

2015 IRP Load Forecast

Development of this 2015 Integrated Resource Plan Update was based on a load forecast that incorporated assumptions on the state of the post-recession economy in 2015, likely growth of Distributed Generation (“DG”), increased acceptance and implementation of Energy Efficiency (“EE”) programs by PWP customers, and growth of local rooftop and community solar projects. Taking all these factors and programs into consideration, PWP forecasts a decline in net billed sales during the 20-year evaluation period as shown in Table 1.

Table 1.

Total Billed Sales Forecast (GWh)									
Year	2015	2016	2017	2018	2019	2020	2025	2030	2034
Billed Sales without EE	1,150	1,147	1,144	1,141	1,138	1,137	1,173	1,157	1,146
Billed Sales with EE	1,137	1,121	1,105	1,090	1,075	1,060	1,045	1,029	1,018
Change in Billed Sales (with EE)	null	-16	-16	-15	-15	-15	approx. -3GWh/yr		

During the 20-year period up to FY 2006, PWP’s annual retail sales grew at a rate of approximately 1.1%, per year. However, during this period PWP did not have any formal EE and DG programs that would affect customer usage. During the period 2007-2014, PWP’s retail sales dropped approximately 10%, or 1.75% per year. This change in direction for the sales growth was due to the combined effects of the Great Recession as well as implementation of EE and DG programs by PWP.

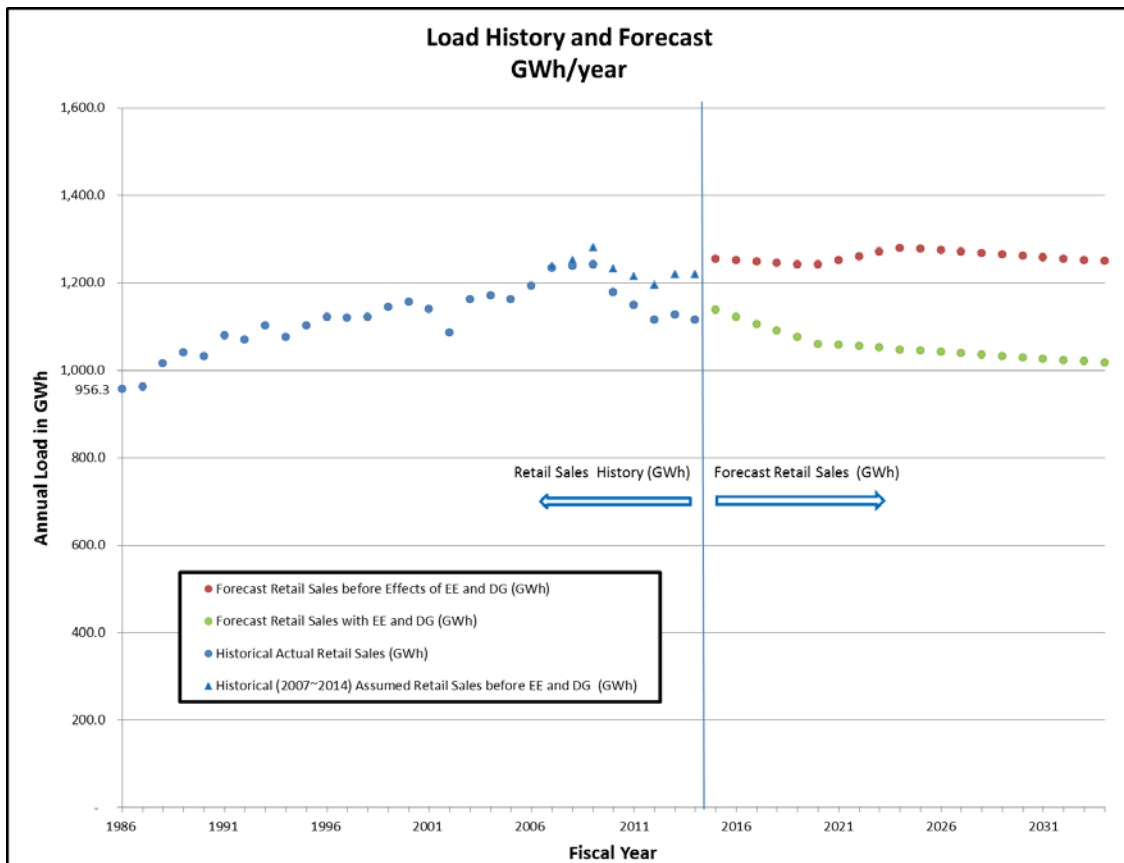


Figure 1.

Overall, Retail Sales over for the IRP reporting period 2015 through 2034 are expected to show a slight decline of 10.5% or 119GWh over 20 years, or a 0.6% per year drop on average. Current economic indicators show that the population of Pasadena will continue to grow slowly and business growth is expected to be stable to slow. This natural load growth is projected to be offset by EE/DSM. During the 2015-2020 timeframe total billed sales (after EE and DG are counted) is expected to decline 1.4%, or approximately 14GWh, per year. This decline in retail sales is due mainly to more aggressive adopted EE goals (12GWh/year), additional net metered solar (2GWh/year) and fuel cell DG (7 GWh/year) programs. The reductions resulting from these programs are offset by an underlying sales growth trend of 6 GWh/year and new Electric Vehicle ("EV") (an additional approximately 150 EV per year) load growth of 1 GWh/year. After 2020, Retail Sales should decline at a lower rate, approximately 0.3% or 3 GWh per year, mainly due to the diminishing effects of EE and net metered DG as these programs reach saturation. Retail Sales growth will be helped by additional Electric Vehicle or other electrification load and a policy shift to Feed-in-Tariffs resulting in no new net metered solar but not enough to offset EE and DG projects completely.