



California Energy Commission

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

PG&E Planning Area Forecast

First Floor, Hearing Room A

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10 a.m.

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PG&E Forecast Overview

- Consumption Forecast is over 2% higher than draft in 2010 growing to over 5% higher by 2018
- Consumption Forecast is still lower than CED 2007 by about 2%
- Peak forecast is over 1% higher in 2018 than draft
- Consumption forecast includes self generation while peak excludes self generation
- Per capita consumption and per capita peak both decline
- Revised Self-generation forecast reduces peak about 200 MW by 2020
- Load factor higher but continues decline



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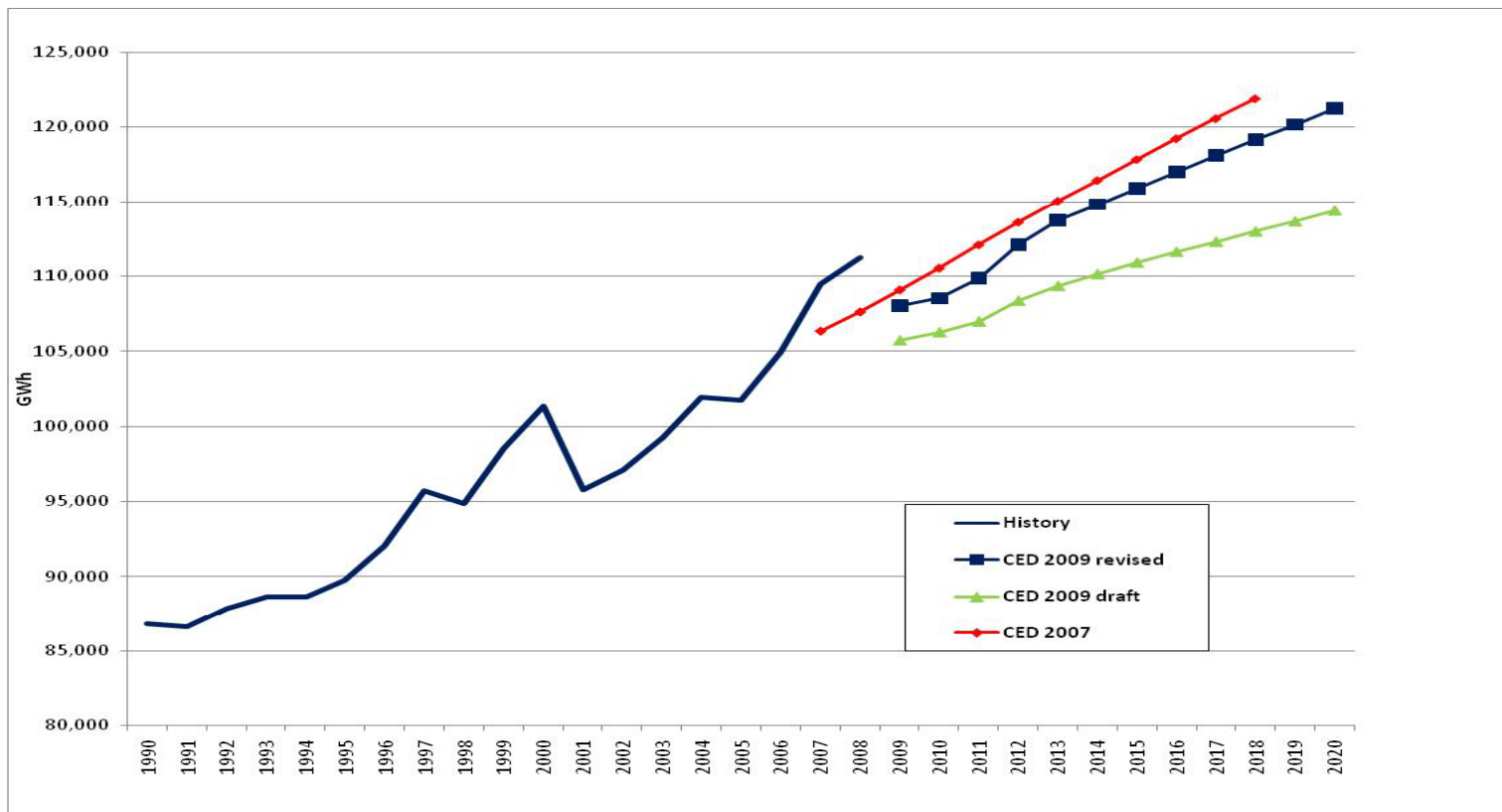
PG&E Planning Area Forecast Results

