

**Form 1.5b - STATEWIDE**  
 California Energy Demand 2019-2030 Managed Forecast - Mid Demand / Mid A&E Ccs  
 1-to-2 Net Electricity Peak Demand by Agency and Balancing Authority (MW)

Balancing Authority	Agency	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Average Annual Growth (2019-2030)	CAISO area Non-IOLUCCA,ESP demand flag
Greater Bay Area	PG&E Service Area - Greater Bay Area	7,223	7,413	6,970	6,930	6,960	6,998	6,972	6,954	6,977	7,022	7,025	7,062	-0.2%	
	NCFA - Greater Bay Area	198	194	190	188	186	185	185	185	185	187	188	188	-0.4%	
	Power Enterprise of the San Francisco PUC	125	120	117	117	117	117	117	117	117	118	118	118	-0.4%	
	Silicon Valley Power	530	542	540	540	551	542	549	570	570	574	574	575	0.7%	
	Other NPES LSEs - Bay Area	5	5	5	5	5	5	5	5	5	5	5	5	-0.6%	
	CDWR - Greater Bay Area	55	55	57	57	57	57	57	56	56	56	56	56	0.0%	
	WAPA - Greater Bay Area	52	53	52	52	52	52	52	52	52	52	52	52	0.0%	
<b>Greater Bay Area Subtotal</b>		<b>8,188</b>	<b>8,083</b>	<b>7,933</b>	<b>7,983</b>	<b>7,973</b>	<b>7,976</b>	<b>7,927</b>	<b>7,917</b>	<b>7,964</b>	<b>8,013</b>	<b>8,013</b>	<b>8,061</b>	<b>-0.14%</b>	
Total North of Path 15	PG&E Service Area - Non Bay Area	9,955	9,809	9,606	9,545	9,513	9,527	9,543	9,580	9,616	9,661	9,662	9,714	-0.2%	
	NCFA - Non Bay Area	211	207	202	200	199	198	198	198	199	200	199	200	-0.4%	
	Other NPES LSEs - Non Bay Area	7	7	7	7	7	7	7	7	7	7	7	7	-0.4%	
	CDWR - Non Bay Area	55	55	57	57	57	57	56	56	56	56	56	56	0.0%	
	WAPA - Non Bay Area	185	185	185	185	185	185	185	185	185	185	185	185	0.0%	
	CDWR - ZIP6	115	115	120	120	120	120	118	118	118	118	118	118	0.0%	
	WAPA - ZIP6	45	45	45	45	45	45	45	45	45	45	45	45	0.0%	
<b>Total North of Path 15</b>		<b>18,602</b>	<b>18,341</b>	<b>17,991</b>	<b>17,886</b>	<b>17,832</b>	<b>17,820</b>	<b>17,893</b>	<b>17,964</b>	<b>18,026</b>	<b>18,161</b>	<b>18,142</b>	<b>18,247</b>	<b>-0.17%</b>	
Total Zone Path 26	Turlock Irrigation District	543	555	551	550	528	527	526	524	524	524	525	525	-0.2%	
	Mendocino	109	107	107	106	106	106	106	106	106	106	106	106	-0.2%	
<b>Total Zone Path 26</b>		<b>2,177</b>	<b>2,146</b>	<b>2,110</b>	<b>2,097</b>	<b>2,091</b>	<b>2,090</b>	<b>2,095</b>	<b>2,109</b>	<b>2,111</b>	<b>2,126</b>	<b>2,124</b>	<b>2,144</b>	<b>-0.14%</b>	
Total Valley	Turlock Irrigation District	543	555	551	550	528	527	526	524	524	524	525	525	-0.2%	
	Mendocino	109	107	107	106	106	106	106	106	106	106	106	106	-0.2%	
<b>Total Valley</b>		<b>12,991</b>	<b>12,409</b>	<b>12,167</b>	<b>12,091</b>	<b>12,043</b>	<b>12,043</b>	<b>12,043</b>	<b>12,043</b>	<b>12,043</b>	<b>12,173</b>	<b>12,265</b>	<b>12,553</b>	<b>-0.19%</b>	
Total North of Path 26 (Total PG&E TAC Area)	Turlock Irrigation District	543	555	551	550	528	527	526	524	524	524	525	525	-0.2%	
	Mendocino	109	107	107	106	106	106	106	106	106	106	106	106	-0.2%	
<b>Total North of Path 26 (Total PG&amp;E TAC Area)</b>		<b>20,779</b>	<b>20,486</b>	<b>20,100</b>	<b>19,983</b>	<b>19,923</b>	<b>19,919</b>	<b>19,988</b>	<b>20,067</b>	<b>20,137</b>	<b>20,287</b>	<b>20,266</b>	<b>20,391</b>	<b>-0.17%</b>	
