's official determination of the facility's regulatory status. The Energy Commission will review this information and consult with CalRecycle to determine if the information is complete and satisfies the requirements specified in Public Resources Code Section 25741, Subdivision ~~(b)(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 precertified applicant does not obtain an applicable solid waste facility permit, 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 precertification.

MSW Conversion Facilities Located Outside California

In the case of an MSW conversion facility not 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 issue such permits. 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 precertification, 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 precertified 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 precertification-status.

C. Renewable Facilities Using Multiple Energy Resources

Renewable facilities using multiple energy resources to generate electricity are eligible for the RPS. These renewable facilities are referred to as "multifuel" facilities and use a mix of fuels or energy resources that includes fossil fuels, other nonrenewable energy resources, and one or more RPS-eligible renewable energy resources to generate electricity. Applicants for these multifuel facilities must accurately measure the annual contribution of each fuel and energy resource type and maintain and report this information to the Energy Commission and WREGIS, as required.

1. Measuring the Renewable Generation From Multifuel Facilities

All applications to certify or precertify a multifuel facility must include a measurement methodology to determine the contribution of each fuel or energy resource, a list of all energy

resources used at the facility, and the actual, or anticipated, percentage of the contribution of each energy resource to the total generation output as measured by the fuel measurement methodology on an annual basis, showing monthly data. Any significant change in the fuel amounts should be reported to the Energy Commission through an amended application for certification, or precertification; significant changes are discussed in Section III: Certification, Subsection B 5. Unless the facility's operations comply with one of the requirements described below to treat an amount of nonrenewable generation as RPS-eligible, no generation attributable to the use of nonrenewable fuel or energy resource will be counted as RPS-eligible.

The Energy Commission will allow one of the methods provided below for measuring the fraction of a multifuel facility's electricity output attributable to renewable energy resources. An application for RPS precertification or certification of a multifuel facility must indicate which of these methods will be used to measure the renewable fraction of the facility's generation. Applicants 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, fuel, or energy resource. The measurements shall be based on the total annual energy input of each energy resource to the generating system, and any inputs not separately metered must 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 precertification or certification. The applicant shall report the fraction of renewable energy relative to the total electricity generation from a multifuel facility to WREGIS on a monthly basis.

All fuels or energy resources contributing thermal energy to the system that generates electricity (except for solar thermal facilities using direct steam generation systems with no thermal storage capacity, which may use the approach described below), and any inputs not separately metered, must be accounted for in the measurement methodology for all thermal conversion technologies. This includes, but is not limited to, fuel use for startup, freeze protection, flame stabilization, supplemental firing, and any input of thermal energy used to maintain, increase, or control the decrease of the thermal energy within the generation system. Similarly, all fuels or energy resources entering a fuel cell must be considered. Nonthermal technologies should independently and accurately measure all generation directly from each technology or separate unit.

Solar thermal facilities using direct steam generation systems with no thermal storage capacity may use nonrenewable fuel for the purpose of increasing or maintaining the thermal energy of the generation system, subject to all the following limitations:

1. The maintenance or increase in thermal energy is limited to levels not exceeding temperatures necessary to generate electricity.
2. The maintenance or increase in thermal energy may not exceed 25 percent of the hourly thermal capacity of the receiver system.

3. The use of nonrenewable fuel for maintenance or increase in thermal energy is limited to the period of time between the final daily termination of generation and the facility's daily initial commencement of generation the next morning.⁴⁹

Uses of nonrenewable fuel falling within these limitations shall not be considered as contributing to electricity generation in the measurement methodology. The applicant must demonstrate to the Energy Commission's satisfaction that the proposed method is superior to the methods discussed below and is the most appropriate method for solar thermal facilities using direct steam generation systems with no thermal storage capacity, similar to all other proposed alternative measurement methodologies. The alternative measurement method shall include separate metering of the total amount of nonrenewable fuel used daily by the facility and separate metering for the portion of this total used between shutdown and commencement of generation the next morning, for reporting the fuel usage to the Commission. The facility operator shall maintain adequate documentation to substantiate the reported nonrenewable fuel use at the facility.

Below are the preapproved methods for measuring the contribution of each fuel or energy resource at RPS-eligible facilities.

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 efficiency by adding heat to the system, given by the following equation:

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

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

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

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

⁴⁹ For example, the pre-generation warming period for the daily initial startup and overnight freeze protection would be treated as part of the period of time between the facility's final daily termination of generation and the facility's initial commencement of generation the next morning.

2. Noncombustion, 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.

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

$(\text{MWh})_{\text{Total}}$ = Total electrical generation of all generators,

not the net electrical output of the facility (MWh)

$(\text{eff})_{\text{plant}}$ = The actual conversion efficiency of the facility or 0.425

- b. The second option for noncombustion, 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 media 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 generating turbine. For this option, the applicant may use the following Percent Renewable equation:

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

Where the noncombustion, 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)

$(MMBTU)_{medium_{in}}$
= *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 noncombustion, thermal process, the contribution of that fuel shall be accounted for in a method similar to the second option for noncombustion, thermal renewable technologies.

3. Nonthermal electric generating technologies (except fuel cell technologies): Some renewable technologies, such as solar photovoltaic and wind, are nonthermal 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 nonthermal renewable technology, if applicable. The percentages attributable to the technology shall be recorded monthly and reported to WREGIS on a monthly basis.

2. De Minimis Quantity of Nonrenewable Fuels or Energy Resources

All of the generation from multifuel facilities using a de minimis quantity of nonrenewable fuels or energy resources in the same generation process as the renewable fuel or resource, and as measured by the methodology approved for that specific facility, may be counted as RPS-eligible. Public Utilities Code Section 399.12, Subdivision (h)(3), requires that the Energy Commission set the de minimis quantity for all facilities applying for precertification or certification at a level of no more than 2 percent of the total annual contribution of nonrenewable fuel to the facility's annual electricity output. The Energy Commission has determined that all facilities using nonrenewable fuels in the generation process may use a de minimis quantity of nonrenewable fuel of 2 percent annually, as calculated by a measurement methodology approved under this guidebook.

The law authorizes the Energy Commission to adjust the de minimis quantity for individual facilities up to a maximum level of 5 percent of the total annual contribution of nonrenewable fuel to the facility's annual electricity output if the applicant can demonstrate that several conditions are met by the facility's use of the increased amount of nonrenewable fuel. The Energy Commission has determined that individual facilities meeting the criteria below will be allowed a de minimis quantity of 5 percent nonrenewable fuel use, as measured by the approved fuel measurement methodology. Applicants for individual facilities seeking this adjusted de minimis nonrenewable fuel use must demonstrate in their applications for precertification or certification that the facility meets all of the following criteria:

1. The higher quantity of nonrenewable fuel used at the facility will lead to an increase in generation from the facility that is significantly greater than generation from the nonrenewable fuel alone. Significantly greater generation from the facility is defined as an increase in generation that, as a result of the increased quantity of nonrenewable fuel use, is

greater than twice the generation potential of the increased quantity of nonrenewable fuel alone.⁵⁰ This equates to an increase in generation attributable to the renewable fuel that is greater than the generation potential from the increased quantity of nonrenewable fuel alone.⁵¹

2. The increased use of nonrenewable fuel reduces the facility's electrical output variability in a manner that results in net environmental benefits to the state. Reduced variability of output from a facility can improve its synchronization to the grid or improve the facility ramp rates, which can improve the ability of renewables to integrate into the California electrical system and achieve the state's RPS and climate change targets, and, thereby, demonstrate a net environmental benefit to the state.
3. The higher quantity of nonrenewable fuel is limited to either natural gas or hydrogen derived by the reformation of a fossil fuel. Specifically, an adjusted de minimis quantity of nonrenewable fuel greater than 2 percent but not greater than 5 percent may be sourced from either natural gas or hydrogen derived by the reformation of a fossil fuel.

All facilities using a de minimis amount of nonrenewable fuels to count toward the RPS must retain records to verify the facility's ongoing compliance with the above requirements and must submit this information to the Energy Commission as required below, and upon request. If the Energy Commission determines that a facility's adjusted nonrenewable fuel use does not meet the above requirements, the facility will be subject to the 2 percent de minimis limit for the applicable year(s) and all subsequent years unless the applicant provides sufficient documentation to demonstrate its qualities for the 5 percent de minimis limit. If the Energy Commission readjusts the annual de minimis quantity of nonrenewable fuels to 5 percent for that facility, it will be applied to generation that occurs subsequent to the Energy Commission's determination.

For counting generation attributed to nonrenewable fuel as California RPS-eligible, see "Counting Nonrenewable Fuel Use as RPS-Eligible" below.

3. Other Nonrenewable Fuel Allowances

In the past, the Energy Commission has allowed the generation from facilities using greater amounts of nonrenewable fuel than the de minimis quantity to be considered 100 percent eligible for the RPS if certain conditions were met, as described below. Only facilities that continue to meet these conditions and are currently RPS certified under these conditions may continue to receive RPS credit for the entire output of the facility. For these facilities to count 100 percent of the electricity generated toward the RPS, one of the following three conditions must be met in the current certification for that facility. If the allowable nonrenewable energy amount is exceeded, then only the generation attributable to renewable energy inputs will be

⁵⁰ The generation potential of the increased nonrenewable fuel alone is calculated by applying the heat rate of the facility to the increased quantity of the nonrenewable fuel.

