



California Energy Commission

Committee Workshop on 2010-2020 Revised Demand Forecast and Uncommitted Energy Efficiency

SCE Planning Area Forecast

First Floor, Hearing Room A

Monday, September 21, 2009
10 a.m.

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DOCKET

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DATE SEP 21 2009

RECD SEP 22 2009



SCE Forecast Overview

- Consumption Forecast is 2% higher than draft in 2010 growing to 5% higher by 2018
- Consumption Forecast is still lower than CED 2007 by over 9%
- Peak forecast is over 1% higher in 2018 than draft
- Consumption forecast includes self generation while peak excludes self generation
- Per capita consumption declines
- Per capita peak now constant
- Load factor higher but continues decline



SCE Planning Area Forecast Results

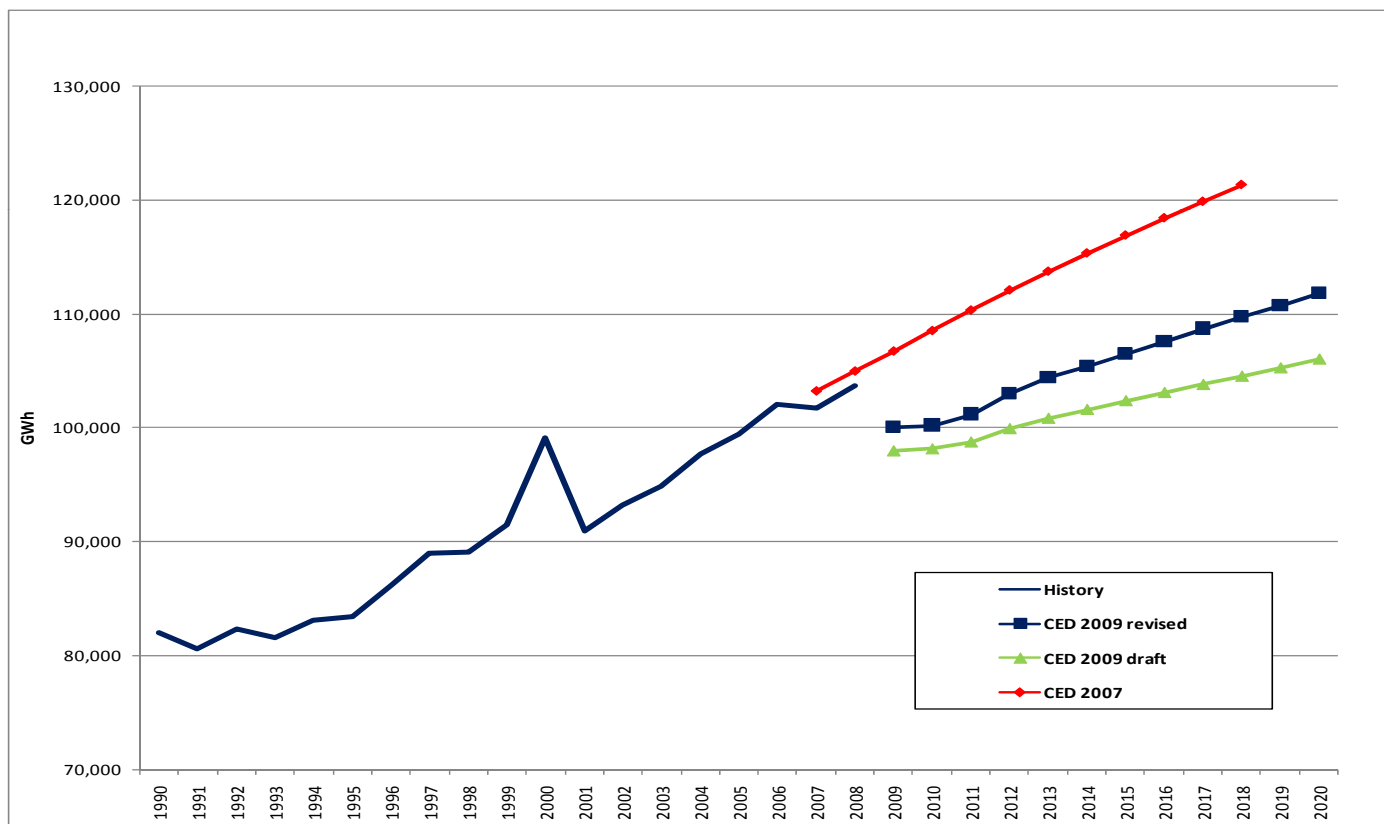
- Revised peak growth rate similar to CED 2007

Consumption (GWH)					
	<i>CED 2007</i> (Oct. 2007)	<i>CED 2009 Draft</i> mid-rate case (June 2009)	<i>CED 2009</i> <i>Revised</i> (Sept. 2009)	Percent Difference <i>CED 2009</i> <i>Revised/CED 2007</i>	Percent Difference <i>CED</i> <i>2009 Revised/CED 2009</i> <i>Draft</i>
1990	82,069	82,069	82,069	0.00%	0.00%
2000	99,146	99,146	99,150	0.00%	0.00%
2008	104,957	99,780	103,701	-1.20%	3.93%
2010	108,503	98,190	100,222	-7.63%	2.07%
2015	116,872	102,394	106,520	-8.86%	4.03%
2018	121,298	104,528	109,750	-9.52%	5.00%
Average Annual Growth Rates					
1990-2000	1.91%	1.91%	1.91%		
2000-2008	0.71%	0.13%	0.90%		
2008-2010	1.68%	-0.53%	-1.13%		
2010-2018	1.40%	0.78%	1.14%		
Peak (MW)					
	<i>CED 2007</i> (Oct. 2007)	<i>CED 2009 Draft</i> mid-rate case (June 2009)	<i>CED 2009</i> <i>Revised</i> (Sept. 2009)	Percent Difference <i>CED 2009</i> <i>Revised/CED 2007</i>	Percent Difference <i>CED</i> <i>2009 Revised/CED 2009</i> <i>Draft</i>
1990	17,635	17,647	17,647	0.07%	0.00%
2000	19,408	19,506	19,506	0.50%	0.00%
2008	23,272	22,859	22,020	-5.38%	-3.67%
2010	24,082	22,898	22,836	-5.17%	-0.27%
2015	26,013	24,299	24,459	-5.97%	0.66%
2018	27,112	25,108	25,418	-6.25%	1.23%
Average Annual Growth Rates					
1990-2000	0.96%	1.01%	1.01%		
2000-2008	2.30%	2.00%	1.53%		
2008-2010	1.73%	0.09%	1.84%		
2010-2018	1.49%	1.16%	1.35%		
Historic values are shaded					



