California Energy Commission

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Staff Proposed 2010 Peak Demand Forecast

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Peak Demand Forecast for Resource Adequacy

- The Energy Commission 1-in-2 peak demand forecast serves as the reference case for year-ahead monthly peak demand forecasts for CPUC-jurisdictional LSEs.
- Staff also collects nonjurisdictional forecasts and adjusts for coincidence. Import allocations for all LSEs in the CAISO are based on load shares calculated with the Energy Commission adjusted forecast.
- The 2010 forecasts for each LSE must be established by June 30th each year to meet CAISO and CPUC schedules. This forecast is the basis of their Fall filing demonstrating that they have met 90% of the 115% of monthly peak load requirement for the following year.
- LSEs must also procure resources to meet local area needs at the 1-in-10 level. The CAISO local area requirements analysis for 2010 used a revised forecast prepared by staff in January 2009 that attempted to adjust, to a limited extent, for changing economic conditions.
- For 2010 system requirements, staff is proposing to use the preliminary peak demand forecast.

Resource Adequacy Demand Forecast Schedule

- Comments on the 2010 peak forecast due by June 5th.
- Final staff peak demand forecast for purposes of 2010 Resource Adequacy will be considered for adoption at the June 18th business meeting.
- Staff provides LSE forecasts and load shares to CAISO and CPUC on June 30.
- LSEs receive final forecasts and Demand Response allocations mid-July.

Draft Peak Demand Forecast

California ISO by Transmission Access Charge(TAC) Area

Draft Forecast (MW)		2008	2009	2010
	PGE	21,784	20,517	20,692
	SCE	21,522	22,129	22,286
	SDGE	4,329	4,425	4,466
	CAISO	46,498	45,949	46,313
2007 IEPR Forecast (MW)				
	PGE	21,671	21,954	22,236
	SCE	24,035	24,438	24,845
	SDGE	4,568	4,641	4,712
	CAISO	49,076	49,815	50,558
Difference (MW)				
	PGE	113	-1,436	-1,544
	SCE	-2,514	-2,309	-2,559
	SDGE	-240	-216	-246
	CAISO	-2,578	-3,867	-4,245
Percent Difference				
	PGE	0.5%	-6.5%	-6.9%
	SCE	-10.5%	-9.4%	-10.3%
	SDGE	-5.2%	-4.6%	-5.2%
	CAISO	-5.3%	-7.8%	-8.4%

Draft Peak Demand Forecast

Other California Balancing Authorities

Draft Forecast (MW)		2008	2009	2010
	LADWP	6,789	6,342	6,334
	SMUD	4,542	4,430	4,483
	TID	589	553	560
	IID	977	975	994
2007 IEPR Forecast (MW)				
	LADWP	6,317	6,355	6,388
	SMUD	4,727	4,797	4,868
	TID	563	572	581
	IID	1,063	1,097	1,129
Difference (MW)				
	LADWP	471	-12	-54
	SMUD	-185	-367	-385
	TID	26	-19	-21
	IID	-87	-121	-135
Percent Difference				
	LADWP	7.5%	-0.2%	-0.8%
	SMUD	-3.9%	-7.6%	-7.9%
	TID	4.6%	-3.3%	-3.6%
	IID	-8.1%	-11.1%	-12.0%

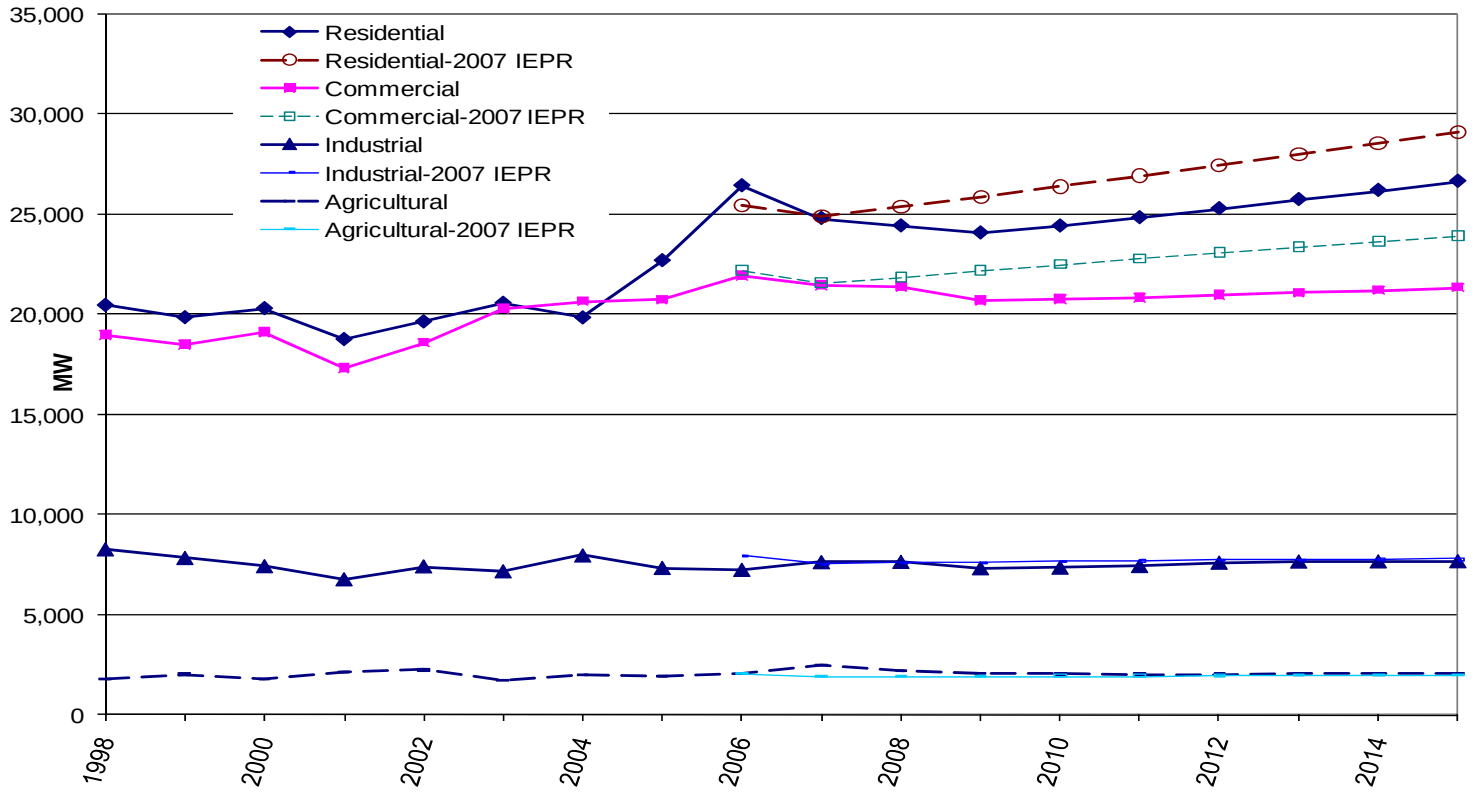
Additional Efficiency Effects in the Draft Forecast

