

Riverside Public Utilities

Updated 2018 Renewable Energy Procurement Policy

1. Introduction

The recently adopted SB 350 legislation and the associated California Energy Commission (CEC) SB X1-2 derived RPS regulations requires that Riverside Public Utilities (RPU) adopt, implement and periodically update a Renewable Energy Resource Procurement Policy that complies with the Renewable Portfolio Standards (RPS) incorporated into Section 399.30 of the Public Utilities Code. Additionally, RPU must submit this Procurement Policy to the CEC within 30 days of its official adoption. Pursuant to this legislative mandate, RPU is adopting this “Updated 2018 Renewable Energy Procurement Policy”. This RPU Procurement Policy supersedes all prior Procurement Policy documents and guidelines issued by RPU.

1.1 Report Outline and Contents

This report summarizes RPU's current and pertinent renewable energy procurement policy guidelines. These guidelines are designed to meet or exceed all of the renewable energy procurement goals mandated by SB X1-2 and SB 350 legislation, as outlined in the CEC RPS Enforcement Guidelines. The following RPS topics are specifically addressed:

- Portfolio Content Categories
- Procurement Requirements
- Long-term Contracting Requirements
- Historic Carryover Credits
- Excess Procurement Rules and Measures
- Voluntary Green Pricing Tariffs
- Delay of Timely Compliance Rules
- Other Optional Compliance Measures

Additionally, the latter part of this report briefly summarizes how the current renewable resources in Riverside's power resource portfolio are being used to meet these RPS mandates.

2. Portfolio Content Categories

Under SB X1-2 and SB 350, all CA Publicly Owned Utilities (POUs) are required to meet both minimum RPS procurement requirements and minimum portfolio content category requirements. All renewable generation assets either contracted for or built after June 1, 2010 must be categorized into one of three distinct portfolio content categories, with Portfolio Content Category 1 representing the preferred category of assets that load serving entities should contract for. At a very high level, categories 1, 2 and 3 represent in-state renewable resources, out-of-state (firmed and shaped) renewable resources, and tradable renewable energy credits (TREC), respectively.

More formal definitions for each portfolio content category are provided below. Interested readers should refer to the appropriate CEC technical publications for precise technical definitions.¹

2.1 Portfolio Content Category 1

Portfolio Content Category 1 (PCC-1) electricity products must be procured bundled to be classified as PCC-1, and the POU may not resell the underlying electricity from the electricity product back to the eligible renewable energy resource from which the electricity product was procured. These products must have a first point of interconnection to the WECC transmission grid. PCC-1 electricity products must also meet one of the following criteria:

- Electricity products must be generated by an eligible renewable energy resource that has its first point of interconnection either within the metered boundaries of one of the following five California balancing authority areas: CAISO, LADWP, BANC, IID or TID, or a distribution system used to serve end users within the metered boundaries of one of these five California balancing authority areas.
- Electricity products from the eligible renewable energy resource with a first point of interconnection outside the metered boundaries of a California balancing authority must be scheduled into a California balancing authority using either firm transmission without substituting electricity from another source, or via a dynamic transfer agreement (between balancing authority areas). Under either scenario, this electricity must be scheduled or transferred into a California balancing authority on an hourly or sub-hourly basis, and the POU's

¹ Refer to *Enforcement Procedures for the Renewable Portfolio Standard for Local Publicly Owned Electric Utilities*, April 2016, as well as *Amendments to Regulations Specifying Enforcement Procedures for the Renewables Portfolio Standard for Local Publicly Owned Electric Utilities (Pre-Rulemaking Draft)*, August 2016.

governing board or other authority must have approved the agreement before the electricity is generated.

