

Electric Generation Workpapers
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SDG&E/SoCalGas 2017 TCAP

The electric generation forecast is based on an analysis of the plant's operation in the western electric market using the Zonal Market Analysis model from Ventyx. Zonal Market Analysis has been used by SoCalGas in previous applications before the Commission.

Workpaper List

Link to CEC Load Forecast

See Form 1.1c (Electricity Deliveries to End Users by Agency), Form 1.5a (Net Energy Load), Form 1.5b (1 in 2 Peak Demand) of California Energy Commission's (CEC's) California Energy Demand Updated Forecast, 2015 - 2025, dated December 2014, Mid Demand Baseline Case, Mid AAEE Savings.

To view the total CEC report, you can find it by clicking the link below.

<http://www.energy.ca.gov/2014publications/CEC-200-2014-009/CEC-200-2014-009-SF.pdf>

To view the electric demand Mid-Demand Case forms, click on the link below.

http://www.energy.ca.gov/2014_energypolicy/documents/demand_forecast_sf/Mid_Case/

Renewables

California Existing and Future Renewable Assumptions

Please see attached table.

Throughput Forecasts data

Please see the consolidated gas demand forecast in Bruce Wetzel's workpapers. For SoCal Gas data, please refer to his files *ScgLgCoGen-UEG-EWG_WriteUp_BMW_2013Tcap.doc* and *Scg_G50-UEG_EWG_LgCogen_BMW(12Oct2011)_WP.xls*. For the SDG&E EG data, please refer to his file; the data are embedded *Sdge_EG-PowerPlant_JCH(12Oct2011)_WP.xls*.

Form 1 5a - Statewide
California Energy Demand Updated Forecast, 2015 - 2025, Mid Demand Baseline Case, Mid AAE Savings
Net Energy for Load by Agency and Balancing Authority (GWh)