Consumption (GWH)					
	<i>CED 2007</i> (Oct. 2007)	<i>CED 2009</i> Draft mid-rate case (June 2009)	<i>CED 2009</i> Revised (Sept. 2009)	Percent Difference <i>CED 2009</i> Revised/ <i>CED 2007</i>	Percent Difference <i>CED</i> 2009 Revised/ <i>CED 2009</i> Draft
1990	86,803	86,803	86,803	0.00%	0.00%
2000	101,331	101,331	101,333	0.00%	0.00%
2008	107,591	106,753	111,205	3.36%	4.17%
2010	110,503	106,240	108,526	-1.79%	2.15%
2015	117,806	110,878	115,860	-1.65%	4.49%
2018	121,873	112,959	119,123	-2.26%	5.46%
Average Annual Growth Rates					
1990-2000	1.56%	1.56%	1.56%		
2000-2008	0.75%	0.65%	1.17%		
2008-2010	1.34%	-0.24%	-1.21%		
2010-2018	1.23%	0.77%	1.17%		
Peak (MW)					
	<i>CED 2007</i> (Oct. 2007)	<i>CED 2009</i> Draft mid-rate case (June 2009)	<i>CED 2009</i> Revised (Sept. 2009)	Percent Difference <i>CED 2009</i> Revised/ <i>CED 2007</i>	Percent Difference <i>CED</i> 2009 Revised/ <i>CED 2009</i> Draft
1990	17,055	17,013	17,250	-0.25%	1.39%
2000	20,716	20,665	20,628	-0.25%	-0.18%
2008	23,413	23,405	23,727	-0.03%	1.38%
2010	24,050	23,240	23,321	-3.37%	0.35%
2015	25,760	24,606	24,874	-4.48%	1.09%
2018	26,754	25,341	25,742	-5.28%	1.58%
Average Annual Growth Rates					
1990-2000	1.96%	1.96%	1.80%		
2000-2008	1.54%	1.57%	1.76%		
2008-2010	1.35%	-0.35%	-0.86%		
2010-2018	1.34%	1.09%	1.24%		
Historic values are shaded					



PG&E Electricity Consumption Forecast

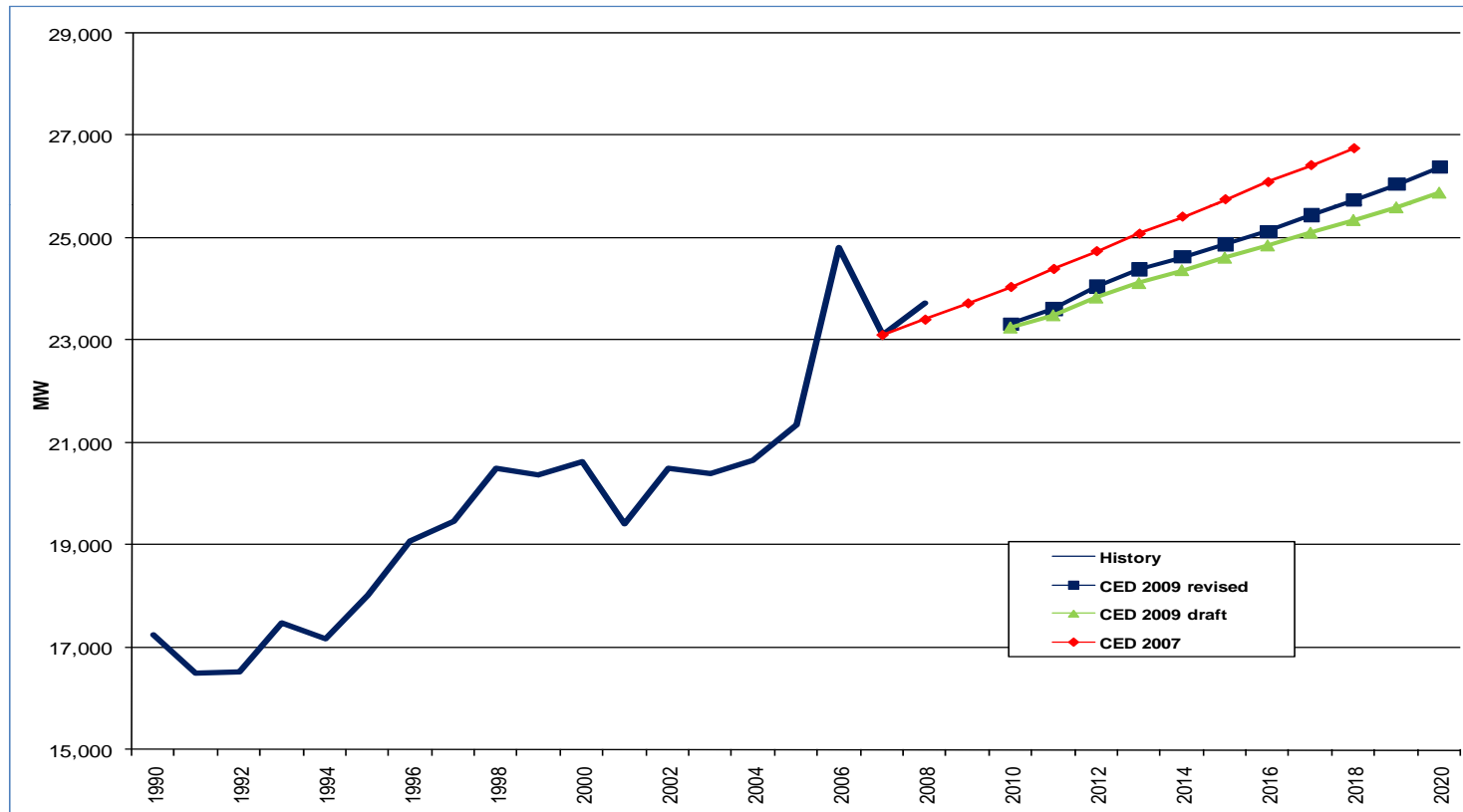
- higher starting point, higher growth coming out of recession