2.2 Portfolio Content Category 2

Portfolio Content Category 2 (PCC-2) electricity products must be generated by an eligible renewable energy resource that is interconnected to a transmission network within the WECC service territory, and the electricity must be matched with incremental electricity that is scheduled into a California balancing authority. PCC-2 electricity products must be procured bundled and must meet all of the following criteria:

- The first point of interconnection to the WECC transmission grid for both the eligible renewable energy resource and the resource providing the incremental electricity must be located outside the metered boundaries of a California balancing authority area.
- The incremental electricity used to match the electricity from the eligible renewable energy resource must be incremental to the POU. More specifically, “incremental electricity” means electricity that is not in the portfolio of the POU claiming the electricity products for RPS compliance prior to the date the contract or ownership agreement for the electricity products from the eligible renewable energy resource, with which the incremental electricity is being matched, is executed by the POU or other authority, as delegated by the POU governing board.
- The contract or ownership agreement for the incremental electricity is executed by the governing board or other authority, as delegated by the POU governing board, at the same time or after the contract or ownership agreement for the electricity products from the eligible renewable energy resource is executed.
- The incremental electricity must be scheduled into the California balancing authority within the same calendar year as the electricity from the eligible renewable energy resource is generated.
- The electricity from the eligible renewable energy resource must be available to be procured by the POU and may not be sold back to that resource.

2.3 Portfolio Content Category 3

All unbundled renewable energy credits and other electricity products procured from eligible renewable energy resources located within the WECC transmission grid that do not meet the requirements of either a PCC-1 or PCC-2 product are deemed to fall within Portfolio Content Category 3 (PCC-3).

3. RPS Procurement Requirements

RPU's renewable energy procurement targets are defined below for Compliance Periods 1 (2011-2013), 2 (2014-2016), 3 (2017-2020), 4 (2021-2024), 5 (2025-2027) and 6 (2028-2030). These targets meet or exceed all of the minimum mandates specified in SBX1-2 and SB 350, respectively.

3.1 Definitions

EP_x = Electricity products retired for the specified year X; this may include excess procurement and historic carryover that the POU has chosen to apply to the compliance period containing year X

RS_x = Total retail sales made by the POU for the specified year X

3.2 Riverside Public Utilities Historical RPS Procurement Targets

For the compliance period beginning January 1, 2011, and ending December 31, 2013, a POU shall demonstrate it has procured electricity products sufficient to meet or exceed an average of 20 percent of its retail sales over the three calendar years in the compliance period. The numerical expression of this requirement is:

$$(EP_{2011} + EP_{2012} + EP_{2013}) \geq 0.200(RS_{2011} + RS_{2012} + RS_{2013})$$

RPU has successfully met this procurement target and the CEC has deemed RPU to be compliant.

For the compliance period beginning January 1, 2014, and ending December 31, 2016, a POU shall demonstrate it has procured electricity products within that period sufficient to meet or exceed the sum of 20 percent of its 2014 retail sales, 20 percent of its 2015 retail sales, and 25 percent of its 2016 retail sales. The numerical expression of this requirement is:

$$(EP_{2014} + EP_{2015} + EP_{2016}) \geq 0.200(RS_{2014}) + 0.200(RS_{2015}) + 0.250(RS_{2016})$$

RPU has successfully met this procurement target. The CEC is currently in the process of reviewing the 2014-2016 RPS claims submitted by the utility.

3.3 RPU's Current and Future RPS Procurement Targets

For the compliance period beginning January 1, 2017, and ending December 31, 2020, a POU shall demonstrate it has procured electricity products within that period sufficient to meet or exceed the sum of 27 percent of its 2017 retail sales, 29 percent of its 2018 retail sales, 31 percent of its 2019 retail sales, and 33 percent of its 2020 retail sales. The numerical expression of this requirement is:

$$(EP_{2017} + EP_{2018} + EP_{2019} + EP_{2020}) \geq 0.270(RS_{2017}) + 0.290(RS_{2018}) + 0.310(RS_{2019}) + 0.330(RS_{2020})$$

For the compliance period beginning January 1, 2021, and ending December 31, 2024, a POU shall demonstrate it has procured electricity products within that period sufficient to meet or exceed the sum of 34.8 percent of its 2021 retail sales, 36.5 percent of its 2022 retail sales, 38.3 percent of its 2023 retail sales, and 40.0 percent of its 2024 retail sales. The numerical expression of this requirement is:

$$(EP_{2021} + EP_{2022} + EP_{2023} + EP_{2024}) \geq 0.348(RS_{2021}) + 0.365(RS_{2022}) + 0.383(RS_{2023}) + 0.400(RS_{2024})$$

