



RENEWABLES PORTFOLIO STANDARD Quarterly Report



4th Quarter 2013



I. ABOUT THE RPS AND THIS REPORT

California is aggressively bringing renewable generation online to meet its Renewables Portfolio Standard (RPS), one of the most ambitious renewable standards in the country.

California's RPS, codified in Public Utilities Code §§ 399.11 – 399.32¹, requires retail sellers such as: investor-owned utilities (IOUs), electric service providers (ESPs) and community choice aggregators (CCAs) regulated by the California Public Utilities Commission (CPUC) to procure 33% of their annual retail sales from eligible renewable sources by 2020. The RPS also requires retail sellers to achieve intermediate RPS targets of 20% from 2011-2013 and of 25% from 2014-2016. The CPUC and the California Energy Commission (CEC) are jointly responsible for implementing California's 33% RPS program.

While the RPS program is the primary vehicle for new utility-scale renewable energy development in California, there are other programs that stimulate development of customer-side renewable generation. The California Solar Initiative (CSI) and Self-Generation Incentive Program (SGIP) provide incentives for customers to install renewable distributed generation technologies that directly serve their on-site load.² The electricity generated from power systems installed through CSI and SGIP may contribute to the RPS provided they meet RPS eligibility requirements established by the CEC.³ In addition, electricity generated by these facilities indirectly contributes to the RPS by reducing demand when serving customer load.

The Commission issues this report on the RPS program every quarter pursuant to the 2006 Budget Act Supplemental Report Item 8660-001-0462. This report focuses on California's three large IOUs: Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E). These IOUs currently provide approximately 68% of the state's electric retail sales, and analyzing this data provides significant insight into the state's RPS progress.

¹ California's 20% RPS by 2020 was established in 2002 under Senate Bill (SB) 1078 (Sher) and modified in 2006 under SB 107 (Simitian). SB 2 of the First Extraordinary Session (SB 2 (1x)) (Simitian) (Stats. 2011, ch.1) expanded the mandate to a 33% RPS by 2020.

² More information on the CSI and SGIP can be found on the CPUC's website: <http://www.cpuc.ca.gov/PUC/energy/DistGen/>.

³ In the case of renewable customer generation, the system-owner owns the renewable energy credits (RECs), but could sell the RECs to retail sellers to contribute to the RPS targets.

II. EXECUTIVE SUMMARY

Status of RPS Procurement

- On August 1, 2013, the large IOUs reported in their Preliminary 2012 Annual RPS Compliance Reports that they served 19.6% of their retail electric load with RPS-eligible generation in 2012. PG&E served 19.04% of its 2012 retail sales with RPS-eligible renewable energy, SCE served 19.9%, and SDG&E served 20.31%. Pursuant to the procurement requirements in SB 2 (1X), the IOUs must average 20% renewable energy during the first RPS compliance period (2011-13).
- Since 2003, 7,267 megawatts (MW) of renewable generation capacity have achieved commercial operation under the RPS program. 2,769 MW of renewable generation capacity came online in 2013 and 2,721 MW is scheduled to come online in 2014.
- In 2013, the IOUs submitted 76 contracts for CPUC approval, representing 664 MW of renewable generation capacity.
- In 2013, the CPUC approved 134 contracts, representing 1,013 MW of renewable generation capacity.