⁵¹ The Energy Commission may revise the definition of "significant" for this purpose after a sampling of operational data is available.

counted for the RPS. For counting generation attributed to nonrenewable fuel for the RPS, see “Counting Nonrenewable Fuel Use as RPS-Eligible” below.

1. Facilities eligible for Existing Renewable Facility Program (ERFP) funding as of December 31, 2011. If a facility met the conditions to qualify 100 percent of its generation for ERFP funding under the January 2009 edition of the *Existing Renewables Facilities Program Guidebook, Sixth Edition*, on December 31, 2011, then the entire electrical generation output of the facility can count as RPS-eligible. As was the case under the Existing Renewable Facilities Program, for facilities using biomass fuel, this level of nonrenewable fuel use is 5 percent of the total annual energy input; for facilities using solar thermal resources, this level is 25 percent of the total annual energy input. As noted in the “Outstanding Issues” section of this guidebook, the Energy Commission plans to consider how to treat the use of nonrenewable fuel for the RPS at facilities previously eligible for the ERFP in a future edition of this guidebook.
2. Facilities that commenced commercial operations before January 1, 2002, were certified and operational as a renewable qualifying small power production facility (QF)⁵² pursuant to the federal Public Utility Regulatory Policies Act⁵³ before January 1, 2002, and are currently certified by the Federal Energy Regulatory Commission (FERC) as a renewable QF, may use up to 25 percent nonrenewable fuels and the entire electrical generation output of the facility will be considered RPS-eligible.
3. If the facility was 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, these facilities may use up to 25 percent nonrenewable energy resources, measured on an annual total energy input basis, and count 100 percent of the electricity generated as RPS-eligible.

4. Counting Nonrenewable Fuel Use as RPS-Eligible

All generation from multifuel facilities using fossil fuel or other nonrenewable fuel and meeting the conditions described in Subsections 2 or 3 above may be counted for RPS. The Energy Commission will not verify that RECs associated with electricity generation from nonrenewable fuels qualify as eligible for California’s RPS until after annual data are available. Because annual data are not available until after the end of a calendar year, and WREGIS does not create RECs until 90 days after the reporting of monthly generation data, the Energy Commission staff will not label any RECs representing electricity generated from nonrenewable fuels as eligible for California’s RPS until after the end of the calendar year during which the generation occurred.

52 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.

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

To help the Energy Commission staff make its determination regarding nonrenewable fuel use, the applicant for each multifuel facility shall provide the following information to the Energy Commission annually:

- The total annual generation from the facility, including monthly data, in MWh.
- A list of energy resources contributing to electricity generation at the facility, and the monthly energy input for each fuel measured in BTUs. (In the case of electricity, contribution should be measured in MWh.) The use of any energy resource that is not separately metered, even if it does not contribute to electricity generation, must be included in this list.
- For solar thermal facilities using direct steam generation systems with no thermal storage capacity the monthly energy input for each fuel, in BTUs, used for maintenance or increase in thermal energy of the generation system during the period of time between the final daily termination of generation and the facility's daily initial commencement of generation the next morning. Each of these fuel uses must be identified separately.
- Any additional documentation necessary for the Energy Commission to determine nonrenewable fuel use based on the fuel measurement methodology included in the RPS certification, including the information submitted to WREGIS related to fuel use.

The information shall be submitted to the Energy Commission by March 31 for the prior calendar year and shall include all relevant information for the prior calendar year, listed by month. Any discrepancies in the reported information shall be explained in detail and supported with documentation. Staff may request additional documentation to determine whether the facility's use of nonrenewable fuels may be counted for the RPS for a given year.

For facilities subject to the de minimis quantity described in Subsection 2 of this section, the Energy Commission will make one of the following determinations:

1. The use of nonrenewable fuel at the facility did not exceed the facility's de minimis quantity as calculated by the approved measurement methodology for that facility. The RECs representing generation attributable to the use of nonrenewable fuels or energy resources for that year that comply with the requirements of this guidebook will be labeled as "California RPS-Eligible" in the WREGIS system.
2. The use of nonrenewable fuel at the facility exceeded the facility's de minimis quantity but remained below 10 percent of the total energy inputs of the system, as calculated by the approved measurement methodology for that facility. The generation attributable to the use of nonrenewable fuels or energy resources that exceeds the de minimis quantity will not be considered RPS-eligible. However, the RECs representing the quantity of generation attributable to the nonrenewable fuel use that does not exceed the de minimis quantity for that year that comply with the requirements of this guidebook labeled as "California RPS-Eligible" in the WREGIS system.⁵⁴

⁵⁴ RECs representing eligible generation that occurred before the month during which the nonrenewable fuel use exceeded the annual allowable de minimis quantity will be labeled California RPS-eligible if they

3. The use of nonrenewable fuel at the facility exceeded 10 percent of the facility's total energy inputs as calculated by the approved measurement methodology for that facility. None of the generation attributable to the use of nonrenewable fuels or energy resources will be RPS-eligible, and the RECs representing the nonrenewable generation will not be labeled as "California RPS-Eligible" in the WREGIS system.

For facilities subject to one of the other nonrenewable fuel allowances described in Subsection 3 of this section, the Energy Commission will make one of the following determinations:

1. The use of nonrenewable fuel at the facility did not exceed the facility's nonrenewable fuel allowance as calculated by the approved measurement methodology for that facility. The generation attributable to the use of nonrenewable fuels or energy resources for that year will be RPS-eligible, and the RECs representing the nonrenewable generation will be labeled as "California RPS-Eligible" in the WREGIS system.
2. The use of nonrenewable fuel at the facility exceeded the facility's nonrenewable fuel allowance as calculated by the approved measurement method for that facility. None of the generation attributable to the use of nonrenewable fuels or energy resources will be RPS-eligible, and the RECs representing the nonrenewable generation will not be labeled as "California RPS-Eligible" in the WREGIS system.⁵⁵

RECs that have been transferred from the original WREGIS subaccount cannot be edited or later labeled as California RPS-eligible. Facilities with utility contracts that require immediate transfer to the utility for RPS retirement, as described in Section IV. RPS Tracking, Reporting, and Verification, will not necessarily reside in the generator's initial subaccount and therefore will not be labeled as RPS-eligible. RECs that are not labeled as RPS-eligible may still be used for California's RPS if the generation that produced the RECs complied with all requirements of this guidebook.

Beginning with the adoption of this guidebook, no REC created in the WREGIS system representing generation attributable to nonrenewable fuel will be considered California RPS-eligible or labeled as such until the Energy Commission has made such a determination as

remain in the original WREGIS subaccount. The nonrenewable RECs representing generation for the month during which the limit was exceeded beyond the fraction that are eligible, and the nonrenewable RECS generated during the remainder of that year, will not be labeled as California RPS-eligible.

55 Facilities that were eligible for Existing Renewable Facility Program (ERFP) funding on December 31, 2011, must comply with the requirements to count the entire electrical output of the facility as RPS-eligible to treat any of the generation attributable to nonrenewable fuels or energy resources as RPS-eligible regardless of the level of nonrenewable fuel allowance. For example, a facility eligible to use up to 5 percent nonrenewable fuel and consider the entire output of the facility as renewable due to participation in the Existing Renewable Facility Program, will not be allowed to treat the allowed 5 percent as RPS-eligible if the nonrenewable fuel use exceeds 5 percent.

described above. Any REC that does not meet the requirements of this guidebook will not be treated as California RPS-eligible regardless of the information printed on the REC.⁵⁶

D. Repowered Facilities

As noted earlier in this guidebook, the criteria for RPS eligibility may depend on the date a facility begins commercial operations. If a facility is repowered as provided in this section, its commercial operation date may be considered its repowering date for purposes of the RPS instead of its initial date of commencement of commercial operations. In general, only an applicant seeking to revise a facility's date of commercial operations needs to apply for certification as a repowered facility. An applicant for a facility that is RPS-certified or not subject to the eligibility restrictions based on the facility's online date may not need to apply as a repowered facility, even if the facility's prime generation equipment is replaced with new equipment.

Applicants seeking to certify a facility as a repowered facility must submit documentation confirming the replacement of the facility's prime generating equipment and the capital investment made to repower the facility, as well as the value of those investments, in addition to the appropriate application form(s) and any other required information necessary for the generating technology.

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:

- 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 directly 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.

⁵⁶ When determining whether nonrenewable fuel or energy resource uses exceed the de minimis quantity, or the applicable fuel allowance, the Energy Commission will round the percentage up to the nearest one-thousandth of a percent. Any use of nonrenewable fuel above the de minimis quantity, or other applicable fuel allowance, will result in the facility exceeding that allowance, regardless of its magnitude.

- Digester gas: the entire digester unit and internal combustion engine or combustion turbine as applicable.
- Solar thermal: the entire steam turbine and solar boiler.

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 recertify 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 be considered only 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 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 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 when 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 this 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.

i. Tax Records Method:

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.

ii. Replacement Value Method:

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.

E. Facilities With a First Point of Interconnection to a non-California Balancing Authority Outside California or Facilities Located Outside the United States

The requirements of this section apply to renewable facilities that have their first point of interconnection to a non-California Balancing Authority (non-CBA) ~~the transmission network~~ outside the state, but within the WECC service area. Facilities within the WECC service area that are located outside the United States must meet the out-of-country requirements below regardless of the location of their first point of interconnection to the transmission network. Facilities located in California ~~for near the border of the state (with the exception of facilities located outside the United States)}~~ with their first point of interconnection to ~~the transmission network of a~~ California balancing authority ~~area primarily located within the state~~ are not subject to the additional requirements of this section ~~for RPS eligibility~~. Applicants may be required to submit documentation to verify the location of their first point of interconnection to the transmission network with their application for precertification or certification.