For the compliance period beginning January 1, 2025, and ending December 31, 2027, a POU shall demonstrate it has procured electricity products within that period sufficient to meet or exceed the sum of 41.7 percent of its 2025 retail sales, 43.3 percent of its 2026 retail sales, and 45.0 percent of its 2027 retail sales. The numerical expression of this requirement is:

$$(EP_{2025} + EP_{2026} + EP_{2027}) \geq 0.417(RS_{2025}) + 0.433(RS_{2026}) + 0.450(RS_{2027})$$

For the compliance period beginning January 1, 2028, and ending December 31, 2030, a POU shall demonstrate it has procured electricity products within that period sufficient to meet or exceed the sum of 46.7 percent of its 2028 retail sales, 48.3 percent of its 2029 retail sales, and 50.0 percent of its 2030 retail sales. The numerical expression of this requirement is:

$$(EP_{2028} + EP_{2029} + EP_{2030}) \geq 0.467(RS_{2028}) + 0.483(RS_{2029}) + 0.500(RS_{2030})$$

3.4 Portfolio Content Category Requirements

In addition to the section 3.3 procurement requirements, for all compliance periods on/after January 1, 2017, RPU must ensure that at least 75% of all of the renewable electricity products procured pursuant to a contract agreement executed on or after June 1, 2010 and retired during each compliance period meet the definition of a PCC-1 product. Additionally, RPU must ensure that no more than 10% of all of the renewable electricity products procured on or after June 1, 2010 and retired during each compliance period meet the definition of a PCC-3 product.

3.5 Long-term Contracting Requirement

In addition to the section 3.3 procurement and section 3.4 content category requirements, for all compliance periods on/after January 1, 2017, RPU must ensure that at least 65% of all of the renewable energy credits (RECs) applied towards the utilities procurement target for each compliance period shall be from contracts of 10 years or more in duration or from ownership agreements. Note that if any electricity product is procured under a contract that has been amended to extend the end date of the contract, the duration of the amended contract will be calculated from the original contract start date to the amended contract end date.

4. Historic Carryover Credits

In August 2015 the CEC notified RPU that Riverside's claims for 769,145 MWh of Historic Carryover credits had been officially reviewed and approved by staff. Riverside had applied for these credits in late 2012, based on the utility's early efforts towards procuring excess renewable energy in the 2002-2010 timeframe. In January 2017 the CEC issued and adopted the POU Renewables Portfolio Standard Verification Results for Compliance Period 1. These results officially deemed Riverside fully RPS compliant for Compliance Period 1 and also awarded the 769,145 MWh of Historic Carryover credits to the utility.

Historic Carryover credits can be used on a one-for-one basis to reduce a utility's minimum compliance period procurement targets. If a utility is already able to fully meet its compliance period procurement targets, these credits can still be applied and used to create additional Excess Procurement credits (see section 5), subject to the utility satisfying all applicable Excess Procurement accounting rules and regulations. As such, RPU reserves the right to apply some or all of its 769,145 MWh of Historic Carryover credits to its current or future compliance period procurement targets, and in doing so generate additional Excess Procurement credits for later use.

5. Excess Procurement Rules and Measures

Excess Procurement credits can be generated when a utility retires more RECs than are needed to fully meet all of the renewable energy procurement targets in a specific compliance period. Credits that are generated by the utility are subject to CEC certification; once certified, these excess procurement credits can be used by the utility to help meet the renewable energy procurement targets associated with future compliance periods.

5.1 RPU Adopted Excess Procurement Measures

RPU hereby adopts the following Excess Procurement measures, so that the utility may apply excess procurement credits generated in any compliance period on/after Compliance Period 3 to any subsequent compliance period. The generation of any Excess Procurement credits will be subject to the following limitations:

- No retired RECs associated with electricity products that are classified as PCC-2 or PCC-3 products may be counted as excess procurement.
- All retired PCC-2 and PCC-3 RECs that exceed the maximum limits for PCC-2 and PCC-3 products in a compliance period must be subtracted from the calculation of Excess Procurement.