Balancing Authority	Agency	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Average Annual Growth 2014 - 2025
CCSF		1,115	1,124	1,130	1,140	1,152	1,161	1,170	1,179	1,188	1,206	1,219	1,228	1,240	0 90%
NCPA - Greater Bay Area		1 500	1,512	1,523	1,538	1,557	1,573	1,591	1,607	1,623	1,640	1,655	1,668	1,683	0 98%
Other NP15 LSEs - Bay Area		47	48	48	48	49	49	50	50	50	51	51	52	52	0 73%
PG&E Service Area - Greater Bay Area		39,804	40,479	40,337	40,239	40,254	40,252	40,308	40,393	40,446	40,477	40,509	40,390	40,271	-0 05%
Silicon Valley Power		3,281	3,309	3,333	3,364	3,400	3,428	3,455	3,479	3,501	3,523	3,540	3,557	3,574	0 70%
Greater Bay Area Subtotal		45,747	46,472	46,371	46,329	46,412	46,463	46,574	46,708	46,808	46,897	46,974	46,895	46,820	0 07%
CDWR-N		1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	0 00%
NCPA - Non Bay Area		1,018	1,028	1,035	1,045	1,058	1,069	1,084	1,097	1 110	1,124	1,136	1,147	1,159	1 10%
Other NP15 LSEs - Non Bay Area		165	166	168	169	171	174	176	179	182	185	187	189	192	1 33%
PG&E Service Area - Non Bay Area		45,256	45,313	45,388	45,484	45,743	45,990	46,313	46,660	46,923	47,244	47,535	47,580	47,758	0 48%
WAPA		1,456	1,459	1,460	1,461	1,462	1,463	1,463	1,464	1,465	1,466	1,467	1,468	1,469	0 06%
Total North of Path 15		94,687	95,483	95,486	95 533	95,890	96,204	96,655	97,153	97 533	97,961	98,344	98,324	98,444	0 28%
CDWR-ZP26		2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	0 00%
PG&E Service Area - ZP26		9,759	9,783	9,744	9,694	9,682	9,688	9,729	9,781	9,814	9,844	9,874	9,866	9,865	0 08%
Total Zone Path 26		11,775	11,799	11,760	11,710	11,698	11,704	11 745	11,797	11,830	11,860	11,890	11,882	11,881	0 06%
Total Valley		60,715	60,810	60,855	60,914	61,177	61 445	61,826	62,242	62,556	62,924	63,260	63,311	63,504	0 39%
Total North of Path 26		106,462	107,282	107,226	107,243	107,588	107,908	108,400	108,950	109,364	109,821	110,234	110,206	110,325	0 25%
Merced		492	496	500	504	509	513	517	521	524	527	530	532	535	0 69%
Turlock Irrigation District		2,236	2,263	2,281	2,303	2,330	2,356	2,389	2,420	2 450	2,481	2,510	2,537	2,565	1 15%
Total Turlock Irrigation District Control Area		2,728	2,759	2,781	2,807	2,839	2,869	2,906	2,941	2,974	3,008	3,040	3,069	3 100	1 07%
City of Shasta Lake		206	209	210	211	213	214	215	216	217	217	218	218	219	0 43%
Modesto Irrigation District		2,739	2,769	2,789	2,813	2,843	2,871	2,906	2,939	2,969	3,000	3,027	3,054	3,081	0 98%
Redding		840	849	855	863	874	885	900	913	927	940	953	964	977	1 28%
Roseville		1,292	1,305	1,314	1,326	1,342	1,357	1,375	1,392	1,408	1,426	1,441	1,455	1,470	1 09%
SMUD		11,137	11,304	11,412	11,506	11,651	11,785	11,961	12,125	12,293	12,474	12,649	12,818	12,990	1 27%
WAPA (SMUD)		1,364	1,189	1,200	1,229	1,260	1,291	1,311	1,331	1,351	1,373	1,391	1,408	1,427	1 67%