Facilities that are not or will not be interconnected to a transmission network within the WECC service area are not eligible for the RPS.

With the exceptions noted below for certain POU's and multijurisdictional utilities, electrical generation from a renewable facility with its first point of interconnection to a non-CBA ~~within~~

the transmission network outside the state can qualify for the RPS if it meets the RPS eligibility requirements described in this guidebook and satisfies all of the following criteria.⁵⁷

1. Facility has its first point of interconnection to an out-of-state transmission network within the WECC service area.
2. Facility commences initial commercial operations on or after January 1, 2005.
3. Facility does not cause or contribute to any violation of a California environmental quality standard or requirement within California.
4. If located outside the United States, the facility is developed and operated in a manner that is as protective of the environment as a similar facility would be if it were located in California.⁵⁸
5. Facility and any retail seller, POU or third parties procuring generation from the facility participate in WREGIS.

If the facility meets all of the above criteria for facilities with a first point of interconnection to a non-CBA outside California except it commenced commercial operations before January 1, 2005 (criterion "2" above), then it may be RPS-eligible if it meets one of the following criteria:

1. The electricity is from incremental generation resulting from project expansion or repowering of the facility on or after January 1, 2005.
2. Electricity generated by the facility was procured by a retail seller or POU local publicly owned utility as of January 1, 2010.

Local Publicly Owned Electric Utilities

For a POU that is interconnected to a balancing authority located outside California but within the WECC, procurement is not subject to the eligibility requirements in this section for facilities with a first point of interconnection outside California if all of the following conditions are met:⁵⁹

1. The POU was in existence on or before January 1, 2009.
2. The POU provides retail electric service to 15,000 or fewer customer accounts in California.
3. Electricity generated by the facility is procured by the POU, delivered to the balancing authority area in which the POU is located, and is not used to fulfill the renewable energy procurement requirements of other states.
4. The POU and facility participate in WREGIS.
5. The Energy Commission verifies that the electricity generated by the facility meets the RPS procurement requirements.

The application for certification of such a facility must indicate it is applying under these requirements. The RPS certification issued will indicate the special conditions on the certificate.

⁵⁷ Public Resources Code Section 25741, Subdivision (a)(2)(B).

⁵⁸ Public Resources Code Section 25741, Subdivision (a)(3).

⁵⁹ Public Utilities Code Section 399.30, Subdivision (i).

This exception to the requirements in this section for facilities with a first point of interconnection outside California applies only to situations wherein these POUs procure energy to meet their own RPS obligations. If generation from these facilities is procured to meet the RPS obligations of another POU or retail seller of electricity, the facility will be subject to all of the eligibility requirements in Section E.

Multijurisdictional Utilities

Procurement that is counted toward meeting the RPS obligations of multijurisdictional utilities ~~retail sellers~~ is not subject to the eligibility requirements in ~~this s~~ Section E ~~for facilities with a first point of interconnection outside California~~.⁶⁰ The application for certification of such a facility must indicate it is applying under these requirements. The RPS certification issued will indicate the special conditions on the certificate. This exception to the requirements for facilities with a first point of interconnection outside California applies only to situations wherein these multijurisdictional utilities procure energy to meet their own RPS obligations. If generation from facilities with a first point of interconnection outside California is procured to meet the RPS obligations of another retail seller of electricity or POU, then the facility will be subject to all of the eligibility requirements in Section E. To qualify as a multijurisdictional utility, the utility must meet the following criteria:

1. As of January 1, 2010, the utility must have served retail end-use customers outside California or have been located in a control area not under the operational balancing authority of the Independent System Operator or other California balancing authority.⁶¹
2. The utility must receive the majority of its electrical requirements from generating facilities located outside California.
3. The utility must have had 60,000 or fewer customer accounts in California as of January 1, 2010.

Pursuant to Public Utilities Code Section 399.17, in lieu of the criteria for facilities with a first point of interconnection outside California, the energy procured by multijurisdictional utilities and their successors must meet all of the following criteria to be eligible for the RPS:

1. The generation must be procured by the multijurisdictional utility subject to Public Utilities Code Section 399.17 on behalf of its California customers and not used to fulfill its

60 Public Utilities Code Section 399.17 modifies the definition of an eligible renewable energy resource for multijurisdictional electric corporations such as PacifiCorp and Liberty Energy–California Pacific Electric Company (formerly known, in part, as Sierra Pacific Power Company), to include facilities with a first point of interconnection outside California that serve customers both in and outside California. Criteria for multijurisdictional utilities subject to Public Utilities Code Section 399.17 apply to a successor entity to all or a portion of the service territory of the multijurisdictional utility, but only to the extent the successor entity will have 60,000 or fewer customer accounts in California.

61 California balancing authority is defined in the *Overall Program Guidebook*, CEC-300-2011-005-SD.

renewable energy procurement requirements in other states or for any other renewable energy retail claim.

2. The facility must be connected to the WECC transmission system.
3. The facility and multijurisdictional utility must participate in WREGIS under the provisions in this guidebook.

1. Additional Required Information for Facilities With a First Point of Interconnection to a non-CBA Outside California

All facilities with a first point of interconnection to a non-CBA ~~the transmission network~~ outside California must provide the following additional required information when applying for certification as RPS-eligible. Further requirements apply to facilities that commenced commercial operations before January 1, 2005, as described below. However, the additional reporting requirements for facilities with a first point of interconnection to a non-CBA outside California do not apply to a facility that is either:

- a) Exclusively serving retail sellers subject to Public Utilities Code Section 399.17.
- b) Exclusively serving POUs subject to Public Utilities Code Section 399.30, Subdivision (i).

Applicants for all other facilities with a first point of interconnection to a non-CBA outside California seeking RPS certification must analyze and document the impacts, if any, the facility has or may have on California's environmental quality.

The law requires a facility with a first point of interconnection to a non-CBA outside California to demonstrate that it will not cause or contribute to a violation of a California environmental quality standard or requirement within California.⁶² To meet this requirement, the analysis performed by the applicant must include the following, subject to the Environmental Area Thresholds set forth in Table 2:

- 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.
- b) An assessment of 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 substantiating the applicant's assessment as required in b) above. For example, documentation could include environmental studies, permits, and similar materials demonstrating 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 in the applicant's analysis 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,

⁶² Public Resources Code Section 25741, Subdivision (a)(2)(B)(ii).

et seq, to the extent that application of the Environmental Area Thresholds for Facilities With a First Point of Interconnection to a non-CBA Outside California 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
- Paleontological Resources
- Geological Hazards and Resources
- Transmission System Safety and Nuisance
- Noise

The assessment of the potential for a facility with a first point of interconnection to a non-CBA outside California to cause or contribute to any violation of a California environmental quality standard or requirement depends on the environmental resource area and the facility'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 facility located in a state not adjacent to California is unlikely to contribute to a violation of a California Visual Resources LORS. The Supplemental Form for a Facility With a First Point of Interconnection to a non-CBA Outside California, CEC-RPS-1: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 facility with a first point of interconnection to a non-CBA outside California will cause or contribute to a violation of any of these LORS in California, the applicant should select the region in California most likely to 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 facility 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.

All applicants must submit a written explanation substantiating the claim that the facility does not and will not cause or contribute to a violation of a California LORS within California. For facilities beyond the discrete thresholds identified in Table 2, submission of a simple explanation documenting how the facility's development and operation does not cause or contribute to a violation of a California LORS is sufficient. For projects closer than the discrete threshold for an environmental area, a detailed explanation documenting how the facility's development and operation does not cause or 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 facility 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 or highway travel. All LORS assessments and explanations should be submitted in a document to accompany the CEC-RPS-1 Form and Supplemental Form for a Facility With a First Point of Interconnection to a non-CBA Outside California, along with documentation substantiating the applicant's assessment as required above in 1.c.

Table 2: Environmental Area Thresholds for Facilities With a First Point of Interconnection to a non-CBA Outside California

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

Source: California Energy Commission

2. Additional Required Information for Existing Facilities With a First Point of Interconnection to a non-CBA Outside California

As noted above, further reporting requirements apply to existing facilities with a first point of interconnection to a non-CBA outside California that commenced commercial operations before January 1, 2005. For such facilities, the applicant may qualify for RPS certification if either: 1) the electricity generated by the facility was procured by a retail seller or a POU as of January 1, 2010, 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.