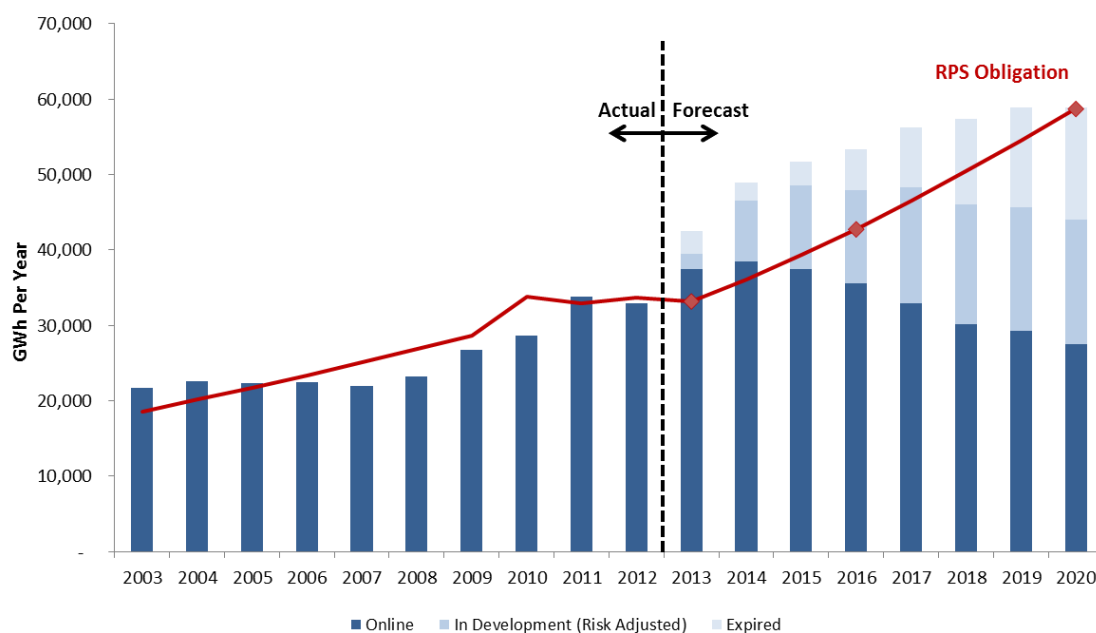
III. PROGRESS TOWARDS A 33% RPS BY 2020

Progress towards a 33% RPS

California is aggressively procuring renewable generation to ensure that 33% of retail sales are procured from renewable energy resources by 2020. The figure below shows retail sellers’ progress toward meeting that mandate, on a risk adjusted basis.⁴ At the close of 2013, California is on track to meet its interim requirement of 25% renewables by 2016, and is well-positioned to meet 33% by 2020.

While the figure below forecasts a surplus of renewable generation for compliance period (CP) 2 and a deficit for CP 3, it should be noted that the IOUs have the option to bank surplus CP 2 RPS procurement and apply it toward meeting RPS obligations in CP 3 or beyond.⁵ IOUs are also planning for additional RPS procurement in CP 2, CP 3, and post-2020 in order to meet and maintain the 33% RPS requirement.

Figure 1: IOU Progress Towards 33% Renewables, Actual and Forecasted by Year^{6,7}



Source: California Public Utilities Commission, August 2013

⁴ Values are risk adjusted to account for a certain degree of project failure. In its 2013 RPS Procurement Plan each IOU assumes a failure rate for new projects not yet online: PG&E assumes a 0% annual failure rate, SCE assumes a 37-40% annual failure rate, and SDG&E assumes a 10-23% annual failure rate.

⁵ CP 1 is from 2011 – 2013, CP 2 is from 2014 – 2016, CP 3 is from 2017 – 2020, and there is an ongoing compliance obligation to maintain 33% after 2020.

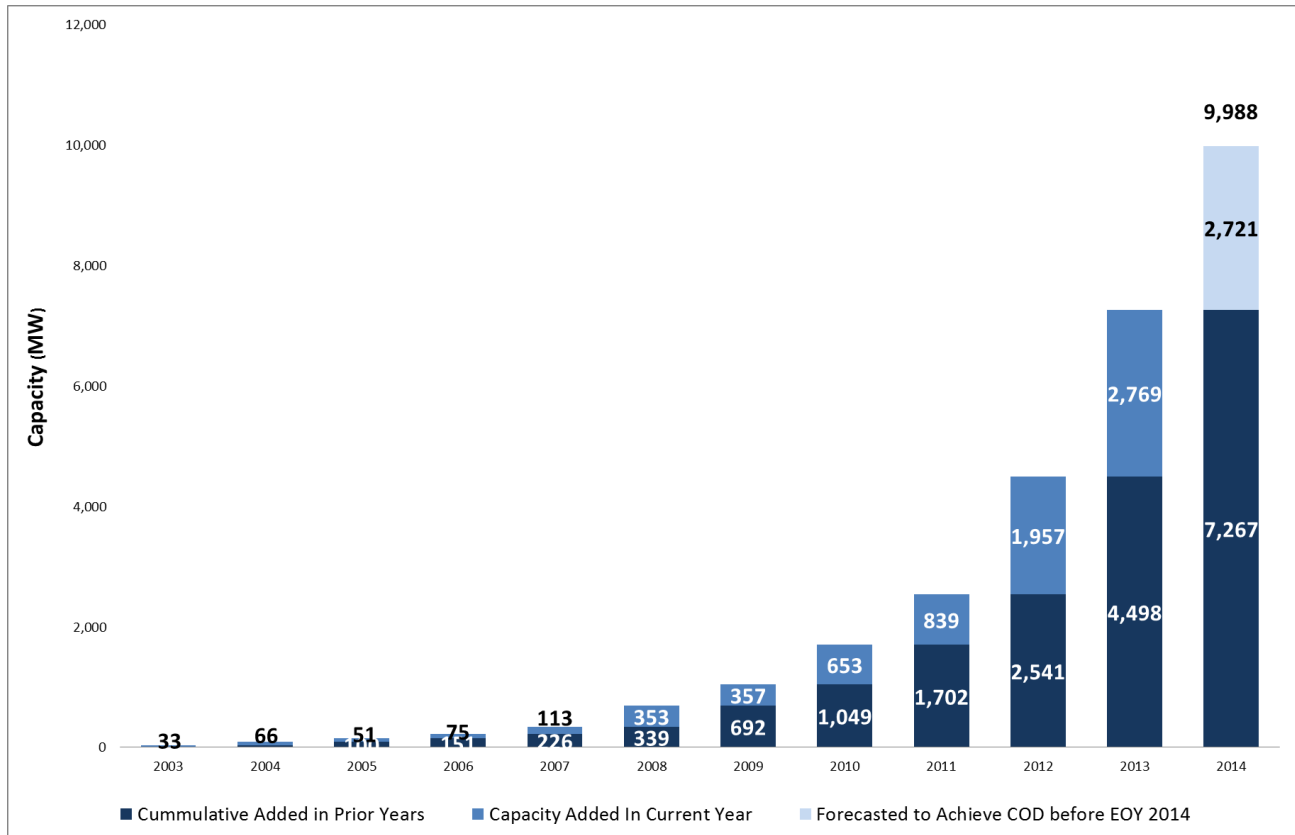
⁶ Forecast does not assume re-contracting of contracts whose terms expire during the RPS compliance periods.