SCE Electricity Consumption Forecast

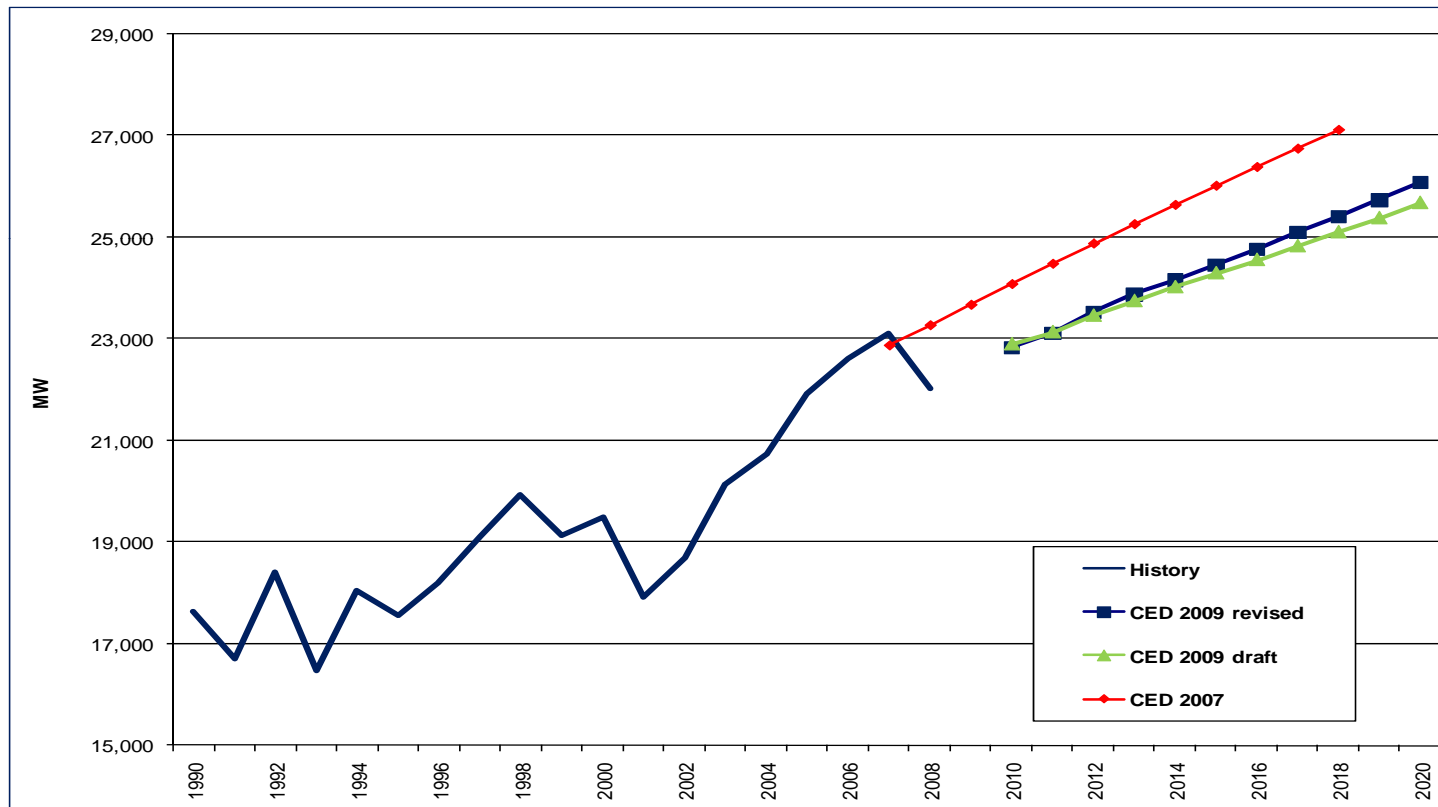
- Higher starting point and growth





SCE Planning Area Peak Forecast

- Slightly higher growth rate

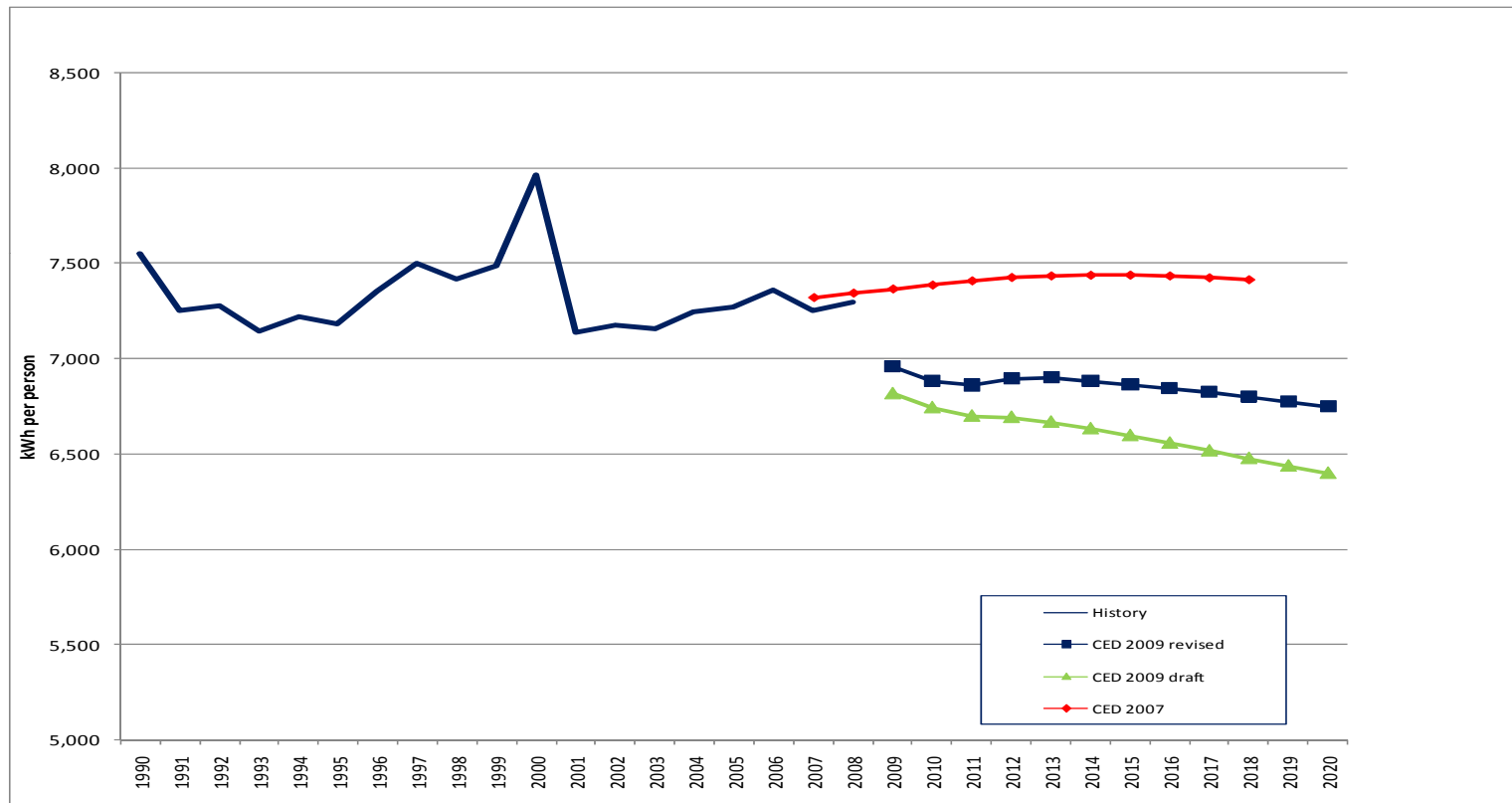




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SCE per Capita Consumption

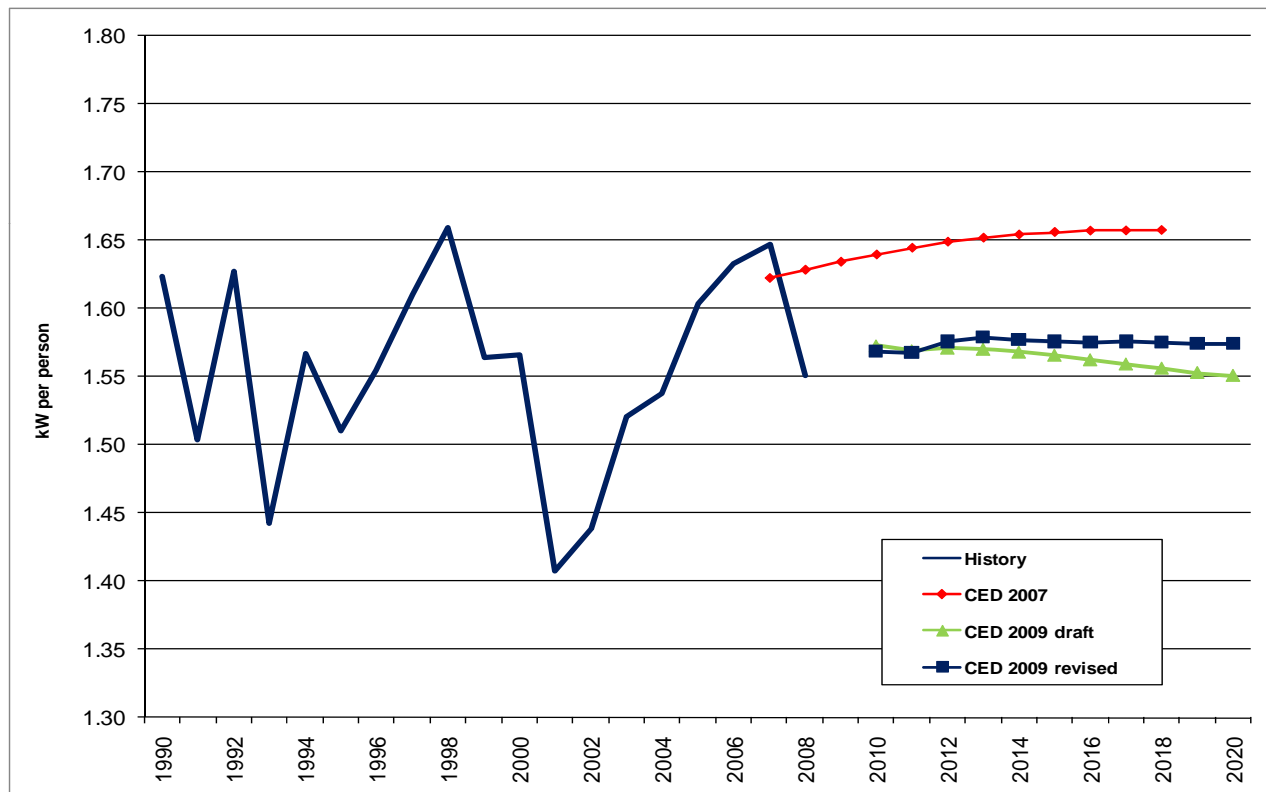
- Higher than draft but still declining





SCE per Capita Peak

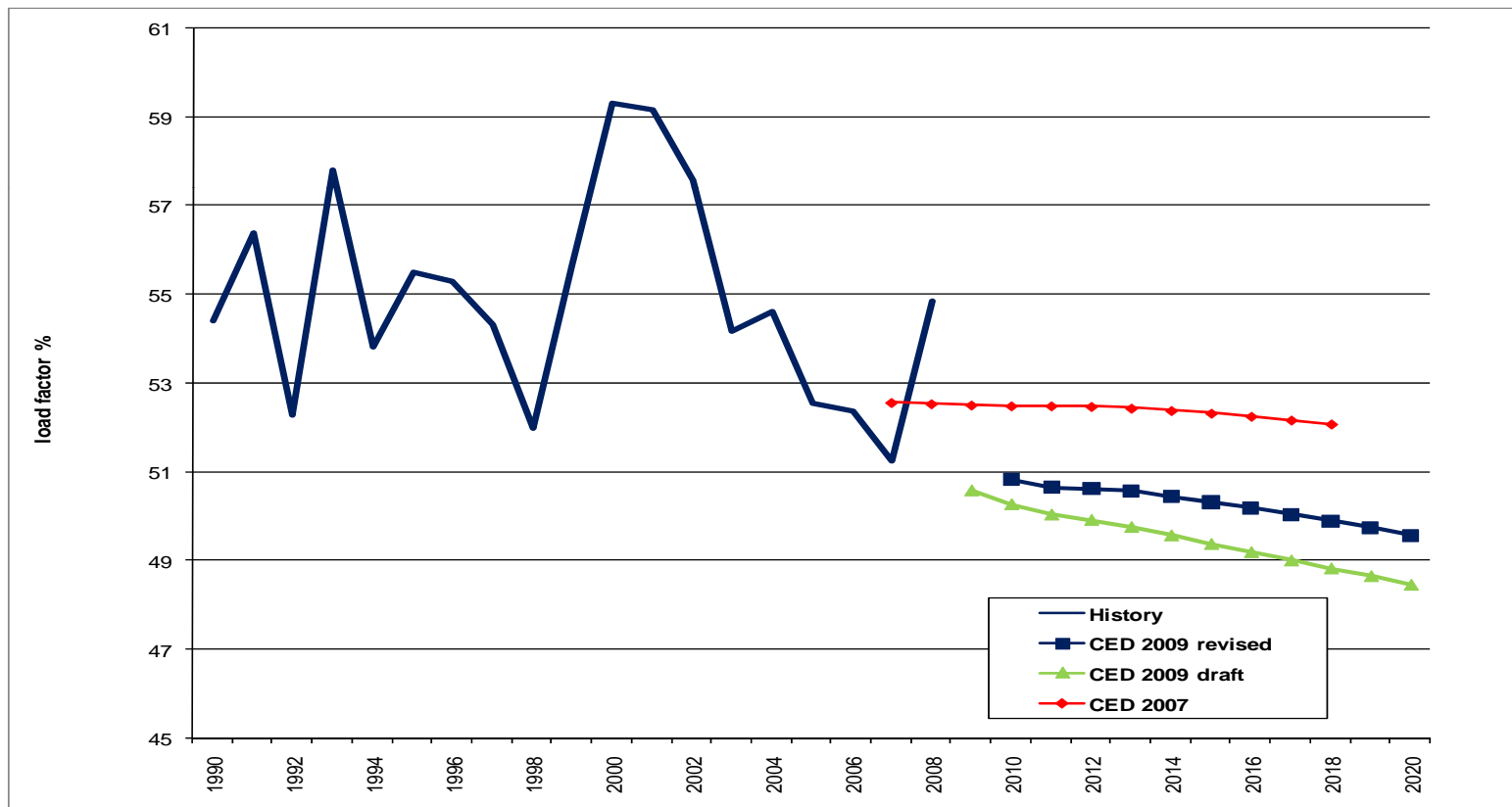
- Flat growth caused by change in LA county population split





SCE Planning Area Load Factor

- Higher than draft but still declining





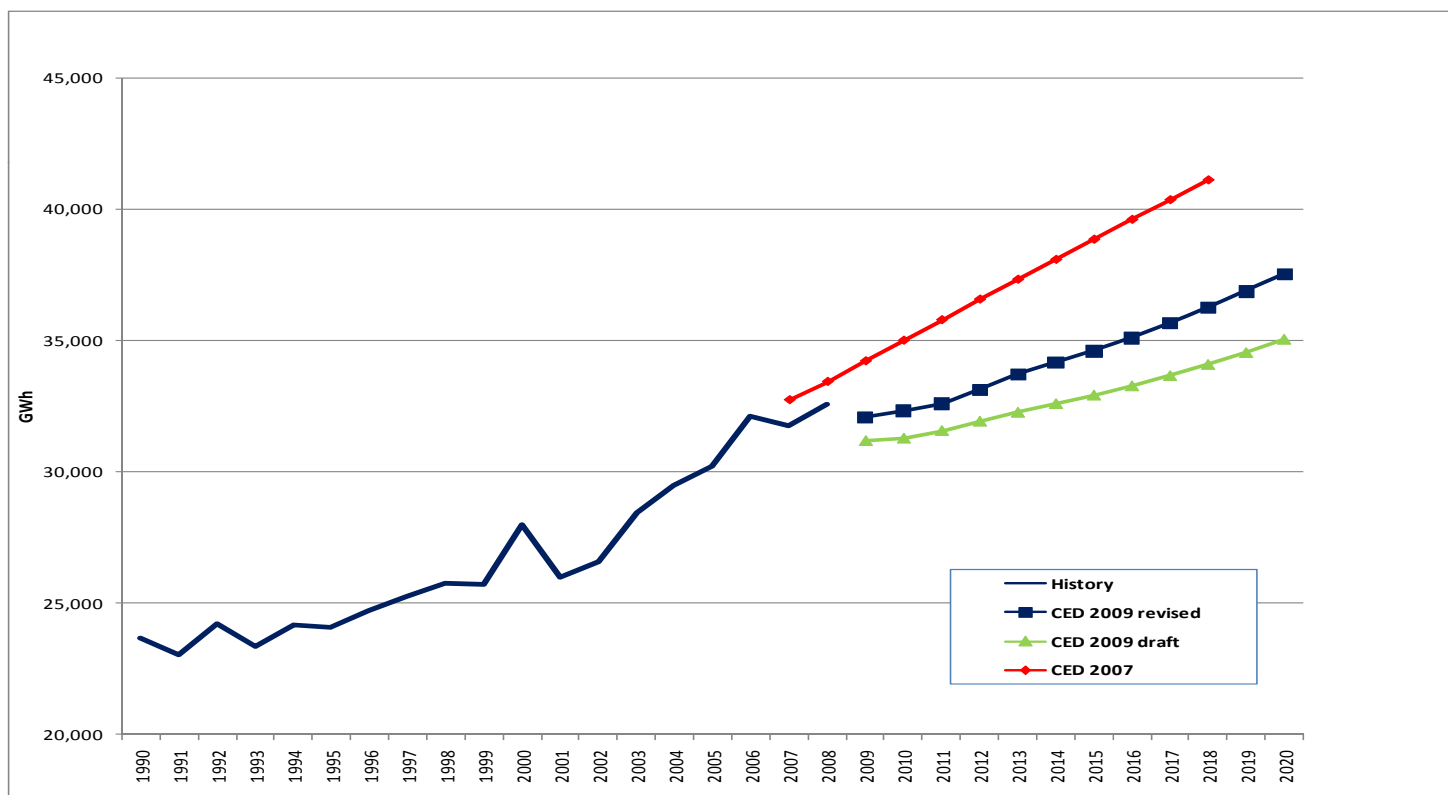
SCE Residential Forecast

- Starting point adjusted upward for 2008 consumption
- Grows at a slightly faster rate
- Use per household now increases slightly
- Household income now grows higher rate after recovery
- Peak differences mirror consumption differences