- Procured by a retail seller or POU: The applicant must provide documentation that demonstrates the electricity from the facility was procured by a retail seller or POU as of January 1, 2010. The applicant must provide a procurement invoice or similar document on the letterhead of the retail seller or POU demonstrating that the facility meets this requirement.
- Incremental generation: The Energy Commission may certify incremental generation from the expansion or repowering of a facility with a first point of interconnection to a non-CBA outside California as RPS-eligible if it finds that the incremental generation exceeds the facility's historical production. The method for quantifying incremental generation from such facilities is described below. The applicant must provide the following information:
 - For small hydroelectric, conduit hydroelectric facilities, or an existing hydroelectric generation unit operated as part of a water supply or conveyance system, the applicant must provide verifiable generation data for the 20 years preceding facility expansion or repowering. If the facility 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 renewable energy resources, except small hydroelectric, conduit hydroelectric, or an existing hydroelectric generation unit operated as part of a water supply or conveyance system, the applicant must provide data on annual generation for the 36 months preceding the facility expansion or repowering. (For example, if the facility expansion comes on-line January 1, 2007, then generation data must be provided from January 1, 2004 through December 31, 2006.) If the facility 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 precertification) from a capital expenditure in the facility. 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 facility 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 Existing Facilities With a First Point of Interconnection to a non-CBA Outside California

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 facility expansion or repowering. For facilities that directly meter the expanded portion 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 facility expansion. For all other eligible renewable energy resources, the baseline is the average annual generation calculated from the 36 months before facility expansion or repowering. For facilities that have not operated for the specified period (for example, 20 years for hydroelectric facilities), the annual average generation for the facility'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.

3. Additional Required Information for Out-of-Country Facilities

For facilities located outside the United States, but within the WECC, the applicant must analyze and document that the facility is developed and operated in a manner that is as protective of the environment as a similar facility in California. To meet this requirement the analysis performed by the applicant must include all of the following:⁶³

63 Depending on the location and interconnection of the facility, the applicant may also need to address the requirements for facilities with a first point of interconnection to a non-CBA outside California. In such cases, the applicant must analyze and document the impacts, if any, the facility has or may have on California's environmental quality, as specified in section E.1, and must also analyze and document that the facility is developed and operated in a manner that is as protective of the environment as a similar facility in California, as specified in this section E.3.

- a) A comprehensive list and description of all California environmental quality LORS that would apply to a similar facility located within California at a location site designated by the applicant.
- ~~b) An assessment of 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 California LORS.~~
- e)b) An explanation of how the facility will be developed and operated in a manner that is as protective of 's developer and/or operator will protect the environment to the same extent as provided by these LORS for as 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)c) Documentation substantiating the applicant's assessment as required in b) ~~and e)~~ above. For example, documentation could include environmental studies, permits, and similar materials demonstrating that the facility's development ~~or and~~ 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.

F. Energy Delivery Requirements

Senate Bill X1-2 eliminates electricity delivery as a requirement for RPS eligibility. To comply with the RPS procurement requirements under SB X1-2, "electricity products" from eligible renewable energy resources must be procured from one of three "portfolio content categories" as described in Section I B 2: 33 Percent RPS by 2020 Implementation in this guidebook. Because the first compliance period under SB X1-2 began January 1, 2011, the Energy Commission will no longer verify energy deliveries for purposes of the RPS beginning with deliveries on or after January 1, 2011. However, one of the portfolio content categories does provide for "firmed and shaped eligible renewable energy resource electricity products providing incremental electricity and scheduled into a California balancing authority." Although many of the details regarding evaluating and verifying conformance with the portfolio content categories have not yet been determined, the Energy Commission may rely in part on methods previously used to verify delivery. For example, WREGIS NERC e-Tag Summary Reports may be used to verify conformance with this and other elements of the portfolio content categories.

As discussed above, the Energy Commission plans to revise this guidebook to incorporate implementation details that are established after the adoption of the fifth edition of the *RPS Eligibility Guidebook*.

G. Eligibility of Renewable Energy Credits for Distributed Generation Facilities and Onsite Load

With the adoption of the fifth edition of this guidebook, the Energy Commission has determined that all grid-connected renewable electric generation facilities may be certified as RPS-eligible, including generation serving onsite load, if all eligibility requirements are met for the specific renewable energy resource used by the facility to generate electricity.

Applicants for a renewable facility that serves onsite load must meet all RPS eligibility requirements in the fifth edition of this guidebook including, but not limited to, small facility aggregation,⁶⁴ participation in WREGIS, and reporting eligible generation based on a meter with an independently verified rating of 2 percent or higher accuracy.

Both the Energy Commission and the CPUC have roles in determining RPS implementation for renewable distributed generation (DG) facilities, and both have established that Renewable Energy Credits (RECs) created by a renewable DG facility belongs to the owner of the RPS-eligible facility. The CPUC issued a decision on January 11, 2007, allowing DG facility owners to retain 100 percent of the RECs associated with the electricity produced. Similarly, 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.

Facilities that are funded, or will be funded, entirely or in part, by the following programs may apply for certification or precertification as RPS-eligible, if all eligibility requirements are met for that resource type: New Solar Homes Partnership program, Emerging Renewables Program, or Pilot Performance-Based Incentive Program; the CPUC-approved Self-Generation Incentive Program or California Solar Initiative; or any similar ratepayer-funded program. Similarly, grid-connected facilities participating in net-metering tariffs or consuming some or all of the electricity produced by the renewable energy resource onsite and not exporting all of the electricity to the electricity grid may apply for certification to be RPS-eligible, if all eligibility requirements are met for that resource type.

On June 9, 2011, the CPUC adopted a decision establishing a rate for payment of excess generation from distributed wind and solar systems, as required by AB 920, and requiring electric utilities to compensate net energy metering customers for electricity they produce in excess of their onsite load at the end of a 12-month period (net surplus generation).⁶⁵In all cases the meter used to report generation to WREGIS must have an independently verified accuracy rating of 2 percent or higher. It is the responsibility of the facility owner and the utility procuring the RECs associated with the net surplus compensation under an AB 920 program to ensure the RECs are transferred appropriately.

⁶⁴ An aggregated unit is a group of facilities having both similar characteristics and registered in WREGIS as an aggregated unit.

⁶⁵ CPUC, Decision D.11-06-016, June 9, 2011.

H. ~~Tradable~~ Unbundled Renewable Energy Credits

RECs represent renewable and environmental attributes associated with renewable energy production. Public Utilities Code Section 399.12, Subdivision (h)(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 399.25, that one unit of electricity was generated and delivered by an eligible renewable energy resource.

Public Utilities Code Section 399.12, Subdivision (h)(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.

On August 21, 2008, the CPUC defined and specified the attributes of a REC for compliance with the RPS as one megawatt-hour of renewable energy generated and delivered by an eligible renewable energy resource.⁶⁶ The decision also clarified what attributes associated with renewable energy generation must be included with a REC for compliance with the RPS.

The term “~~tradable unbundled~~ RECs” refers to a concept wherein the renewable attributes may be procured 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,” WREGIS uses the term “WREGIS Certificate.”

Public Utilities Code Section 399.21, Subdivision (a), authorizes the CPUC to rule that tradable RECs associated with energy produced from RPS-eligible resources qualify toward RPS procurement requirements, once certain conditions have been met. The law states that 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 that electricity is generated by an eligible renewable energy resource, and can assure that RECs are not double-counted by any seller within the WECC⁶⁷. To satisfy this requirement, the CPUC and Energy Commission jointly developed and each adopted the *Joint Commission Report on Tracking System Operational Determination*.⁶⁸

On March 11, 2010, the CPUC adopted Decision 10-03-021 authorizing the use of tradable RECs for compliance with the RPS. This decision, modified by Decision 11-01-025 on January 13, 2011, distinguishes between bundled REC transactions (wherein the energy and the RECs are procured together) and tradable (or REC-only) transactions for RPS compliance. REC-only transactions do not necessarily convey the energy associated with the REC to the buyer.

66 CPUC Decision 08-08-028, August 21, 2008. See Ordering Paragraph 1.

67 Public Utilities Code Section 399.21, Subdivision (a)(1).

68 The CPUC issued Resolution E-4178 adopting the *Joint Commission Report on Tracking System Operational Determination* on November 21, 2008, and the Energy Commission adopted an identical report, Publication Number CEC-300-2008-001-CMF, on December 3, 2008.

In its Decision Implementing Portfolio Content Categories for the RPS,⁶⁹ the CPUC transitioned from the prior rules on unbundled RECs to the new portfolio content categories established by SB X1-2, noting that some of its previous rules for unbundled RECs are not affected by the new legislation and remain in effect.

SB X1-2 introduces the term “electricity products” consisting of eligible renewable energy resources that may be differentiated by their impacts on the operation of the electricity grid. The law requires a balanced portfolio of electricity products from eligible renewable energy resources consisting of portfolio content categories based on their interconnection to a California balancing authority. The CPUC has defined the product content categories for retail sellers in D.11-12-052, and the Energy Commission will define them for POUs in the regulations it will adopt in its 33 Percent RPS Rulemaking proceeding Docket Number 11-RPS-01.

III. Certification Process

This section describes the process for RPS precertification and certification of electrical generation facilities that use renewable energy resources to generate electricity. Applications will be evaluated under the edition of this guidebook that is in place at the time a complete application is received by the Energy Commission. Applications that are submitted using forms no longer in use by the Energy Commission will not be accepted.

Electricity generation from any facility cannot be counted toward meeting a retail seller’s RPS procurement requirements unless the facility is first certified by the Energy Commission as an eligible renewable energy resource for the RPS. This same requirement applies to RPS procurement for POUs subject to the grace period exception noted below. 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 or POU’s RPS obligation must certify the facility with the Energy Commission before the generation may be counted toward a retail seller’s or POU’s RPS obligation.⁷⁰ Procurement of RPS-eligible electricity may count toward a retailer seller’s or POU’s RPS obligation if the electrical generation facility uses an eligible renewable energy resource and was RPS-certified at the time of procurement or applied for RPS certification or precertification at the time of procurement, with some exemptions as noted below.