Peak Impacts of Additional Efficiency Measures in Draft Forecast (MW)

		Residential Energy Efficiency Programs	Commercial Energy Efficiency Programs	Agr. Energy Efficiency Programs	Increased Commercial Lighting Compliance	Total	Percent Change
PG&E	2008	137	118	11	35	301	-1.3%
	2009	236	139	14	66	455	-2.0%
	2010	331	152	17	94	595	-2.6%
SCE	2008	87	46	4	40	178	-0.8%
	2009	152	80	14	76	321	-1.4%
	2010	213	111	23	108	456	-2.0%
SDG&E	2008	11	5	0	9	25	-0.6%
	2009	20	12	0	18	49	-1.1%
	2010	28	19	0	26	72	-1.6%

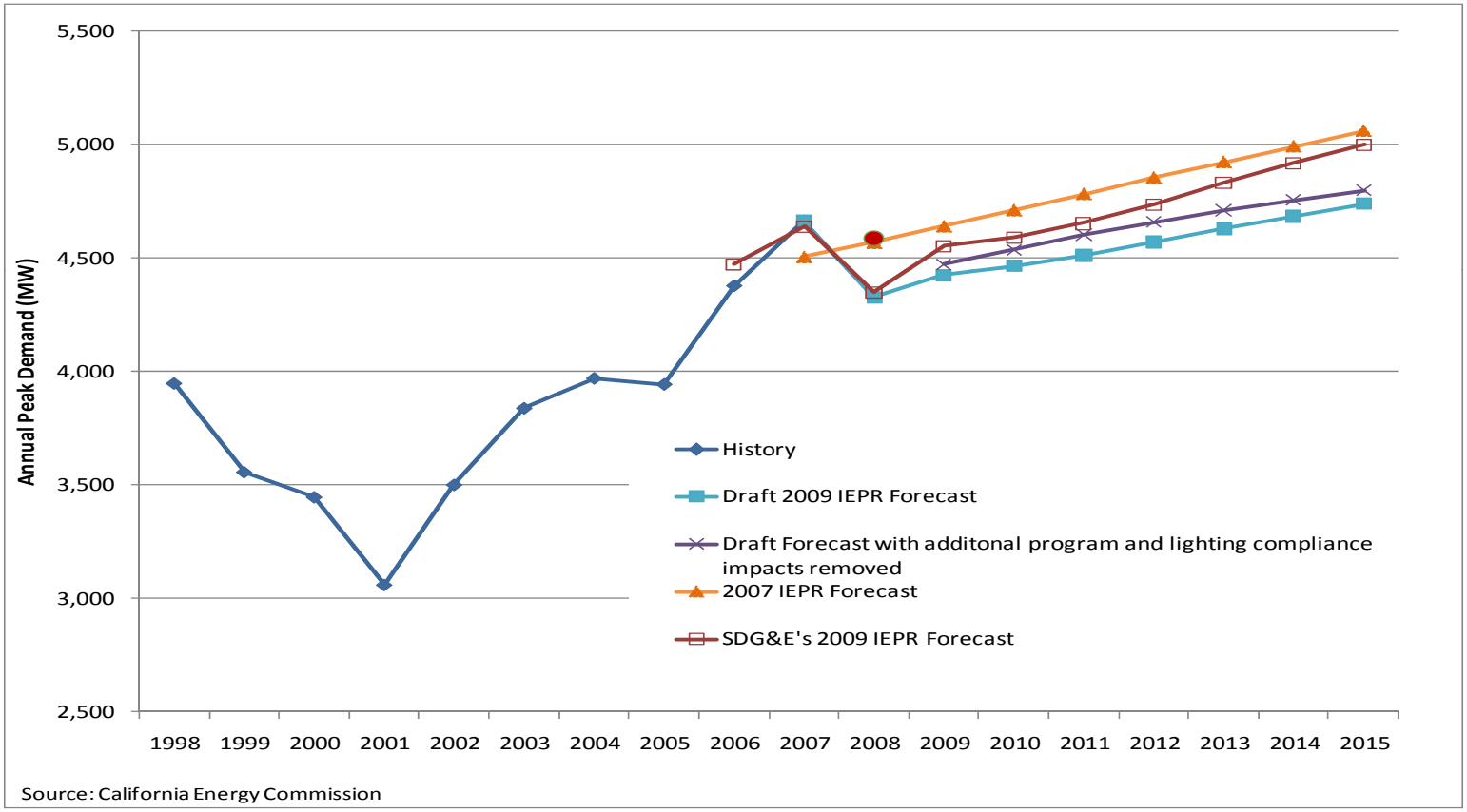
The additional efficiency effects contribute from 18-38% of the reduction in the 2010 forecast.