SCE Residential Consumption

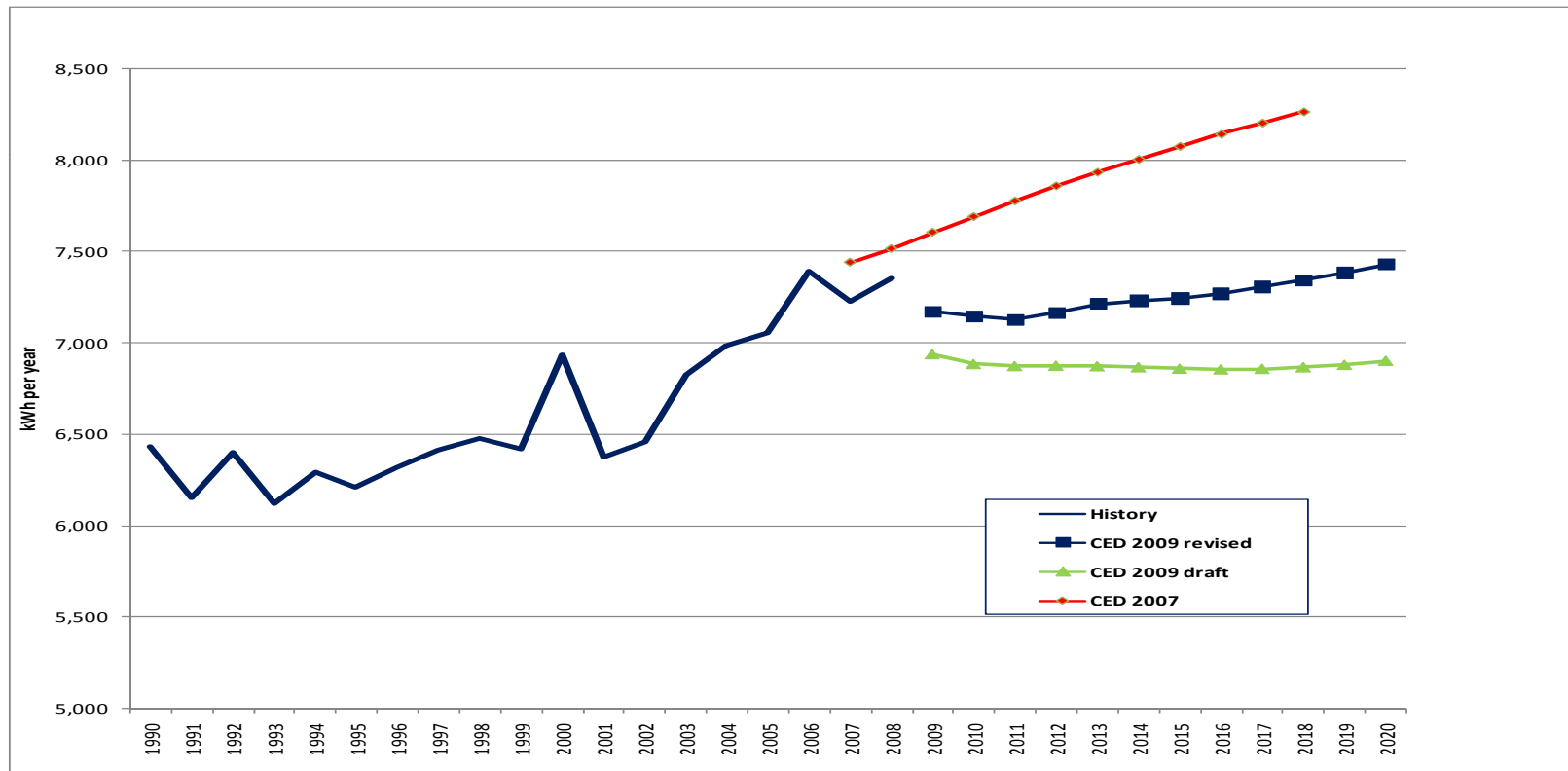
- higher starting value, slightly higher growth than draft





SCE Residential Use per Household

- short term decline, then increases with income projection

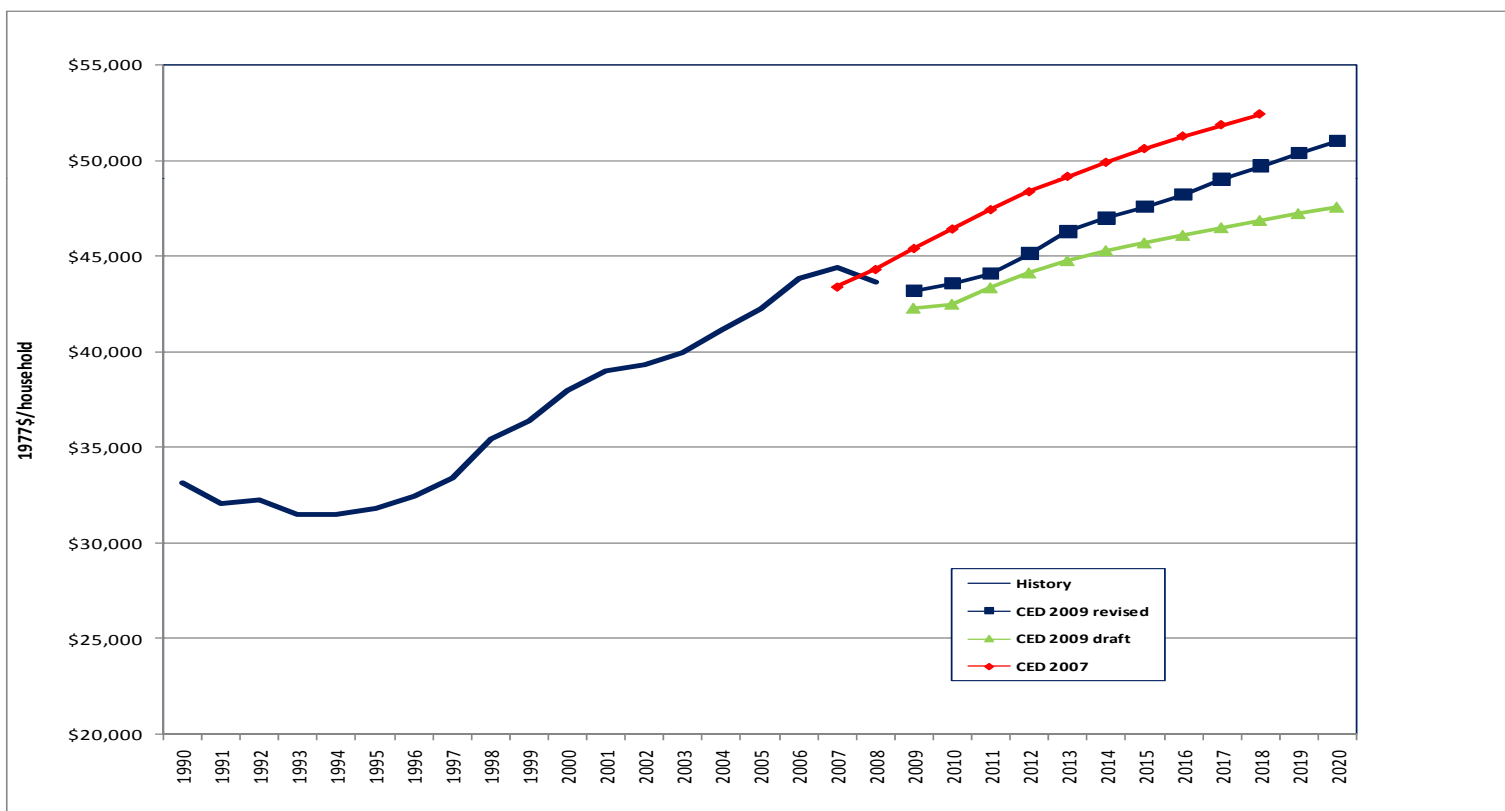




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SCE Household Income

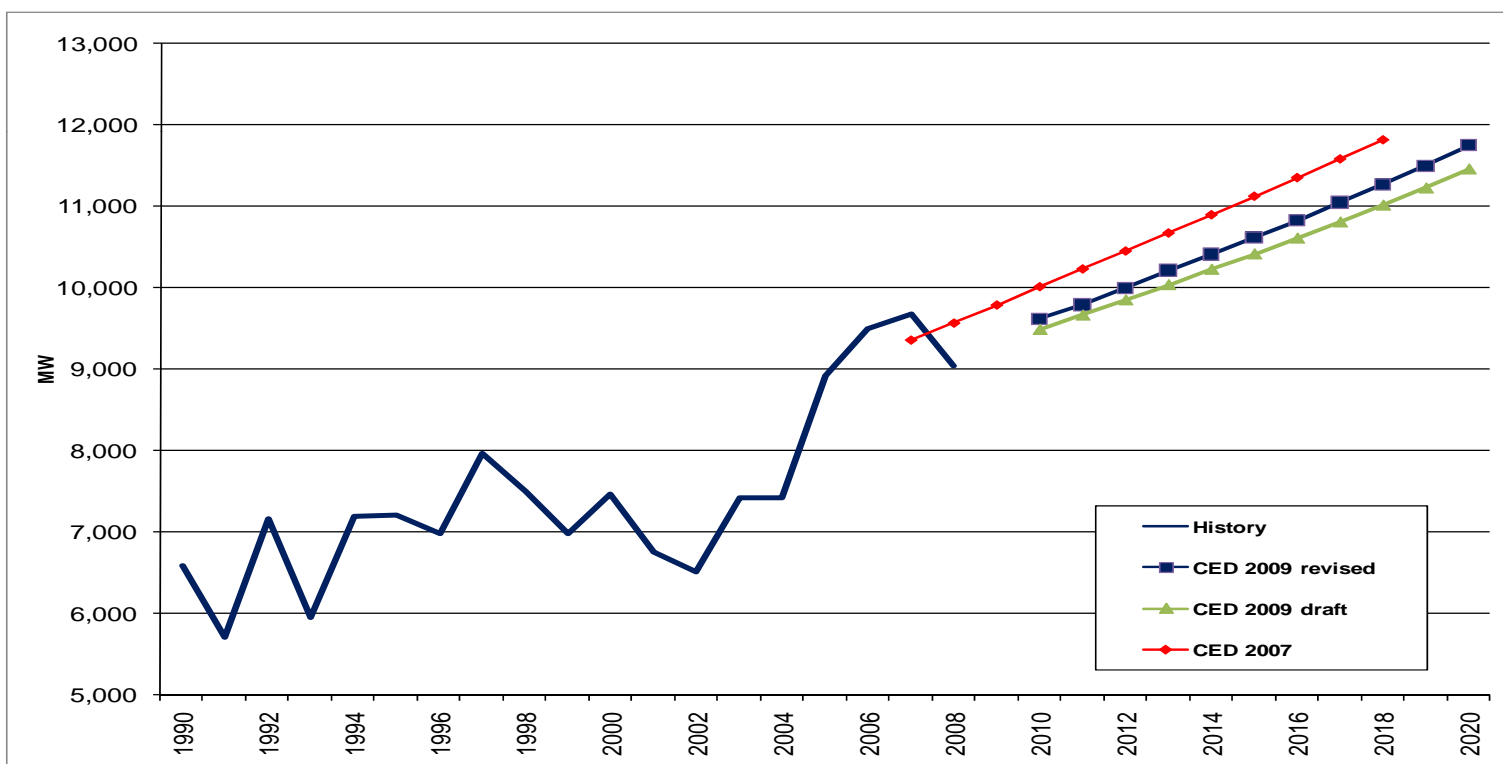
- now higher anticipated growth after recovery, smaller short term dip