⁶⁹ CPUC Decision 11-12-052, December 15, 2011.

⁷⁰ The Third Edition of the *RPS Eligibility Guidebook* allows generation to count only toward a retail seller’s RPS procurement obligation if it occurs after the Energy Commission receives the precertification or certification application. Earlier editions of the *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. The Fourth Edition of the *RPS Eligibility Guidebook* provided 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 received an application for certification before March 1, 2011.

Upon receipt of the first application for precertification or certification of a facility not certifying as part of an aggregated unit, which is described in Section III A 2: Aggregated Facilities, the Energy Commission will assign an RPS-eligibility date for the facility. If the facility is subsequently certified as RPS-eligible, all generation beginning with the month of the eligibility date that is tracked in WREGIS will be considered RPS-eligible if the operations of the facility are consistent with the information provided in the initial precertification or certification application and the application for certification is submitted within 90 days of the commencement of commercial operations date. If an application for precertification or certification is initially denied or is submitted more than 90 days beyond the commercial operations date, and the Energy Commission subsequently approves a new application for certification, a new date of eligibility will be assigned to that facility based on the later date of application.

Upon the receipt of an application for an aggregated unit, all facilities included in the aggregated unit will be assigned an eligibility date as part of that aggregated unit, if one has not been previously assigned. Facilities that were previously part of another aggregated unit will receive a new eligibility date when applying into a different aggregated unit.⁷¹

Generation procured by a utility under an AB 920 net surplus compensation program prior to the electrical generation facility's eligibility date will be considered RPS-eligible once the facility has become RPS-certified. The generation produced and procured pursuant to an AB 920 net surplus compensation program prior to the facility applying for certification or October 1, 2012, whichever is earlier, may be reported to the Energy Commission using the ITS if the facility is registered in WREGIS when applying for RPS certification. It is the responsibility of the utility claiming the RECs procured under an AB 920 program to provide evidence that the quantity of claimed RECs does not exceed the quantity procured under AB 920.

In all cases, the electricity will not be considered eligible and will not be counted toward meeting an RPS obligation until the facility is actually certified by the Energy Commission as eligible for the RPS, and the facility's operations are consistent with the information provided in the certification application. This applies to all facilities regardless of whether they previously registered with the Energy Commission's Renewable Energy Program.

All generation from facilities certified as eligible for California's RPS must be tracked in WREGIS, with the limited exceptions for 2011-2012 generation noted in this guidebook for facilities serving POUs and generation procured under an AB 920 program prior to October 1, 2012. Applicants for certification must provide the WREGIS Generating Unit Identification number (GU ID) for each certified facility to the Energy Commission by

71 For example, if a facility is certified as part of aggregated "Unit A" in 2012, then removed from "Unit A" in 2013 and later certified as part of a newly formed aggregated "Unit B" in 2014, only generation occurring after "Unit B's" eligibility date may be counted for RPS as part of Unit B's generation. Generation from the facility occurring while the facility was part of "Unit A" will remain eligible as part of "Unit A's" generation.

October 1, 2012.⁷² As of the date of this guidebook, WREGIS will not create RECs for generation for periods preceding the generator registration and approval in WREGIS, beyond generation that is associated with the earliest active certificate issuance cycle at the time the facility is approved in the WREGIS system.⁷³

An RPS-certified facility must remain registered in the WREGIS system and comply with all WREGIS rules, and all generation from that facility must be tracked in the WREGIS system to be considered RPS-eligible, with the limited exceptions noted in this section. Failure to remain registered in the WREGIS system, or the inability to provide proof of registration in WREGIS upon request, may result in the facility's RPS certification being revoked.

When applying for certification, the facility operator or 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 titled "RPS Tracking, Reporting and Verification."

Existing Hydroelectric Generation Unit Operated as Part of a Water Supply or Conveyance System

Generation from an existing small hydroelectric generation unit up to 40 MW that is operated as part of a water supply or conveyance system and that is RPS-certified by the Energy Commission may be counted toward a retail seller's or POU's RPS target beginning on the effective date of SB X1-2, if an application for certification is received by the Energy Commission by October -1, -2012. The effective date of SB X1-2 is December 10, 2011.⁷⁴

Grace Period Exception for Facilities Serving Local Publicly Owned Electric Utilities

For generation occurring on or after January 1, 2011, to count toward a POU's RPS procurement obligations from a facility that was not certified by the Energy Commission as RPS-eligible at the time of generation, the Energy Commission must receive an application for RPS certification before October 1, 2012, and subsequently certify the facility as RPS-eligible.⁷⁵ An applicant must include the facility's assigned WREGIS GU ID number on the application for RPS certification. As noted above, applicants must register facilities with and be approved by WREGIS to be assigned a WREGIS ID number. If the generation occurred before adoption of the *Renewables Portfolio Standard Eligibility Guidebook, Fifth Edition*, the Energy Commission must determine that the facility met the eligibility requirements of the *Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition*, at the time the generation occurred for the generation to count toward

72 POU's may use the Interim Tracking System (ITS) to report generation occurring through October 2012 that is not tracked in WREGIS; for more information on the ITS, see Section IV: RPS Tracking, Reporting and Verification System. Applicants must register their facilities with WREGIS to receive a WREGIS ID number.

73 A WREGIS Certificate Issuance Cycle begins the first day *after* the end of the current period generation month.

74 California Government Code Section 9600, Subdivision (a).

75 Facilities under contract with or approved by a POU for its RPS before June 1, 2010, are encouraged to apply for certification by October 1, 2012, but are not required to do so.

the POU's RPS. Generation meeting these requirements may only be counted toward the RPS procurement obligations of a POU. The eligibility date of this generation for any entity will be assigned as described above.

Certification Extension for Utility-Certified Facilities

Facilities that were certified by a utility on the CEC-RPS-2 form prior to the adoption of the *Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition* were eligible for only the generation procured under the existing contract with that utility and received an "E" suffix on the RPS ID number. Except for CPUC-ordered extensions to existing QF power purchase contracts, RPS certification becomes void in the event the facility's contract with the utility expires, is voluntarily extended, or is otherwise renegotiated by the utility and the facility operator. The ~~at~~ utility under contract with the facility identified in the utility certification may count only the amount of generation under contract with the facility identified in the utility certification that occurs after the termination date of the contract if the facility operator, or agent thereof, submits an application for certification to the Energy Commission using a CEC-RPS-1 form before October 1, 2012. For facilities with contract termination dates after August 3, 2012, the certification application must be received by the Energy Commission no later than 90 days after the termination date of the contract.

For more information on Utility-Certified Facilities, see Section III A 5 below.

A. Certification Types

The Energy Commission approves RPS certification for electrical generation facilities that have commenced commercial operations and are generating renewable electricity, as described in this guidebook. Provisional or "precertification" as an eligible renewable resource is available for an applicant whose facility has not commenced commercial operations or is not yet using an eligible renewable resource. **The Energy Commission's approval of a facility for precertification does not guarantee that a facility will be eligible for RPS certification in the future, and the precertification certificate will indicate this on its face.** Upon receipt of the application for certification or precertification, the Energy Commission will record the date of submission and assign each facility an RPS ID number and suffix, depending on the certification type. A facility given a RPS ID with five digits will retain this ID for the duration of the facility's eligibility in the RPS program, though the suffix may change. A facility originally certified as part of an aggregated unit may be assigned a new RPS ID number as a result of an amended application or a certification application if its relationship to the original aggregated group is changed or if the facility becomes certified individually. No facility may have more than one active RPS ID at any given time. If it appears that a single facility has been assigned more than one active RPS ID number, Energy Commission staff will work with the applicant(s) to resolve the situation; failure to respond to staff inquiries within 60 days may jeopardize RPS certification.

All eligible generation produced in the month of the eligibility date and properly tracked in the WREGIS system⁷⁶ will be considered RPS-eligible generation.

The Energy Commission provides different types of certification, depending on the facility operations, contractual obligations, and applicant preference. Each type of certification may require the use of a specific application form. Provided below are descriptions of the different types of certification and the necessary forms for each type.

1. Individual Facilities

Applicants seeking certification of an individual facility must apply using the CEC-RPS-1 form. Upon receipt of an application for a facility not previously certified with the Energy Commission's RPS program, the facility will be assigned a unique RPS certification number with a suffix of "A" for certification applications, and a suffix of "C" for precertification applications. A previously certified or precertified facility will retain its RPS identification number, but the suffix will change to reflect the most recent application type.

2. Aggregated Facilities

To streamline the process for certifying and precertifying distributed generation facilities, the Energy Commission provides an aggregated application process for wind and solar photovoltaic facilities. An aggregated unit is a group of facilities having both similar characteristics and registered in WREGIS as an aggregated unit. The eligibility of an aggregated unit depends on the eligibility of all facilities within the aggregated unit. An application for an aggregated unit will not be approved unless all facilities in the unit are eligible. If the Energy Commission determines that one facility in an approved unit is not RPS-eligible, the applicant shall have 30 days, once notified, to submit an amended application that removes any ineligible facilities from the aggregated unit, or the entire unit will lose its certification, until an amended application is submitted that removes the ineligible facility from the list.

A facility may be part of an aggregated unit using the CEC-RPS-3 form if it meets any one of the following:

- a) Has received benefits from a ratepayer-funded incentive program.
- b) Participates in a net metering tariff.
- c) Primarily serves onsite load.