⁷ Data Source: 2003-2010 data sourced from the Provisional 20% RPS Closing Report (January 13, 2012); 2011-2020 data sourced from the 2012 Annual RPS Compliance Reports (August 1, 2013).

New Renewable Generation Capacity Added in 2013

Since 2003, 7,627 MW of renewable generation capacity has achieved commercial operation under the RPS program. More than 2,769 MW of renewable generation capacity came online in 2013, and another 2,721 MW of capacity is forecasted to reach commercial operation by the end of 2014. The 2,769 MW of renewable generation capacity that came online in 2013 represents the largest year-to-year increase in capacity since the beginning of the program.

Figure 2: RPS Capacity Installed Since 2003, By Year^{8,9,10}



Source: California Public Utilities Commission, December 2013

⁸Additional figures representing IOUs' progress towards meeting the 33% RPS goal and resource mix of actual and forecasted resources can be found in the Q3 2013 RPS Report to the Legislature. See "Renewables Portfolio Standard Quarterly Report: 3rd Quarter 2013": <http://www.cpuc.ca.gov/NR/rdonlyres/87F6BDFB-06A8-48C7-83C3-C6056A1E2E24/0/2013Q3RPSReportFINAL.pdf>.

⁹ Figure 2 only includes new capacity with a contract term of 10 years or greater. It does not reflect capacity that was re-contracted from existing resources.

