



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: OCTOBER 23, 2017

ITEM NO: 13

SUBJECT: 2017 STATUS UPDATE ON RIVERSIDE PUBLIC UTILITIES RENEWABLE PORTFOLIO STANDARD PROCUREMENT ACHIEVEMENTS

ISSUE:

Receive and file this status update on the Riverside Public Utilities Renewable Portfolio Standard procurement achievements to date, and future Renewable Portfolio Standard projections and mandates.

RECOMMENDATION:

That the Board of Public Utilities receive and file information on the Riverside Public Utilities Renewable Portfolio Standard procurement achievements to date, current Renewable Portfolio Standard projections through 2030, and future anticipated renewable energy procurement needs and mandates.

LEGISLATIVE HISTORY:

In 2002, the California Legislature adopted Senate Bill 1078, which established a Renewable Portfolio Standard mandate requiring 20% of retail sales to be procured from renewables and increasing each year by 1% to reach the 20% goal. This bill was only applicable to investor owned utilities and publicly owned utilities were not mandated to fulfill this requirement.

In 2006, the California Legislature adopted Senate Bill 107, which accelerated and defined the target year for the 20% Renewable Portfolio Standard goal to 2010. Again, this bill was only applicable to investor owned utilities.

In 2008, the California Governor signed Executive Order S-14-08 that again increased the Renewable Portfolio Standard goal to 30% by 2020.

In 2011, the California Legislature adopted Senate Bill X1-2, which officially created the first set of tiered Renewable Portfolio Standard targets of 20% by 2013, 25% by 2016, and 33% by 2020. In addition, this bill explicitly stated that publicly owned utilities were now mandated to fulfill this Renewable Portfolio Standard obligation and to adopt a Renewable Portfolio Standard Enforcement Program and Renewable Portfolio Standard Procurement Plan.

In 2015, the California Legislature adopted Senate Bill 350, which further increased the Renewable Portfolio Standard goal to 50% by 2030. At the same time, while the bill retained the goal of 33% by 2020, it added interim goals of 40% by 2024 and 45% by 2027, with an end goal of 50% by 2030.

In 2017, the California Legislature introduced Senate Bill 100. If adopted, this legislation will advance the Renewable Portfolio Standard goals to 44% by 2024, 52% by 2027 and 60% by 2030. Additionally, an aspirational goal has been inserted into this bill requiring that 100% of total retail sales of electricity in California should be obtained from eligible renewable energy resources and zero carbon resources by 2045.

BACKGROUND:

In 2003, Riverside Public Utilities began procuring power resources via short and long term contracts to voluntarily meet the changing regulations for Renewable Portfolio Standard mandates. Over the years, Riverside Public Utilities gradually increased the procurement of renewable resources to meet these goals, before Senate Bill X1-2 formally mandated Renewable Portfolio Standard compliance obligations on all publicly owned utilities.

Per Senate Bill X1-2, by the end of calendar year 2011, a publicly owned utilities' local governing board was required to adopt a Renewable Portfolio Standard Enforcement Program. As part of this mandate, each publicly owned utility was also required to adopt a Renewable Portfolio Standard Procurement Plan within 60 days of the California Energy Commission adopting its own regulations for the Renewable Portfolio Standard Publicly Owned Utility Enforcement Procedures. In November and December 2011, the Board of Public Utilities and the City Council, respectively, adopted a Renewable Portfolio Standard Enforcement Program for Riverside Public Utilities. Oversight for compliance with Senate Bill X1-2 is fulfilled by a publicly owned utilities' local governing authority and the California Energy Commission.

In May 2013, Riverside adopted a Renewable Portfolio Standard Procurement Plan consistent with the new Senate Bill X1-2 regulations, which included meeting minimum compliance period procurement targets. Riverside procured enough short and long term renewable resources to meet the procurement requirements of Senate Bill X1-2 for Compliance Period 1 (2011-2013). Riverside has also met its minimum three-year 2014-2016 Renewable Portfolio Standard procurement goal for Compliance Period 2, given the significant number of new renewable energy projects that came on-line in 2016.