Peak Load by Sector



The combination of increased energy efficiency and weak economic growth reduce residential and commercial peak demand by 7.5% each in 2010. The forecast of industrial peak demand is 4% lower.

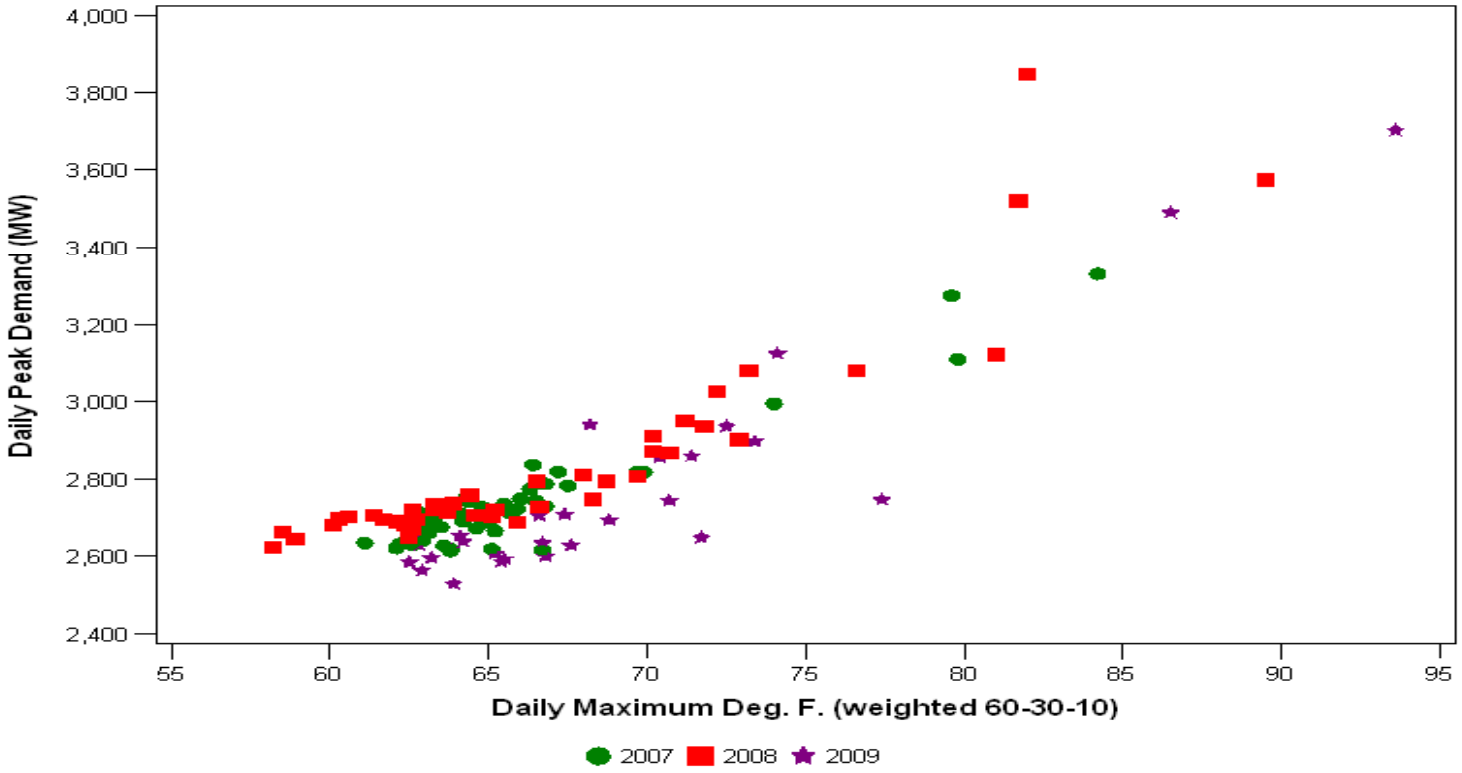
SDG&E Area Peak Demand Forecast



Forecasted 2009 demand is 3.6% (165 MW) below the weather-adjusted 2008 peak.