SCE Residential Peak

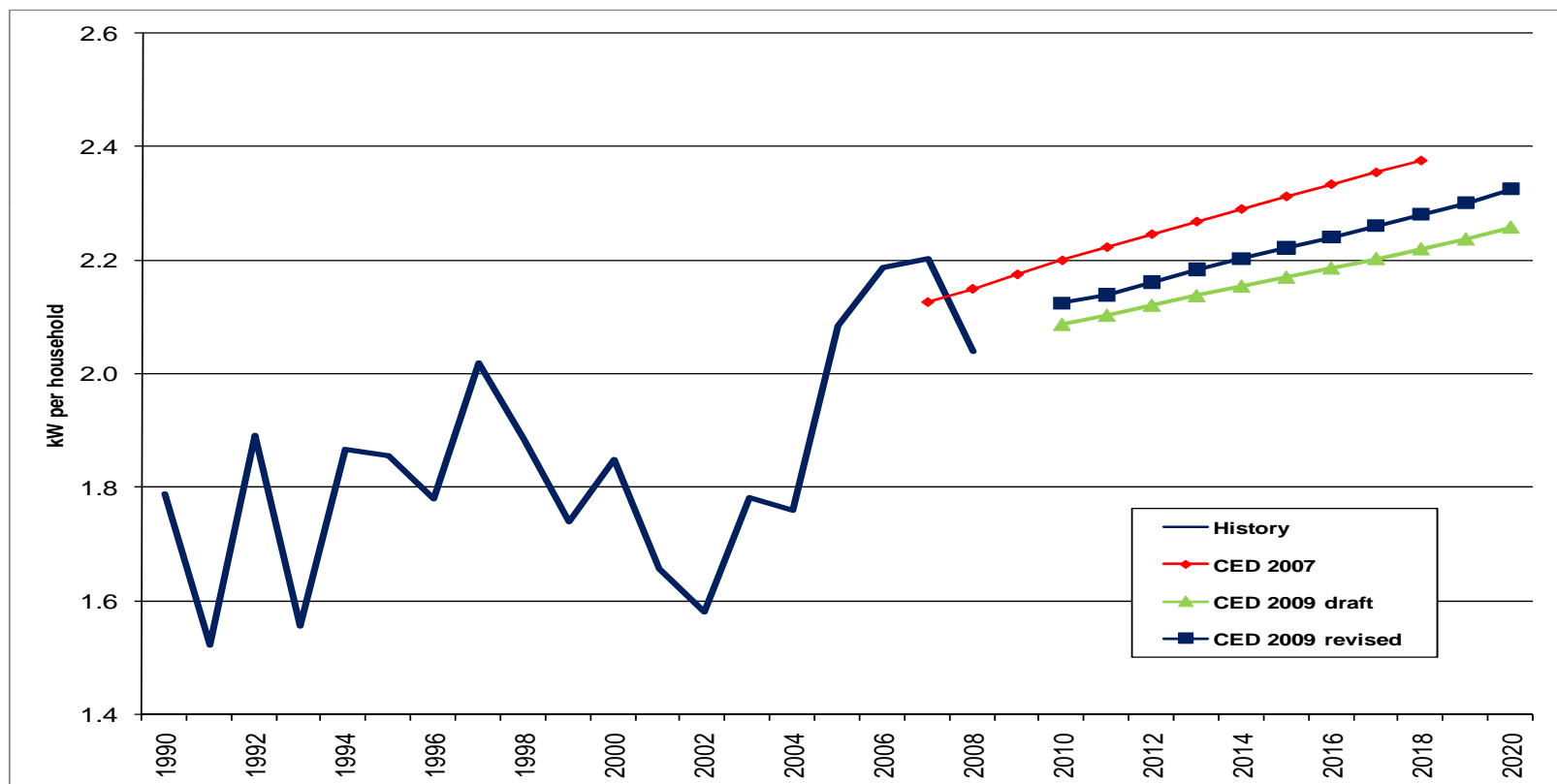
- slightly higher than draft





SCE Residential Peak Use per Household

- higher starting value, similar growth to draft forecast





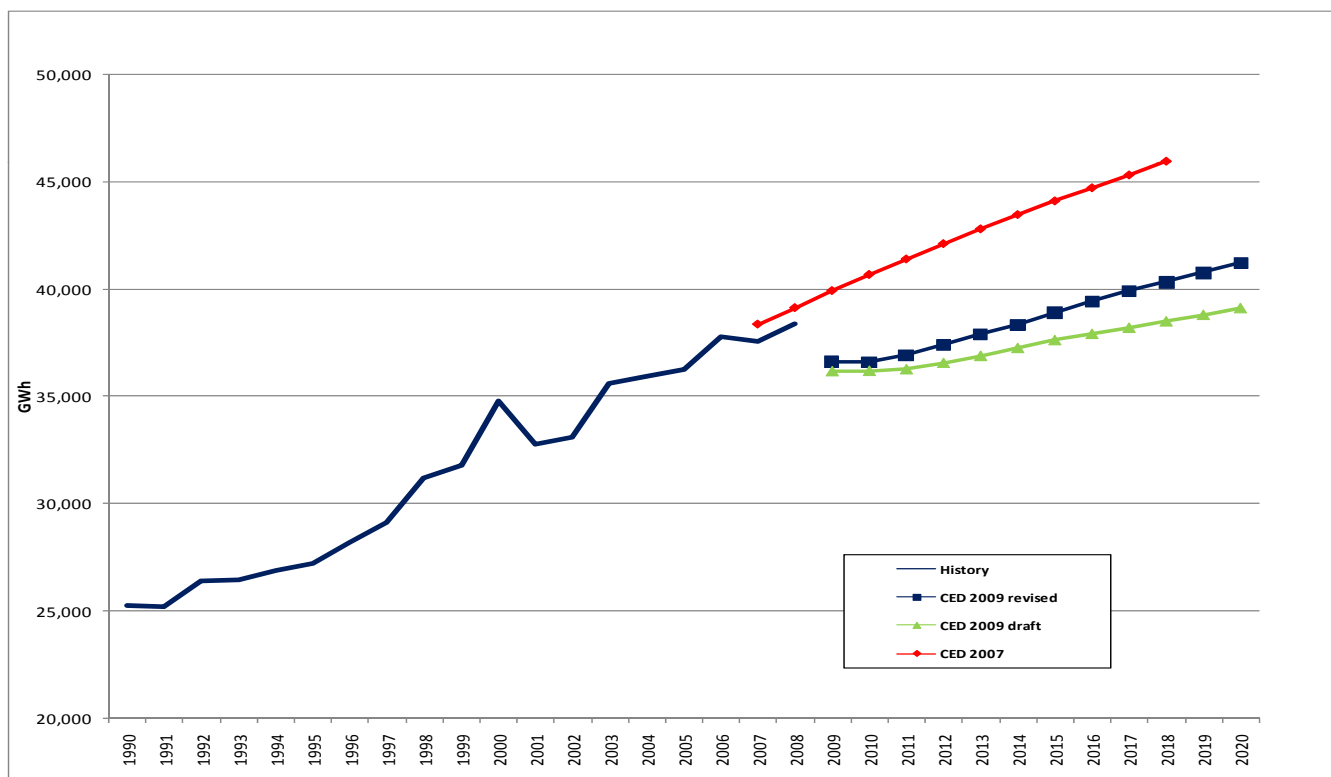
SCE Commercial Building Sector

- Revised consumption forecast grows faster than draft
- Projected floor space increases but still lower than CED 2007 levels
- Use per square foot declines
- Peak results mirror consumption forecast



SCE Commercial Building Consumption

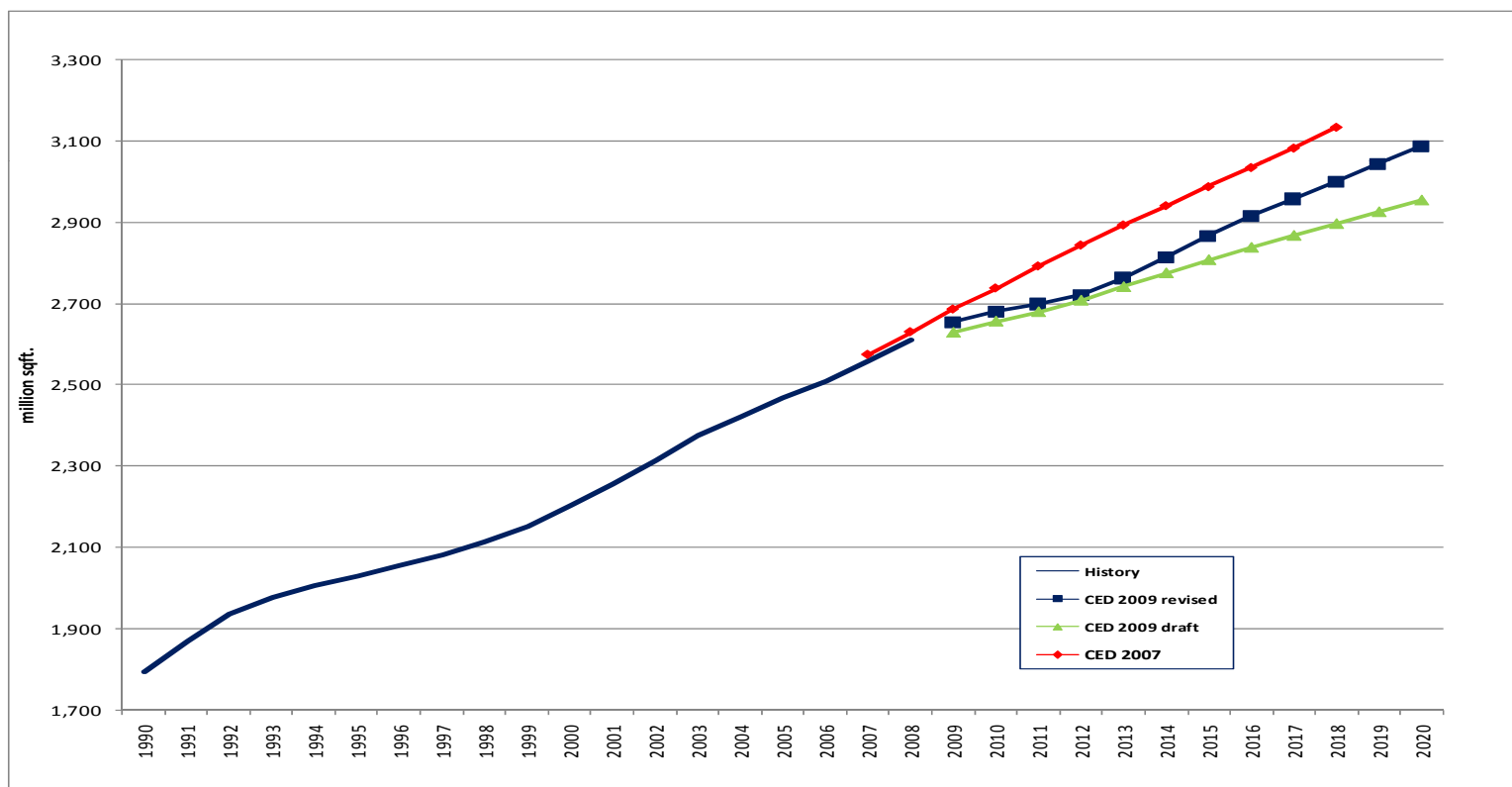
- Higher growth than draft





SCE Commercial Floor Space

- Higher growth than draft

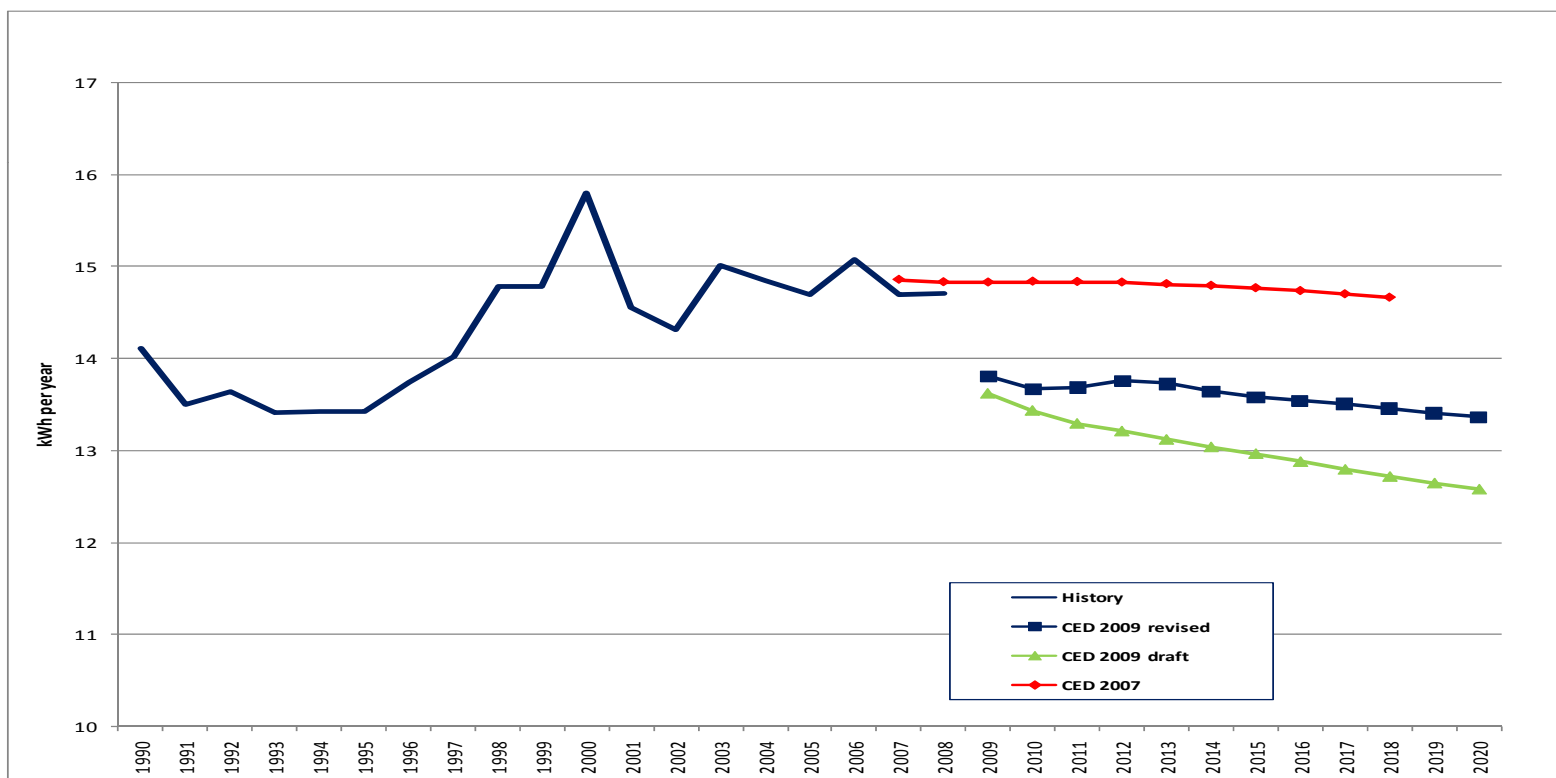




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SCE Commercial kWh per Square Foot