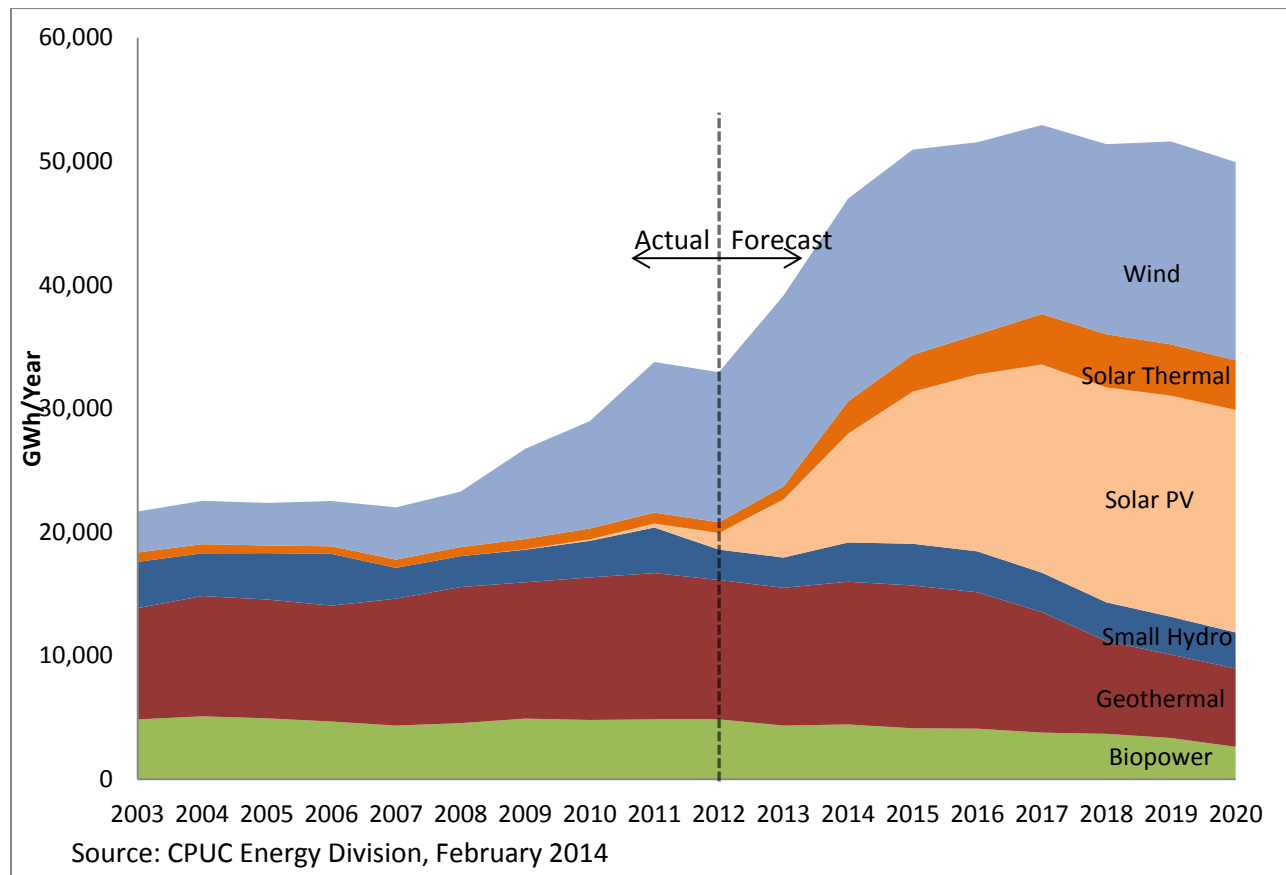
¹⁰ Data Source: IOU Project Development Status Reports (August 1, 2013) with updates from an Energy Division Staff Data Request to IOUs.

RPS Renewable Resource Mix

The mix of technologies bidding into and receiving contracts through RPS solicitations has shifted over the life of the RPS program. This shift is forecasted to dramatically alter the relative contribution to the RPS goals provided by different renewable technologies by 2020.

In 2013, wind and geothermal generating facilities supplied the majority of California’s renewable generation (contributing 40% and 28%, respectively). The generation mix in 2020 is expected to reflect a considerable increase in generation coming online from new solar PV and solar thermal generating facilities. These technologies are forecasted to contribute 32% and 13%, respectively, of the state’s total renewable generation by 2020. The figure below displays California’s actual and forecasted mix of renewable generation by technology type through 2020.

Figure 3: Renewable Resource Mix, Actual and Forecasted by Year^{11,12}



¹¹ Figure is not risk-adjusted and forecast does not assume re-contracting of contracts whose terms expire prior to 2020.

¹² Data Source: 2003-2010 data sourced from the Provisional 20% RPS Closing Report (January 13, 2014); 2011-2020 data sourced from the 2012 Annual RPS Compliance Reports (August 1, 2013).

RPS Contracting Activities in 2013

Since 2002, the CPUC has approved more than 320 contracts for over 20,000 MW of renewable generation capacity. As Table 1 below shows, the CPUC approved 134 additional contracts in 2013, representing 1,013 MW of capacity.

Table 1: IOU RPS-Eligible Contracts Submitted and/or Approved in 2013 ^{13 14}

		PGE		SCE		SDGE		Total	
		Number of Contracts	MW	Number of Contracts	MW	Number of Contracts	MW	Number of Contracts	MW
Q1	Submitted	0	0	40	222	3	5	43	227
	Pending	3	67	89	281	5	43	97	391
	Approved	1	0	6	265	0	0	7	265
Q2	Submitted	4	75	5	7	8	47	17	129
	Pending	1	1	3	0	7	11	11	12
	Approved	6	141	91	288	6	79	103	508
Q3	Submitted	0	0	9	213	3	10	12	223
	Pending	0	0	12	213	4	21	16	234
	Approved	1	1	0	0	6	0	7	1
Q4	Submitted	3	80	0	0	1	5	4	85
	Pending	3	80	0	0	0	0	3	80
	Approved	0	0	12	213	5	26	17	239
Total	Submitted	7	155	54	442	15	67	76	664
	Pending	3	80	0	0	0	0	3	80
	Approved	8	142	109	766	17	105	134	1013

Source: California Public Utilities Commission, 4th Quarter 2013

¹³ 75 of the contracts submitted by and approved for SCE are Feed-in Tariff (FIT) contracts that SCE executed under its California Renewable Energy Small Tariff (CREST) program. These contracts were jointly submitted for approval to the CPUC via Tier 2 Advice Letter and were subsequently approved by the CPUC in Resolution E-4593, which was adopted on June 27, 2013.

