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California Energy Commission **STAFF REPORT**

Renewables Portfolio Standard Verification and Compliance Methodology Report, Third Edition

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ABSTRACT

This Renewables Portfolio Standard Verification and Compliance Methodology Report, Third Edition, describes the methods California Energy Commission (CEC) staff uses to accomplish the following:

- verify the eligibility of claims for the procurement of renewable energy submitted by load-serving entities for each compliance period of California's Renewables Portfolio Standard (RPS)
- confirm the vintage and determine the portfolio content category classification of claims submitted by local publicly owned electric utilities' (POU) eligible renewable energy
- confirm the retail sales for each POU and calculate each POU's procurement requirements based on their retail sales, and
- Determine whether each POU has met the procurement requirements for each compliance period of the RPS

For each compliance period, results from the application of the verification analyses covered in this report are issued separately for retail sellers and POUs. For retail sellers, a final verification report will be adopted by the CEC at a regularly scheduled business meeting and subsequently transmitted to the California Public Utilities Commission (CPUC) to be used for its compliance and enforcement activities. For each POU, verification results will be issued in separate reports that are also adopted by the CEC at a regularly scheduled business meeting to be used for compliance and enforcement activities.

Keywords: Renewables Portfolio Standard, RPS, Renewable Energy Credits, RECs, renewable attributes, annual procurement target, certification, verification, compliance, generation, load serving entities, local publicly owned electric utilities, POU, historic carryover, Western Renewable Energy Generation Information System, WREGIS, retail sellers

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EXECUTIVE SUMMARY

Established in 2002, California's Renewables Portfolio Standard is one of the most ambitious renewable energy policies in the nation. Enacted by Senate Bill 1078 (Sher, Chapter 516, Statutes of 2002), and accelerated and expanded by subsequent legislation, California's Renewables Portfolio Standard establishes increasingly progressive renewable energy procurement targets for the state's load-serving entities. Originally applicable to retail sellers, the statewide mandatory Renewables Portfolio Standard was expanded by Senate Bill X1-2 (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session) to include local publicly owned electric utilities starting in 2011. Senate Bill 100 (DeLeón, Chapter 312, Statutes of 2018) required load-serving entities to increase their procurement of eligible renewable energy resources to 60 percent of retail sales by 2030.

California's Renewables Portfolio Standard is administered by the California Energy Commission and the California Public Utilities Commission. As part of its responsibilities, the California Energy Commission verifies the eligibility of renewable energy procured by load-serving entities, which include retail sellers, local publicly owned electric utilities, and all other entities serving retail sales of electricity in California that are obligated to participate in California's Renewables Portfolio Standard. The California Energy Commission is also responsible for certifying Renewables Portfolio Standard eligible renewable energy resources, developing a tracking system to verify renewable energy procurement for all program participants, and overseeing compliance and enforcement of the local publicly owned electric utilities. The California Public Utilities Commission is responsible for compliance and enforcement for retail sellers.

This report describes the methods that California Energy Commission staff uses to 1) verify the eligibility of claims reported for the procurement of renewable energy submitted by load-serving entities for each compliance period of California's Renewables Portfolio Standard, 2) confirm the vintage and the portfolio content category classification of claims submitted by local publicly owned electric utilities, 3) confirm the retail sales and calculate each publicly owned electric utilities' procurement requirements based on their retail sales, and 4) determine whether each local publicly owned electric utility has met the procurement requirements of the Renewables Portfolio Standard for each compliance period. Results of the verification analyses described in this report will be issued separately for retail sellers and local publicly owned electric utilities. For retail sellers, a verification report will be adopted by the California Energy Commission at a regularly scheduled business meeting and subsequently transmitted to the California Public Utilities Commission to be used for its compliance and enforcement activities. For each local publicly owned electric utility, verification results will be issued in separate reports that are also adopted by the California Energy Commission at a regularly scheduled business meeting to be used for compliance and enforcement activities.

CHAPTER 1: Introduction

Renewables Portfolio Standard Legislation

California's Renewables Portfolio Standard (RPS) program was established in 2002 by Senate Bill (SB) 1078 (Sher, Chapter 516, Statutes of 2002) with the goal of increasing the percentage of renewable energy in California, and advancing the diversity, reliability, public health, and environmental benefits of the state's energy mix. In addition to requiring each retail seller to procure 20 percent of its retail sales from renewable energy sources by no later than the end of 2017, the legislation also required the governing body of each local publicly owned electric utility (POU) to implement and enforce an RPS that recognizes the Legislature's intent to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources.

In 2006, SB 107 (Simitian and Perata, Chapter 464, Statutes of 2006) advanced the state's RPS target, requiring retail sellers to increase renewable energy purchases by at least one percent of retail sales per year with a target of 20 percent renewable energy by the end of 2010. The bill also required POUs to report to the CEC on the status of implementing their RPS programs and the progress made toward achieving their RPS goals.

In April 2011, Governor Edmund G. Brown Jr. signed SB X1-2 (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session), which adjusted the RPS target of 20 percent by 2010 to an average of 20 percent for 2011 through 2013; extended the long-term RPS target to 33 percent by 2020; and required the state's POUs to comply with similar RPS procurements requirements as retail sellers starting January 1, 2011. SB X1-2 also gave the CEC and the California Air Resources Board (CARB) new oversight responsibilities with respect to POUs compliance with the RPS. Specifically, it authorized the CEC to adopt regulations specifying RPS enforcement procedures for POUs, including a public process for issuing notices of violation for noncompliance and for referring the violations to the CARB for penalty assessment.

The passage of SB 350 (DeLeón, Chapter 547, Statutes of 2015) increased the RPS to 50 percent by 2030 and made other changes to the state's RPS, including the Long-Term Procurement Requirement (LTR) that, beginning January 1, 2021, at least 65 percent of a POU's procurement counting towards the RPS for each compliance period shall be from contracts, ownership, or ownership agreements of 10 years or more in duration. The passage of SB 100 (DeLeón, Chapter 312, Statutes of 2018) further increased the RPS to 60 percent by December 31, 2030 and made additional changes to the state's RPS. For instance, with respect to POUs, SB 100 tasked the CEC to establish appropriate multiyear compliance periods for all subsequent years, after 2030, that require the POU to procure not less than 60 percent of retail sales of electricity products from eligible renewable energy resources.

Roles and Responsibilities

The CEC and the California Public Utilities Commission (CPUC) jointly implement the RPS program.

The CEC's legislatively mandated responsibilities are, in part, to:

- Certify eligible renewable energy resources under the RPS.
- Adopt regulations specifying RPS enforcement procedures for POUs.
- Verify and classify procurement of renewable energy by load-serving entities (LSEs).
- Determine POU compliance with the RPS, issue notice of violation for non-compliance, and refer POU violations to the CARB for assessment of penalties when applicable.

The CEC's Renewables Portfolio Standard Eligibility Guidebook (RPS Eligibility Guidebook) specifies the criteria and process for certifying generating facilities as eligible renewable energy resources for the RPS. The RPS Eligibility Guidebook also includes annual reporting and verification requirements for program participants.1

To design and implement an accounting system to track and report program participants' procurement claims, the CEC worked with the Western Governors' Association to develop the Western Renewable Energy Generation Information System (WREGIS).² WREGIS is an independent renewable energy tracking system for the region covered by the Western Electricity Coordinating Council (WECC). WREGIS issues and electronically tracks renewable energy credits (RECs) representing renewable energy generation. Since 2008, the CEC has used WREGIS for RPS reporting and verification.

As part of its responsibilities, the CEC verifies renewable electricity procurement for all RPS program participants. The CEC also determines POUs' compliance with the RPS.4 The CEC's Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities⁵ (RPS POU Regulations) establishes the rules and procedures by which the CEC will assess a POU's procurement actions and determine whether those actions meet the RPS procurement requirements in the law. After the CEC adopts each POU's verification report, it begins the process to determine if POUs are complying with the RPS procurement requirements for the compliance period in accordance with the RPS POU Regulations. An overview of the compliance process can be found in Chapter 5.

CEC staff does not evaluate retail sellers' progress in meeting RPS procurement requirements. Instead, the CEC verifies renewable electricity procurement claims for retail sellers and then

¹ California Energy Commission, Renewables Portfolio Standard Eligibility Guidebook, Ninth Edition (Revised). April 2017.

² More information about WREGIS can be found at https://www.wecc.biz/WREGIS/Pages/Default.aspx.

³ The Western Electricity Coordinating Council is the regional entity responsible for coordinating and promoting bulk electric system reliability in the Western Interconnection. https://www.wecc.biz/Pages/home.aspx.