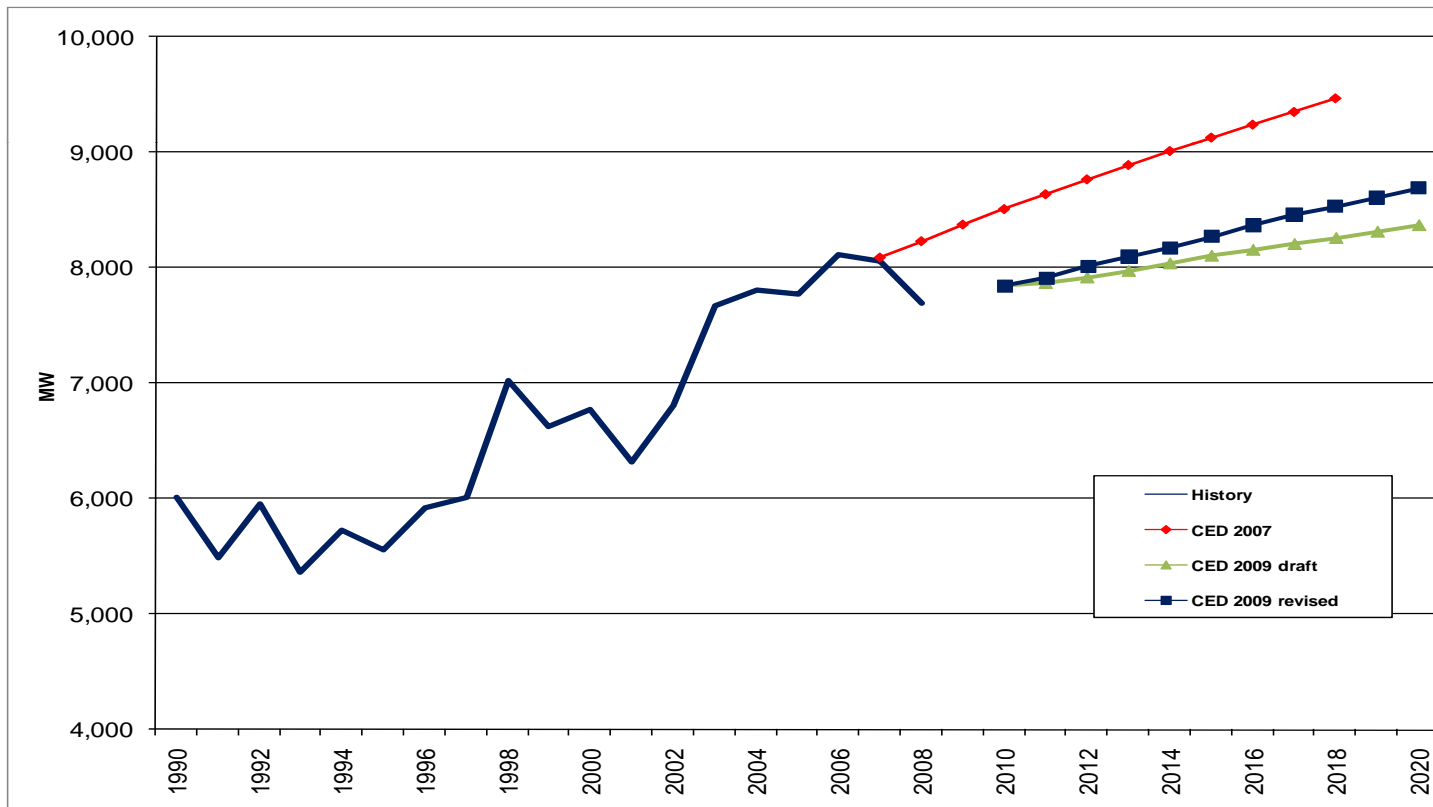
- declines less than draft





SCE Commercial Building Sector Peak

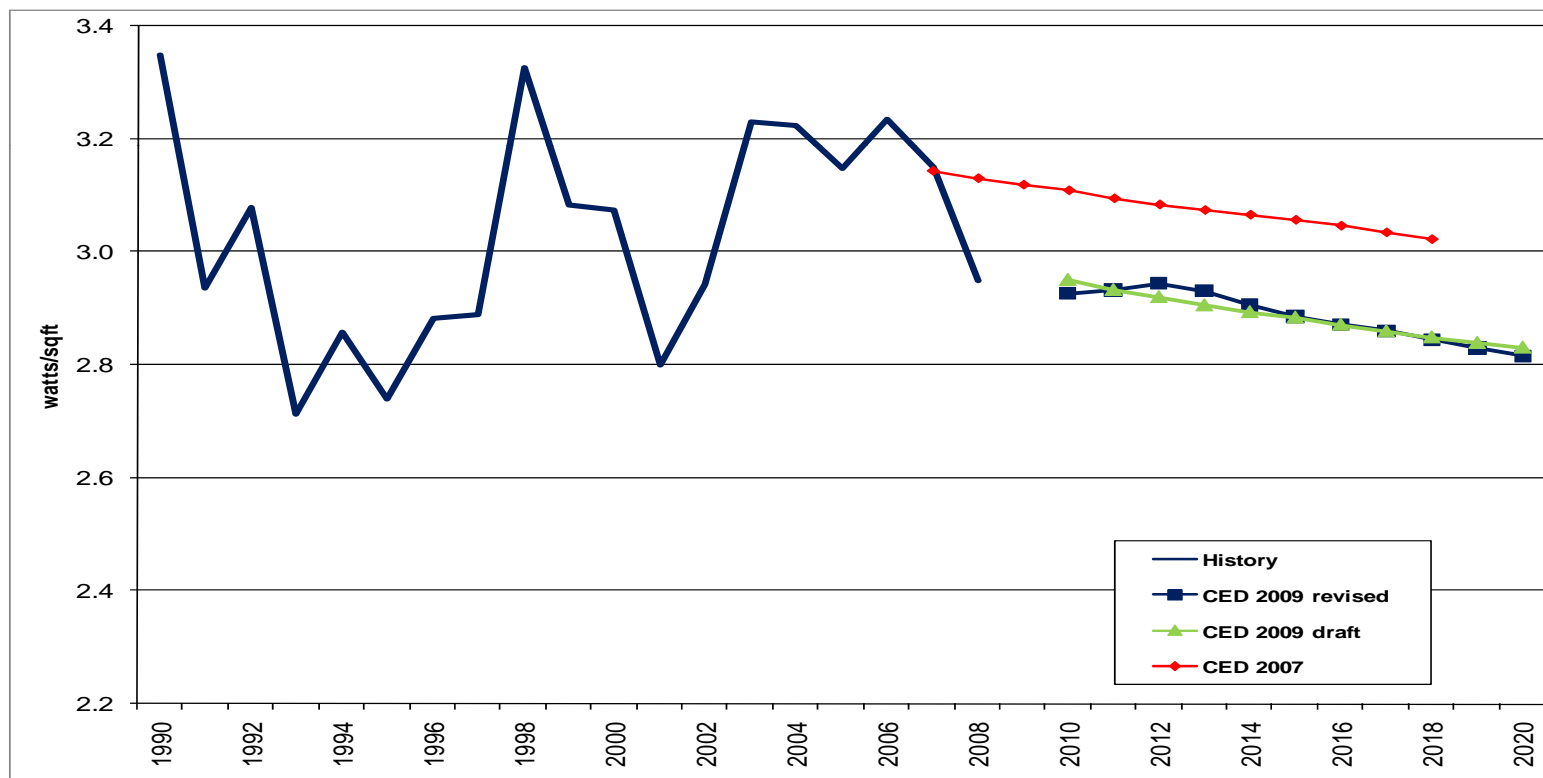
- higher growth than draft





SCE Commercial Peak per Square Foot

- similar projection to draft





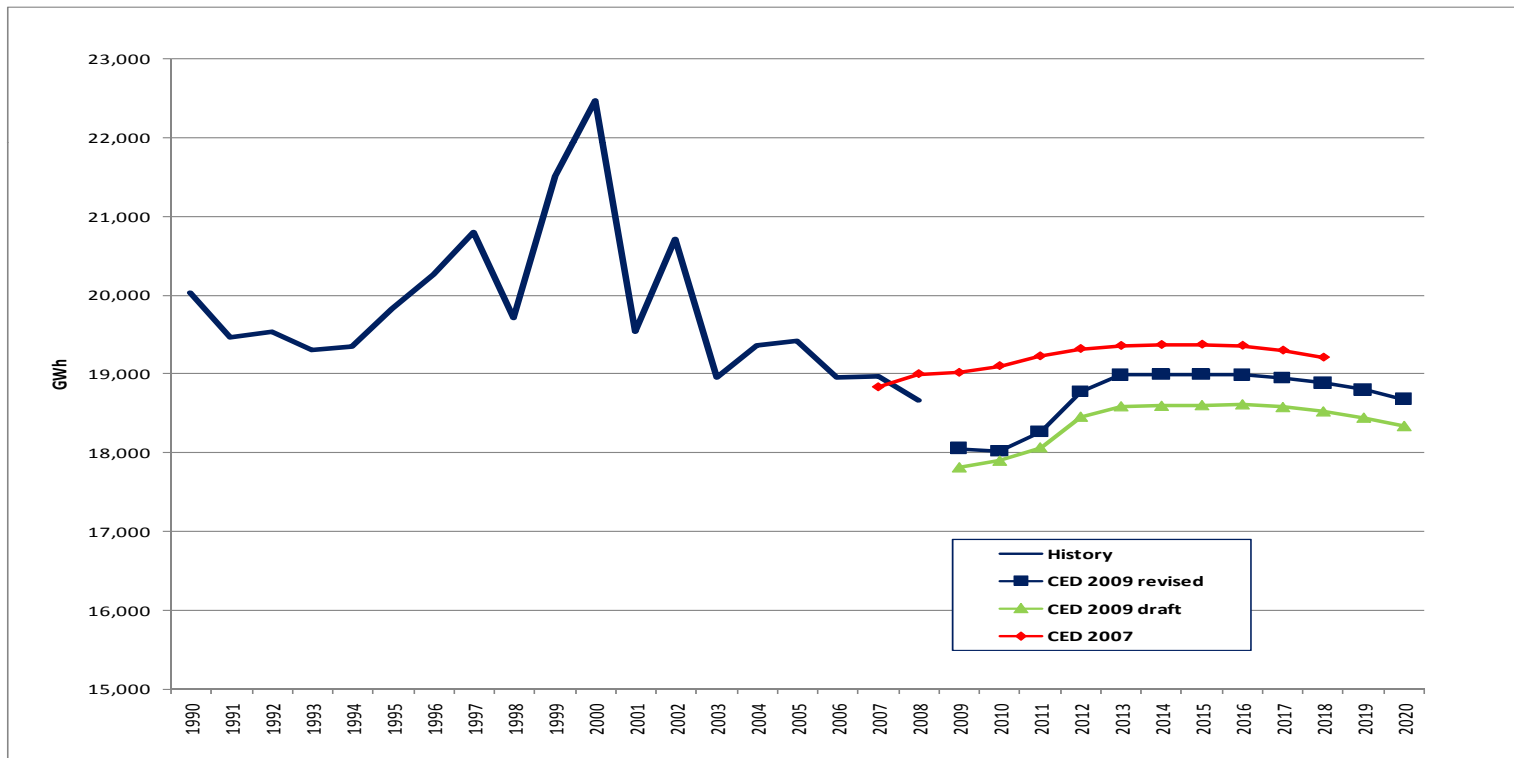
SCE Industrial Sector

- Now higher forecast after recovery
- More rapid recovery than other sectors
- Peak forecast similar to CED 2007



SCE Industrial Sector Consumption

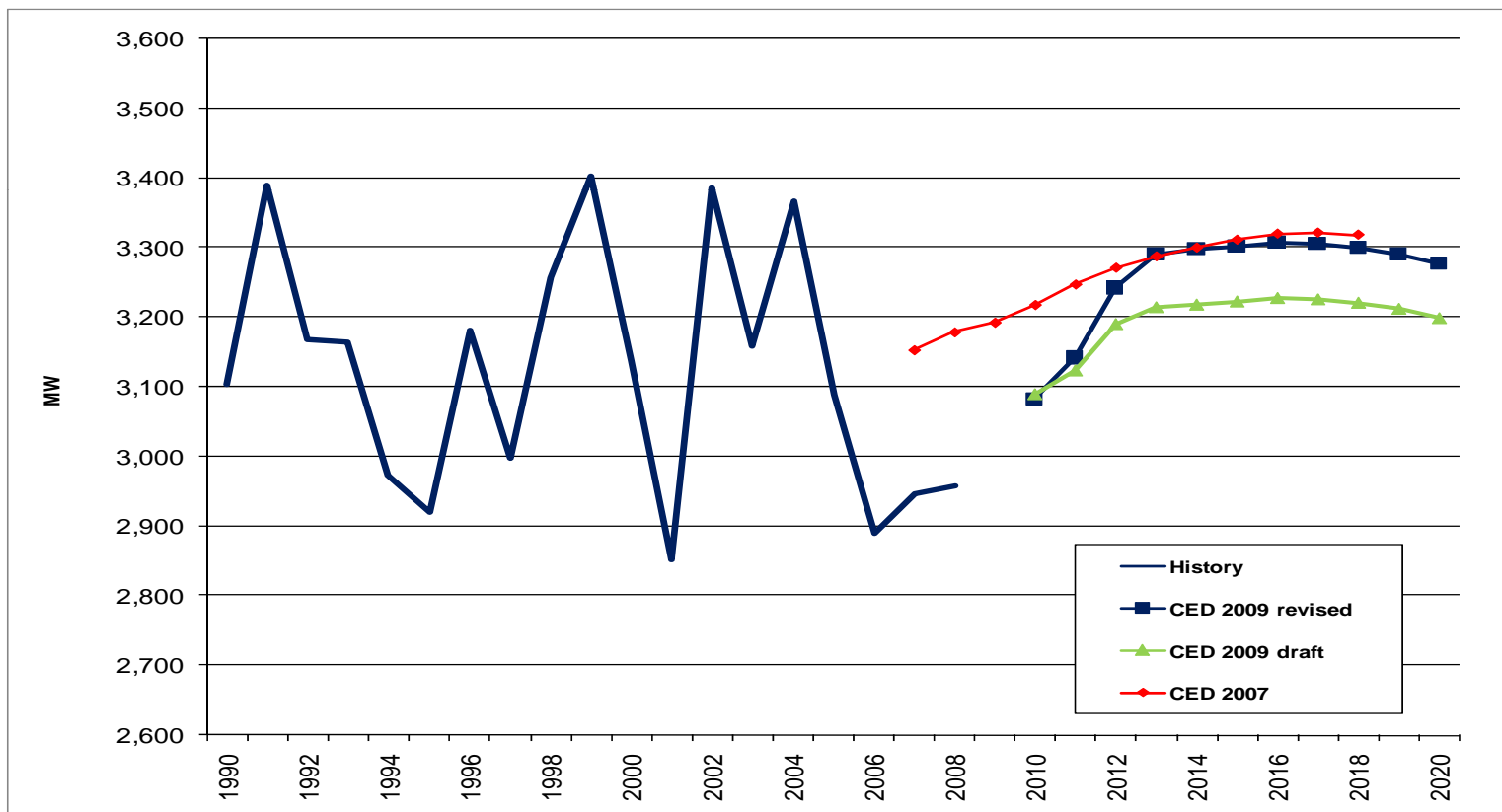
- higher starting point , greater recovery than draft