Total SMUD/WAPA Control Area		17,578	17,625	17,780	17,948	18,183	18,403	18,668	18,916	19,165	19,430	19 679	19,917	20,164	1 23%
Anaheim		2,558	2,567	2,583	2,607	2,637	2,662	2,691	2,721	2,752	2,783	2,812	2,839	2,868	1 01%
MWD		191	167	165	163	161	161	161	161	161	161	161	162	162	-0 28%
Other SP15 LSEs - LA Basin		997	1,002	1,008	1,017	1,028	1,038	1,051	1,065	1,078	1,092	1,104	1,116	1,129	1 09%
Pasadena		1,201	1,187	1,187	1,189	1,193	1,198	1,206	1,217	1,232	1,245	1,261	1,275	1,288	0 75%
Riverside		2,292	2,304	2,317	2,338	2,365	2,390	2,421	2,452	2,484	2,515	2,545	2,574	2,603	1 12%
SCE Service Area - LA Basin		70,923	71,156	70,842	70,531	70,429	70,418	70,585	70,873	71,097	71,286	71,372	71,397	71,372	0 03%
Vernon		1,217	1,219	1,230	1,237	1,243	1,247	1,253	1,257	1,261	1,265	1,269	1,272	1,275	0 41%
LA Basin Subtotal		79,379	79,602	79,332	79,082	79,056	79,114	79,368	79,746	80,065	80,347	80,524	80,635	80 697	0 12%
CDWR-S		4,405	4,405	4,405	4,405	4,405	4,405	4,405	4,405	4,405	4,405	4,405	4,405	4,405	0 00%
SCE Service Area - Big Creek Ventura		15,174	15,235	15,165	15,093	15,057	15,034	15,044	15,063	15,085	15,101	15 107	15 100	15,072	-0 10%
Big Creek/Ventura Subtotal		19,579	19,640	19,570	19,498	19,462	19,439	19 449	19,468	19,490	19,506	19,512	19,505	19,477	-0 08%
MWD		1,935	1,692	1,671	1,652	1,633	1,632	1,631	1,631	1,630	1,631	1,633	1,634	1,635	-0 31%
Other SP15 LSEs - Out of LA Basin		79	79	80	80	81	81	81	82	82	82	82	83	83	0 45%
SCE Service Area - Out of LA Basin		4,363	4,348	4,338	4,350	4,382	4,412	4,454	4,491	4,529	4,588	4,628	4,652	4,694	0 70%
Total SCE TAC Area		105,334	105,361	104,991	104,661	104,614	104,678	104,983	105,417	105,796	106,155	106,379	106 509	106,586	0 11%
Valley Electric Association		11	11	11	11	11	11	11	11	11	11	11	11	11	0 00%
SDG&E Service Area		21,266	21,496	21,370	21,248	21,290	21,350	21,439	21,491	21,506	21,513	21,483	21,452	21,404	-0 04%
Total South of Path 26		126,611	126,869	126,372	125,921	125,915	126,039	126,433	126,919	127,313	127,679	127,873	127,972	128,001	0 08%
Burbank		1,125	1,120	1,126	1,133	1,142	1,151	1,162	1,176	1,189	1,203	1,211	1,220	1,229	0 85%
Glendale		1,173	1,170	1,176	1,183	1,194	1,204	1,217	1,234	1,249	1,265	1,276	1,287	1,298	0 95%
LADWP		25,945	25,942	26,025	26,140	26,308	26,455	26,740	27,098	27,459	27,829	28,167	28 495	28,834	0 97%
Total LADWP Control Area		28,243	28,232	28 327	28,456	28,644	28,810	29,119	29,508	29,897	30,297	30,654	31,002	31,361	0 96%
Imperial Irrigation District Control Area		3,793	3,867	3,942	4,019	4,109	4,202	4,309	4,423	4,415	4,489	4,581	4,670	4,761	1 91%
Total CAISO		233,073	234,151	233,598	233,164	233,503	233,947	234,833	236,869	236,676	237,500	238,107	238,178	238,326	0 16%
Total Statewide		285,415	286,634	286,428	286,394	287,278	288,231	289,835	291 657	293,127	294,724	296 061	296,836	297,712	0 35%