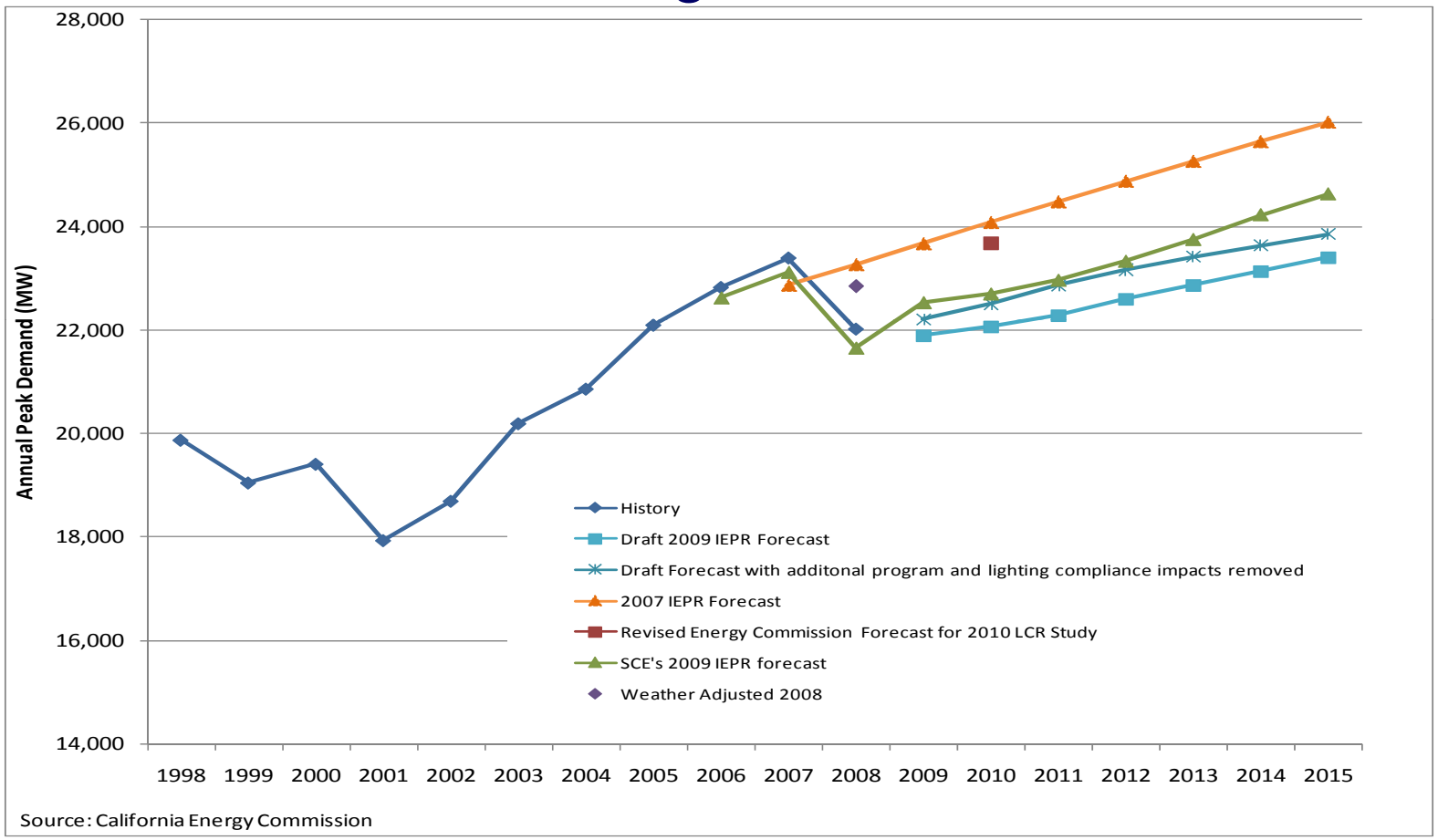
SDG&E Daily Peaks and Temperatures

April and May Weekdays



Staff estimated 2008/2009 monthly load-temperature response to assess current load growth. In SDG&E, the average year over year change in estimated weather-adjusted peak for January through April was -1%.

SCE Planning Area Forecast



Forecasted 2009 Demand is 5.6% (1150 MW) below the weather adjusted 2008 peak.

Draft SCE TAC Area Forecast (MW)