However, facilities that are less than 20 kW (AC) and that received benefits, or plans to receive benefits, from a ratepayer-funded incentive program or a net metering tariff must apply for certification as part of an aggregated unit to become RPS-eligible.

All facilities applying for certification as an aggregated unit on the CEC-RPS-3 application form must share a WREGIS Generating Unit ID number (GU ID).⁷⁷ The application form must also

⁷⁶ Limited exceptions to this requirement exist. Please see Section IV: RPS Tracking, Reporting, and Verification.

include all the facilities using that WREGIS GU ID, so that the RPS ID and the WREGIS GU ID numbers assigned to an aggregated unit will include an identical set of generating facilities. All facilities must also use the same generation technology (for example, wind or solar photovoltaic).

Aggregated units will receive an RPS ID with an "R" suffix, and each facility in the unit will be assigned a four-digit identifier with an additional suffix of "A" for certification, or "C" for precertification, so the extended RPS ID number for a facility in an aggregated unit will have the format #####R-#### A.

Facilities receiving compensation for excess RECs under an AB 920 program may also be certified in an aggregated unit. In all cases the meter used to report generation to WREGIS must have an independently verified accuracy rating of 2 percent or higher. It is the responsibility of the facility owner and the retail seller or POU procuring the excess RECs under an AB 920 program to ensure the RECs are transferred appropriately. To count RECs procured under an AB 920 program, the retail seller or POU must retire the RECs in WREGIS and may be required to submit documentation demonstrating that the RECs and the associated electricity were procured together as part of an AB 920 program.

3. Facilities Serving Multijurisdictional Utilities

Facilities certified pursuant to Public Utilities Code 399.17 using the CEC-RPS-1 form will be approved for certification, but only for the generation procured by the multijurisdictional utility or successor entity to all or a portion of the service territory specified in the application. If another load-serving entity plans to procure electricity from a facility certified pursuant to Section 399.17, the facility operator, or agent thereof, must submit an amended application to certify the facility as an individual facility and must submit all applicable certification forms and information.

4. Facilities Serving POUs

To expedite the initial RPS certification of facilities selling electricity to POUs, the Energy Commission will accept new applications for commercially on-line facilities serving POUs submitted on the CEC-RPS-4 form until October 1, 2012. To certify a facility using the CEC-RPS-4 form, the facility must have been under contract with and delivering electricity to the POU submitting the form as of January 1, 2012. In addition the POU must be able to provide all necessary material for certification of the facility; the facility must not already be certified in the RPS program; the technology, fuel, or energy resource used by the facility must not require use of supplemental forms or additional reporting requirements; and no fewer than 5 facilities must be included in the application. A facility certified using a CEC-RPS-4 form will be assigned an RPS ID with an "A" suffix, and any utility may procure generation from the facility as RPS-eligible.

⁷⁷ See the WREGIS Operating Rules Appendix A, the WREGIS Interface Control Document, Addendum A, WREGIS Generation Classification.

5. Utility-Certified Facilities

The Energy Commission will not accept an application on the facility operator's behalf using a CEC-RPS-2 form.⁷⁸ Instead, a retail seller must now use the CEC-RPS-1 form to apply for certification or precertification as a facility's agent; in this instance, the generation would be eligible for use by any retail seller or POU, subject to other applicable limitations.

Facilities certified by a retail seller using a CEC-RPS-2 form before the publication of the fourth edition of this guidebook were assigned RPS IDs with an "E" suffix and were granted certification for only the generation procured under contract by that retail seller. The facility operator must separately certify any facility capacity that is not subject to its procurement contract with the retail seller, but that is procured to satisfy the RPS targets of another retail seller or POU. If a facility operator, or agent thereof, seeks certification on its own behalf using the CEC-RPS-1 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 or POUs.

Except for CPUC-ordered extensions to existing QF power purchase contracts, retail seller certification on the operator's behalf using the CEC-RPS-2 form becomes void in the event the facility's contract with the retail seller either expires, 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, or agent thereof, must apply for certification from the Energy Commission using a CEC-RPS-1 form within 90 days of the contract termination date.⁷⁹ ~~and~~ The retail seller may not recertify the facility on the operator's behalf using a CEC-RPS-2 form. For CPUC-ordered extensions, retail seller certification may continue until the extension expires.

6. Limited Certifications

A facility using renewable energy resources that was under contract with, or owned by, a retail seller or POU with the contract or ownership agreement having been originally executed prior to June 1, 2010, and not meeting the eligibility requirements of the current RPS guidebook, may receive a limited certification of the facility so that the electricity procured under that contract or ownership agreement may be counted for the RPS if all the following conditions are met:

- a) The facility was eligible for the RPS under the rules in the *RPS Guidebook* as of the date when the contract was executed.
- b) For an electrical corporation, the contract has been approved by the CPUC, even if that approval occurs after June 1, 2010.

⁷⁸ The Energy Commission developed the CEC-RPS-2 Form in 2004 to facilitate the initial application process for the RPS and to accommodate 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.

⁷⁹ See Section III: Certification Process for information on an extension for facilities with contract expiration dates prior to August 3, 2012.

- c) Any contract amendments or modifications occurring after June 1, 2010, do not increase the nameplate capacity or expected quantities of annual generation, or substitute a different renewable energy resource. The duration of the contract may be extended if the original contract specified a procurement commitment of 15 or more years.

A facility meeting the above requirements, but failing to meet the eligibility requirements of the current RPS guidebook, may apply for a limited certification on the CEC-RPS-1 form. Except for contract modifications noted above, a facility receiving a limited certification will be eligible for the RPS only for the duration of the contract or ownership agreement originally executed prior to June 1, 2010;⁸⁰ this provision applies to only the generation procured under the contract or ownership agreement. These facilities will be assigned a unique RPS certification number with an “L” suffix signifying limited certification applications.

7. Special Precertification for POU-Related Facilities

Facilities previously assigned a precertification RPS ID number with a “P” suffix are owned by or under contract with a POU rather than a retail seller. The “P” suffix indicates that these facilities met all RPS-eligibility requirements, except for previous limitations in the law precluding POU-owned or contracted facilities from being RPS-certified. Thus, the Energy Commission could have assigned only a precertification status to these facilities. A change in law has now removed this restriction, and precertified facilities with a “P” suffix may now apply for RPS certification. Applicants for such facilities must apply for RPS certification and must provide all supporting documentation required in this fifth edition of the 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 RPS certification is approved for a facility with a “P” suffix, all generation from the date the initial precertification application was received by the Energy Commission will be considered RPS-eligible. The Energy Commission will change the “P” suffix to an “A” suffix once a facility is again approved for certification.

B. The RPS Application Process

The next section outlines the process of applying for precertification and certification, provides information on completing the application forms and submission requirements, and describes the application review and approval processes. Only facilities that have begun commercial operations may apply for RPS certification.

1. Completing Application Forms

Individual facility or aggregated unit applicants must submit a completed application (see Section III A: Certification Types) and all required supplemental information; for more information please review Section II: Eligibility Requirements. All information requested in the application forms must be provided unless otherwise specified. The additional required

⁸⁰ Public Utilities Code Section 399.16, Subdivision (d).

information described in this guidebook must be submitted along with any application for certification.

When a retail seller, POU, or agent applies on a facility operator's behalf, the retail seller or agent must furnish all additional required information. 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 precertification. In addition, the agent, POU, or retail seller must possess documents to verify a facility's compliance with the requirements of certification and precertification. These documents must be available to the Energy Commission upon request for auditing purposes.

Only the authorized officer or agent of the facility, the applicant, or the persons identified on the application form, as listed on the submitted application, may approve or request any changes to an application form during the review process. No changes may be made to an application once the review has been finalized; if the applicant wishes to make any changes, an amended certification (or precertification) application must be submitted. If persons identified on the application form are unavailable or no longer associated with the facility, an amended application must be immediately submitted. (See Subsection 5 below.)

Application forms can be found on the Energy Commission's website at:

<http://www.energy.ca.gov/renewables/documents/index.html#rps>

2. Submission Requirements

Before an application for RPS precertification or certification is considered received by the Energy Commission, the applicant must submit a hard copy of the completed application form, with an original signature (not a copy) of the authorized officer or agent of the facility, along with all supporting documentation (supplemental forms may be provided either in hard copy or electronically), to the Energy Commission at:

California Energy Commission
Attn: RPS Certification
1516 Ninth Street, MS-45
Sacramento, CA 95814

Additionally, an electronic version of the unsigned application form in Excel® format must be submitted to the Energy Commission via email to [RPSTrack@energy.ca.gov]. The subject line of the e-mail and the name of the Excel® file should include "Certification," the facility name (or aggregated unit name), and the RPS ID number (if applicable) in the following format:

RPS Certification (or Precertification) of the [Facility Name], [RPS ID number if available]

Once the Energy Commission has received all of the above information from the applicant, including all required supplemental information, the application will proceed into the review

process.⁸¹ An application for certification for a facility that has not yet begun commercial operations using a renewable fuel will be returned to the applicant; only an application for precertification will be accepted for such facilities.

3. Application Review Process

Upon receipt of the completed application, staff will date stamp the application as received and begin the review process. A valid RPS ID will be assigned to the facility or aggregated unit, as necessary. Complete applications are processed in the order they are received.