Table developed based on actual 2013 data

For PG&E service territory, Bay Area Growth is based on projections for forecasting climate zones 4 and 5, non-Bay Area on climate zones 1, 2, and 3, and ZP 26 on climate zone 1

For SCE service territory, LA Basin growth is based on projections for forecasting climate zones 8, 9, and 10, Big Creek-Ventura on climate zone 8, and Out of LA Basin on climate zone 7

In 2013, Valley Electric Association became a CAISO participating transmission owner

**Form 1.5b - Statewide
California Energy Demand Updated Forecast, 2015 - 2025, Mid Demand Baseline Case, Mid AAEE Savings
1 in 2 Net Electricity Peak Demand by Agency and Balancing Authority (MW)**

Balancing Authority	Agency	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Average Annual Growth 2014 - 2025
	CCSF	130	132	133	134	135	136	137	138	140	142	143	144	0 93%
	NCPA - Greater Bay Area	220	224	226	229	232	234	237	239	241	243	244	246	1 02%
	Other NP15 LSEs - Bay Area	7	7	7	7	7	7	7	7	7	7	7	7	0 00%
	PG&E Service Area - Greater Bay Area	7,887	7,908	7,847	7,813	7,806	7,799	7,793	7,767	7,746	7,700	7,644	7,582	-0 36%
	Silicon Valley Power	461	469	473	478	483	487	490	492	495	497	499	500	0 74%
	Greater Bay Area Subtotal	8,705	8,740	8,666	8,661	8,663	8,663	8,664	8,643	8,629	8,589	8,537	8,479	-0 24%
	CDWR-N	152	152	152	152	152	152	152	152	152	152	152	152	0 00%
	NCPA - Non Bay Area	235	239	242	244	248	251	254	257	259	262	264	266	1 13%
	Other NP15 LSEs - Non Bay Area	35	35	36	36	37	37	38	38	39	39	40	40	1 22%
	PG&E Service Area - Non Bay Area	10,337	10,454	10,485	10,543	10,627	10,703	10,779	10,831	10,890	10,923	10,945	10,951	0 53%
	WAPA	149	151	153	155	157	158	159	160	161	162	163	164	0 88%
	Total North of Path 15	19,613	19,772	19,754	19,790	19,885	19,963	20,046	20,081	20,130	20,127	20,100	20,052	0 20%
	CDWR-ZP26	288	288	288	288	288	288	288	288	288	288	288	288	0 00%
	PG&E Service Area - ZP26	2,152	2,165	2,157	2,155	2,160	2,165	2,170	2,170	2,171	2,167	2,159	2,159	-0 01%
	Total Zone Path 26	2,440	2,453	2,445	2,443	2,448	2,453	2,458	2,458	2,459	2,455	2,447	2,439	0 00%
	Total Valley	13,348	13,484	13,513	13,572	13,669	13,754	13,840	13,896	13,960	13,993	14,011	14,012	0 44%
	Total North of Path 26	22,053	22,225	22,199	22,233	22,332	22,416	22,504	22,539	22,588	22,581	22,548	22,491	0 18%
	Merced	93	94	95	96	97	98	98	99	99	100	100	100	0 66%
	Turlock Irrigation District	526	535	540	546	554	561	569	575	582	588	594	599	1 19%
	Total Turlock Irrigation District Control Area	619	629	635	642	651	659	667	674	681	688	694	699	1 11%
	City of Shasta Lake	33	33	33	34	34	34	34	34	34	34	34	34	0 27%
	Modesto Irrigation District	676	688	693	700	709	717	725	732	739	745	751	756	1 02%
	Redding	272	276	279	282	287	291	296	299	304	307	311	314	1 31%
	Roseville	345	351	354	358	363	368	372	376	381	384	388	391	1 14%
	SMUD	2,950	2,992	3,013	3,049	3,086	3,125	3,161	3,196	3,233	3,270	3,307	3,344	1 15%
	WAPA (SMUD)	126	127	129	130	132	133	134	135	136	136	137	138	0 83%
	Total SMUD/WAPA Control Area	4,402	4,467	4,501	4,553	4,611	4,668	4,722	4,772	4,827	4,876	4,928	4,977	1 12%
	Anaheim	563	572	578	586	593	600	607	614	620	626	632	638	1 14%
	MWD	21	21	20	20	20	20	20	20	20	20	20	20	-0 44%
	Other SP15 LSEs - LA Basin	233	236	239	242	245	248	251	254	257	260	262	265	1 18%
	Pasadena	284	287	288	289	290	292	294	295	297	298	299	300	0 50%
	Riverside	616	625	632	640	649	658	667	675	683	691	698	706	1 25%
	SCE Service Area - LA Basin	16,986	17,090	17,075	17,114	17,171	17,236	17,328	17,391	17,433	17,447	17,441	17,415	0 23%
	Vernon	183	187	188	189	190	191	192	193	193	194	194	194	0 53%
	LA Basin Subtotal	18,886	19,018	19,020	19,080	19,158	19,245	19,359	19,442	19,503	19,536	19,546	19,538	0 31%
	CDWR-S	160	160	160	160	160	160	160	160	160	160	160	160	0 00%
	SCE Service Area - Big Creek Ventura	3,413	3,415	3,386	3,366	3,353	3,339	3,333	3,316	3,300	3,277	3,252	3,224	-0 52%
	Big Creek/Ventura Subtotal	3,573	3,575	3,546	3,526	3,513	3,499	3,493	3,476	3,460	3,437	3,412	3,384	-0 49%
	MWD	209	208	206	204	204	204	204	204	204	204	204	204	-0 22%
	Other SP15 LSEs - Out of LA Basin	11	12	12	12	12	12	12	12	12	12	12	12	0 79%
	SCE Service Area - Out of LA Basin	707	720	729	738	748	759	770	779	788	795	802	808	1 22%
	Total SCE TAC Area	23,386	23,533	23,514	23,560	23,635	23,719	23,838	23,913	23,966	23,984	23,977	23,945	0 22%
	Valley Electric Association	118	119	120	120	121	121	121	121	121	121	122	122	0 30%
	SDG&E Service Area	4,669	4,722	4,705	4,721	4,737	4,748	4,746	4,732	4,714	4,684	4,654	4,616	-0 10%
	Total South of Path 26	28,173	28,374	28,338	28,401	28,493	28,588	28,705	28,765	28,801	28,789	28,753	28,683	0 16%
	Burbank	282	284	286	288	290	293	295	298	300	301	302	303	0 66%
	Glendale	305	308	309	312	314	317	321	324	326	328	330	332	0 77%
	LADWP	5,739	5,808	5,838	5,888	5,933	5,988	6,059	6,124	6,189	6,245	6,299	6,353	0 93%
	Total LADWP Control Area	6,326	6,400	6,433	6,488	6,537	6,598	6,675	6,746	6,815	6,874	6,931	6,988	0 91%