⁴ Public Utilities Code § 399.30 (o) and (p).

⁵ The Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities. July 2021. These regulations are set forth in 20 CCR §§ 1240 and 3200 - 3208.

provides results to the CPUC to use in determining retail sellers' compliance with the RPS and any enforcement actions.

Verification and Compliance Process Overview

This Renewables Portfolio Standard Verification and Compliance Methodology Report, Third Edition, describes CEC staff methodology, which is also summarized in **Figure 1**.

Level 1 Summary of Claims Eligibility - all LSEs⁶

- Collect and analyze RPS data sources to ensure claims do not exceed generation
- Determine generation eligibility for multi-fuel, biomethane claims, and WREGIS adjustments
- Identify the status of RPS claims and verify eligibility of all RPS claims

Level 2: Classification of Procurement Claims - POUs only

- Contract analysis
- Contract analysis for the LTR
- E-Tag analysis
- Hourly analysis
- Verification of Portfolio Content Categories
- Identify POUs opting for voluntary early compliance with the LTR and verify the LTR status of all voluntary early compliance claims

Level 3: Procurement Requirement Calculations (POUs)

- Complete procurement target calculations for each POU.
- Complete Portfolio Balance Requirement (PBR) calculations for each POU
- Complete LTR calculations for POUs opting for voluntary early compliance with the LTR
- Recommend adoption of POU Verification Reports at a CEC Business Meeting
- Optional Compliance Measures evaluation
- Complete compliance assessment for each POU, and if there was a failure to meet any
 of the requirements in the RPS POU Regulations, the Executive Director may issue a
 complaint against the POU, with adjudication by the CEC in accordance with sections
 3208 and 1240 of the RPS POU Regulations. If non-compliance is found, CEC staff shall
 forward a notice of violation to the CARB for assessment of penalties when applicable.

⁶ For purposes of Energy Commission administration of the RPS, "load-serving entity" includes both retail sellers and POUs.

Retail Sellers Level 1: Retail Sellers Reports adopted at a Summary of Verification **CEC Business Meeting** Claims Eligiblity Report and transmitted to the (all LSEs) CPUC Level 2: Classification of Procurement (POUs only) Level 3: POU Draft POU Verification Procurement Verification Results Reports Requirement Results adopted by the CEC Calculations Reports (POUs only) Issuance of POU Compliance Compliance Determination Determinations Letters

Figure 1: RPS Verification Process Overview

Source: California Energy Commission staff

CHAPTER 2: Verification Level 1 – Summary of Claims Eligibility

This chapter describes the processes employed by CEC staff to verify the eligibility of RPS claims reported annually by LSEs. The Level 1 verification of a REC eligibility can be grouped into three main verification processes:

- 1. RPS data sources: CEC staff evaluates RPS procurement claims reported to California's RPS Program, which the LSEs report using the WREGIS and the RPS Online System. Annual generation amounts reported to various other programs including to the federal Energy Information Administration (EIA) program and the CEC's Energy Assessments Division are additional data sources used in determining generation eligibility.
- 2. Generation eligibility: CEC staff determines the total generation from each facility eligible to be claimed for the RPS. There are three types of generation assessments at this level—multi-fuel, biomethane, and WREGIS adjustments.
- 3. Claims eligibility: CEC staff determines if submitted claims are:
 - a. from an RPS-certified facility
 - b. from energy generated and retired in allowable months and years indicated by the vintage of the RECs,
 - c. that RECs claimed equal the generation reported, and
 - d. that generation represented in RPS claims is not also being used in other compliance or voluntary programs.

At the end of Level 1 analysis, a detailed Summary Claims Report (SCR) for each compliance year is produced for each LSE. The SCR categorizes claims verified as eligible, ineligible, or withdrawn. CEC staff works closely with LSEs throughout the verification process to keep them informed of issues with their procurement claims and attempts to resolve any identified issues in a timely manner. These processes, and the methods used, are discussed in more detail in this chapter.

Multifuel Generation Resolve EIA/Gen Multifuel discrepancies **Facilities** Reporting Comparison Analysis Summary All LSEs WREGIS Claims Overclaims Approval or Claims (Retail Sellers rocurement Eligibility Dispute Analysis Reports & POUs) Claims

Figure 2: Level 1 Processes

Source: California Energy Commission staff

RPS Data Sources

For this report, the terms "renewable energy credit," "REC," and "procurement claim" all refer to a claim submitted to the CEC by an LSE for an amount of electricity or electricity products⁷ procured from a specific RPS-certified generation facility. As of January 1, 2014, all procurement claims must be reported to the CEC using WREGIS except for claims that meet the requirements specified in the *RPS Eligibility Guidebook* to be reported directly to the CEC as WREGIS Adjustments, which are described below.

WREGIS

WREGIS tracks renewable energy generation from generating units that register and report verifiable data. A facility must be registered and approved in WREGIS before the CEC will approve an application for RPS certification, and with limited exceptions, all generation must be tracked in WREGIS to be considered RPS-eligible.

For each megawatt-hour (MWh) of such electricity generated and reported, WREGIS creates a unique electronic renewable energy credit also referred to as a REC.⁸ In the WREGIS system RECs are created and initially deposited into the account of a renewable energy generator. Generators transfer RECs to the accounts of LSEs or other parties based on procurement contracts. Account holders can transfer RECs to other parties and between accounts, but the RECs can reside in only one account at any given time, thereby preventing possible double counting of renewable energy generation tracked within WREGIS.

^{7 &}quot;Electricity product" means either electricity and the associated renewable energy credit generated by an eligible renewable energy resource or an unbundled renewable energy credit.

⁸ This REC reflects the requirements for a renewable energy credit under Public Utilities Code Section 399.12, subdivision (h).

As mentioned, LSEs are required to use WREGIS to report procurement claims to the CEC, except in limited instances. LSEs authorize WREGIS to submit California RPS compliance reports (WREGIS reports) on their behalf to the CEC. The WREGIS reports provide the RPS procurement claims data by year and month, listed by RPS-certified facility and fuel type.

RPS Online System

In January 2017, California's RPS Program was updated with the introduction of a web-based online system, through which LSEs submit annual procurement and compliance WREGIS reports. LSEs began completing annual procurement reporting in the RPS Online System for the 2016 reporting year.

For Compliance Period 3 (2017-2020), all LSEs submitted WREGIS Reports to the CEC using the RPS Online System. POUs have additional reporting requirements they must complete in the RPS Online System's Annual Summary Report, including reporting general procurement, contractual information, and additional reports supporting portfolio content category claims.

The RPS Online System allows CEC staff to complete multiple steps of analysis and display the results of the analyses for LSEs claims review, approval, or dispute. The system further allows for multiple authorized representatives of each LSE to report additional supporting documentation and contribute to completion of verification activities.

Other Data Sources

During the verification analysis, CEC staff may compare data from a certain number of facilities' WREGIS reports to information contained in reports submitted to the EIA, ¹⁰ or other available data sources to confirm that the total claims submitted from those facilities do not exceed the total eligible generation for a given year.

CEC staff also confirm that all claims submitted for generation from facilities that are required to report annual generation data directly to the CEC do not exceed the total allowable generation from each facility. The CEC receives annual generation reporting from multi-fuel facilities, which are facilities using a nonrenewable fuel in addition to a renewable fuel for energy generation. RPS eligible facilities using a common carrier pipeline or a functionally dedicated pipeline for delivery of biomethane must also report data annually.

In limited circumstances, LSEs also report generation not tracked in WREGIS that qualify as a WREGIS Adjustment under Chapter 7.A.2. of the *RPS Eligibility Guidebook*. In these instances, CEC staff verify that claims submitted are consistent with the data reported in the WREGIS Adjustment.

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⁹ Effective January 1, 2014, generation amounts that qualify as a WREGIS Adjustment may be reported to the Energy Commission to be included in the verification. LSEs may submit a WREGIS Adjustment to report generation not tracked in WREGIS by submitting a request using the RPS Online System subject to specific requirements as described in the *Renewables Portfolio Standard Eligibility Guidebook, Ninth Edition (Revised)*. See Chapter 7. A. 2: WREGIS Adjustments.

¹⁰ EIA data includes annual generation information for generation facilities with a capacity greater than one megawatt (MW). Annual generation data from the U.S. EIA is available at: www.eia.doe.gov/cneaf/electricity/page/eia906 920.html.