SCE Industrial Sector Peak

- now similar to CED 2007





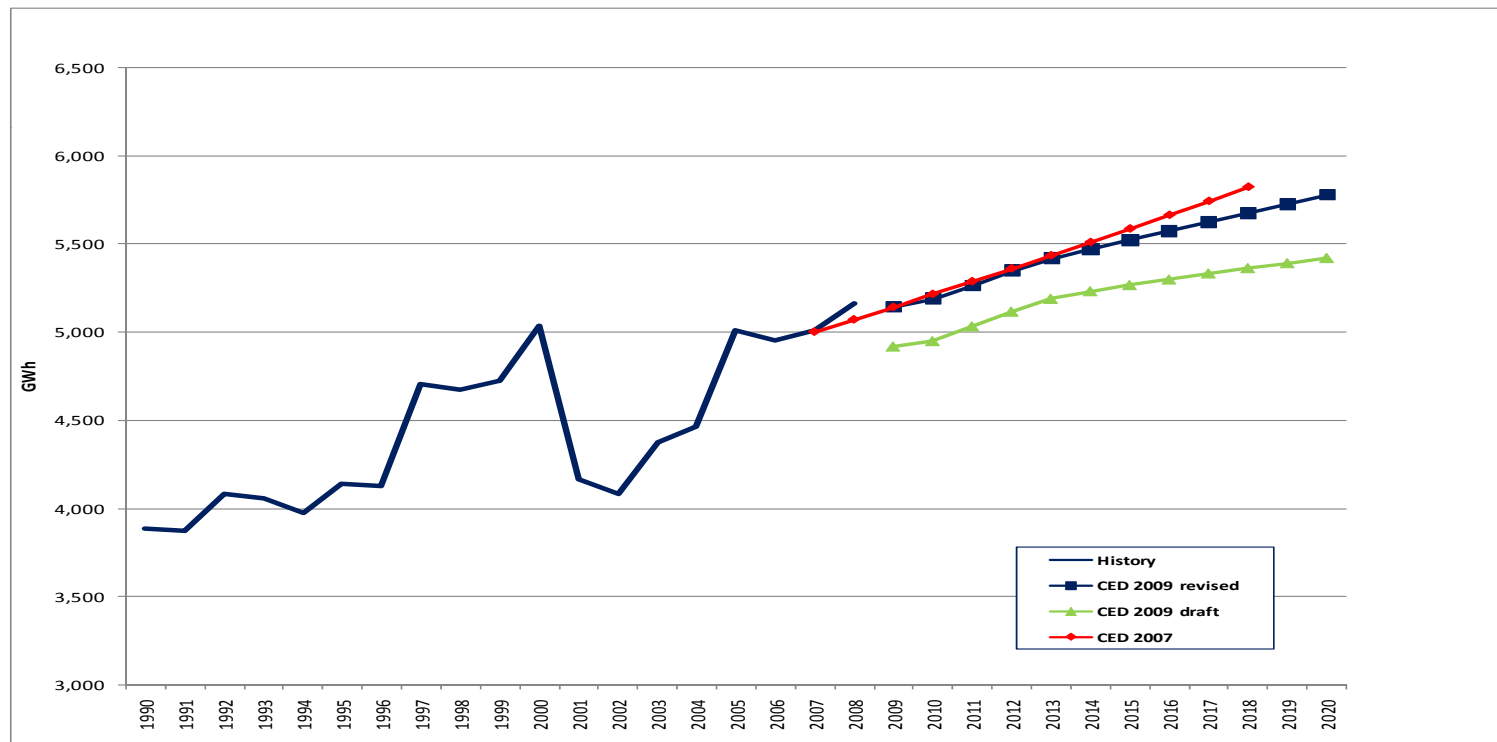
SCE Other Sectors

- Remaining sectors comprise 13% of total consumption
- Other sectors comprise only 7% of peak



SCE Transportation, Communications and Utilities Sector Consumption

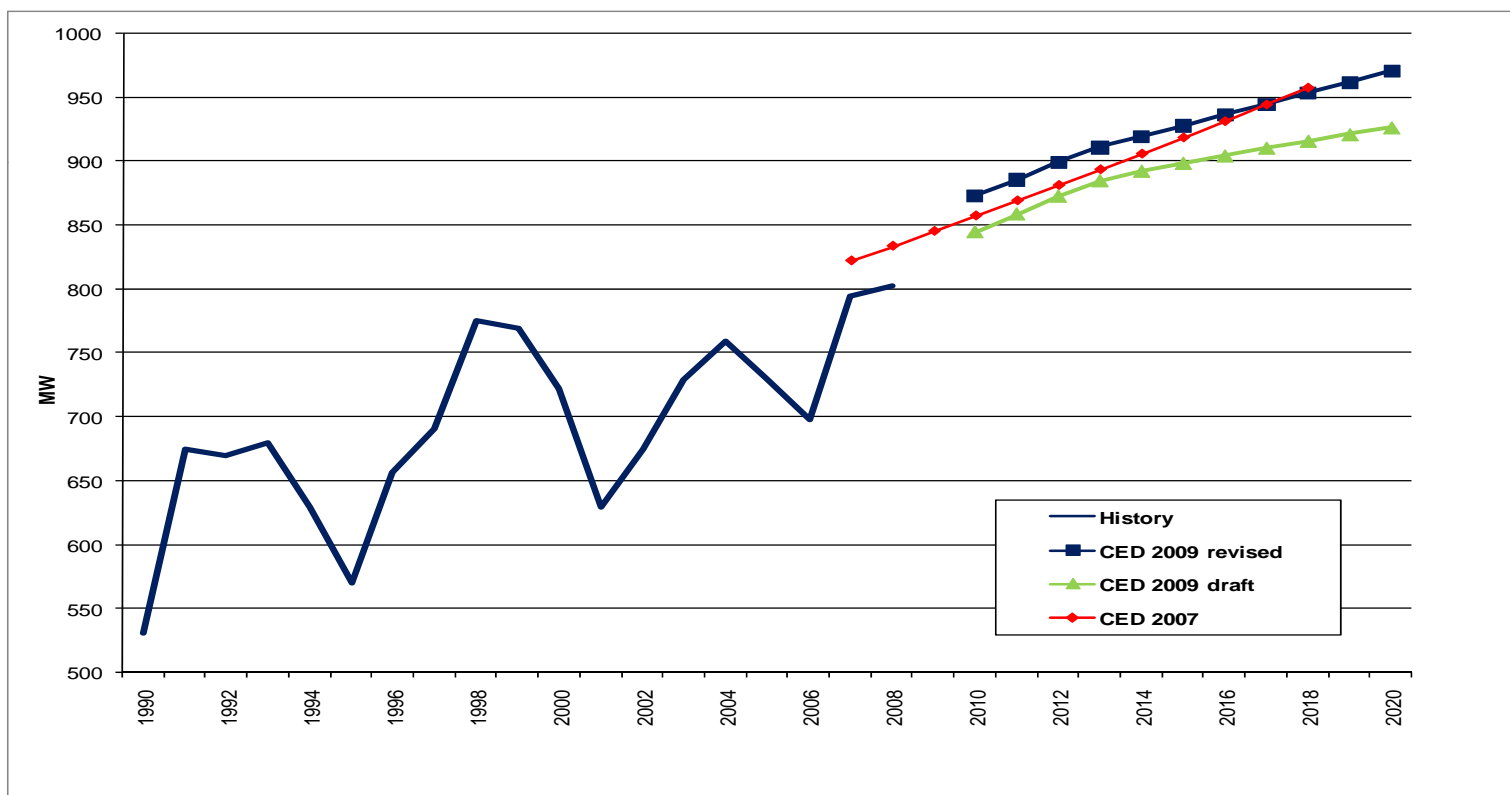
- now slightly lower than CED 2007





SCE Other Sectors Peak

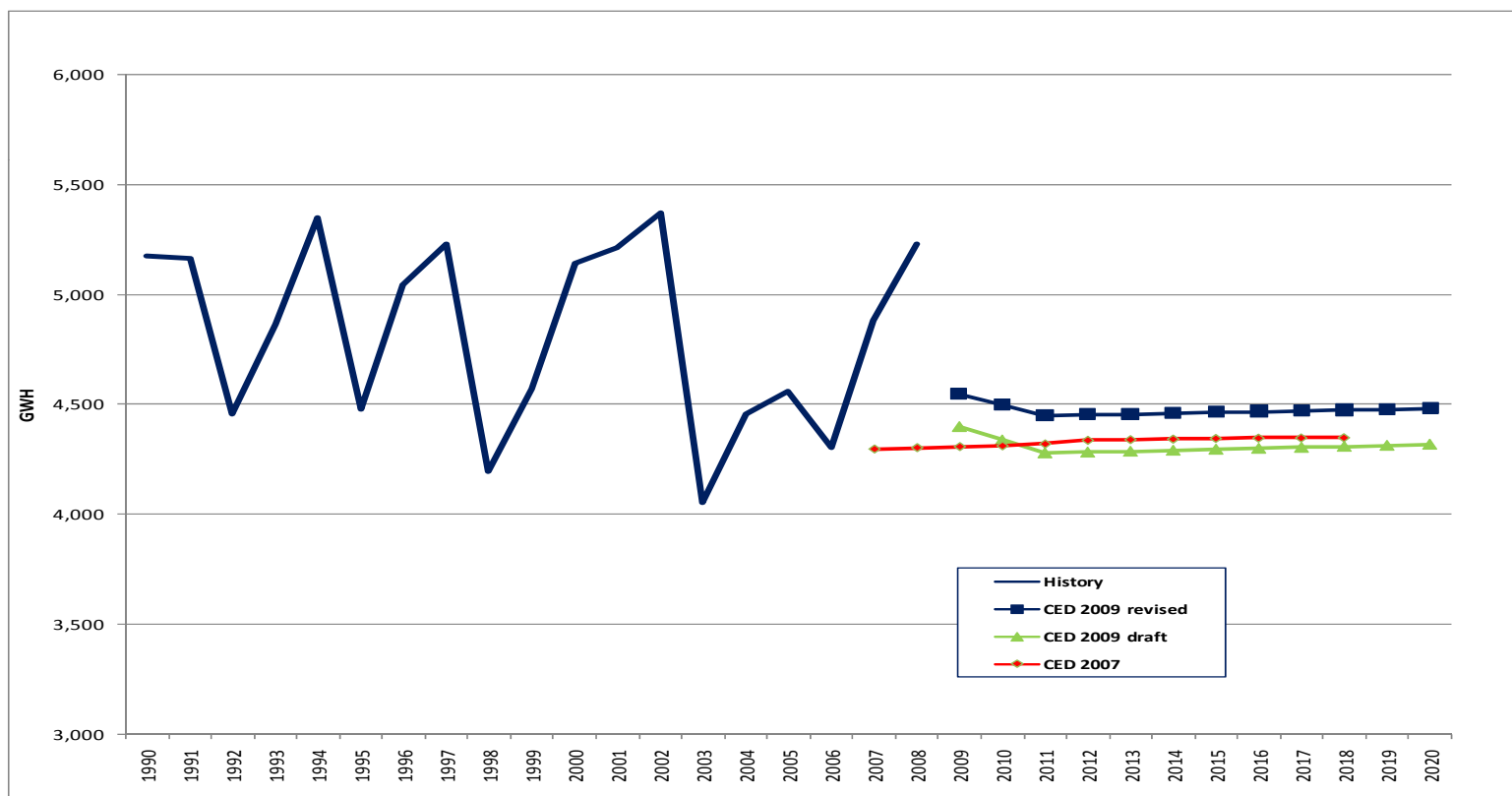
- now higher than CED 2007 level in early years