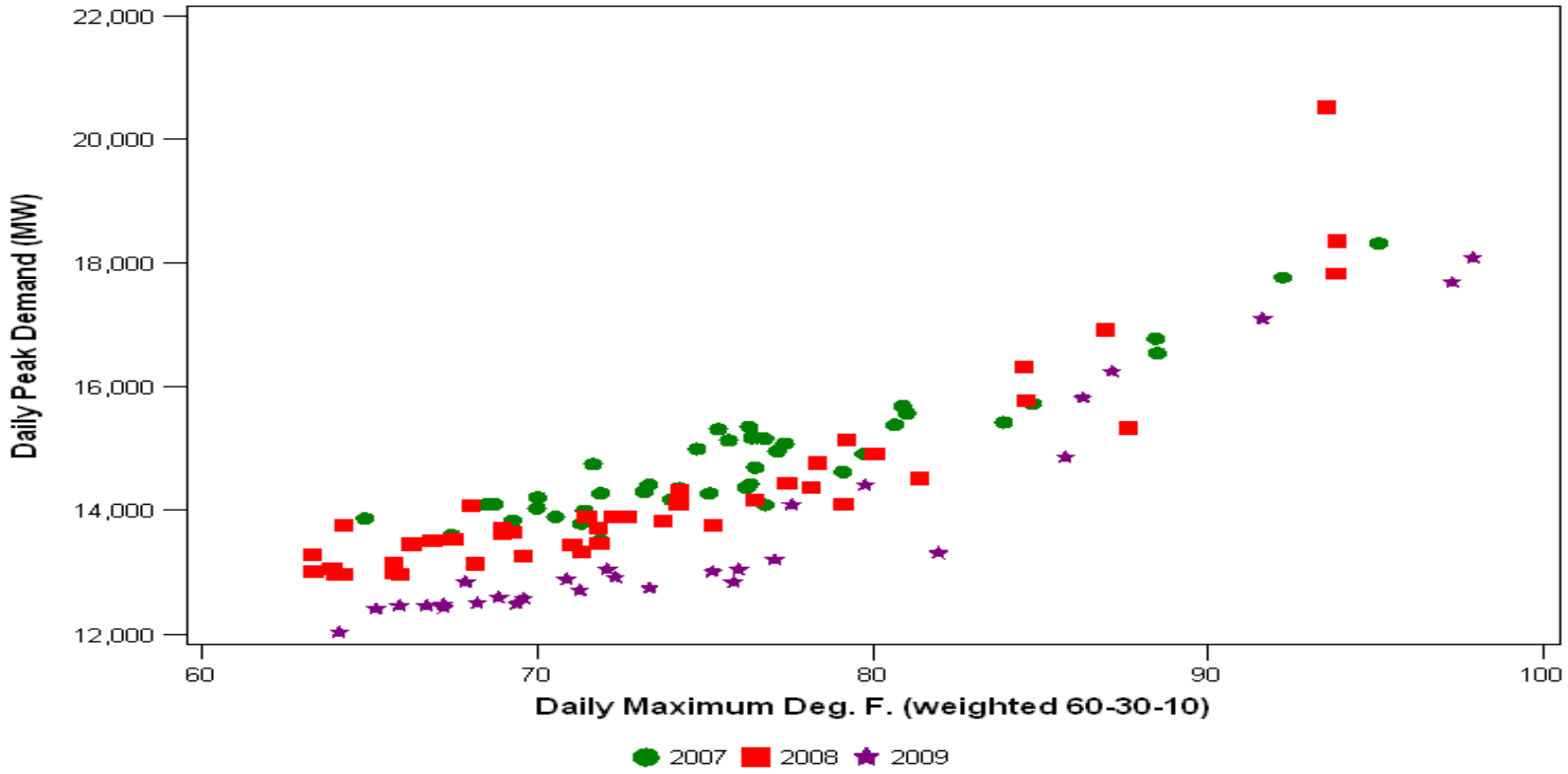
	2007 IEPR Forecast	Revised Forecast for 2010 LCR	Draft *2009 IEPR* Forecast		
	1-in-2	1-in-2	1-in-2	MW	%
Coincident Peak by Utility	**2010**	**2010**	**2010**	**Change**	**Change**
SCE Service Area	22,227	21,849	20,183	-1,666	-7.6%
Anaheim Public Utilities Dept.	584	578	527	-52	-9.0%
Riverside Utilities Dept.	619	603	540	-63	-10.5%
Vernon Municipal Light Dept.	184	182	177	-5	-2.8%
Metropolitan Water District	185	185	185	0	0.1%
Other Publicly Owned Utilities	282	276	213	-63	-22.8%
Pasadena Water and Power Dept.	300	300	283	-17	-5.6%
Dept of Water Resources - South	463	178	178	0	0.0%
SCE TAC Area Coincident Peak	**24,845**	**24,152**	22,286	-1,866	-7.7%

Source: California Energy Commission

The LSE and TAC level forecast was developed using historic coincident peaks and planning area growth rates.

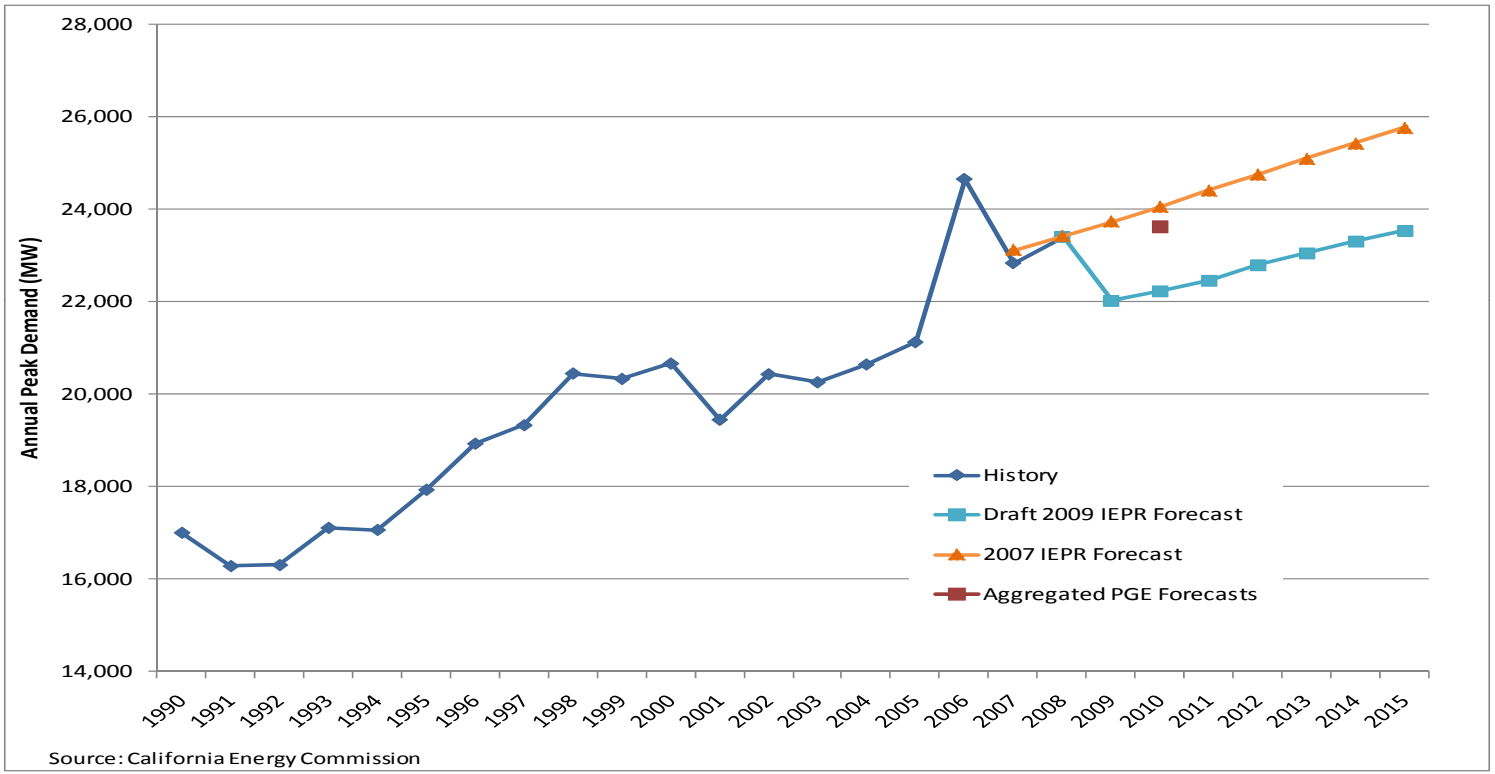
SCE TAC Area Daily Peaks and Temperatures