Generation Eligibility Analysis

As stated above, WREGIS issues and electronically tracks RECs representing renewable energy generation for the region covered by the WECC. WREGIS was designed to ensure that generation is accurately reported, recorded, and counted only once for any regulatory or voluntary program. As such, CEC staff rely on the generation information as reported to WREGIS.

Facility Eligibility Analysis

The CEC's verification process begins with determining if RPS claims are based on generation from RPS-certified generating facilities and during an RPS-eligible period. The CEC certifies generating facilities that meet the eligibility criteria as specified in the *RPS Eligibility Guidebook*. To be RPS-certified, a facility must, among other things, use an eligible renewable resource or fuel, satisfy resource-specific criteria, and be either located within the state or satisfy applicable requirements for out-of-state and out-of-country facilities.

A facility receives an RPS eligibility date based on several factors including whether the facility was pre-certified, the date an application is submitted to the CEC for certification, the commercial operations date of the facility and the WREGIS eligibility date. The RPS eligibility date is the earliest month that generation from the facility can be considered RPS-eligible. The eligibility date for a facility may be revised or the eligibility may change for reasons described in the *RPS Eligibility Guidebook*.

Procurement claims from a facility are eligible only if the facility was eligible for the RPS during the month of the generation. CEC staff initially reviews all claims to ensure the RECs were generated from RPS eligible facilities and for generation that occurred during a period the facility was eligible for the RPS.

Biomethane Claims

Verification of procurement claims from facilities that use biomethane delivered to the generating facility through a common carrier pipeline or functionally dedicated pipeline relies on additional information provided directly to the CEC.

Any RPS-certified facility using biomethane delivered in a common carrier pipeline or functionally dedicated pipeline during the prior calendar year is required to annually report information related to the delivery and volume of biomethane and contracts for the biomethane through the RPS Online System as detailed in the *RPS Eligibility Guidebook*. CEC CEC staff conducts specific analysis using the data, delivery and contract information contained in these annual reports to confirm the eligibility of the facility and to calculate the RPS-eligible generation.

Claims from certain facilities that use biomethane to generate electricity require additional verification of facility eligibility and eligible generation. CEC staff analyzes all biomethane amounts on an energy basis of British Thermal Units (MMBtu) and all electrical generation in

MWh units. CEC staff reviews biomethane delivery contracts to verify the contracted delivery requirement is met. This analysis is conducted to confirm that only the biomethane fuel that was purchased, delivered, and used by the RPS-certified facility is eligible for the RPS. CEC staff also examines the monthly invoices of the RPS-certified facility to confirm the purchaser of the biomethane. This analysis is conducted to confirm that the biomethane fuel was purchased, delivered, and used by the RPS-certified facility in a manner consistent with the RPS statutes and *RPS Eligibility Guidebook*.

Next, CEC staff analyzes the physical verification data by comparing the biomethane fuel purchase invoices, pipeline injection reports, and pipeline nomination reports showing monthly delivery amounts. The lesser value for each month from these three sources is taken as the verifiable biomethane fuel amount for the month. Only the lesser of the injected, delivered, or monthly invoiced amounts is accepted to ensure nonrenewable fuel, particularly fossil gas, is not inadvertently counted as RPS-eligible.

After determining the total RPS-eligible amount of biomethane delivered to the RPS facility for the year or the contracted time frame (based on the monthly analysis described above), the data can be compared to the total amount of fuel used at the facility to determine the ratio of renewable fuel used at the facility during the specified period. The ratio of the total RPS-eligible amount of biomethane for the year and the total amount of fuel consumed at the RPS-certified facility for the same year is multiplied by the total electrical output of the RPS-certified facility for the same year to derive the total amount of RPS-eligible generation produced that year, as shown in the following equation:

$$RPS \ Eligible \ Generation = \frac{RPS \ Eligible \ Biomethane \ (MMBtu)}{Total \ Fuel \ Use \ At \ RPS \ Certified \ Facility \ (MMBtu)} \times Total \ Generation \ (MWh)$$

Only the generation that corresponds to the eligible renewable fuel used at the facility is counted as RPS-eligible. Using monthly RPS claims helps account for any WREGIS REC creation issues in which the number of RECs created in one month could be lower than the amount of verified RPS-eligible gas that was delivered to the RPS-certified facility in that same month. Such accounting adjustments may occur in WREGIS, and the lower amount is later adjusted in a subsequent WREGIS REC creation cycle, resulting in REC amounts that may not mirror the monthly biomethane delivered amounts. However, requiring RPS claims to match the amount of RPS-eligible biomethane delivered in a particular month is not necessary if the total RPS-eligible biomethane amount does not exceed the amount of verified RPS-eligible biomethane delivered to the facility in a particular year or contracted time frame.

Multifuel Analysis

RPS-certified multifuel facilities using renewable and nonrenewable energy resources to generate electricity may count a percentage of the electricity generated as RPS-eligible under certain provisions of the *RPS Eligibility Guidebook*. CEC staff calculates the amount of generation that is RPS-eligible for multifuel facilities. When determining the amount of RPS-eligible generation produced by an RPS-certified facility using multiple energy resources, the

total electrical output of the facility for the year will be multiplied by the percent renewable, as calculated using the applicable equations described in the *RPS Eligibility Guidebook*.

All the generation from multifuel facilities using a de minimis quantity of nonrenewable energy resources in the same generation process as the renewable energy resource, as calculated by the approved method, may be counted as RPS-eligible. The amount of RPS-eligible generation for each multifuel facility using a de minimis quantity of nonrenewable energy is determined by calculating the percentage of nonrenewable fuel used and determining if it is equal to or below the allowed de minimis amount specific to the facility, ¹¹ depending on the facility's RPS certification.

If the generation and fuel use data reported directly to the CEC by a multifuel facility varies from the generation data reported to EIA or other source by more than five percent, CEC staff will request an explanation from the facility owner. Acceptable explanations may include, but are not limited to, unit conversion errors, missing periods of reporting in the EIA data, or EIA data that included on-site load¹², and estimated generation and fuel use amounts being reported to the EIA. Facilities may submit revised information to correct reporting errors.

WREGIS Adjustments Analysis

In very limited cases, previously reported data in WREGIS must be corrected. When a discrepancy is identified between actual generation and the RECs issued for a generation month, the WREGIS system makes a prior period adjustment to correct the WREGIS REC total. If the actual generation was less than originally reported, RECs were overproduced and, to adjust this discrepancy, WREGIS reduces the number of RECs issued in the current period by an amount equal to the number overproduced in the prior period. Similarly, if the actual generation was more than originally reported, RECs were under produced and, to adjust for this discrepancy, WREGIS issues additional RECs in the current period to make up for the number under produced in the prior period. As such, the prior period adjustment will result in either the overproduction or underproduction of the current vintage of WREGIS REC certificates. LSEs should claim procurement based on the date of the actual generation from the facility versus the timeframe of the WREGIS adjustment. When needed, LSEs have the option to submit a WREGIS Adjustment through the RPS Online System when the vintage date(s) on RECs do not correspond to the month of generation due to a WREGIS prior period adjustment.

Under certain circumstances LSEs may also submit a WREGIS Adjustment using the RPS Online System to report generation not tracked in WREGIS when the correction cannot be made in WREGIS due to requirements in the WREGIS Operating Rules. The request will be

11 See Chapter 3. B. 2. De Minimis Quantity of Nonrenewable Energy Resources in the *Renewables Portfolio Standard Eligibility Guidebook, Ninth Edition (Revised)*.

¹² Generation from a certified facility serving onsite load may be claimed for use in the RPS if all eligibility requirements are met and the generation serving onsite load is metered independently from any station service loads using a meter with a verified accuracy rating of 2 percent or higher. See *Renewable Portfolio Standard Eligibility Guidebook, Ninth Edition (Revised),* Chapter 3. A. 4. Onsite Load.

evaluated by CEC staff for compliance with applicable requirements. If a WREGIS Adjustment is approved, the reported generation will be reflected in the verification of claims in the RPS Online System but will not be reflected in WREGIS or in the WREGIS report. CEC staff may request additional documentation to verify claims made pursuant to a WREGIS Adjustment.

Claims Eligibility Analysis

The claims eligibility analysis includes analyses completed to determine the following:

- that claims are from energy generated and retired in allowable months and years indicated by the vintage of the RECs,
- that there are not more RECs claimed than generation reported, and
- that generation represented in RPS claims is not also being used in other compliance or voluntary programs.

If a claim is determined to be ineligible for the RPS, CEC staff will notify the LSE submitting the claim and provide an opportunity to dispute and resolve this determination by providing supporting information.