PG&E Planning Area Peak Forecast

- Slightly higher than draft forecast

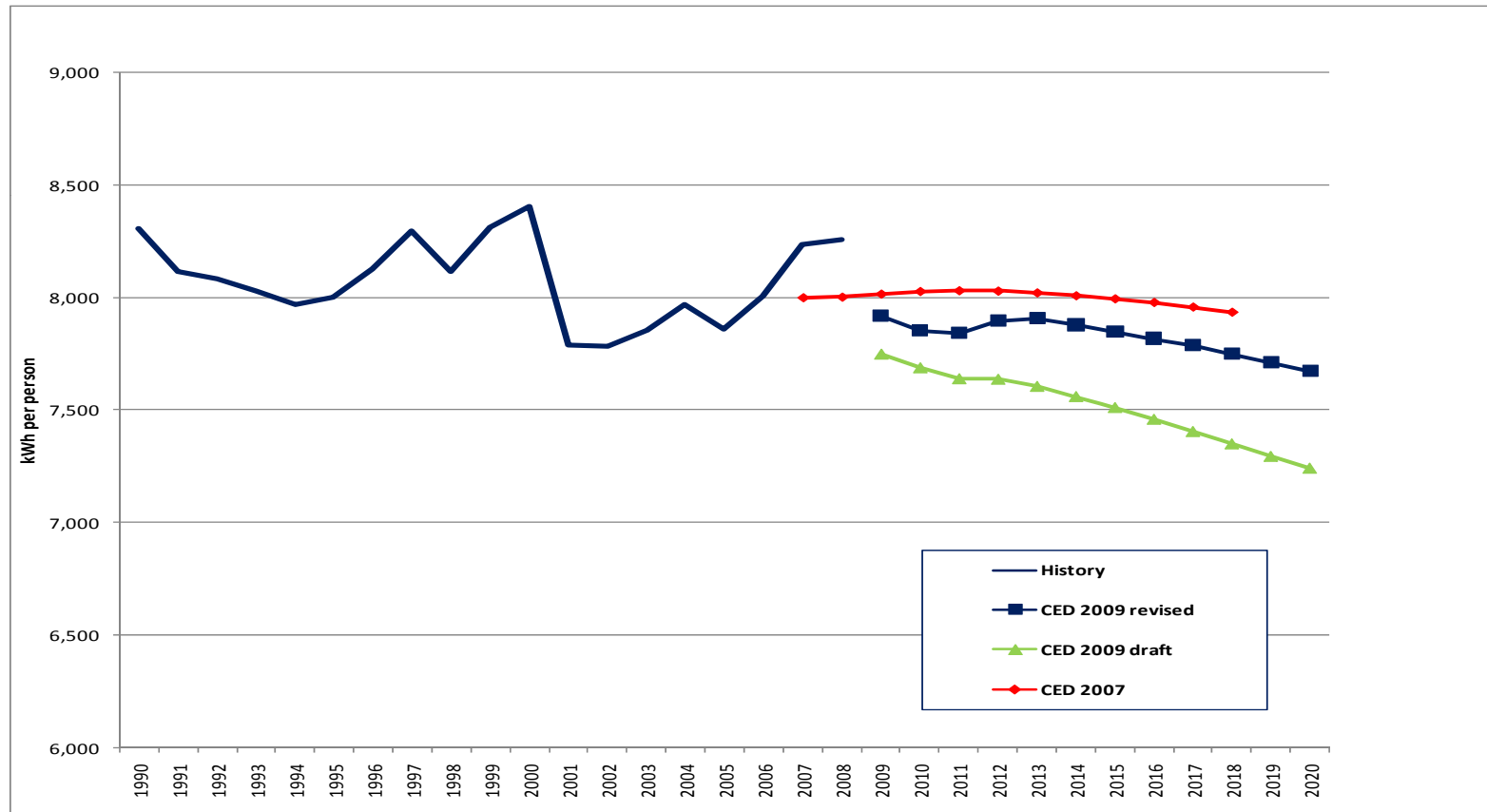




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PG&E