April and May Weekdays



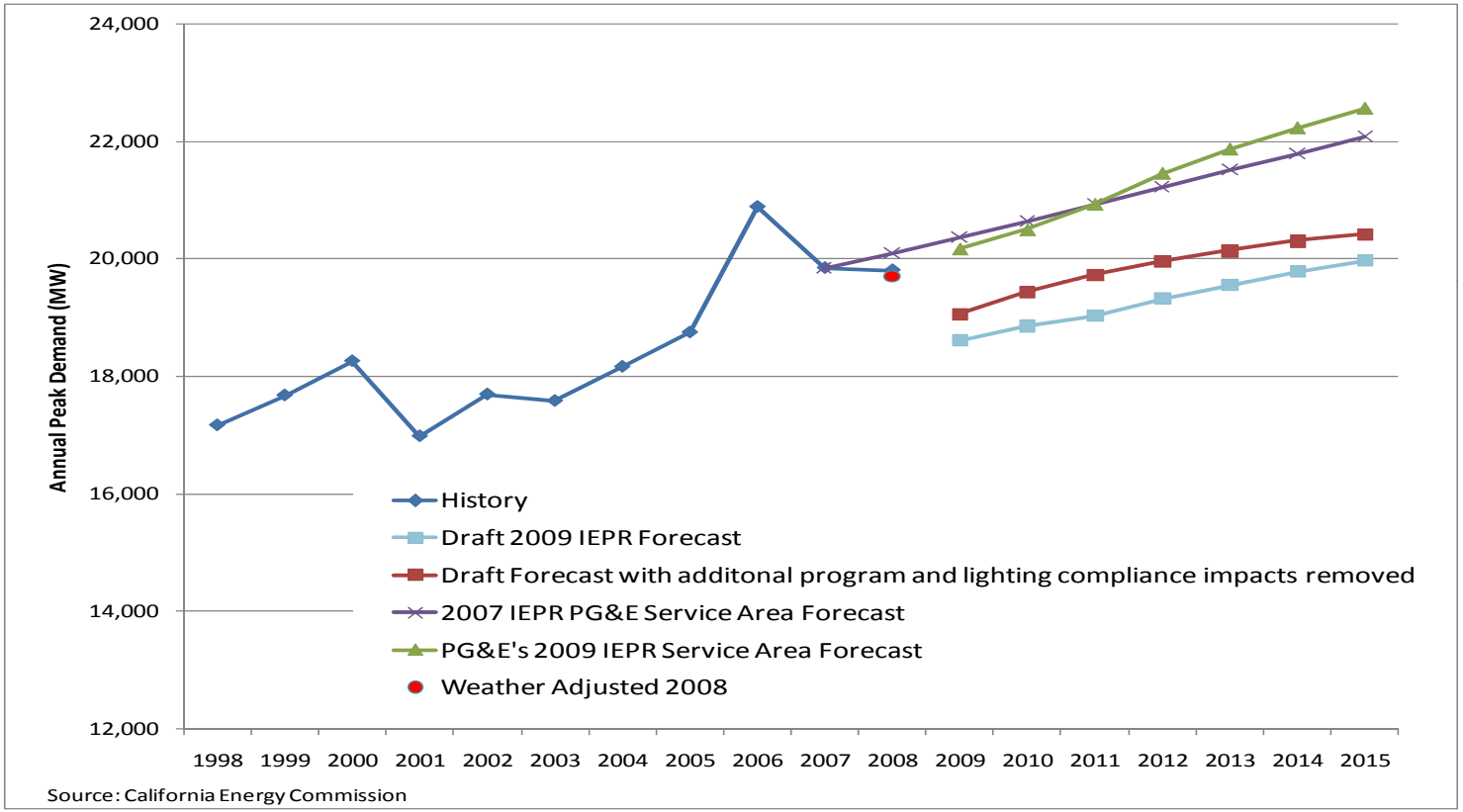
Staff estimates April 2009 baseload declined by 580 MW compared to April 2008. Average year over year change in weather-adjusted peak Jan.-April is -3.7%.

PG&E Planning Area Forecast



The PG&E planning forecast, which includes non-CAISO LSEs such as MID, TID, Redding, and Roseville, declines by 5.8% from 2008 to 2009.