Claim Vintage Analysis

For POUs, the *RPS POU Regulations* at Section 3202 establishes the criteria an electricity product must meet to be used for compliance toward the RPS procurement requirements. Section 3202(c) of the *RPS POU Regulations* states, "A POU may not use a REC associated with electricity products to meet its RPS procurement requirements unless it is retired within 36-months from the initial month of the generation of the associated electricity."

The "initial month of the generation" is the vintage month, as reported in WREGIS. CEC staff currently determine the retirement date by the Action Date¹³ in WREGIS. To ensure only RECs that meet the 36-month retirement requirement are counted as eligible for LSEs, CEC staff calculates the number of months from the initial month of generation to the month in which the REC was retired.

For example, a POU with a REC generated in January 2011 must retire that REC no later than January 31, 2014. In situations where a REC is retired, subsequently unretired, and then retired again, CEC staff uses the first retirement date to determine compliance with the 36-month requirement.

LSE procurement claims based on RECs retired more than 36 months after the month of the associated electricity generation are determined to be ineligible for the RPS.

For Compliance Period 3, CEC staff conducted the 36-month REC retirement requirement analysis for retail sellers. It is worth noting the 36-month verification analysis for retail sellers is calculated differently than for POUs. The CEC's 36-month REC retirement check for retail sellers was completed pursuant to retirement rules codified in Public Utilities Code section

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^{13 &}quot;Action Date" refers to the date that a REC is retired within WREGIS.

399.21(a)(7) and further defined in CPUC Decision 12-06-038.¹⁴ Claims that did not meet the criteria of the retirement rules were flagged as not meeting the 36-month retirement requirement.

For example, under the CPUC's interpretation of the 36-month retirement rules, a REC retired on behalf of a retail seller in June 2011 must be associated with electricity generated not earlier than July 2008; a REC retired in December 2013 must be associated with electricity generated not earlier than January 2011.

Overclaim Analysis

Since WREGIS creates RECs based on reported, metered generation, there is limited potential for the total RECs submitted in LSE's claims to equal more than the total generation of any facility for a given year, referred to as overclaims. However, since generation is reported separately to EIA and other third-party sources as well as WREGIS, CEC staff compare data reported to third parties, such as EIA, to the total of all LSE claims submitted for a given year to verify consistency in reporting and accuracy. This overclaims analysis is conducted on a sample of facilities that do not report generation directly to the CEC and takes into consideration any generation reported as Green-E voluntary market sales or for green pricing program reductions to retail sales as allowed by Public Utilities Code section 399.30(c)(4). To conduct this overclaims analysis, the difference between the total generation and the total procurement claims is calculated for each facility. If the result indicates that the total claim for the facility exceeds the total generation reported to the EIA or other third-party sources, the facility is considered to have overclaims. These differences may occur for reasons such as errors in reporting and unit conversion errors. CEC staff will refer to other third-party sources or work with the facility or LSEs submitting claims to obtain additional data or supporting documentation to verify that the total claims accurately represent facility generation.

An overclaims analysis is also conducted for all multifuel and biomethane facilities that report generation directly to the CEC. As described above in the Generation Eligibility Analysis section of this report, multifuel and certain biomethane facilities report annual generation directly to the CEC. CEC staff determine the total allowable amount of generation from these facilities that is eligible for the RPS for each compliance year. The calculated total allowable generation may differ from the generation reported to WREGIS from these facilities. CEC staff reviews total procurement claims from facilities that report generation directly to the CEC to ensure that total claims do not exceed the maximum allowable generation. If claims exceed the allowable generation for a multifuel or biomethane facility, CEC staff will notify the facility's owners and the LSEs submitting claims to determine if additional documentation can be considered in reviewing the claims. CEC staff confirm with WREGIS to ensure the discrepancies are not due to reporting errors by the facilities. If, after further analysis, the procurement

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¹⁴ The CPUC's REC retirement rules are defined and found under <u>Decision 12-06-038</u>. http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/169704.pdf

claims still exceed the total allowable generation, CEC staff will recommend that the CEC determine those procurement claims to be ineligible in the LSE's verification results report.

Since LSEs are allowed to retire RECs to meet RPS procurement requirements up to 36 months from when the electricity is generated, procurement claims may include RECs that were generated in previous years and from prior compliance period terms. As such, the overclaim analysis requires the review of data from previously verified years, because RECs generated in the same year from the same facility may be retired in different reporting years. To complete the overclaims analysis, CEC staff compiles and reviews claims data based on the vintage year of the REC, not the year that it was reported. If an overclaim is identified specific to a vintage year from a prior compliance period in which the CEC has adopted verification reports, the adopted reports will not be revised, and only the current claims may be determined to be ineligible.

Double-Counting Analysis

CEC staff verification activities ensure that a REC is counted only once for compliance with the California RPS Program. A REC cannot be counted for compliance with the California RPS Program if it has been used to satisfy any other retail, regulatory, or voluntary market claim. Tracking of RECs in WREGIS prevents a REC from being counted more than once or for compliance with the California RPS Program and for the regulatory requirements of any other state or voluntary program in the WECC. CEC staff analyses ensure that a REC is not claimed for both the RPS and programs that are not tracked and retired in WREGIS.

Coordinating with Other State and Voluntary Programs

WREGIS was developed as a regional tracking system in part to prevent RECs from being used in more than one regulatory or voluntary program in the WECC. By design, claims tracked and reported through WREGIS and submitted for California's RPS Program cannot be double counted in other states' RPS programs that also require the use of WREGIS. The CEC collaborates with CEC staff from other states within the WECC and can confirm data as needed and based on the reporting requirements and availability of data in each state.

In addition, CEC staff coordinates with other California agencies and the voluntary REC market to safeguard against double-counting in voluntary programs. Generators and brokers sell RECs to individuals, companies, utilities, and other organizations for voluntary environmental and sustainability programs. The CEC collaborates with Green-e Energy¹⁶ (Green-e), which administers the most widely used voluntary REC market, to verify that RECs represented in RPS claims are not also being counted in the voluntary REC market.

^{15 &}quot;Reporting year" refers to a particular year within a compliance period for which the annual generation has already occurred and for which the RECs are being retired and used for RPS compliance. The reporting year is the year for which the retired RECs are reported and, on an annual basis, should represent the calendar year preceding the reporting due date.

¹⁶ Green-e Energy, a program of the Center for Resource Solutions, is an independent consumer protection program for the sale of renewable energy in the voluntary retail market; see www.green-e.org. Green-e Energy does not require the use of WREGIS.

Finalizing Eligible Claims Data

Summary Claims Report

After CEC staff completes the claims eligibility analyses, a SCR for each year in the compliance period is posted in the RPS Online System. Each LSE receives its SCRs that include CEC staff determinations on the eligibility status of all claims reported for the compliance period. Claims that were deemed ineligible are listed, and a reason for ineligibility is provided. LSEs can accept or dispute the results of the SCR. If the LSE disputes the SCR, it needs to provide additional information supporting their dispute. If the LSEs agree with CEC staff's determination of ineligible claims, they have the option to withdraw claims as described in the process below.

Withdrawing Claims

If a procurement claim is determined to be ineligible during the verification process, the affected LSE may "withdraw" the claim from the total procurement amount being claimed so that no ineligible claims appear on their final verification report. Withdrawn claims are removed from the verification process and are not counted toward the LSE's total RPS-eligible procurement amount.

In WREGIS, an LSE can also "unretire" RECs within 12 months of when the certificates were retired and submit a revised WREGIS report to the CEC.

Results of the claims eligibility analyses are issued separately for retail sellers and POUs.

Retail Sellers Verification Results Report

For retail sellers, a verification results report is adopted by the CEC at a regularly scheduled business meeting and subsequently transmitted to the California Public Utilities Commission to be used for its compliance and enforcement activities.

Chapter 2: Level 1 Summary of Claims Eligibility is the only chapter on verification and compliance guidance pertaining to both retail sellers and POUs.

Additional POU Verification Activities

The CEC is responsible for enforcing POU compliance with the RPS. As such, a determination of claims eligibility is only the initial step in verification activities completed by CEC staff for POUs. The following chapters of this report describe the additional verification activities conducted only for POUs. When all POU verification activities are completed, a verification results report will be issued for each POU and adopted by the CEC at a regularly scheduled business meeting. After the verification results reports are adopted, the Executive Director may conduct compliance and enforcement activities for POUs not meeting the California RPS Program requirements for the compliance year.