For calendar year 2016, 27% of Riverside's retail sales were served using renewable energy obtained from the following renewable resources: (1) Salton Sea and Vulcan geothermal resources located in Imperial Valley; (2) Wintec and Wagner wind resources located in Palm Springs; (3) Cabazon wind resource located in Riverside County; (4) Columbia Two solar resource located in Kern County; (5) AP North Lake solar resource located in the City of Hemet; (6) Tequesquite and UOC solar resources located in the City of Riverside; (7) sPower solar projects (Summer Solar, Antelope Big Sky Ranch, and Antelope DSR 1) located in Lancaster. For calendar year 2017, staff currently forecasts that Riverside will serve approximately 37% of its retail sales using renewable energy resources and thus exceed its 33% by 2020 Renewable Portfolio Standard mandate three years ahead of schedule. A listing of all the renewable energy contracts that are currently in Riverside's portfolio is shown in Table 1 below.

Table 1. Riverside's renewable energy resources under long-term contract.

Project Name	Resource Type	Capacity (MW)	Generation (MWh)	% of Retail Sales	Start Date	End Date
CalEnergy (Salton Sea Unit 5)	Geothermal	46.0	321,500	14.6%	6/1/2003	5/31/2020
CE Portfolio - 2016 incremental	Geothermal	20.0	146,200	6.6%	2/11/2016	12/31/2039
CE Portfolio - 2019 incremental	Geothermal	20.0	309,900	14.1%	1/1/2019	12/31/2039
CE Portfolio - 2020 incremental	Geothermal	46.0	648,900	29.5%	6/1/2020	12/31/2039
Cabazon	Wind	39.0	60,000	2.7%	12/22/2014	12/31/2024
Wintec	Wind	1.5	4,600	0.2%	12/28/2003	12/30/2018
WKN (Wagner Wind)	Wind	6.0	21,500	1.0%	12/22/2012	12/22/2032
Columbia Two	Solar	11.0	32,800	1.5%	11/27/2014	12/22/2034
AP North Lake	Solar	20.0	47,500	2.2%	7/28/2015	8/11/2040
Kingbird B	Solar	14.0	41,000	1.9%	4/5/2016	12/31/2036
Summer Solar	Solar	10.0	22,000	1.0%	7/15/2016	12/31/2041
Antelope Big Sky Ranch	Solar	10.0	22,000	1.0%	8/13/2016	12/31/2041
Antelope DSR 1	Solar	25.0	70,300	3.2%	11/18/2016	12/19/2036
Tequesquite	Solar	7.3	15,700	0.7%	8/12/2015	12/31/2040
UOC	Solar	0.2	150	0.0%	early 2001	N/A

DISCUSSION:

Based on current forecasts of retail loads and expected renewable energy generation levels, Riverside anticipates reaching a 43% Renewable Portfolio Standard by 2020 and remaining above a 40% Renewable Portfolio Standard through 2024. Depending upon the outcome of the Senate Bill 100 legislation, the utility can expect to remain above the minimum state mandated Renewable Portfolio Standard compliance levels through at least 2022. As shown in Figure 1 below, the utility is expected to remain above these minimum compliance levels through either 2022 (if Senate Bill 100 becomes law) or 2024 (under the current Senate Bill 350 paradigm). Under either scenario, it will be necessary to either procure additional renewable energy resources in the early part of the next decade or use excess renewable energy credits (that the utility acquires and banks over the next four to six years) to meet the increasing Renewable Portfolio Standard mandates in the 2024-2030 time frame.