The Energy Commission may use any information or records submitted to the Energy Commission or obtained as part of the application review process or any audit to determine eligibility and compliance with the RPS. The information and records may include, but are not limited to, applications for RPS precertification and certification, supplemental documentation submitted with RPS applications, documents submitted to substantiate procurement or generation claims, any other documentation submitted upon request of the Energy Commission, publicly available information and documents, and information submitted to other state, federal, or local agencies. This information and these 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 2505.⁸²

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 pursuant to this guidebook, the Energy Commission expects to review and process applications for certification and precertification within 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 biopower, hydroelectric, repowered, facilities with a first point of interconnection to a non-CBA outside California, or out-of-country facilities, the Energy Commission must conduct an extensive review of the additional data, which could take more than 60 days from the date a complete application is received by the Energy Commission and, if applicable, the Executive Director makes a determination on any related requests from the applicant for confidential designation.⁸³

81 The electronic submission requirement may be waived if the facility owner, or agent thereof, does not have the required software or Internet access to complete an electronic submission and obtaining access to either would be unduly burdensome. Applicants meeting these conditions must include an explanation of the circumstances with the application submission.

83 Review times provided are estimates and are subject to change depending on the complexity of the application and the activity in the application queue.

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.

4. Notification of the Final Determination

After completing its review, the Energy Commission will notify applicants in writing of its determination on the application for certification or precertification. If the application for certification or precertification is approved, the Energy Commission will issue a certificate stating that the facility, or aggregated unit, is certified or pre-certified as eligible for the RPS. An individual facility certificate will list the Energy Commission-issued certification number for the facility as well as the size, fuel type or types, annual percentage of nonrenewable energy resources (if any), name, location, 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. An aggregated unit certificate will list the Energy Commission-issued certification number for the unit as well as the number of facilities in the unit, the total size, fuel type, annual percentage of nonrenewable energy resources (if any), fuel suppliers, name, aggregating entity, applicant or certifying agent, the applicable RPS eligibility dates, and other information relevant to the facilities' eligibility.

Previous approval of precertification status does not guarantee that a facility will be eligible for RPS certification in the future, and the precertification certificate will indicate this on its face. All facilities must meet the eligibility requirements set forth in the edition of the *RPS Eligibility Guidebook* in place at the time the Energy Commission receives an application for certification, regardless of whether the facility had previously been awarded precertification status.

In addition, the certificate will identify any limits on certification (or precertification). For example, a certificate issued for a multijurisdictional facility certified pursuant to Public Utilities Code Section 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.

If the applicant disagrees with the Energy Commission's determination on a certification (or precertification) application, the applicant may petition 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 precertified) 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 precertification) for the RPS. Further, the Energy Commission may conduct on-site audits and facility inspections to verify compliance with the requirements for certification (or precertification). The Energy Commission may request additional information it deems necessary to monitor compliance with the certification requirements specified in this guidebook. The information submitted by applicants for precertification is subject to further verification once the facility comes on-line. Applicants for precertified facilities must submit a complete certification application (CEC-RPS-1) with all additional required information and be certified as RPS-eligible before any of the facility's generation may be counted toward satisfying a retail seller's or POU's RPS procurement requirements.

5. Amending Certification or Precertification

Representatives of certified and precertified facilities must notify the Energy Commission promptly of any changes in information previously submitted in an application for certification or precertification. A facility failing to do so within 90 days of the change risks losing its certification status. Any changes to a certification or precertification application should be reported on an amended CEC-RPS-1 form or an amended CEC-RPS-3 form; certifications cannot be amended on the CEC-RPS-2 form or on the CEC-RPS-4 form. An amended application with any of the following significant changes will be reviewed under the edition of the guidebook in place at the time the Energy Commission receives a complete amended application for precertification or certification:

- Change in fuel, technology, or energy resource type
- Increase in nameplate capacity
- Change in QF status
- Change in fuel suppliers (except for biomass facilities)
- Repowering of the facility⁸⁴
- Increase in the amount of nonrenewable fuel used annually beyond the allowable amount, or a change that exceeds 10 percent of the total annual energy input.

⁸⁴ An amended application for an RPS-certified facility that is repowered, as defined in this guidebook, will be evaluated under the edition of this guidebook in place at the time the Energy Commission receives a complete amended application for certification only if the applicant seeks to revise the commercial operations date of the facility based on the date the repowered facility reentered commercial operations. Applicants of previously certified facilities that are repowered but not seeking to revise the operations date need not amend the facility's certification if all information in the original certification remains accurate and no change in facility ownership or applicant representing the facility have occurred. However, such an applicant is encouraged to notify the Energy Commission to document that the facility was repowered.

If all persons listed on the application form are no longer associated with the facility described in the application, the new applicant must include a cover letter, signed by the new authorized officer or agent, indicating the legitimacy of the changes. 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.

IV. RPS Tracking, Reporting, and Verification

The California 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 and POUs 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 and POUs 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.⁸⁵

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 of electricity associated with each REC and protects against multiple counting of the same renewable energy credit. The Energy Commission shall consult with other western states and with the WECC in the development of this system.⁸⁶

The Energy Commission developed WREGIS, an electronic tracking system that covers the WECC service area, to meet its RPS tracking requirements, including the tracking of RECs. WREGIS, launched in June 2007, 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 acknowledged as renewable by regulatory and voluntary programs in the WECC, and that must be retired to claim procurement for RPS compliance.

⁸⁵ Public Utilities Code, Section ,399.25, Subdivision (b).

⁸⁶ Public Utilities Code, Section ,399.25, Subdivision (c).

The Energy Commission used the ITS to verify all RPS procurement and deliveries until the use of WREGIS. The ITS is based on self-reported data and data collected from various other sources to verify procurement claims and energy deliveries.

The *RPS Eligibility Guidebook, Third Edition*, stated that effective January 1, 2008, the Energy Commission required RPS-certified facilities, retail sellers, procurement entities and third parties to participate in WREGIS as part of RPS compliance. In addition, it stated that Qualified Reporting Entities (QREs)⁸⁷ must register with WREGIS before they can report generation data on the facilities' behalf. Under SB X1-2, the Energy Commission will begin tracking and reporting the procurement of POUs, which must now meet the same RPS targets as retail sellers. Beginning in 2011, the Energy Commission will accept only retail sellers' procurement claims for generation that is tracked in WREGIS and reported to the Energy Commission using WREGIS State/Provincial/Voluntary Compliance Reports (WREGIS Compliance Reports). Beginning with generation in October 2012, the Energy Commission will accept only WREGIS Compliance Reports from POUs. POU procurement claims for generation before October 2012 may be reported using the ITS for data that are not available in WREGIS.

Beginning with generation that occurs on or after January 1, 2011, the Energy Commission will no longer verify deliveries from out-of-state facilities for generation occurring after December 31, 2010 for purposes of verifying energy delivery. However, as the Energy Commission and the CPUC continue to implement SB X1-2, data from NERC e-Tags⁸⁸ may be required to verify renewable energy product categories in the future. For example, WREGIS NERC e-Tag Summary Reports may be used to verify conformance with elements of the portfolio content categories. As noted above, this guidebook will be revised as appropriate to incorporate new RPS requirements once they are established in the CPUC and Energy Commission's RPS proceedings for implementing SB X1-2.

As of this writing, the Energy Commission intends to conduct a verification process for each retail seller and POU for each intervening year during the compliance periods established by SB X1-2. This process will begin with an Energy Commission staff analysis of annual procurement data as submitted by retail sellers and POUs for the preceding year, as described in the following section, "Reporting to the Energy Commission." Staff will work with each retail seller and POU to verify its procurement claims, then a public workshop will be held to present the Energy Commission's findings and discuss outstanding issues. The Energy Commission plans to post its findings on its website. Following each compliance period, the Energy

87 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.

88 The North American Electric Reliability Council (NERC) transferred its Electronic Tagging (e-Tag) Specifications and Schema to the North American Energy Standards Board (NAESB) effective October 27, 2009. NERC e-Tags are used to schedule the transmission of electric power transactions in wholesale markets. E-Tags (or Requests for Interchange) are used to schedule interchange transactions in wholesale markets. An interchange transaction is an agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries, and sometimes to schedule transactions internal to a single Balancing Authority Area.

Commission will combine the verification results for the intervening years with the final year of the compliance period.

After each compliance period, the Energy Commission plans to conduct further analyses to determine each POU's compliance with RPS requirements. This process will be more fully developed as the Energy Commission continues to draft regulations for the enforcement of the RPS for POUs. If the Energy Commission determines that a POU has violated the provisions set forth in the regulations, a notice of violation will be submitted to the California Air Resources Board for possible penalties.

Special Restrictions

By law, no RECs shall be created for electricity generated pursuant to any electricity purchase contract with a retail seller or a POU executed before January 1, 2005, unless the contract contains explicit terms and conditions specifying the ownership or disposition of those RECs. The law requires procurement under those contracts be tracked through WREGIS and automatically retired as counting toward the retail seller's or POU's RPS procurement requirement.⁸⁹

Similarly, the law states that no RECs shall be created for contracts with QFs under the federal Public Utility Regulatory Policies Act⁹⁰ executed after January 1, 2005. The law requires procurement under these contracts be tracked through WREGIS and automatically be retired as counting toward a retail seller's RPS procurement requirement.⁹¹

A REC shall be counted only once for compliance with the California RPS and may not be used to count toward the regulatory requirements of any other state or to satisfy any other retail product claims. RPS-eligible facilities, POUs, and retail sellers who enter into REC transactions for RPS compliance purposes must participate in WREGIS.