SCE Agriculture and Water Pumping Sector Consumption

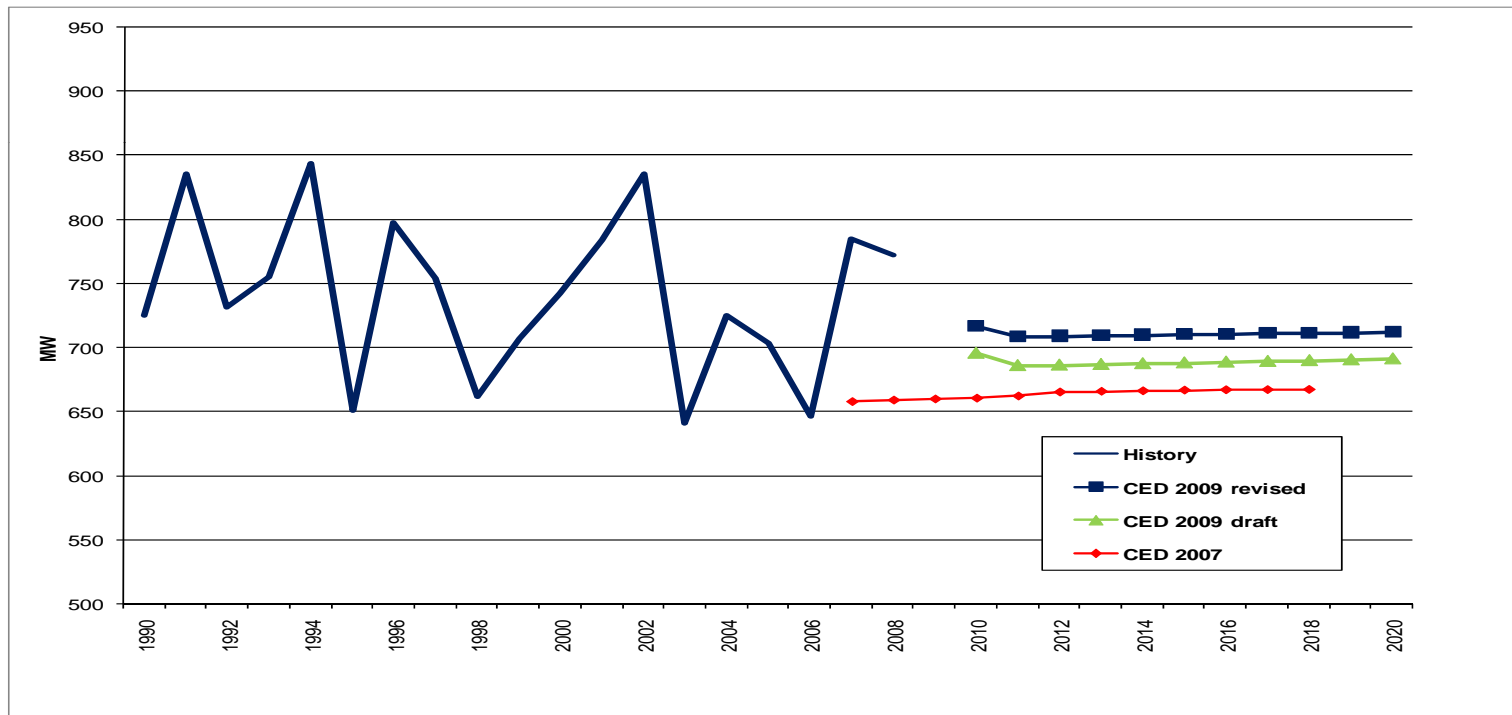
- Higher starting point, forecast based on normal rainfall





SCE Agriculture and Water Pumping Peak

- higher starting value, similar projection





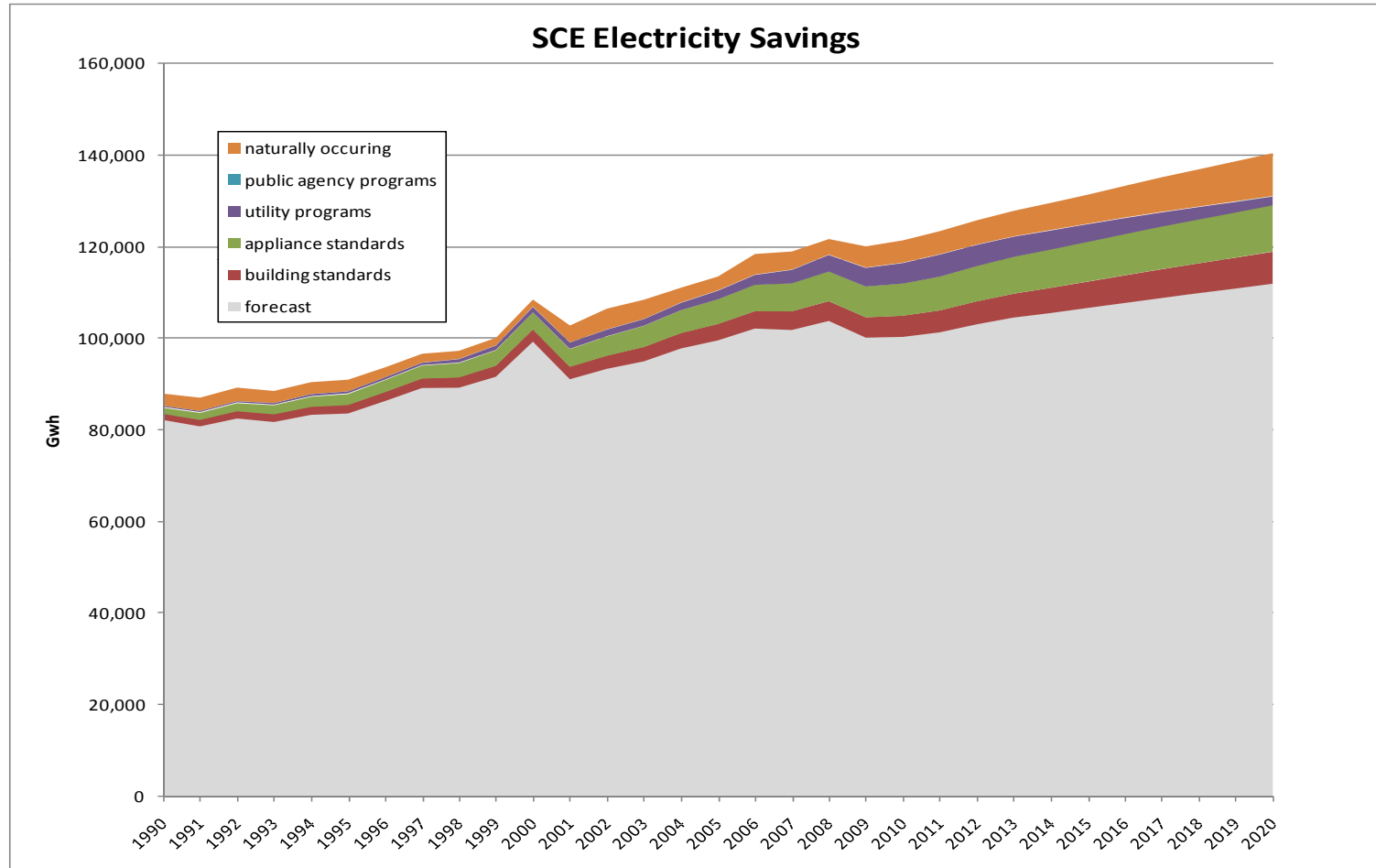
Efficiency Savings and Self Generation

- Efficiency savings are presented by program
- 2009-2011 utility program estimates are based on current CPUC filings
- Self generation forecast is based on recent installation patterns
- Historic self-generation estimates have been revised
- New self-generation estimates reduce peak 400 MW



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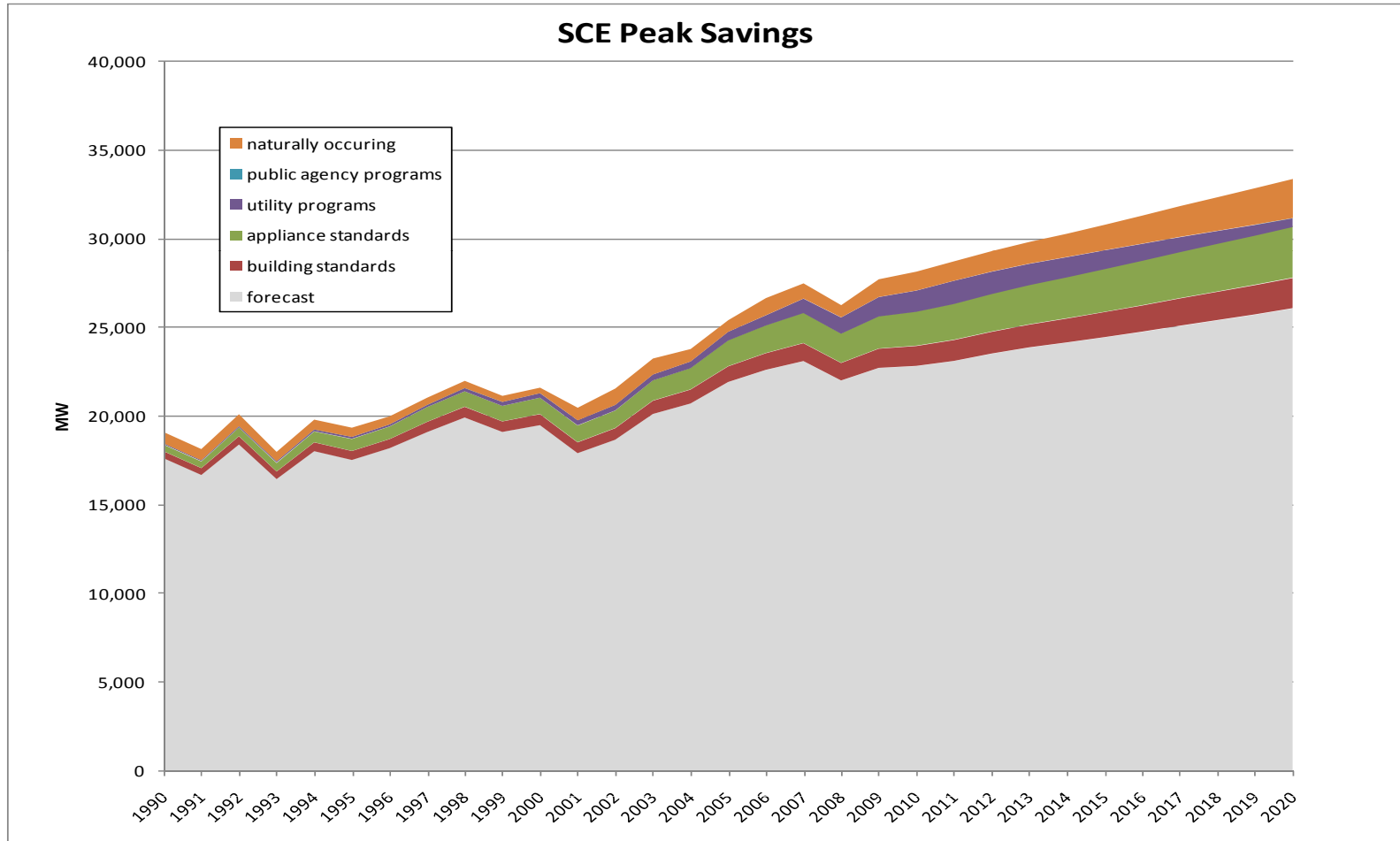
Total savings 25% of forecast by 2020





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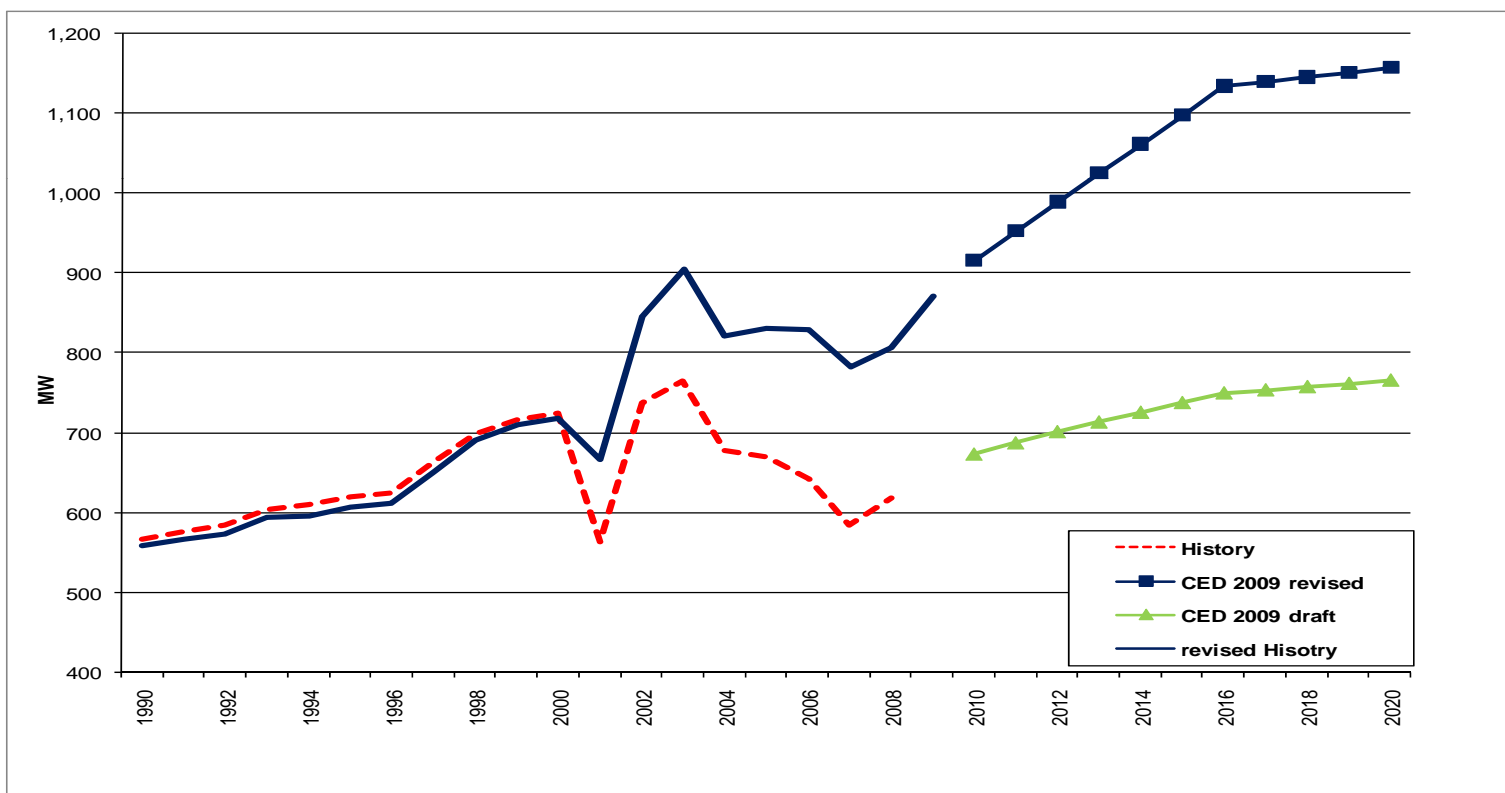
Total savings 28% of forecast by 2020