For clarity, Excess Procurement shall be calculated as follows:

$$\text{Excess Procurement} = (EP_x) - (RPS_x + S2_x + S3_x)$$

where

EP_x = Electricity products retired for the RPS procurement target for compliance period X.

RPS_x = The RPS procurement target calculated in section 3.3 for compliance period X.

$S2_x$ = Retired PCC-2 RECs in excess of the maximum allowable amount for compliance period X.

$S3_x$ = Retired PCC-3 RECs in excess of the maximum allowable amount for compliance period X.

6. Voluntary Green Pricing Tariffs

Beginning January 1, 2014 a POU may exclude from its retail sales the MWhs generated by eligible renewable energy resources that are credited to customers who voluntarily elect to participate in a “green energy” tariff offered by that POU.

6.1 RPU Proposal to Offer a 100% Renewable Energy Tariff Option

RPU hereby reserves the right to offer a 100% renewable energy tariff (RET) option to its customers, either as an optional tariff in the utility's 2018 General Rate Case proposal or at some future date. Under the 100% RET option, RPU customers will be able to voluntarily elect to purchase and receive 100% renewable energy in place of the utility's current energy mix. This 100% RET option shall satisfy the following requirements:

- The renewable electricity products credited to the customer and excluded from retail sales shall consist solely of PCC-1 products.
- Any RECs associated with the electricity products credited to a participating customer under the program shall not be used by the utility for compliance with its own RPS procurement requirements. Additionally, these RECs shall be retired on behalf of the participating customer in WREGIS and shall not be further sold or monetized for any purpose. (Customers who participate in this 100% RET option and maintain their own WREGIS accounts may elect to have RPU retire their RECs into their own WREGIS accounts by submitting a written request to the utility.)
- The electricity products excluded from retail sales shall be procured by RPU from eligible renewable energy resources that are located in the greater Southern California region.

7. Delay of Timely Compliance

From time to time, due to unforeseen events beyond Riverside's control, RPU may not meet the RPS procurement targets specified in section 3. Riverside hereby adopts the following Delay of Timely Compliance rules consistent with SB X1-2 and SB 350 RPS mandates and CEC enforcement regulations for such events. Valid Delay of Timely Compliance events can be briefly summarized as follows:

- Inadequate transmission capacity exists to allow for the contracted amount of electricity to be delivered from an eligible renewable energy resource using the current operational protocols of the CAISO balancing authority.
- Permitting, interconnection, or other system-related circumstances beyond the control of Riverside have delayed the Commercial Operation Date of a contracted, eligible renewable energy resource.
- Unanticipated curtailment of eligible renewable energy resources was necessary to address the needs of a balancing authority.

8. Other Optional Compliance Measures

On November 18, 2011 and December 13, 2011, Riverside’s Public Utilities Board and City Council, respectively, formally adopted Riverside Public Utilities SB X1-2 Enforcement Program. This Enforcement Program contains additional cost limitations associated with this RPS Procurement Policy. Riverside reserves the right to update both this Procurement Policy and the associated Enforcement Program as needed, in order to comply with future statutory and/or regulatory RPS mandates.

9. RPU RPS Progress to Date

Riverside has been actively contracting for new, cost effective, long-term renewable resources with expected commercial operation dates in the 2013-2019 timeframe. As of December 31, 2016, the City of Riverside had formally approved nine new long-term PCC-1 renewable resource contracts. Each of these additional contracts were identified and selected for RPU’s renewable portfolio using a best-fit, least-cost procurement strategy with the goal of exceeding a 33% RPS mandate by 2020.

As shown in Figure 1 on the next page, these additional PCC-1 resources should supply Riverside with enough new renewable energy to significantly exceed all of its minimum renewable energy procurement, portfolio content category and contracting length mandates well beyond 2020. More specifically, provided these contracts continue to perform as expected, Riverside expects to remain fully compliant with all current SB 350 RPS regulations through 2024 (i.e., through Compliance Period 4), before needing to rely on any excess procurement credits. Additionally, Riverside expects to receive excess PCC-1 renewable energy from 2017 through 2023 under current SB 350 compliance obligations. This energy will most likely be “banked” as excess procurement for use in later compliance years, but the utility reserves the right to instead monetize some or all of this excess procurement if such activities are in the best interest of RPU ratepayers.