**Form 1.5b - Statewide
California Energy Demand Updated Forecast, 2015 - 2025, Mid Demand Baseline Case, Mid AEE Savings
1 in 2 Net Electricity Peak Demand by Agency and Balancing Authority (MW)**

Imperial Irrigation District Control Area	999	1,014	1,032	1,057	1,083	1,108	1,134	1,137	1,154	1,174	1,194	1,213	1 78%
Total CAISO Noncoincident Peak	50,226	50,599	50,537	50,634	50,825	51,005	51,209	51,305	51,390	51,370	51,301	51,173	0 17%
Total CAISO Coincident Peak	46,560	46,905	46,848	46,938	47,115	47,281	47,471	47,559	47,638	47,620	47,556	47,438	0 17%
Total Statewide Noncoincident Peak	62,572	63,109	63,138	63,374	63,707	64,038	64,407	64,634	64,867	64,982	65,048	65,050	0 35%
Total Statewide Coincident Peak	58,004	58,502	58,529	58,748	59,056	59,363	59,705	59,915	60,131	60,239	60,299	60,302	0 35%

Table developed based on weather-adjusted 2014 peak estimates

For PG&E service territory, Bay Area Growth is based on projections for forecasting climate zones 4 and 5, non-Bay Area on climate zones 1, 2, and 3, and ZP 26 on climate zone 1

For SCE service territory, LA Basin growth is based on projections for forecasting climate zones 8, 9, and 10, Big Creek-Ventura on climate zone 8, and Out of LA Basin on climate zone 7

In 2013, Valley Electric Association became a CAISO participating transmission owner

**Form 1 1c - Statewide
California Energy Demand Updated Forecast, 2015 - 2025, Mid Demand Baseline Case, Mid AEE Savings
Electricity Delivered to End Users by Agency (GWh)**