¹⁴ Data Source: Energy Division Staff Data Request to IOUs for quarterly contracts submitted/approved.

IV. RECENT AND UPCOMING EVENTS

Timing	Deliverable	Notes
November 1, 2013	First program period for the SB 32 FIT Program (ReMAT) began	IOUs awarded the first PPAs for the SB 32 FIT Program and the ReMAT pricing mechanism was launched to set the payment rate for FIT contracts going forward.
November 20, 2013	Decision (D.)13-11-024 Conditionally Accepting 2013 RPS Procurement Plans	The Commission adopted the Decision that accepted the 2013 RPS Procurement Plans.
November 20, 2013	Workshop: Procurement Expenditure Limitation (PEL) Staff Proposal	Energy Division Staff held a workshop to discuss the PEL staff proposal, alternate proposals and key implementation details raised by stakeholders.
November 22, 2013	CEC posted RPS 2008-2010 Procurement Verification Commission Final Report	The CEC issued the RPS 2008-2010 Procurement Verification Commission Final Report that summarized the 2008-2010 RPS procurement verification findings for all California Retail Sellers.
November/December 2013	Renewable Auction Mechanism (RAM) IV Contracts Approved	Commission approved PG&E's, SCE's and SDG&E's contracts resulting from the fourth RAM auction.
December 31, 2013	Administrative Law Judge (ALJ) Ruling: Requesting Comments on the RAM Program	An ALJ Ruling was issued requesting comments and reply comments on a series of questions related to the potential reauthorization of the RAM Program. Comments were received January 31, 2014 and reply comments were received February 14, 2014.
January 23, 2014	Final 20% RPS Closing Reports Issued	Retail sellers filed closing reports that included RPS compliance data from 2003-2010 and closed the 20% RPS pursuant to SB 2 (1X) and Commission D.12-06-038.
February 7, 2014	RPS Biennial Program Update in Compliance with Public Utilities Code Section 399.19	A Biennial RPS Progress Report was issued to the State Legislature that included an update on RPS procurement, RPS projects' permitting and siting, RPS cost limitation, and RPS barriers and recommendations.
February 12, 2014	RPS Portfolio Content Category Staff Proposal	Energy Division issued a staff proposal regarding the review process for portfolio content category classification.

Timing	Deliverable	Notes
February 15, 2014	Public Utilities Code Section 910 Report and Padilla Report	Energy Division issued the annual Section 910 Report and the Padilla Report to the California legislature, which included IOU's direct and indirect RPS costs, avoided costs (savings) and information about IOUs' workforce diversity goals related to the RPS program.
February 18, 2014	ALJ Ruling: Update to Renewable Net Short (RNS) Methodology	An ALJ Ruling was issued seeking comments on a staff proposal to update the RNS methodology and key RNS assumptions including: surplus RECs, voluntary margin of over-procurement, and risk-adjustment of projects in development. Comments were due March 12, 2014 and reply comments were due March 26, 2014.
February 20, 2014	ALJ Ruling: RPS Procurement Expenditure Limitation	An ALJ Ruling was issued seeking comments on a revised staff proposal to implement an RPS PEL for investor-owned utilities, pursuant to 399.15(c)-(g). Parties filed updated alternate proposals. Comments and reply comments were due March 19, 2014 and April 3, 2014, respectively.
March 26, 2014	Assigned Commissioner's Ruling (ACR): 2014 RPS Procurement Plans	The assigned Commissioner issued a ruling directing the IOUs and ESPs to file draft 2014 RPS Procurement Plans.
April 8, 2014	ALJ Ruling: RPS Procurement Process Improvements	An ALJ Ruling was issued seeking comments on a revised staff proposal to streamline the evaluation and approval process for advice letters seeking approval of RPS-eligible PPAs.
Second Quarter 2014	Workshop: Updates to RNS Methodology and Key Assumptions	Energy Division Staff will hold a workshop to discuss the RNS staff proposal and address comments raised by parties.
Second Quarter 2014	ALJ Ruling: Updates to the RPS Calculator	An ALJ Ruling will mail seeking comments on proposed revisions to the RPS Calculator.
Second Quarter 2014	Proposed Decision: RPS Compliance and Enforcement	A proposed decision will be issued regarding compliance and enforcement issues in the RPS program.