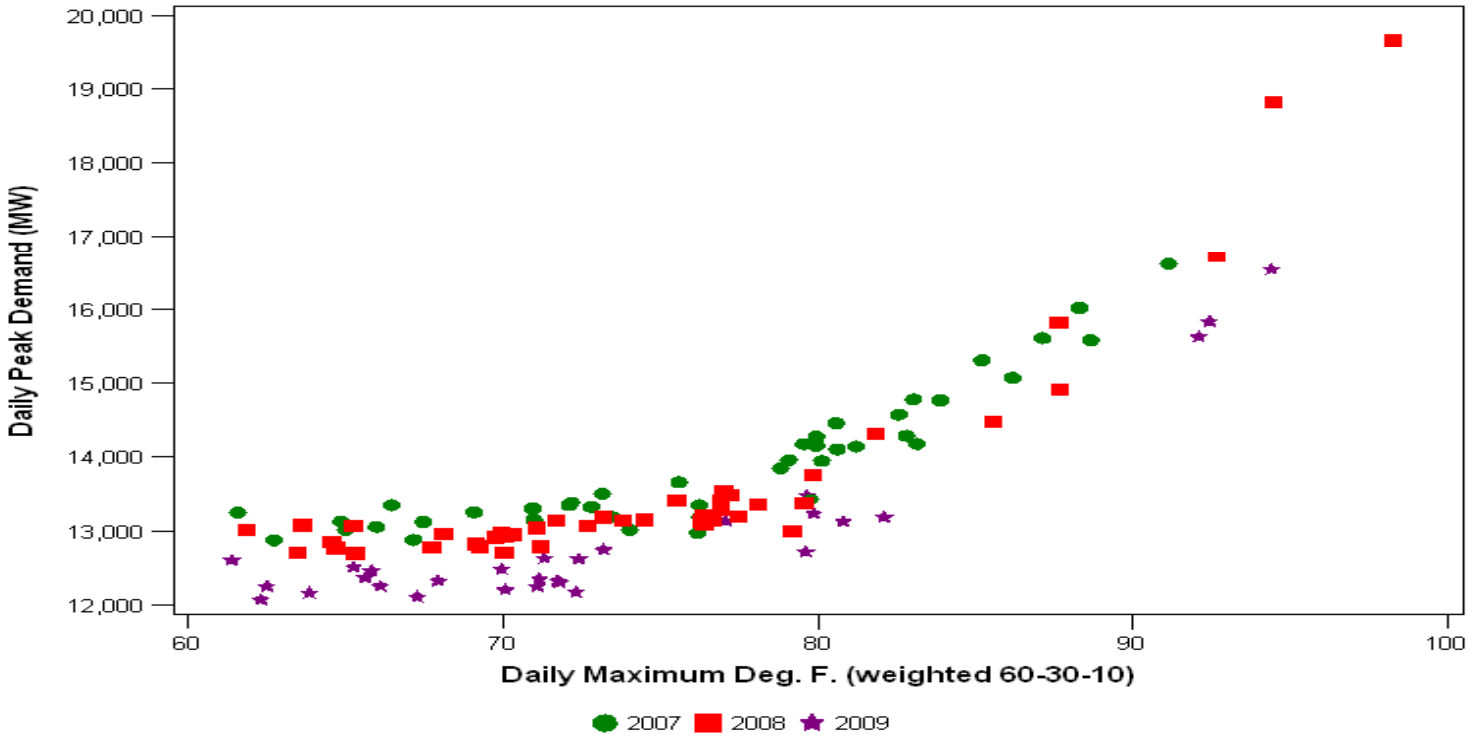
PG&E Service Area Forecast



Forecasted 2009 demand is 5.5% (1088 MW) lower than the weather-adjusted 2008 peak.

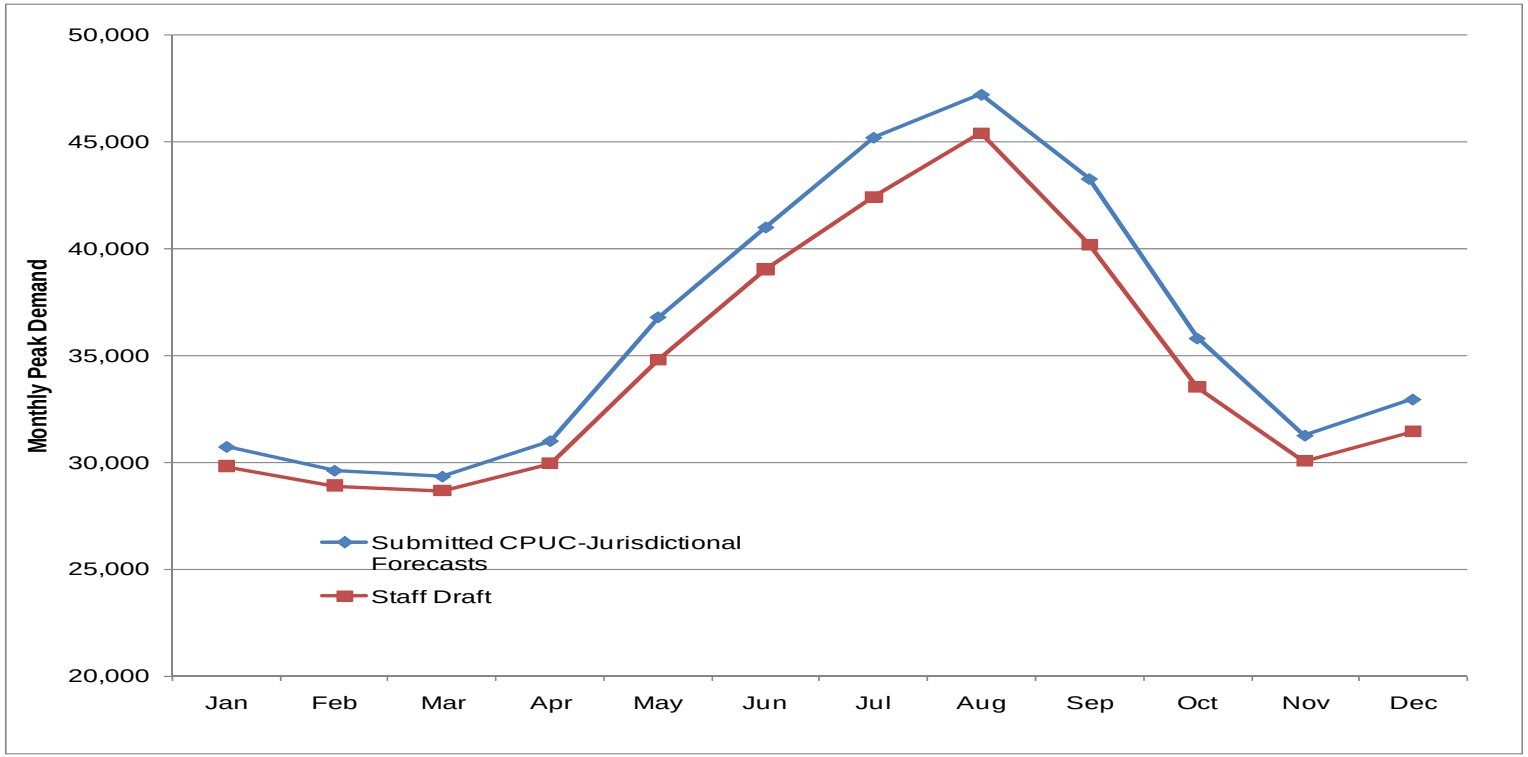
PG&E TAC Area Daily Peaks and Temperatures