CHAPTER 3: Verification Level 2 – Classification of Procurement Claims

The CEC's RPS POU Regulations establish the rules and procedures by which the CEC will assess a POU's procurement actions and determine whether those actions meet the RPS procurement requirements. This chapter describes the processes employed by CEC staff for determining the portfolio content category classification (PCC) of POUs' procurement claims. CEC staff describe the process for LTR classification determinations of procurement claims for POUs opting for voluntary early compliance with the LTR. These processes, as illustrated in Figure 3, support determination of compliance with the portfolio balance requirements for applicable POUs, and the LTR for POUs opting for voluntary early compliance in Compliance Period 3. The LTR is applicable to all POUs beginning in Compliance Period 4.

To ensure POUs are complying with the RPS procurement requirements, CEC staff evaluates the following:

- contract review and matching
- contract analysis for the LTR
- e-Tag analysis
- hourly analysis
- portfolio content categories

POUs Only Exemptions LTR Contract Contract Contract e-Tag Hourly Review Review Matching Analysis **Analysis** Adjustments **POU Opting** for Voluntary **PCC Reports** Approval or LTR Report Early Dispute Compliance with LTR

Figure 3: Level 2 Processes

Source: California Energy Commission staff

Contract Review and Matching

POUs are required to submit documentation of electricity product procurement contracts and ownership agreements, including master agreements and amendments that may be relevant, for all RPS claims. CEC staff reviews this documentation and matches procurement claims to relevant contracts to ensure that any electricity products procured are correctly classified into a PCC or as "count in full" based on:

- Contract or ownership execution date.
- Contract or ownership agreement amendment execution date, when applicable.
- Contract or ownership agreement end date.
- Contracted amount of electricity products.
- Scheduling and delivery terms, when applicable.
- Whether electricity products were procured as a bundled product.

If inconsistencies are found during contract matching, CEC staff may ask the POU for additional documentation. If documentation does not substantiate the PCC claims identified by the POU, CEC staff will reclassify procurement claims into the appropriate PCC, based on the information and documentation provided.

Contract Analysis for LTR Reporting

Consistent with section 3207 (c)(5)(B)1.i., all POUs are required to submit the LTR status of previously reported contracts within 30 days of the effective date of the *RPS POU Regulations*. The Contract Analysis confirming LTR status of previously reported contracts is conducted as part of the verification processes for Compliance Period 3. This is a one-time process in preparation for the LTR reporting and verification activities effective beginning in Compliance Period 4 for all POUs, or for POUs opting for voluntary early compliance with the LTR during Compliance Period 3.

CEC staff review and determine if a previously reported contract meets the criteria qualifying for the LTR based on the requirements outlined in section 3204 (d)(2)(A)-(C) of the *RPS POU Regulations* based on the following:

- Contract, ownership, or ownership agreement is 10 or more continuous years, measuring duration from delivery start date to the delivery end date.
- Contract procurement is from an RPS-certified facility or facilities.
- Contract procurement is continuous and specify non-zero quantities for the duration of the contract term.

CEC staff confirm that contracts satisfy additional criteria for contracts executed on or after July 1, 2020, based on the following:

1. Long-term contracts have reasonably consistent contracted-for quantities over the term of the contract, as specified in section 3204 (d)(2)(C)1.i.-v.

- 2. Contracts do not include no-cost, early termination clause(s) without penalty, fee, or other form of liquidated damages, as specified in section 3204 (d)(2)(C)2.
- 3. Defined output share or quantities of procurement or minimum pricing terms, as specified in section 3204 (d)(2)(C)3.

If inconsistencies are found during contract review, CEC staff may ask the POU for additional documentation to support the LTR classification of procurement claims. If documentation does not substantiate the LTR claims identified by the POU, CEC staff will reclassify procurement claims into the appropriate LTR classification based on the documentation provided.

Long-Term Requirement Results

For POUs opting for voluntary early compliance with the LTR for Compliance Period 3, CEC staff evaluates the LTR classification of procurement claims by matching procurement claims to verified contracts. CEC staff will share the preliminary results with the respective POU for review and confirmation. CEC staff considers any requests for changes to the findings and allows POUs to submit additional supporting documentation, as needed, to resolve discrepancies.

Scheduled Delivery for Facilities Not Interconnected to a California Balancing Authority

e-Tag Analysis

For procurement claims of PCC 1 and PCC 2 electricity products from RPS-certified facilities not interconnected to a California Balancing Authority (CBA), CEC staff verifies that procurement satisfies the scheduling requirements of the *RPS POU Regulations*.

To demonstrate that an electricity product procured from a facility that is not interconnected to a CBA meets the requirements for PCC 1 or PCC 2, the POU is required to submit e-Tag data. There are two processes for submitting e-Tag data for the verification of scheduled claims, one that is used when e-Tags are tracked in WREGIS and another when e-Tags are not tracked in WREGIS. For e-Tags tracked in WREGIS, WREGIS provides e-Tag data on the CA e-Tag Report¹⁷, which includes the information necessary to verify that the claim meets the scheduling requirement. When e-Tags are not tracked in WREGIS¹⁸, the POU must report the same information in the CA e-Tag Report directly to the CEC using the RPS Online System. This information includes the delivery start and stop date, generator (source point), point of delivery (load or sink point), and total MWh on the e-Tag, as well as the amount matched to the specific RPS ID or WREGIS certificate serial number of the claimed procurement.

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¹⁷ WREGIS updated its "Matched e-Tag Summary Report" to a format designed by Energy Commission staff. The new CA e-Tag Report became available on October 26, 2015 and is the new required report for submitting e-Tag data from WREGIS.

18 WREGIS provides information to verify scheduled delivery of energy into a CBA from out-of-state facilities. This service, which uses data from e-Tags to report scheduling information, became available in WREGIS in early 2009. However, WREGIS stakeholders identified a technical issue that precludes POUs from accessing the e-Tag in WREGIS if third-party importers schedule delivery into a CBA. Since these technical issues are beyond the control of the POU, Energy Commission staff allow submission of e-Tag information using an alternative method. For additional information, refer to the *Renewables Portfolio Standard Eligibility Guidebook, Ninth Edition (Revised)*.

CEC staff analyzes the e-Tag information provided to ensure that the source or "point of receipt" was located outside a CBA and within the WECC; the final sink/load center or "point of delivery" was located in a CBA; the amount of electricity scheduled was sufficient to cover the RPS claim amount; and the scheduled amount of electricity on the e-Tag is not also assigned to another LSE.

CEC staff will request POUs to provide randomly selected e-Tags, based on the number of claims reported for the compliance period, to audit the e-Tag information provided. If CEC staff identifies reporting issues such as identical e-Tags listed more than once, insufficient e-Tags to substantiate claims, or duplicate e-Tags reported with the same "Total MWh" and "Used MWh," CEC staff will work with POUs to resolve the issues through e-Tag form corrections and the submittal of additional e-Tags.

Hourly Analysis for PCC 1 Claims

For procurement claims of PCC 1 electricity products from facilities not interconnected to a CBA, the generation must be scheduled into a CBA using standard hourly or sub-hourly scheduling (not dynamic transfer). Hourly data must be submitted using the Hourly report found in the RPS Online System. To demonstrate that this requirement was satisfied, POUs are required to submit the hourly meter data and hourly scheduled amount for each hour that is claimed as PCC 1 procurement, in addition to the CA e-Tag Report. The amount eligible for PCC 1 is calculated by taking the lesser amount of the hourly meter or schedule amount. The eligible hourly PCC 1 amounts are then summed for the entire calendar year and compared with the POU's total PCC 1 procurement claims from the same facility and vintage year. If the procurement claims are equal to or less than the eligible PCC 1 amount, the entire claim may qualify as PCC 1. However, if the procurement claim exceeds the eligible PCC 1 amount, then the procurement claim amount in excess of the eligible PCC 1 amount will be reclassified as either PCC 2 or PCC 3.

e-Tag Analysis for PCC 2 Claims

To verify that enough electricity scheduled into a CBA was matched with the PCC 2 procurement claims using the submitted data, CEC staff sums the total annual amount of MWh as reported for each POU through e-Tags, and then compares that amount to the total annual PCC 2 procurement claim reported by each POU. This analysis ensures that a sufficient amount of scheduled substitute electricity was matched with the POU's PCC 2 procurement claims.

Exemptions and Adjustments

Qualifying Large Hydroelectric Generation

Consistent with section 3204(b)(3), a POU meeting the criteria listed in Public Utilities Code section 399.30(j) that meets its electricity demand with an average of at least 67 percent in the past 20 years from qualifying large hydroelectric generation may satisfy its RPS procurement requirements with qualifying large hydroelectric generation.