Planning Area	Agency	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Average Annual Growth 2014 - 2025
PGE	Calaveras Public Power Agency	33	33	33	34	34	35	35	35	36	36	37	37	38	1.3%
	Central Valley Project	2,516	2,358	2,368	2,395	2,424	2,451	2,470	2,488	2,506	2,527	2,543	2,559	2,577	0.8%
	City of Alameda	398	401	404	408	413	418	423	429	434	440	445	449	454	1.1%
	City of Biggs	17	17	17	17	17	17	18	18	18	18	18	18	18	0.5%
	City of Gndley	35	36	36	36	37	37	38	38	39	39	40	40	41	1.2%
	City of Healdsburg	75	76	76	77	78	79	80	81	82	83	84	85	86	1.1%
	City of Hercules	15	15	16	16	16	16	16	16	16	17	17	17	17	1.1%
	City of Lodi	436	440	443	447	453	457	462	468	472	477	481	485	490	1.0%
	City of Lompoc	130	132	133	134	135	137	139	141	143	145	147	149	150	1.2%
	City of Palo Alto	925	932	939	948	960	970	980	990	999	1,008	1,016	1,023	1,031	0.9%
	City of Redding	766	774	780	787	798	808	821	833	845	858	869	880	891	1.3%
	City of Roseville	1,179	1,191	1,199	1,210	1,225	1,238	1,254	1,270	1,285	1,301	1,314	1,327	1,341	1.1%
	City of San Francisco	1,017	1,026	1,031	1,040	1,051	1,060	1,068	1,076	1,084	1,100	1,112	1,120	1,132	0.9%
	City of Shasta Lake	188	191	192	193	194	195	196	197	198	198	199	199	199	0.4%
	City of Ukiah	106	107	108	109	111	112	114	115	117	119	120	121	123	1.3%
	Island Energy/Pittsburg	28	28	28	28	29	29	29	29	30	30	30	30	30	0.6%
	Lassen Municipal Utility District	131	133	134	135	137	138	141	143	145	148	150	152	154	1.3%
	Merced Irrigation District	449	453	456	460	465	468	472	475	478	481	483	486	488	0.7%
	Modesto Irrigation District	2,499	2,527	2,545	2,567	2,594	2,619	2,651	2,681	2,709	2,737	2,762	2,786	2,811	1.0%
	Pacific Gas and Electric Company (Bundled)	76,602	76,124	74,552	74,421	74,784	75,122	75,621	76,163	76,585	77,042	77,314	77,515	77,692	0.2%
	Pacific Gas and Electric Company (Direct Access)	8,868	9,068	9,203	9,321	9,230	9,149	9,064	8,990	8,913	8,833	8,748	8,665	8,573	-0.5%
	Pacific Gas and Electric Company (Mann Clean Energy CCA)	1,043	1,577	1,600	1,580	1,561	1,545	1,527	1,512	1,496	1,479	1,462	1,445	1,427	-0.9%
	Pacific Gas and Electric Company (Sonoma Clean Power CCA)	-	435	1,751	1,737	1,723	1,711	1,699	1,688	1,677	1,665	1,653	1,640	1,626	12.7%
	Plumas-Sierra Rural Electric Cooperation	129	130	131	132	134	136	138	140	142	144	146	148	150	1.3%
	Port of Oakland	46	46	47	47	47	48	48	48	48	49	50	50	50	0.8%
	Port of Stockton	19	19	19	20	20	20	20	20	20	21	21	21	21	0.9%
	Silicon Valley Power	2,994	3,019	3,041	3,069	3,102	3,127	3,153	3,174	3,194	3,215	3,230	3,245	3,261	0.7%
Tuolumne County Public Power Agency	25	25	25	26	26	26	26	27	27	27	27	28	28	1.0%	
Turlock Irrigation District	2,040	2,065	2,081	2,101	2,126	2,150	2,179	2,208	2,235	2,264	2,290	2,314	2,341	1.1%	
PGE Total		102,709	103,378	103,368	103,495	103,924	104,318	104,881	105,493	105,973	106,502	106,808	107,035	107,241	0.3%
SMUD	Sacramento Municipal Utility District	10,467	10,624	10,725	10,814	10,950	11,076	11,241	11,396	11,554	11,724	11,888	12,047	12,208	1.3%
SCE	Anza Electric Cooperative, Inc	48	49	49	50	50	51	52	54	55	56	57	58	59	1.7%
	Azusa Light & Water	266	268	270	272	275	277	280	284	287	290	293	296	299	1.0%
	Bear Valley Electric Service	129	130	131	132	134	135	138	140	143	145	148	150	152	1.4%
	City of Anaheim	2,388	2,396	2,412	2,434	2,462	2,485	2,513	2,541	2,569	2,598	2,626	2,651	2,678	1.0%
	City of Banning	138	140	140	141	142	143	144	146	148	150	151	153	154	0.9%
	City of Colton	344	346	348	351	355	358	362	367	371	375	379	383	387	1.0%
	City of Corona	75	75	76	77	78	78	79	79	80	80	81	81	82	0.8%
	City of Rancho Cucamonga	74	74	74	75	75	76	77	77	78	79	79	80	80	0.7%
	City of Riverside	2,140	2,151	2,164	2,183	2,208	2,231	2,260	2,290	2,319	2,349	2,377	2,403	2,431	1.1%
	City of Vernon	1,137	1,138	1,148	1,155	1,161	1,165	1,170	1,173	1,177	1,181	1,184	1,187	1,191	0.4%
	Metropolitan Water District	1,985	1,736	1,715	1,695	1,675	1,674	1,674	1,673	1,673	1,674	1,675	1,676	1,678	-0.3%
	Moreno Valley Utilities	122	123	124	125	126	128	129	131	132	134	136	137	139	1.1%
	Southern California Edison Company (Bundled)	72,545	73,027	72,784	72,584	72,620	72,722	73,030	73,442	73,802	74,145	74,369	74,510	74,614	0.2%
	Southern California Edison Company (Direct Access)	11,903	11,682	11,552	11,403	11,266	11,157	11,050	10,958	10,860	10,764	10,659	10,553	10,438	-1.0%
	Valley Electric Association, Inc	10	10	10	10	10	10	10	10	10	10	10	10	10	0.0%
	Victorville Municipal	74	74	75	75	75	76	76	76	76	77	77	77	77	0.4%
SCE Total		93,378	93,418	93,072	92,762	92,712	92,765	93,044	93,441	93,780	94,106	94,301	94,406	94,469	0.1%
LADWP	Los Angeles Department of Water and Power	22,859	22,857	22,929	23,031	23,179	23,309	23,560	23,874	24,193	24,519	24,817	25,106	25,405	1.0%
BUGL	City of Burbank	1,057	1,053	1,058	1,065	1,074	1,082	1,092	1,105	1,118	1,130	1,139	1,147	1,156	0.9%
	City of Glendale	1,103	1,099	1,105	1,112	1,122	1,131	1,144	1,160	1,174	1,189	1,199	1,209	1,220	1.0%

