



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

Riverside Public Utilities
Power Resources Division

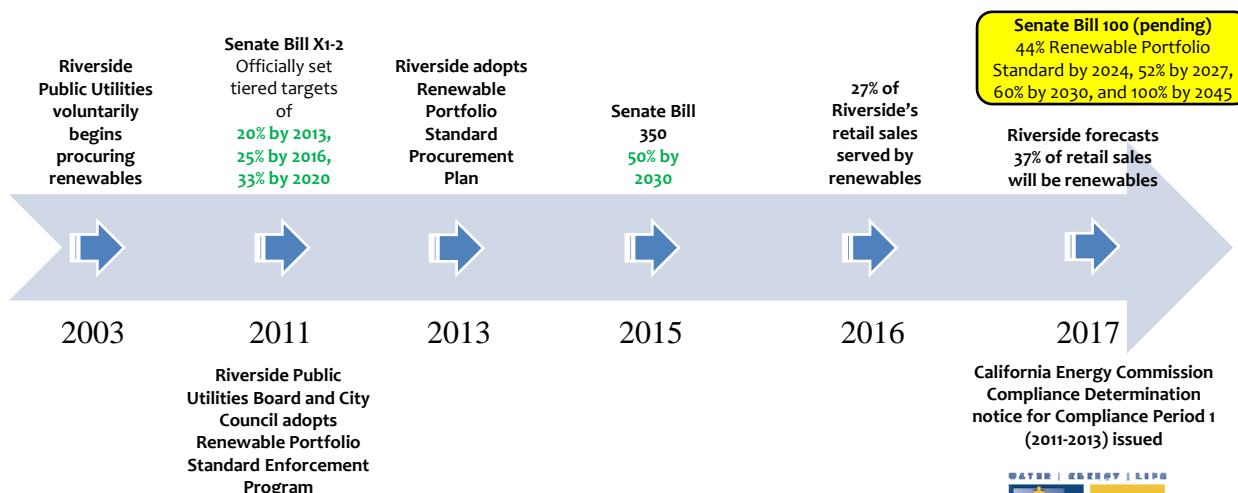
Board of Public Utilities
October 23, 2017

RiversidePublicUtilities.com



1

RENEWABLE PORTFOLIO STANDARD MANDATE TIMELINE AND RIVERSIDE PUBLIC UTILITIES PROGRESS



RiversidePublicUtilities.com



2

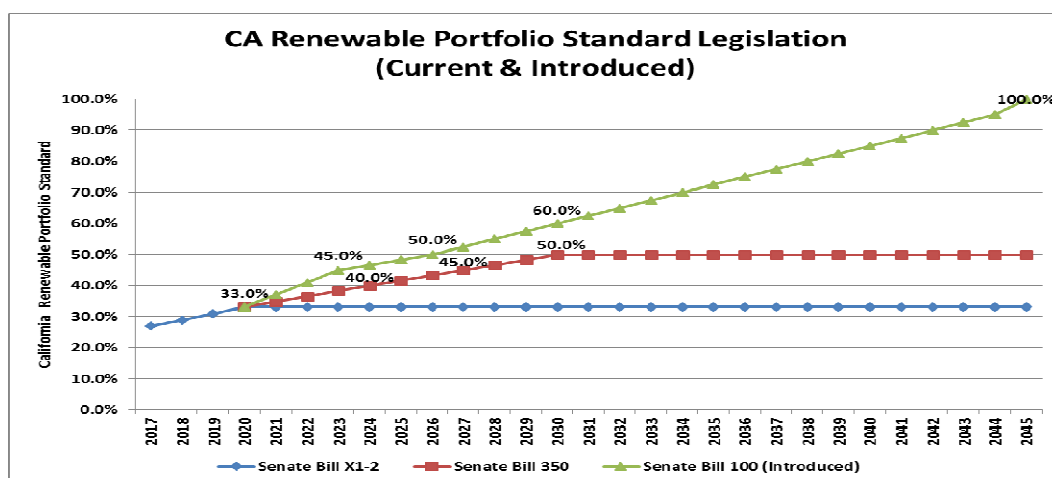
LEGISLATION SUMMARY TABLE

	Legislation	2020	2026	2030	2035	2040	2045	2050
Renewable Portfolio Standard	Senate Bill X1-2 (2011) Renewable Portfolio Standard	33%						
	Senate Bill 350 (2015) Clean Energy & Pollution Reduction Act			50%				
	Senate Bill 100 (Introduced) 100% Renewable Portfolio Standard Mandate		50%	60%			100%	
Greenhouse Gas	Assembly Bill 32 (2006) California Greenhouse Gas Reduction Mandate	1990 levels						
	Senate Bill 32 (2016) California Global Warming Solutions Act			40% below 1990 levels				
	Executive Order S-3-05 (2005)							80% below 1990 levels
Energy Efficiency	Senate Bill 1037 (2005) Energy Efficiency	Annually report investments in energy efficiency and demand reduction programs to customers and California Energy Commission						
	Assembly Bill 2021 (2006) Energy Efficiency	Identify potential energy efficiency savings and establish 10-year energy efficiency targets						
	Assembly Bill 802 (2015) Building Energy Use & Benchmarking	Provide energy consumption data for buildings covered under the legislation to the building owners upon request						
	Senate Bill 350 (2015) Clean Energy & Pollution Reduction Act	Double statewide energy efficiency savings by 2030						
Energy Storage	Assembly Bill 2514 (2010) as amended by Assembly Bill 2227 (2012) Energy Storage	Establish energy storage procurement targets to be achieved by 2016 and 2020						