If a POU can show it meets the criteria for section 3204(b)(3), its procurement target is determined annually, rather than a compliance period basis, and further, it is exempt from the PBR.

CEC staff evaluates documentation submitted via the RPS Online System showing the POU received at least an average of 67 percent of its electricity demand in the 20 years preceding each compliance period from qualifying large hydroelectric generation. Once confirmed, the calculation for the POU's new procurement target is equal to the POU's soft target minus its qualifying large hydroelectric generation. This new procurement target is calculated for each calendar year in the compliance period.

Green Pricing Program Provisions

Pursuant to Public Utilities Code section 399.30(c)(4), beginning January 1, 2014, a POU may exclude from its total retail sales used to calculate its RPS procurement requirements any electricity generated by an eligible renewable energy resource that is credited to a participating customer pursuant to a voluntary green pricing or shared renewable generation program.

To apply for this reduction, any procurement credited to a participating customer pursuant to a voluntary green pricing or shared renewable generation program must be tracked and retired in WREGIS separate from any generation retired for the RPS. CEC staff verifies documentation including WREGIS reports, and data provided by other agencies to verify that any procurement assigned to a green pricing or shared renewable generation program is not also being used for RPS procurement or in other voluntary programs. CEC staff also verifies that any RECs reported for the Green Pricing Program reduction in retail sales meet the provisions for PCC 1 claims, as required by Public Utilities Code section 399.30 (c)(4). This analysis is described in the previous chapter.

CEC staff may request program documentation and sample contracts to confirm the validity of a POU claim for a reduction in retail sales.

Portfolio Balance Requirements

Public Utilities Code sections 399.16 and 399.30 (c)(3) require that POUs procure a "balanced portfolio of eligible renewable energy resources" consisting of three PCCs, which are further defined in section 3203 of the *RPS POU Regulations*. The portfolio balance requirements set a minimum level of electricity products that must be procured within a specific PCC and maximum level of electricity products that can be procured within another PCC.

POUs initially identify the PCC classification of each claim by retiring RECs into subaccounts specific to each PCC and each year of a compliance period. The CEC verifies that the claims for procurement of electricity products are classified into the correct PCCs, and subsequently calculates whether POUs have met the portfolio balance requirements.

The following provides an overview of the PCCs for procurement claims and the specific verification methods used by the CEC to verify the classification of procurement claims into either a PCC or as another category, including "count in full."

Definition of Portfolio Content Categories

Public Utilities Code section 399.16 and section 3202 of the *RPS POU Regulations* draw a distinction between ownership agreements and procurement contracts for electricity products executed before June 1, 2010, and ownership agreements and procurement contracts executed on or after this date as follows:

1) Electricity products procured under contracts or ownership agreements executed before June 1, 2010, that satisfy the conditions of Public Utilities Code section 399.16

- (d) are referred to as "count-in-full procurement" in accordance with section 3202 (a)(2) of the *RPS POU Regulations* and are identified as PCC 0.
- 2) Electricity products procured under contracts or ownership agreements executed on or after June 1, 2010, must satisfy one of the three portfolio content categories specified in Public Utilities Code section 399.16 (b) in accordance with section 3202 (a)(1) of the RPS POU Regulations, and are identified as PCCs 1, 2, and 3 (PCC 1, PCC 2, and PCC 3).

The following describes these four portfolio content categories, which are sometimes referred to as "buckets".

Procurement from Pre-June 2010 Contracts Count in Full (Portfolio Content Category 0 or PCC 0)

As mentioned above, electricity products procured under contracts or ownership agreements executed before June 1, 2010, from a facility that met the requirements to be certified according to the *RPS Eligibility Guidebook* in place at the time the contract was executed, in accordance with section 3202 (a)(2) of the *RPS POU Regulations*, are considered "count in full" and are not included in the calculation of the portfolio balance requirements.

For electricity products generated by a facility that is not interconnected to a CBA to qualify as "count in full," the electricity product must have been procured bundled, and the procurement contract must have included delivery terms. Electricity products qualifying as "count in full" are categorized as PCC 0 when retired in WREGIS, to distinguish them from PCC 1, 2, or 3.

Portfolio Content Category 1 (PCC 1 or Category 1)

PCC 1 RECs must be procured bundled¹⁹ from a facility that has its first point of interconnection with a CBA, a distribution facility used to serve end users within a CBA, or the electricity product must be scheduled into a CBA on an hourly or sub-hourly basis without substituting electricity from another source in accordance with section 3203 (a) of the *RPS POU Regulations*.

Portfolio Content Category 2 (PCC 2 or Category 2)

PCC 2 RECs must be procured bundled and scheduled into a CBA and firmed and shaped²⁰ with incremental electricity in accordance with section 3203 (b) of the *RPS POU Regulations*.

^{19 &}quot;Bundled" is defined by section 3201 of the *RPS POU Regulations* as an electricity product that includes both the electricity and the associated renewable energy credits from an eligible renewable energy resource.

^{20 &}quot;Firmed and shaped" refers to transactions where the bundled procurement from a renewable resource is matched with an equivalent amount of incremental energy from another facility, which is scheduled into a California Balancing Authority (CBA).

Portfolio Content Category 3 (PCC 3 or Category 3)

PCC 3 RECs are all electricity products that do not meet the criteria of PCC 1 or PCC 2, including the procurement of unbundled RECs, in accordance with section 3203 (c) of the *RPS POU Regulations*.

Other Pre-June 2010 RECs

Electricity products procured under contracts or ownership agreements executed before June 1, 2010, from a facility that did not meet the requirements to be RPS-certified according to the *RPS Eligibility Guidebook* in place at the time the contract or ownership agreement was executed are still classified into the portfolio content categories but are not included in the calculation of the portfolio balance requirements. Electricity products qualifying as either pre-June 1, 2010, PCC 1 or pre-June 1, 2010 PCC 3 are classified as either PCC 1 or PCC 3 when retired in WREGIS and are labeled during verification as "pre-June 2010" based on the associated contract or ownership agreement execution date.

Portfolio Content Category Classification Results

After CEC staff has completed verification of PCC classifications for each POU, CEC staff will share the preliminary results with the respective POU for review and confirmation. As discussed further below, CEC staff will notify each POU at this time that they have 90 days to provide the Final Compliance Report required by Section 3207 (d) of the *RPS POU Regulations*. CEC staff will additionally consider any requests for changes to the findings during this period and allow POUs to submit additional supporting documentation, as needed, to resolve discrepancies.

CHAPTER 4: Verification Level 3 – Procurement Requirement Calculations

The RPS includes three major procurement requirements for POUs for each compliance period: (1) the procurement target (also called the procurement quantity requirement), (2) the portfolio balance requirement (PBR), and (3) the long-term procurement requirement (LTR). However, the LTR has minimal applicability to CP 3 because it became effective for POUs commencing with CP 4, on January 1, 2021. While POUs may opt for voluntary early compliance with the LTR beginning January 1, 2017, only one POU opted to meet this requirement in CP 3.

This chapter provides definitions and describes the methods used to determine POU compliance with the RPS procurement requirements applicable in CP 3. This chapter also describes the exemptions to the procurement requirements for qualifying POUs, the verification process for retail sales, the calculation of excess procurement, and a process for the withdrawal of surplus RECs.

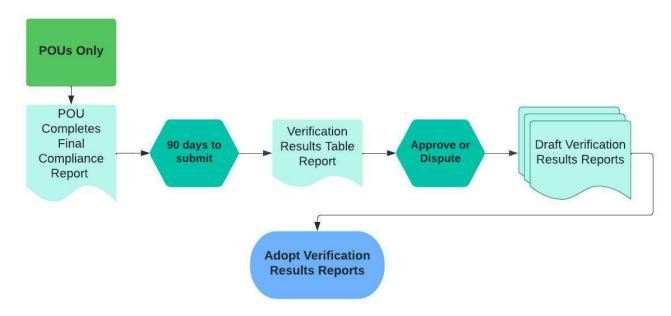


Figure 4: Level 3 Processes

Source: California Energy Commission staff

Procurement Targets

Public Utilities Code, section 399.30 (b) establishes multi-year compliance periods for the RPS, and section 399.30 (c) requires that POUs procure electricity products from eligible renewable

energy resources equal to 25 percent of retail sales by December 31, 2016; 33 percent by December 31, 2020; 44 percent by December 31, 2024; 52 percent by December 31, 2027; and 60 percent by December 31, 2030. The RPS procurement targets for each year within CPs 1 through 6 are specified in section 3204 (a) of the *RPS POU Regulations* and shown in Table 1 below. These "soft targets" are the percentage of retail sales for a single year within a compliance period that are used to calculate the RPS procurement target for that compliance period.