April and May Weekdays



Staff estimates that April 2009 baseload was 500 MW lower than April 2008.

Staff Forecast versus Forecasts Submitted by CPUC-Jurisdictional LSEs



Staff developed monthly peaks by service area from by estimating 2008 seasonal load-temperature response, and calculating the median predicted demand using historical weather data. The sum of the submitted forecasts, after adjustments must sum to within 1% of the Energy Commission forecast.

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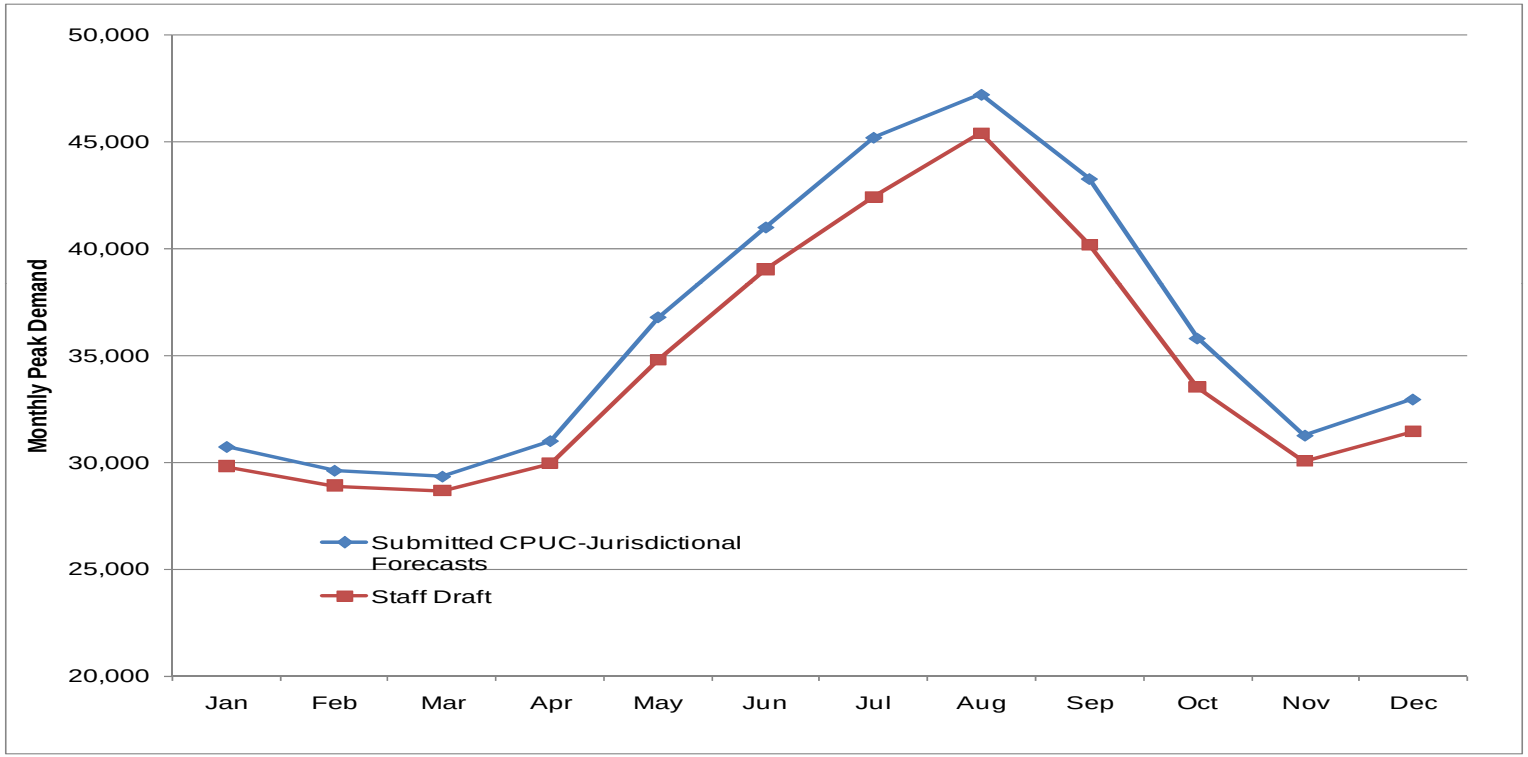

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