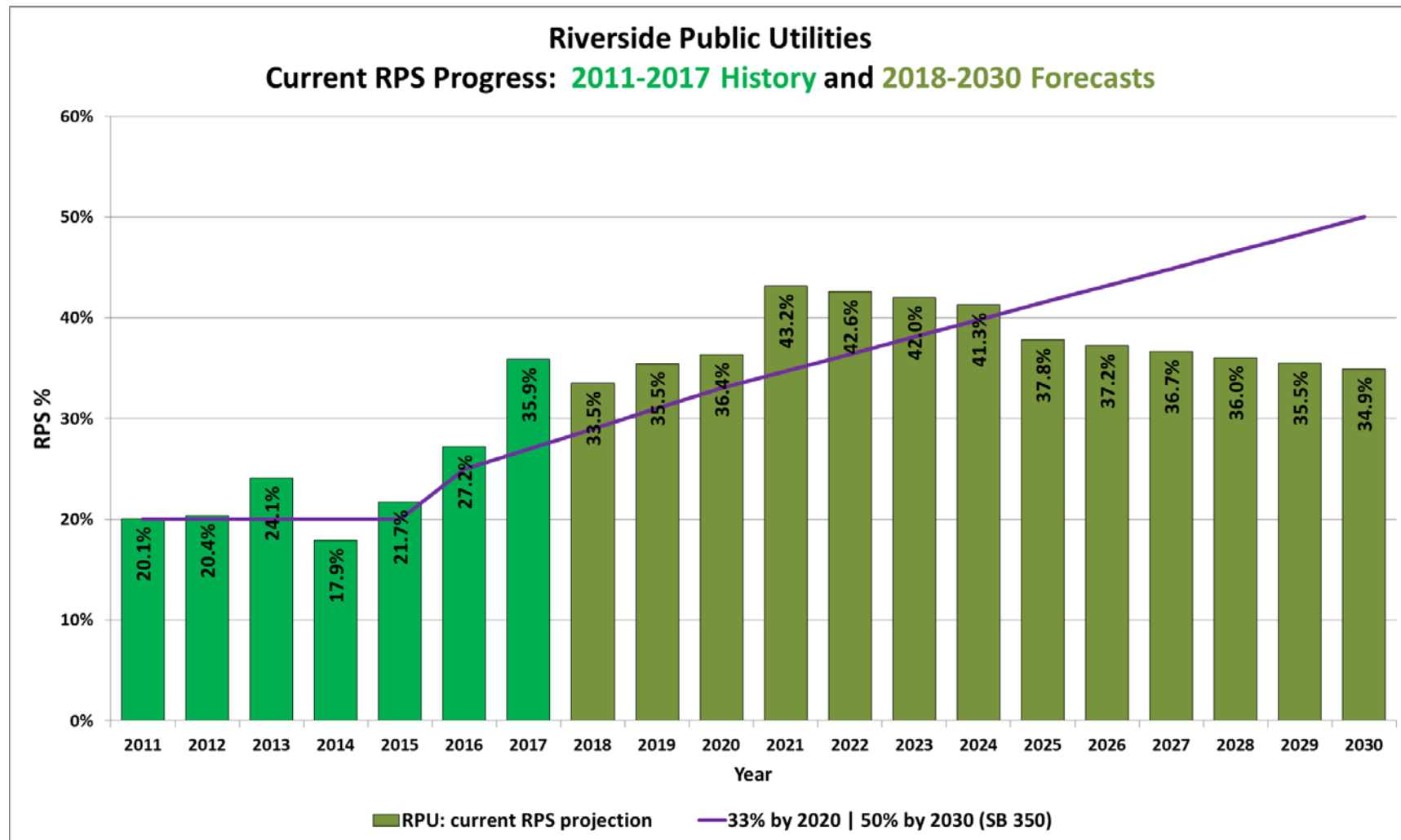


Figure 1. Riverside’s achieved (2011-2017) and forecasted (2018-2030) renewable energy amounts, by year. Note that the overlaid purple line defines the current CA (SB 350) RPS procurement mandate.