Table 1: Procurement Target Calculations by Compliance Period

Compliance Period	Procurement Target	
Compliance Period 1 (2011-2013)	2011 retail sales * 20% + 2012 retail sales * 20% +	
Compliance Period 2 (2014-2016)	2013 retail sales * 20% 2014 retail sales * 20% + 2015 retail sales * 20% + 2016 retail sales * 25%	
Compliance Period 3 (2017-2020)	2017 retail sales * 27% + 2018 retail sales * 29% + 2019 retail sales * 31% + 2020 retail sales * 33%	
Compliance Period 4 (2021-2024)	2021 retail sales * 35.75% + 2022 retail sales * 38.50% + 2023 retail sales * 41.25% + 2024 retail sales * 44%	
Compliance Period 5 (2025-2027)	2025 retail sales * 46% + 2026 retail sales * 50% + 2027 retail sales * 52%	
Compliance Period 6 (2028-2030)	2028 retail sales * 54.67% + 2029 retail sales * 57.33% + 2030 retail sales * 60%	

Source: California Energy Commission (based on information contained in the *Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities. July 2021.* ²¹ and Public Utilities Code section 399.30(c)).

Each POU's specific procurement target for each compliance period is calculated by multiplying the POU's annual retail sales for each year by the annual soft target for that year, rounding each year's value down to the closest MWh, and summing the values for all years within the compliance period.

²¹ https://efiling.energy.ca.gov/GetDocument.aspx?tn=238814&DocumentContentId=72218; See 20 CCR § 3204 (a).

Retail Sales

For POUs, retail sales are defined in section 3201 (ii) of the *RPS POU Regulations* as "sales of electricity by a POU to end-use customers and their tenants, measured in MWh. This does not include energy consumption by a POU, electricity used by a POU for water pumping, or electricity produced for onsite consumption (self-generation)."

CEC staff compares the annual retail sales reported to the CEC with the retail sales reported on the annual EIA 861 report. When the EIA 861 report does not have retail sales to compare for a POU, the retail sales reported in the annual Power Source Disclosure reporting is used for comparison. If the difference between annual retail sales submitted in RPS Annual Reports and the sales as reported in the EIA 861 Report or Power Source Disclosure reporting is greater than five percent, the POU is required to revise the retail sales reported or provide an explanation for CEC staff consideration. CEC staff may request additional documentation to support the determination of retail sales, and POUs may submit corrected retail sales amounts.

POU with Different Retail Sales Calculations

Section 3204(b)(1) of the *RPS POU Regulations* provides that, for a qualifying POU, the percentage of total retail sales upon which the RPS procurement target is calculated is based on the POU's average annual retail sales over the seven years preceding the end of each year within that compliance period. To qualify, a POU must:

- 1. Be a joint powers authority of districts established pursuant to state law on or before January 1, 2005;
- 2. Furnish electric services other than to residential customers; and
- 3. Be formed under the Irrigation District Law (Division 11, commencing with section 20500 of the Water Code).

Portfolio Balance Requirements Calculations

As specified in the *RPS POU Regulations* section 3204(c), the portfolio balance requirements are minimum and maximum percentages of specific PCC products that POUs are required to procure through contracts or ownership agreements executed on or after June 1, 2010, to apply toward the RPS procurement requirements. *RPS POU Regulations* section 3204(c) specifies the following portfolio balance requirements for PCC 1 and PCC 3:

Table 2: Portfolio Balance Requirements by Compliance Period

Compliance Period	PCC 1 Minimum	PCC 3 Maximum
Compliance Period 1 (2011-2013)	50%	25%
Compliance Period 2 (2014-2016)	65%	15%

Compliance Periods beginning	75%	10%
2017		

Source: The Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities. July 2021.

The minimum percentage of PCC 1 RECs procured pursuant to contracts or ownership agreements executed on or after June 1, 2010, that must be applied towards the RPS procurement target for each compliance period is calculated as:

(PCC 1 Minimum) × [(Lesser of: Target or Total RECs retired) – (Count in Full, Pre-June 2010 RECs Applied to Target, and Historic Carryover)]

The maximum percentage of PCC 3 RECs procured pursuant to contracts or ownership agreements executed on or after June 1, 2010, that are allowed to be applied towards the RPS procurement target for each compliance period is calculated as:

(PCC 3 Maximum) × [(Lesser of: Target or Total RECs retired) – (Count in Full, Pre-June 2010 RECs Applied to Target, and Historic Carryover)]

Long-Term Procurement Requirement

Beginning in CP 4 (2021-2024), all POUs are required to procure 65 percent of their procurement from contracts that are 10 or more years in duration. POUs may also opt for voluntary early compliance with the LTR in CP 3 (2017-2020). POUs opting for voluntary early compliance are subject to the new excess procurement rules as described in section 3206 (a)(1)(D) of the *RPS POU Regulations*. The LTR is calculated as:

65% × (Lesser of: Target or Total RECs retired)

Additional Verification Processes

POU with Special Exemptions

The *RPS POU Regulations* describe several specific exemptions and adjustments to the RPS procurement requirements. CEC staff factors in any allowed exemptions and adjustments when completing the analysis of procurement requirements. In many cases, a POU that wishes to apply an exemption or adjustment must notify the CEC of the intent to apply the allowed adjustment in their annual reporting and must provide supporting documentation to support the application. CEC staff will verify the application of any special provisions applied to meet procurement requirements and adjust calculations as needed.

Pursuant to the *RPS POU Regulations*, if a qualifying POU can show that it meets the criteria for one of the allowed exemptions, the procurement target will be adjusted or in some cases will be determined annually, instead of on a compliance period basis, and in some cases a POU will be exempt from the portfolio balance requirement. POUs that serve customers that are located within California, but not interconnected to a CBA, do not classify their procurement of

electricity products into the portfolio content categories; instead, they categorize them as either "count in full," "bundled", or "unbundled."

Historic Carryover

In accordance with section 3206 (a)(5) of the *RPS POU Regulations*, a POU that procured electricity from qualifying renewable energy resources from January 1, 2004, through December 31, 2010, that was in excess of its 2004-2010 RPS procurement targets that was not otherwise applied to another state RPS program, or a voluntary program may apply that excess amount to its procurement requirements for CP 1 or any subsequent compliance period. While this historic carryover procurement may count toward a POU's RPS procurement target, the historic carryover procurement is not categorized into a PCC and is not included in the calculation of the portfolio balance requirements.

Review of Applied or Claimed Excess Procurement

Section 3206 of the *RPS POU Regulations* specifies optional compliance measures that can be adopted and applied by a POU, including excess procurement. The excess procurement optional compliance measure provides that RPS-eligible RECs retired by a POU that are in excess of the POUs procurement target for a specific compliance period can be used to meet the procurement requirements for any future compliance period. Subdivision 3206 (a)(1) specifies criteria for excess procurement and describes the restrictions on excess procurement associated with PCC 3 electricity products and procurement under contracts of less than 10 years in duration.

Excess procurement is calculated by summing the total number of eligible RECs retired for the compliance period and subtracting:

- 1. The RECs applied toward the RPS procurement target.
- 2. Any retired PCC 3 RECs that are procured pursuant to a contract or ownership agreement executed on or after June 1, 2010 in excess of the PCC 3 maximum, as calculated for the portfolio balance requirements.
- 3. Any RECs retired during the compliance period that were procured pursuant to a contract or ownership agreement less than 10 years in duration that was also executed on or after June 1, 2010, or executed before June 1, 2010 from a facility that did not meet the requirements to be certified for the RPS when the contract was executed.

Withdrawing Surplus RECs for Future Use

In March 2016, the CEC adopted Resolution 16-0309-4A, which established a process for the CEC's Executive Director to allow POUs with surplus RECs, in specific circumstances, to withdraw the RECs from one compliance period and use them in the next compliance period. This process was incorporated into Chapter 7 section D of the subsequent *RPS Eligibility Guidebook*.

Final Compliance Report Filing

The POU will have 90 days to submit the Final Compliance Report after CEC staff releases draft verification results for the compliance period (also called "PCC Reports"), ²² as provided by Section 3207 (d) of the *RPS POU Regulations*. The Final Compliance Report must include the following information:

- The POU's procurement target for the compliance period.
- The amount of verified procurement retired that the POU applies towards the RPS procurement requirements, by PCC, and LTR classifications, if applicable.
- The amount of excess procurement accrued in previous compliance periods and/or historic carryover the POU applies towards the RPS procurement requirements, by PCC, and LTR classifications, if applicable.
- The amount of excess procurement accrued during the compliance period, that may be applied in future compliance periods, reported by PCC and LTR classifications, if applicable.
- If necessary, application of optional compliance measures such as delay of timely compliance, cost limitations, and/or portfolio balance requirement reduction for the compliance period, and all the required documentation justifying the POU's application of optional compliance measures including but not limited to the POU's adopted renewable energy resource procurement plan(s) and enforcement program(s) in effect during the compliance period.