Total Balancing Authority of Northern California Control Area	Modesto Irrigation District	674	664	669	668	668	668	664	661	661	661	661	661	-0.3%	
	Roseville	325	311	318	318	316	316	315	314	314	314	314	315	-0.2%	
	Redding	221	216	215	215	215	214	213	213	213	213	213	214	-0.2%	
	City of Shasta Lake	35	34	34	34	34	34	33	33	33	33	33	34	-0.2%	
	WAPA (BANC)	90	90	90	90	90	90	90	90	90	90	90	90	0.0%	
	SCS Service Area - LA Basin	16,297	16,109	15,975	15,861	15,850	15,796	15,753	15,749	15,769	15,789	15,789	15,883	-0.15%	
	Adakus	526	530	535	537	531	528	528	528	528	528	528	528	0.0%	
	Piedra Water and Power	273	270	267	265	265	264	264	264	264	264	264	264	-0.1%	
	Bakerside	594	587	582	578	577	575	574	574	574	575	576	584	-0.15%	
	Wenon	148	147	151	150	149	149	149	149	149	149	149	149	0.0%	
Other SPES LSEs - LA Basin	248	243	241	240	239	239	238	238	238	238	238	242	-0.1%		
MWD - LA Basin	30	30	30	30	30	30	30	30	30	30	30	30	0.0%		
<b>LA Basin Subtotal</b>		<b>18,104</b>	<b>17,895</b>	<b>17,771</b>	<b>17,645</b>	<b>17,633</b>	<b>17,572</b>	<b>17,528</b>	<b>17,521</b>	<b>17,542</b>	<b>17,568</b>	<b>17,669</b>	<b>-0.14%</b>		
Big Creek/Ventura Subtotal	SCS Service Area - Big Creek/Ventura	3,996	3,950	3,917	3,899	3,886	3,873	3,862	3,861	3,866	3,871	3,894	3,924	-0.1%	
	CDWR - Big Creek/Ventura	290	275	275	275	275	275	275	276	276	280	303	303	0.0%	
	Other SPES LSEs - Other	1,000	999	999	999	999	971	971	976	977	978	986	986	-0.1%	
	CDWR - Other	47	45	45	45	45	45	45	45	45	45	50	50	0.0%	
<b>Big Creek/Ventura Subtotal</b>		<b>4,286</b>	<b>4,224</b>	<b>4,192</b>	<b>4,164</b>	<b>4,161</b>	<b>4,148</b>	<b>4,137</b>	<b>4,137</b>	<b>4,142</b>	<b>4,174</b>	<b>4,197</b>	<b>-0.11%</b>		
Total SCE TAC Area	SCS Service Area - Other	163	164	164	164	164	164	164	164	164	164	171	171	0.0%	
	MWD - Other	26	26	25	25	25	25	25	25	25	25	25	25	-0.1%	
<b>Total SCE TAC Area</b>		<b>23,637</b>	<b>23,343</b>	<b>23,177</b>	<b>23,015</b>	<b>23,000</b>	<b>22,923</b>	<b>22,862</b>	<b>22,859</b>	<b>22,886</b>	<b>22,964</b>	<b>23,097</b>	<b>23,091</b>	<b>-0.13%</b>	
SOG&E TAC Area	Imperial Irrigation District Control Area	1,971	1,956	1,945	1,937	1,930	1,924	1,919	1,917	1,917	1,920	1,926	1,933	-0.3%	
	Imperial Irrigation District Control Area	48,743	48,112	47,589	47,269	47,266	47,253	47,267	47,284	47,295	47,297	47,291	48,261	-0.09%	
Valley Electric Association (LA + NV Territory)	Total California SO Non-coincident Peak	46,117	45,647	45,181	45,280	45,447	45,610	45,827	46,011	46,227	46,493	46,702	47,016	0.18%	
	Total California SO Coincident Peak	61,141	60,327	59,673	59,369	59,158	59,040	58,929	58,923	58,940	59,138	59,246	59,558	-0.24%	
<b>Total STATEWIDE Non-coincident Peak</b>		<b>57,848</b>	<b>57,236</b>	<b>56,628</b>	<b>56,775</b>	<b>56,872</b>	<b>56,987</b>	<b>57,109</b>	<b>57,216</b>	<b>57,354</b>	<b>57,572</b>	<b>57,776</b>	<b>58,045</b>	<b>0.03%</b>	