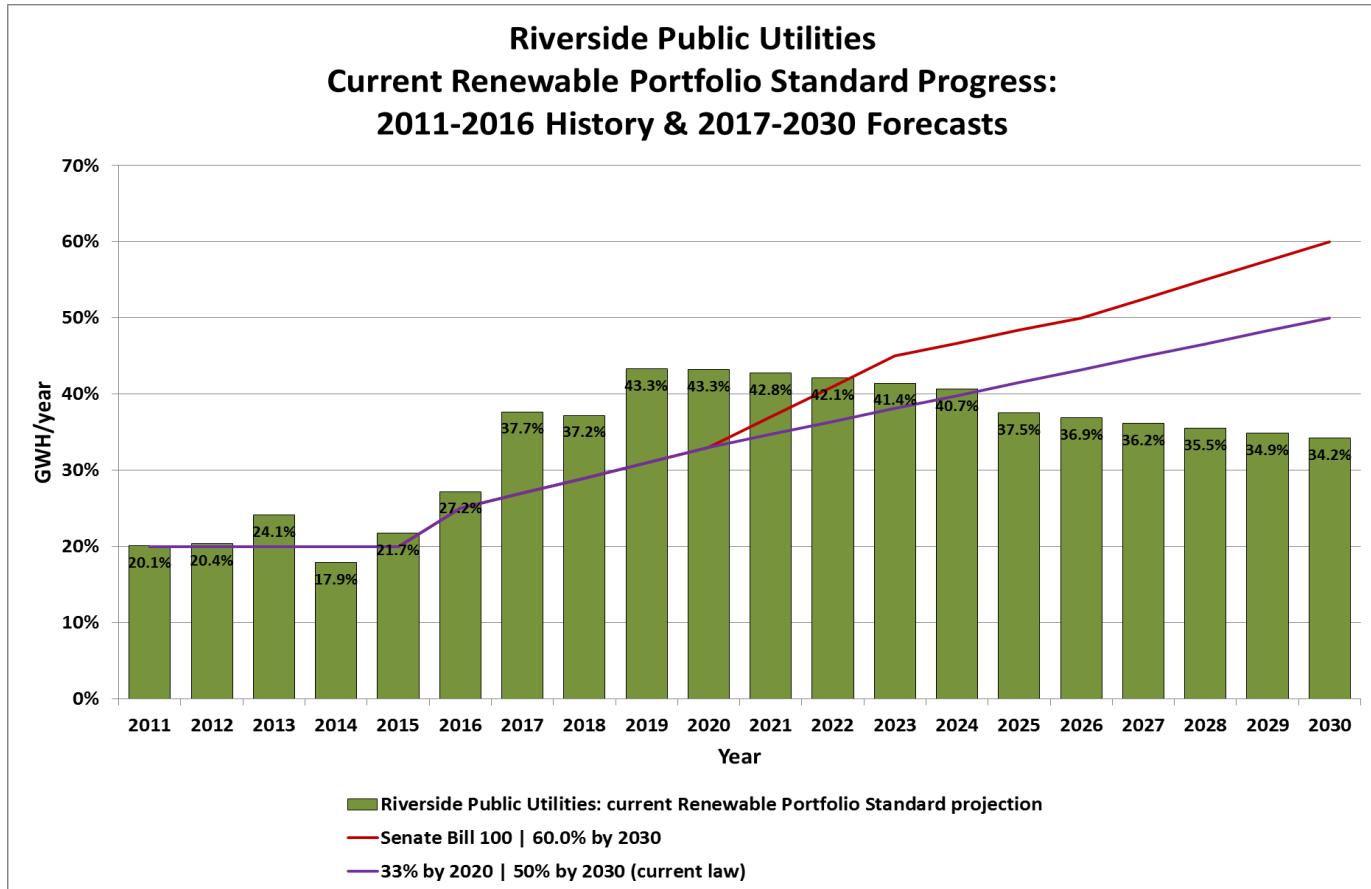


Figure 1. Riverside Public Utilities' current and forecasted progress towards meeting the California state Renewable Portfolio Standard mandate through 2030.

Riverside's last Renewable Portfolio Standard Procurement Plan, adopted in May 2013, only specifies the utilities Renewable Portfolio Standard mandates through 2020. Given the recent adoption of Senate Bill 350 and the pending Senate Bill 100 legislation, staff anticipates updating Riverside's Renewable Portfolio Standard procurement plan to reflect the new Senate Bill 350 mandates and pending Senate Bill 100 regulations. Staff intends to develop and propose an updated Renewable Portfolio Standard Procurement Plan that specifies the utilities renewable energy mandates and policies through 2030. Staff will bring this Updated Procurement Plan to the Public Utilities Board for adoption, after the new state Renewable Portfolio Standard mandates have been determined and the California Energy Commission adopts its own updated set of publicly owned utility Renewable Portfolio Standard requirements.

FISCAL IMPACT:

There is no fiscal impact associated with this reporting.

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Attachment: Presentation