**Form 1 1c - Statewide
California Energy Demand Updated Forecast, 2015 - 2025, Mid Demand Baseline Case, Mid AAEE Savings
Electricity Deliveries to End Users by Agency (GWh)**

BUGL Total		2,160	2,152	2,164	2,177	2,196	2,213	2,237	2,265	2,292	2,319	2,338	2,356	2,376	0.9%
PASD	City of Pasadena	1,128	1,115	1,115	1,117	1,122	1,126	1,133	1,144	1,157	1,170	1,185	1,198	1,211	0.8%
DWR	Department of Water Resources	7,193	7,193	7,193	7,193	7,193	7,193	7,193	7,193	7,193	7,193	7,193	7,193	7,193	0.0%
SDGE	San Diego Gas and Electric Company (Bundled)	16,459	16,638	16,540	16,446	16,478	16,533	16,648	16,726	16,772	16,813	16,819	16,826	16,818	0.1%
	San Diego Gas and Electric Company (Direct Access)	3,399	3,436	3,416	3,397	3,403	3,405	3,371	3,342	3,309	3,276	3,241	3,206	3,168	-0.7%
SDGE Total		19,858	20,074	19,956	19,843	19,881	19,937	20,019	20,068	20,082	20,089	20,060	20,032	19,986	0.0%
IID	Imperial Irrigation District	3,363	3,428	3,495	3,563	3,643	3,725	3,820	3,921	3,914	3,980	4,061	4,140	4,221	1.9%
OTHER	California Pacific Electric Company, LLC	556	556	556	556	556	556	556	556	556	556	556	556	556	0.0%
	City of Needles	33	33	33	33	33	33	33	33	33	33	33	33	33	0.0%
	Kirkwood Meadows Public Utility District	7	7	7	7	7	7	7	7	7	7	7	7	7	0.0%
	PacificCorp	788	800	806	812	818	824	830	836	843	849	856	849	856	0.6%
	Surprise Valley Electrification Corporation	104	105	105	106	106	106	107	107	108	108	109	108	109	0.3%
	Truckee-Donner Public Utility District	147	149	151	152	154	155	157	158	160	161	163	161	163	0.8%
OTHER Total		1,636	1,650	1,658	1,666	1,674	1,682	1,690	1,698	1,706	1,715	1,723	1,715	1,723	0.4%
Statewide Total		264,751	265,890	265,695	265,661	266,474	267,345	268,819	270,492	271,844	273,317	274,374	275,228	276,033	0.3%
Total Pumping Load		10,009	9,707	9,689	9,678	9,668	9,676	9,682	9,687	9,693	9,701	9,707	9,714	9,721	0.0%
Total Statewide Retail Deliveries excluding pumping		254,742	256,183	256,006	255,983	256,806	257,669	259,137	260,805	262,151	263,616	264,667	265,514	266,312	0.4%

This table includes retail sales and other deliveries only measured at the customer level. Losses and consumption served by self-generation are excluded. Table developed based on actual 2013 data.

Table includes sales from entities outside of California control areas.

Pacific Gas and Electric Company (Direct Access) includes BART.

TCAP 2017
Total California Renewable Energy (GWh)

Total CA RPS (GWh)						
Plants (GWh)	2015	2016	2017	2018	2019	2020
Wind	13,045	13,440	13,432	13,432	14,068	14,093
Geothermal	13,540	13,720	13,692	13,693	13,696	13,731
Biomass	5,608	7,214	7,542	8,106	8,598	8,623
Solar	14,695	16,555	20,453	24,027	29,014	32,873
Hydro	3,819	5,833	5,833	5,851	5,851	5,851
Out-of-State	11,279	11,279	11,279	11,279	11,279	11,279
Total	61,985	68,041	72,231	76,387	82,506	86,450
% of Sales	24%	27%	28%	30%	32%	33%