Table developed using weather normalized 2019 net peak demand values for each BA area. Includes the impact of IOU load-modifying demand response programs. Agency peak demand within a BA area is adjusted to be coincident with the respective BA area net peak demand total.

Please input your LSE's 2021 System RA allocation, NQC MW here. This will be kept confidential.														
CAISO area Non-IOLUCCA,ESP non-coincident demand	2,030	2,011	2,012	2,003	2,024	2,015	2,026	2,027	2,028	2,029	2,030			
CAISO area IOLUCCA,ESP non-coincident demand	43,227	43,592	43,811	43,314	43,259	43,288	43,496	43,689	43,881	44,121	44,311			
coincident adjustment	2616	2616	2616	2616	2616	2616	2616	2616	2616	2616	2616			
CAISO area IOLUCCA,ESP coincident demand	41,866	41,389	41,466	41,612	41,754	41,951	42,123	42,326	42,533	42,726	43,000			
Your LSE's estimated percent of CAISO area IOLUCCA,ESP coincident demand	1.64%													
Your LSE's estimated system RA requirement, NQC MW	685	677	678	681	683	686	689	692	696	699	703			

Adjusted share for RSP comparisons

3.75%

Test TRUE































resource_num	resource	note	resource_contract_note	online	online_date_for_new_resources
1				1	ok
2				1	ok
3				0	1/1/2022
4				0	1/1/2023
5				0	1/1/2025
6				0	1/1/2022
7				0	1/1/2023
8				0	1/1/2026
9				0	1/1/2023
10				0	1/1/2023
11				0	1/1/2024
12				0	1/1/2026
13				1	ok
14				1	ok
15				1	ok
16				1	ok
17				0	8/1/2022
18				0	8/1/2023
19				0	8/1/2022
20				0	8/1/2021
21				0	8/1/2021
22				0	8/1/2021
23				1	ok
24				1	ok
25				0	8/1/2023



contract_execution_date	contract_start	contract_end	interconnection_queue_position	lse_owned	cam	is_incremental	incremental_explanation	viability_cod_reasonableness	viability_technical_feasibility
11/1/2020	3/1/2021	12/31/2030	N/A			0		ok	ok
11/1/2020	3/1/2021	12/31/2030	N/A			0		ok	ok
11/1/2020	1/1/2022	12/31/2030	TBD			1		3	1
1/1/2021	1/1/2023	12/31/2030	TBD			1		3	1
1/1/2023	1/1/2025	12/31/2030	TBD			1		3	1
1/1/2021	1/1/2022	12/31/2030	TBD			1		3	1
1/1/2021	1/1/2023	12/31/2030	TBD			1		3	1
1/1/2024	1/1/2026	12/31/2030	TBD			1		3	1
1/1/2021	1/1/2023	12/31/2030	TBD			1		3	1
1/1/2021	1/1/2023	12/31/2030	TBD			1		3	1
1/1/2022	1/1/2024	12/31/2030	TBD			1		3	1
1/1/2024	1/1/2026	12/31/2030	TBD			1		3	1
10/1/2020	1/1/2024	12/31/2030	N/A			0		3	1
10/1/2020	1/1/2026	12/31/2030	N/A		1	0		3	1
1/1/2021	3/1/2021	12/31/2030	N/A			0		ok	ok
1/1/2021	3/1/2021	12/31/2030	N/A			0		ok	ok
9/1/2020	8/1/2022	8/1/2037	N/A	0	0	1		2	1
9/1/2020	8/1/2023	8/1/2038	N/A	0	0	1		2	1
9/1/2020	8/1/2022	8/1/2032	N/A	0	0	1		1	1
9/1/2020	8/1/2021	8/1/2041	N/A	0	0	1		1	1
9/1/2020	8/1/2021	8/1/2041	N/A	0	0	1		1	1
9/1/2020	8/1/2021	8/1/2036	N/A	0	0	1		1	1
9/1/2020	8/1/2021	7/31/2022	N/A	0	0	1	resource con	1	1
9/1/2020	8/1/2022	8/1/2033	N/A	0	0	1	ed to VSTAE	1	1
9/1/2020	8/1/2023	8/1/2033	N/A	0	0	1		3	1