Final POU Verification Results

The results of all analyses, including the information submitted in the Final Compliance Report, are compiled for each POU in a preliminary verification results report and published to the Compliance Period 3 docket, 21-RPS-01.²³ All verification results reports are adopted by the CEC at a regularly scheduled business meeting and subsequently used for compliance and enforcement activities.

Each POU's verification results report for a given compliance period includes the following:

- The amount of eligible renewable energy procured by the POU.
- The portfolio content category classification of eligible renewable energy.
- The POU's procurement target and portfolio balance requirements.
- Any optional compliance measures being applied by the POU.

²² Along with each draft PCC Report, CEC staff will notify each POU of their obligation to provide a Final Compliance Report through the RPS Online System within 90 days.

²³ https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-RPS-01

 The POU's additional procurement above requirements, which may be applied to a future compliance period.

When adopting each verification results report, the CEC finds that the procurement claim amounts listed in the report are eligible for the RPS, consistent with the RPS certification and procurement rules and requirements specified in the *RPS Eligibility Guidebook* and *RPS POU Regulations* and should therefore count toward meeting the POU's RPS procurement requirements.

CHAPTER 5: POU Compliance Determinations

Compliance Process

One of the CEC's duties is to determine POU compliance with the RPS. The *RPS POU Regulations* establish the rules and procedures by which the CEC will assess a POU's procurement actions and determine whether those actions meet the RPS procurement requirements. Each POU verification report will contain the results of the POU's claims eligibility, portfolio content category analyses, procurement requirement calculations, the POU's procurement for the compliance period, and additional information. After each POU Verification Results Report is adopted, CEC staff will begin the process of determining if a POU is in compliance with the RPS statutes and *RPS POU Regulations*.

For POUs that did not meet the procurement target or portfolio balance requirement for a given compliance period, the CEC will evaluate optional compliance measures as applied by each POU and reported in the POU's Final Compliance Report. The available optional compliance measures are detailed in the *RPS POU Regulations* and include:

- 1. Cost limitations for procurement expenditures.
- 2. Conditions that allow for delaying timely compliance.
- 3. Portfolio balance requirement reduction for the reduction of the PCC 1 portfolio balance requirement.

The CEC's Executive Director will make a compliance determination informed by the verification results presented in each POU's verification report and, if applicable, the application of optional compliance measures by the POU. The Executive Director will issue a letter to each POU documenting the RPS compliance determination. If the Executive Director determines a POU is not in compliance with the RPS requirements, the Executive Director may direct CEC staff to draft and issue a complaint against the POU to be heard by the CEC in accordance with sections 3208 and 1240 of the *RPS POU Regulations*. If non-compliance is found, CEC staff shall forward a notice of violation to the CARB for assessment of penalties when applicable.

Glossary

CPUC

e-Tag

EIA

LSE

LTR

CARB — California Air Resources Board.

CBA — California balancing authority — means a balancing authority primarily located in California with more than 50 percent of its enduse electric load physically located within the political boundaries of California. This includes balancing authority areas operated by the California Independent System Operator Corporation, Los Angeles Department of Water and Power, Balancing Authority of Northern California, Imperial Irrigation District, and Turlock Irrigation District.

 California Public Utilities Commission – an agency that regulates utilities in California, including electric power, telecommunications, natural gas, and water companies. CEC staff and CPUC staff have special status to work collaboratively and participate in confidential deliberations concerning decision-making on the implementation of the Renewables Portfolio Standard.

— Consistent with 20 CCR section 3201 (t), an electronic record that contains the details of a transaction to transfer energy from a source point to a sink where the energy is scheduled for transmission across one or more balancing authority area boundaries. For purposes of this definition, "source point" refers to the generation source of the energy, and "sink" refers to the balancing authority in which the electric load is located. Previously referred to as a "NERC e-Tag."

U.S. Energy Information Administration – part of the U.S.
 Department of Energy, and responsible for collecting and analyzing energy information. EIA programs cover data on coal, petroleum, natural gas, electric, renewable and nuclear energy.

 Load-serving entity – an entity that provides electric service to end users and wholesale customers. This includes investor-owned utilities, local publicly owned electric utilities, community choice aggregators, and electric service providers.

— Long Term Procurement Requirement – established by SB 350, beginning January 1, 2021, that at least 65 percent of the procurement counted towards a POU's RPS procurement requirement each compliance period must come from contracts of ten years or more in duration, or through ownership or ownership agreements for eligible renewable energy resources, as required by Public Utilities Code section 399.13 (b). For CP 3, which concluded

December 31, 2020, POUs have a more limited set of LTR reporting obligations, as per 20 CCR section 3207 (c)(5)(B)1.i.

MMBtu

 One million British thermal units (BTU) – a measure of the energy content in fuel, and is used in the power, steam generation, heating and air conditioning industries.

MW

 Megawatt – 1,000 kilowatts. One megawatt is about the amount of power required to meet the peak demand of a large hotel.

MWh

 Megawatt hour – a unit of measure describing the amount of electricity consumed over time. It means 1 megawatt of electricity supplied for one hour.

PCC

 Portfolio Content Category - refers to one of three categories of electricity products procured from an eligible renewable energy resource, as specified in 20 CCR section 3203.

POU

Local publicly owned electric utility – as defined in Public Utilities Code section 224.3, a municipality or municipal corporation operating as a "public utility" furnishing electric service as provided in section 10001 of the Public Utilities Code, a municipal utility district furnishing electric service formed pursuant to Division 6 (commencing with section 11501 of the Public Utilities Code), a public utility district furnishing electric services formed pursuant to the Public Utility District Act set forth in Division 7 (commencing with section 15501 of the Public Utilities Code), an irrigation district furnishing electric services formed pursuant to the Irrigation District Law set forth in Division 11 (commencing with section 20500) of the Water Code, or a joint powers authority that includes one or more of these agencies and that owns generation or transmission facilities, or furnishes electric services over its owners' or its members' electric distribution system.

REC

 Renewable Energy Credit – as defined in Public Utilities Code section 399.12, Subdivision (h), a certificate of proof, issued through the accounting system established by the Energy Commission under section 399.25, that one unit of electricity was generated and delivered by an eligible renewable energy resource.

Retail seller —

- As defined in Public Utilities Code section 399.12, subdivision (j), an entity engaged in the retail sale of electricity to end-use customers located within the state. Retail sellers include electrical corporations (as defined in Public Utilities Code section 218), community choice aggregators (as defined in Public Utilities Code section 331.1), and electric service providers (as defined in Public Utilities Code section

218.3). Retail sellers do not include local publicly owned electric utilities, entities employing cogeneration technology or producing power consistent with Public Utilities Code section 218(b), or the Department of Water Resources acting within its capacity pursuant to Division 27 of the Water Code (commencing with section 80000).

RPS

California's Renewables Portfolio Standard – as established in Public Utilities Code section 399.11, et seq. and defined in Public Utilities Code section 399.12, Subdivision (i), is the specified percentage of electricity generated by eligible renewable energy resources that a retail seller or local publicly owned electric utility is required to procure under Public Utilities Code section 399.11 et seq.

SB

Senate Bill – legislation that originates in the California State Senate.

Vintage

The month and year that a megawatt hour of energy was generated.

WECC

— Western Electricity Coordinating Council – the electricity coordinating council as defined in Public Utilities Code section 399.12 (k). WECC is one of several regional electric reliability councils with delegated authority under the North American Electric Reliability Corporation and the regional entity responsible for coordinating and promoting bulk electric system reliability in the Western Interconnection serving all or part of the 14 western states and portions of Mexico (in northern Baja California) and Canada (in British Columbia and Alberta). The western states include Arizona, California, Colorado, Idaho, Montana, Nebraska, Nevada, New Mexico, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

WREGIS

Western Renewable Energy Generation Information System – an independent, renewable energy tracking system implemented for the region covered by the WECC and operated by WECC employees.
 WREGIS electronically tracks RECs (Renewable Energy Credit or WREGIS Certificates) representing renewable energy generation and, beginning with 2008 data, is used for RPS reporting and verification by the CEC.