Pursuant to SB X1-2, all RECs must be tracked in WREGIS and retired within 36 months of the month of generation of the associated RPS-eligible electricity to be RPS-compliant.⁹²

A. Reporting to the Energy Commission

Retail sellers and POUs must report annually to the Energy Commission on the amount of RPS-eligible electricity they procure per month per facility. Although SB X1-2 established multiyear compliance periods, the Energy Commission requires retail sellers and POUs to report monthly procurement that was retired or claimed in the previous calendar year, as described below.

89 Public Utilities Code Section 399.21, Subdivision (a)(4).

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

91 Public Utilities Code Section 399.21, Subdivision (a)(5).

92 Public Utilities Code Section 399.21, Subdivision (a)(6).

Reports are due to the Energy Commission on June 1 (or the next business day if the first falls on a weekend) of each year for reporting data for the previous year. However, retail sellers and POU's should postpone reporting of 2011 RPS procurement until finalization of the ~~sixth~~ future edition of the *RPS Eligibility Guidebook*, by when detailed reporting instructions related to SBX 1-2 procurement requirements will have been established.

To be RPS-compliant, all RECs must be retired within 36 months of the month of generation of the associated RPS-eligible electricity.⁹³ This includes generation both tracked in WREGIS and reported using the ITS.

By June 1, 2014, June 1, 2017, June 1, 2021, and on June 1st of each year thereafter, each retail seller and POU, except those explicitly exempted by SB X1-2, must submit to the Energy Commission its compliance period report information. Details of this compliance period reporting will be included in the next edition of the *RPS Eligibility Guidebook*.

1. Reporting Using the Interim Tracking System

a. Procurement Data

RPS Procurement for 2011 should not be retired or reported until the ~~sixth~~ future version of the *RPS Eligibility Guidebook* is finalized, which will provide instructions on reporting 2011 and later data. Beginning with the verification process for 2011, the Energy Commission will accept only retail sellers' procurement claims for generation that is tracked in WREGIS and reported to the Energy Commission using WREGIS State/Provincial/Voluntary Compliance Reports (compliance reports). POU's may use the ITS to report generation that occurs before October 1, 2012, unless it is tracked in WREGIS. Beginning on October 1, 2012, all load-serving entities must track and report their procurement using WREGIS.

POU's will need to submit RPS procurement information reflecting SB X1-2 portfolio content categories with the update of the ~~sixth~~ future edition of the *RPS Eligibility Guidebook*. See below for a discussion of using WREGIS to report procurement data; detailed instructions for reporting using WREGIS are found in Appendix A.

b. Generation Data

As with procurement data, beginning January 1, 2011, WREGIS must be used to track and report all RPS generation data. With the exceptions noted for test energy and POU's, the ITS is being phased out. In cases when the ITS is used for reporting procurement, generators (or POU's, if facilities are owned by the POU) 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. The CEC-RPS-GEN form and instructions are provided in Appendix B. The Energy Commission staff may request that the facility additionally submit monthly payment statements from the POU, procurement entity, or third party, showing the amount of energy procured from the facility, as an attachment to the CEC-RPS-GEN form. If the facility uses the POU's payment statement to

⁹³ Public Utilities Code 399.21, Subdivision (a) (6).

serve as the verification, the facility should strike out any price or other data on the statement that it does not want to make publicly available.

For cases in which the POU certifies a facility for the RPS on the facility's behalf, the POU 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, and POUs do not need to file separate CEC-RPS-GEN forms to report generation for the facilities they certify. Also, since the POU is providing the data, the POU does not need to separately provide third-party verification of the generation.

Generation for 2011 and thereafter must be tracked and reported in WREGIS, for retail sellers and POUs, as applicable. 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 RPS compliance.

2. Reporting Using WREGIS

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 and POUs must retire WREGIS Certificates to demonstrate procurement of the generation represented 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 since generation data are reported in a WREGIS Compliance Report. However, with implementation of SBX 1-2, additional generation data may be required to verify compliance and 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 RPS compliance.

At the time of this writing, the WREGIS system will create RECs only for generation associated with the earliest active certificate issuance cycle at the time the facility is approved in the WREGIS system.⁹⁴ For new facilities with a recent commercial on-line date, this could include "test energy."⁹⁵ This limitation for test energy will be addressed in WREGIS in mid-2012 to address creation of RECs for test energy generated during periods that precede the generator's registration and approval in WREGIS. Until WREGIS has been modified, test energy not tracked in WREGIS may be reported using the ITS and counted toward the retail seller's or POU's RPS procurement obligations.

⁹⁴ The WREGIS Certificate Issuance Cycle begins on the first day *after* the end of the Current Period Generation Month.

⁹⁵ Test energy in this guidebook refers to preproduction electricity generation that occurs during the testing period of a facility before it commences commercial operations.

The CPUC's TREC decision established rules for how TRECs may be used for RPS compliance, including the requirement that they be tracked in WREGIS and certified by the Energy Commission as RPS-eligible, for which the RPS-eligible electricity associated with the TREC was generated on or after January 1, 2008, to be procured, traded and used for RPS compliance.⁹⁶ However, TRECs cannot be used for RPS before the 2010 compliance year. With the adoption of the fifth edition of this *RPS Eligibility Guidebook*, retail sellers may submit supplemental WREGIS reports for 2010 procurement, as appropriate, to report TRECs from RPS-certified facilities tracked in WREGIS for 2010. Updated 2010 procurement reporting should be submitted to the Energy Commission within 30 days of adoption of this the fifth edition of the guidebook.

SB X1-2 states that a REC shall not be eligible for RPS compliance unless it is retired in the tracking system established pursuant to subdivision (c) of Section 399.25 by the retail seller or POU within 36 months from the initial date of generation of the associated electricity. As of this writing, the Energy Commission and the CPUC are determining the compliance requirements for POUs and retail sellers, respectively. Until such requirements are finalized and the Energy Commission incorporates the details in the sixth a future edition of the *RPS Eligibility Guidebook*, the Energy Commission will not require retail sellers and POUs to report their procurement data for generation on or after 2011. The Energy Commission plans to provide detailed instructions about using WREGIS and submitting documentation to verify the procurement requirements under SB X1-2 in the sixth a future edition of the *RPS Eligibility Guidebook*, and until then retail sellers and POUs should not retire or report procurement for 2011 or 2012 unless necessary. Retail sellers should contact Energy Commission staff for assistance with 2011-2012 procurement that must be retired before the adoption of the sixth a future edition of the *RPS Eligibility Guidebook*.

B. RPS Procurement Verification Reports

The Energy Commission will account for procurement consistent with the requirements of this guidebook, applicable CPUC decisions, and Energy Commission regulations for POUs, and prepare *RPS Procurement Verification Reports* after each compliance period, as described earlier in this guidebook. The Energy Commission expects to adopt two *Verification Reports*, one for retail sellers and one for POUs. After it adopts the *Verification Report* for retail sellers, the Energy Commission transmits it to the CPUC for its use in determining RPS compliance for the retail sellers. Details of the Energy Commission's process for reporting POU procurement will be incorporated into a later edition of this guidebook, after the Energy Commission adopts regulations specifying the enforcement procedures for POUs.

The *RPS Procurement Verification Reports* will be based on the analysis of WREGIS data, with exceptions noted above for POUs.

⁹⁶ CPUC Decision 11-01-025, January 13, 2011. Rulemaking 06-02-012, Order E, updating D.10-03-021 Section 4.11.

1. Verification Methodology Using the Interim Tracking System

As discussed above, the Energy Commission developed an ITS for use until WREGIS became operational. Under the ITS, the Energy Commission first verifies that the RPS procurement reported to the Energy Commission is from a facility certified as RPS-eligible. Also, to the extent possible, the Energy Commission ensures that RPS-eligible energy procured by the utilities is counted only once in California or any other state. 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 indicate that procurement exceeded generation by 5 percent or greater, the procuring utility must submit supporting documentation to verify procurement from those facilities.

The Energy Commission will apply statutory provisions, CPUC rules, and Energy Commission regulations for POUs when verifying 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 did not exceed the facility's total generation. The Energy Commission will check that if two or more utilities 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 Energy⁹⁷ and the Energy Commission are collaborating to help ensure against double-counting of the same renewable energy claims.

2. Verification Method Using WREGIS

Beginning with the 2008 compliance year, the Energy Commission started conducting its RPS procurement verification process by analyzing available WREGIS data, and will use WREGIS data to compile RPS Procurement Verification reports, except for POUs using the ITS. 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 help ensure against double-counting of RECs.

In the case of a multijurisdictional utility that has retired RECs in a tracking system other than WREGIS (such as NVTREC⁹⁸), 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.

⁹⁷ Green-e Energy is a voluntary certification program for renewable energy.

⁹⁸ NVTREC is the REC tracking and verification system for Nevada's RPS.

As noted in Section C 4: Counting Nonrenewable Fuel Use as RPS-Eligible, additional information is needed to verify that the nonrenewable RECs are eligible for California's RPS. This information as described above must be submitted to the Energy Commission no later than March 31 of the year following the generation year so staff may verify that the facility's use of nonrenewable fuel did not exceed the facility's nonrenewable fuel allowance as calculated by the approved measurements methodology for that facility.