viability_resource_sufficiency	viability_financing	storage_max_disc_harge_mw	storage_depth_mwh	is_hybrid	hybrid_generator_mw	hybrid_combined_max_mw	hybrid_can_charge_from_grid	execution_year
ok	ok							2020
ok	ok							2020
2	4	50	200	1	100	150	0	2020
2	4	200	800	1	400	600	0	2021
2	4	50	200	1	100	150	0	2023
2	4							2021
2	4							2021
2	4							2024
2	4							2021
2	4							2021
2	4							2022
2	4	65	520	0	N/A	N/A	N/A	2024
2	4							2020
2	4							2020
ok	ok							2021
ok	ok							2021
2	3	50	100	0	N/A	N/A	N/A	2020
2	3	75	300	0	N/A	N/A	N/A	2020
2	3	20	80	0	N/A	N/A	N/A	2020
2	3	20	80	0	N/A	N/A	N/A	2020
2	3	20	80	0	N/A	N/A	N/A	2020
2	3	104	416	0	N/A	N/A	N/A	2020
2	2	10	40	0	N/A	N/A	N/A	2020
2	2	20	80	0	N/A	N/A	N/A	2020
2	4	17	69	0	N/A	N/A	N/A	2020

execution_month	start_year	start_month	end_year	end_month	Test: Correct data type for lse_owned	Test: Correct data type for cam	Test:All data provided for hybrid	TEST: All data provided for contract	TEST: No fillmes	Max MW in September 2021	NQC MW in September 2021
11	2021	3	2030	12	1	1	1	1			
11	2021	3	2030	12	1	1	1	1			
11	2022	1	2030	12	1	1	1	1			
1	2023	1	2030	12	1	1	1	1			
1	2025	1	2030	12	1	1	1	1			
1	2022	1	2030	12	1	1	1	1			
1	2023	1	2030	12	1	1	1	1			
1	2026	1	2030	12	1	1	1	1			
1	2023	1	2030	12	1	1	1	1			
1	2023	1	2030	12	1	1	1	1			
1	2024	1	2030	12	1	1	1	1			
1	2026	1	2030	12	1	1	1	1			
10	2024	1	2030	12	1	1	1	1			
10	2026	1	2030	12	1	1	1	1			
1	2021	3	2030	12	1	1	1	1			
1	2021	3	2030	12	1	1	1	1			
9	2022	8	2037	8	1	1	1	1			
9	2023	8	2038	8	1	1	1	1			
9	2022	8	2032	8	1	1	1	1			
9	2021	8	2041	8	1	1	1	1			
9	2021	8	2041	8	1	1	1	1			
9	2021	8	2036	8	1	1	1	1			
9	2021	8	2022	7	1	1	1	1			
9	2022	8	2033	8	1	1	1	1			
9	2023	8	2033	8	1	1	1	1			

Supply Side incremental NQC MW in September 2021	Incremental energy-only NQC MW in September 2021	Incremental demand-side resource not in IEPR demand forecast in September 2021	find_position_of_adding	find_position_of_mw
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	#VALUE!
		0	#VALUE!	3
		0	#VALUE!	#VALUE!