SCE Planning Peak Self-Generation

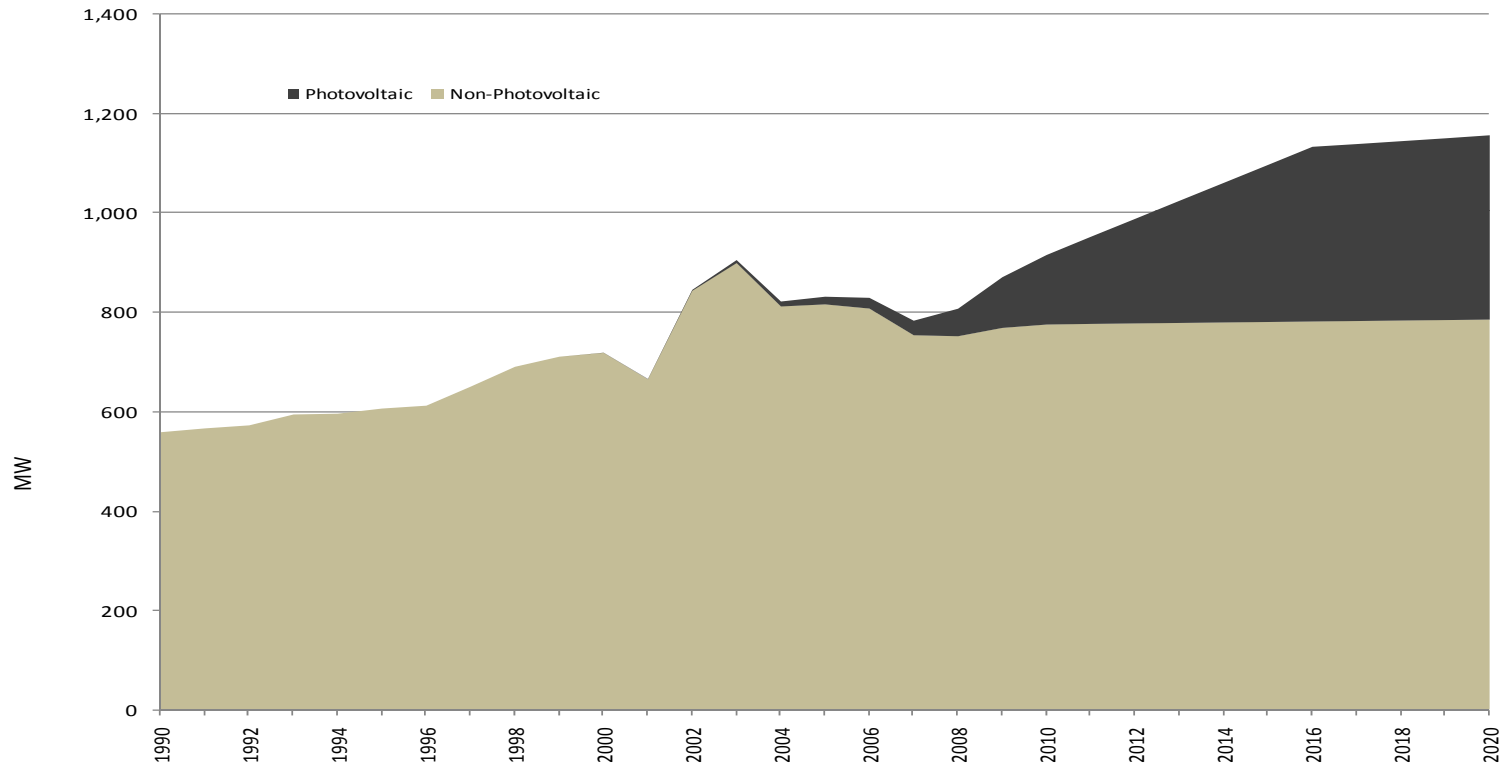
- higher history, higher forecast





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SCE Self Generation Peak Estimates



Source: California Energy Commission, 2009



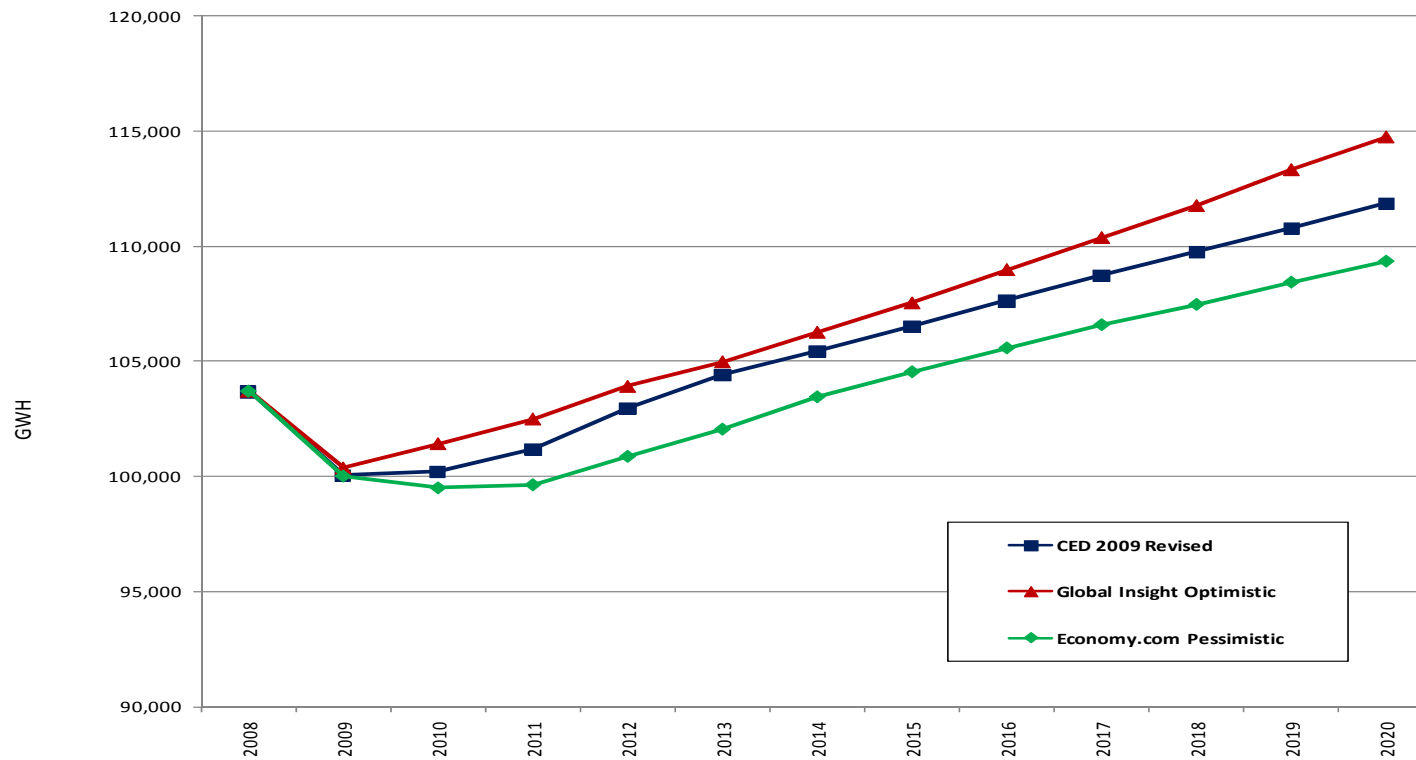
Economic Scenarios

- Consumption and peak increase about 2.6% in high case
- Consumption and peak decrease about 2.4% in low case



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SCE Economic Scenarios (consumption)

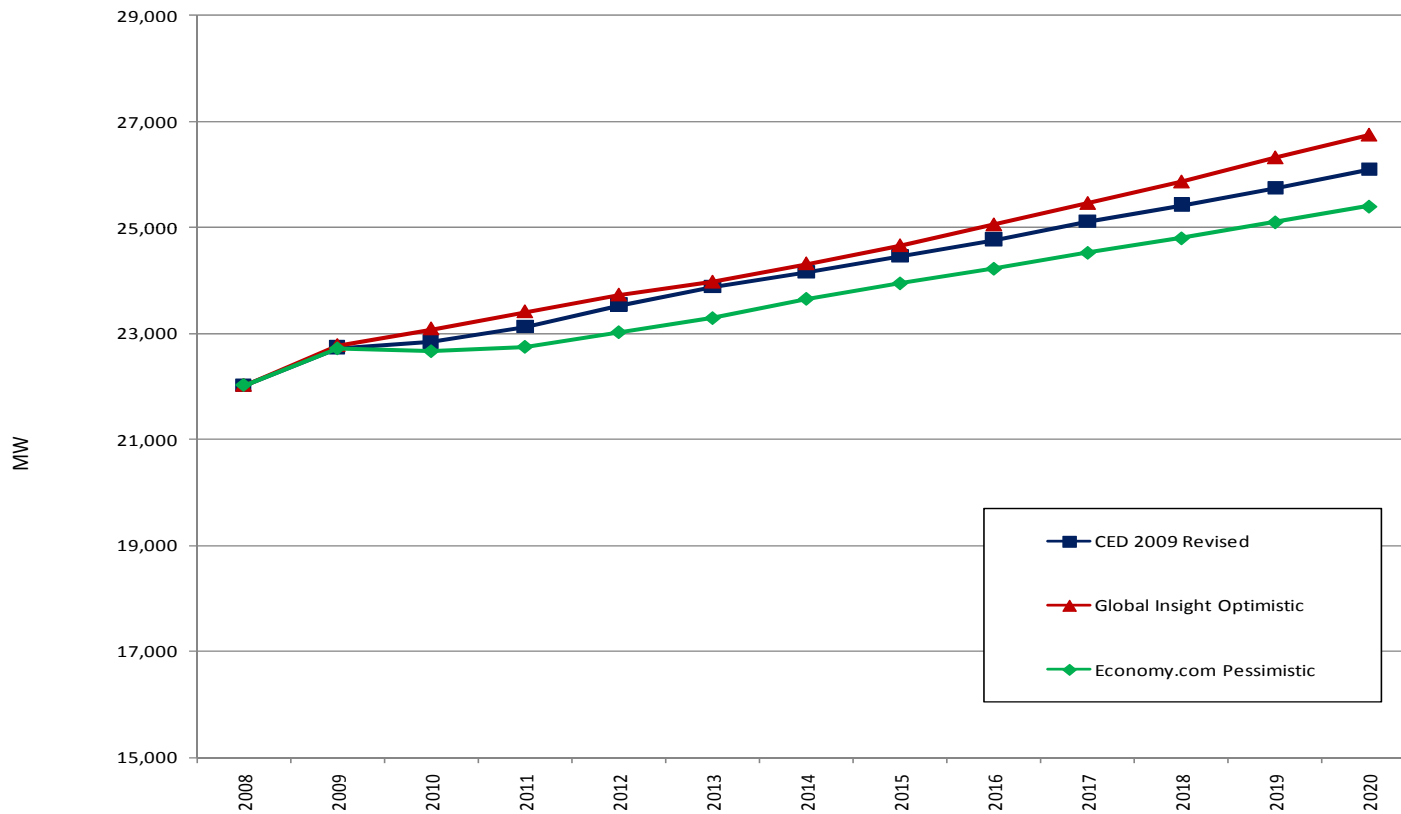


Source: California Energy Commission, 2009



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SCE Economic Scenarios (peak)



Source: California Energy Commission, 2009