RiversidePublicUtilities.com



CALIFORNIA RENEWABLE PORTFOLIO STANDARD LEGISLATION PROJECTIONS



RiversidePublicUtilities.com



RIVERSIDE PUBLIC UTILITIES RENEWABLE RESOURCES

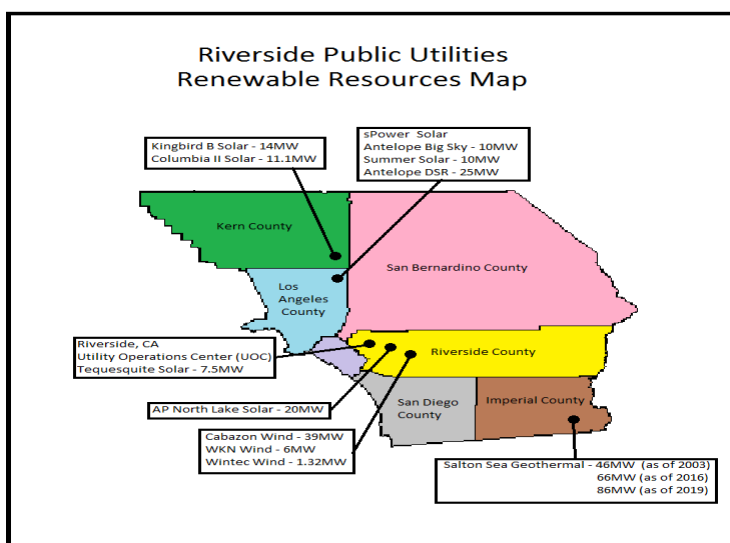
Project Name	Resource Type	Capacity (MW)	Generation (MWh)	% of Retail Sales	Start Date	End Date
CalEnergy (Salton Sea Unit 5)	Geothermal	46.0	321,500	14.6%	6/1/2003	5/31/2020
CE Portfolio - 2016 incremental	Geothermal	20.0	146,200	6.6%	2/11/2016	12/31/2039
CE Portfolio - 2019 incremental	Geothermal	20.0	309,900	14.1%	1/1/2019	12/31/2039
CE Portfolio - 2020 incremental	Geothermal	46.0	632,850	28.8%	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



5

RiversidePublicUtilities.com

RENEWABLE RESOURCES MAP



6

RiversidePublicUtilities.com

DISCUSSION

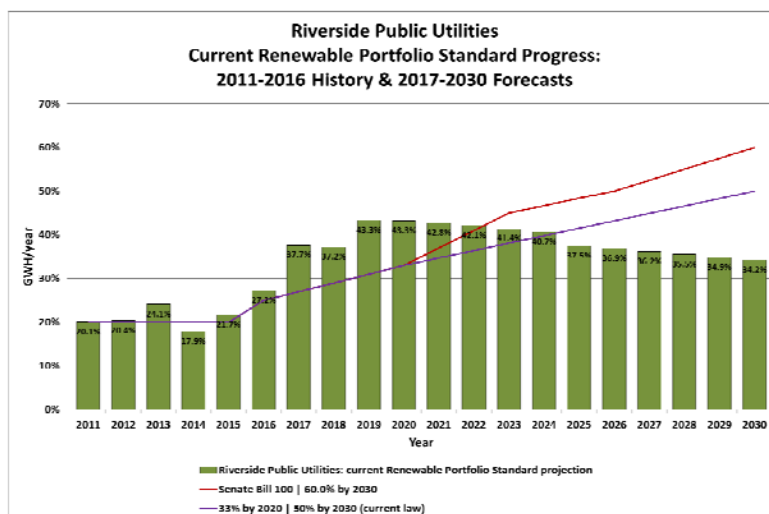
1. Based on current forecasts of retail loads and expected renewable energy generation levels, Riverside anticipates reaching a 43% Renewable Portfolio Standard by 2020, and remaining above a 40% Renewable Portfolio Standard through 2024.
2. Riverside Public Utilities anticipates reaching a 43% Renewable Portfolio Standard by 2020 using a combination of geothermal, wind and solar photovoltaic resources.

RiversidePublicUtilities.com

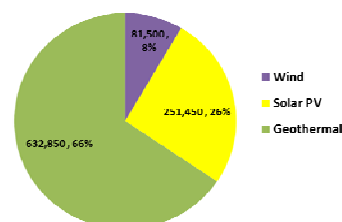


7

CURRENT RENEWABLE PORTFOLIO STANDARD PROGRESS AND FORECASTS



**Expected Quantities of Riverside
Public Utilities Renewable
Resources in 2020**



RiversidePublicUtilities.com



8

RENEWABLE PORTFOLIO STANDARD PROCUREMENT OUTLOOK

1. The utility is expected to remain above the minimum compliance levels through either 2022 (if Senate Bill 100 becomes law) or 2024 (under the current Senate Bill 350 rules).
2. Under either scenario, it will be necessary to procure additional renewable energy resources in the early part of the next decade or use excess renewable energy credits to meet the increasing Renewable Portfolio Standard mandates from 2024-2030.

RiversidePublicUtilities.com



9

RECOMMENDATION

That the Riverside Public Utilities Board 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 mandates and procurement needs.

RiversidePublicUtilities.com



10