per Capita Consumption

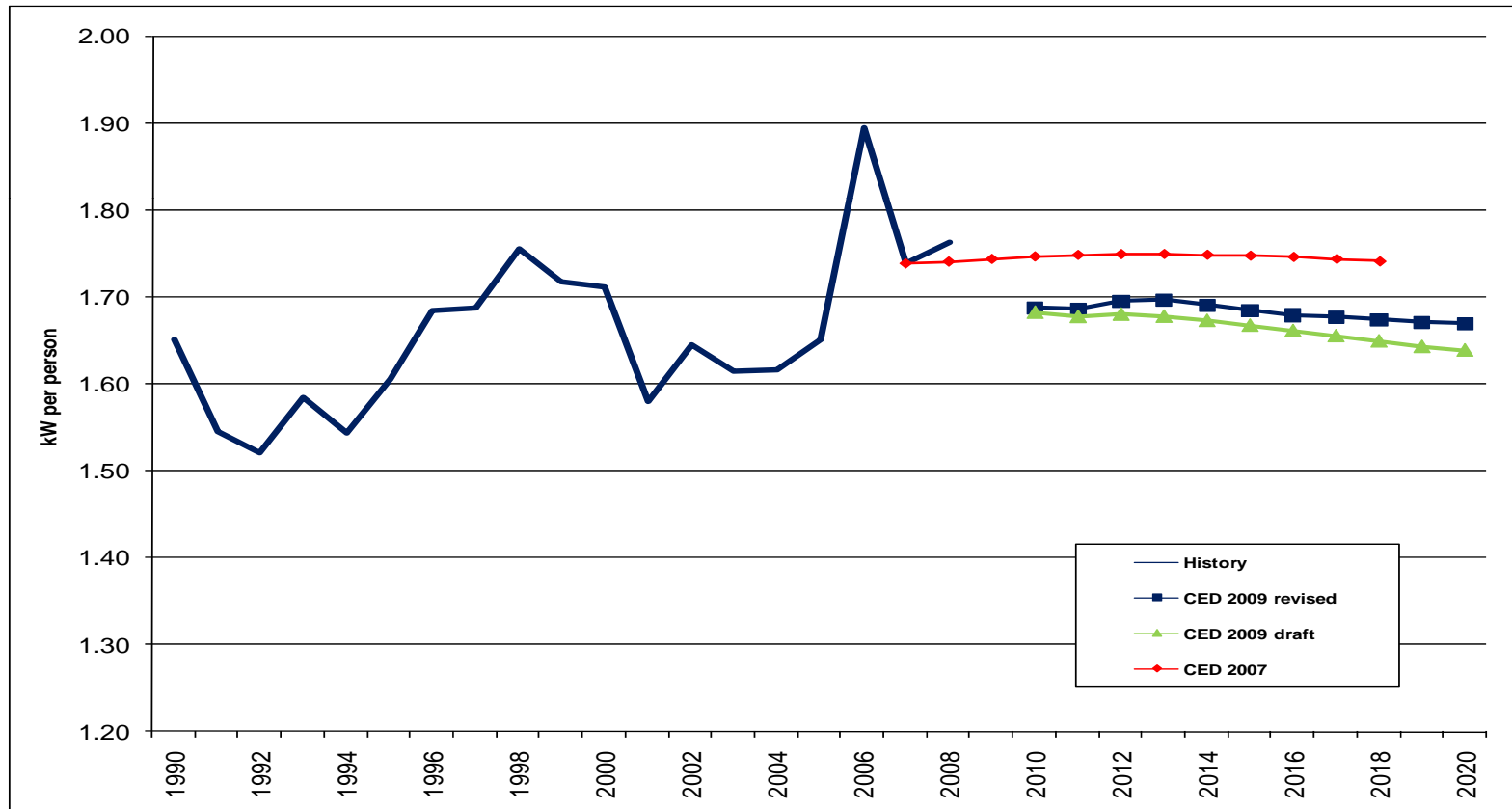
- higher starting point, less decline than draft forecast





PG&E per Capita Peak

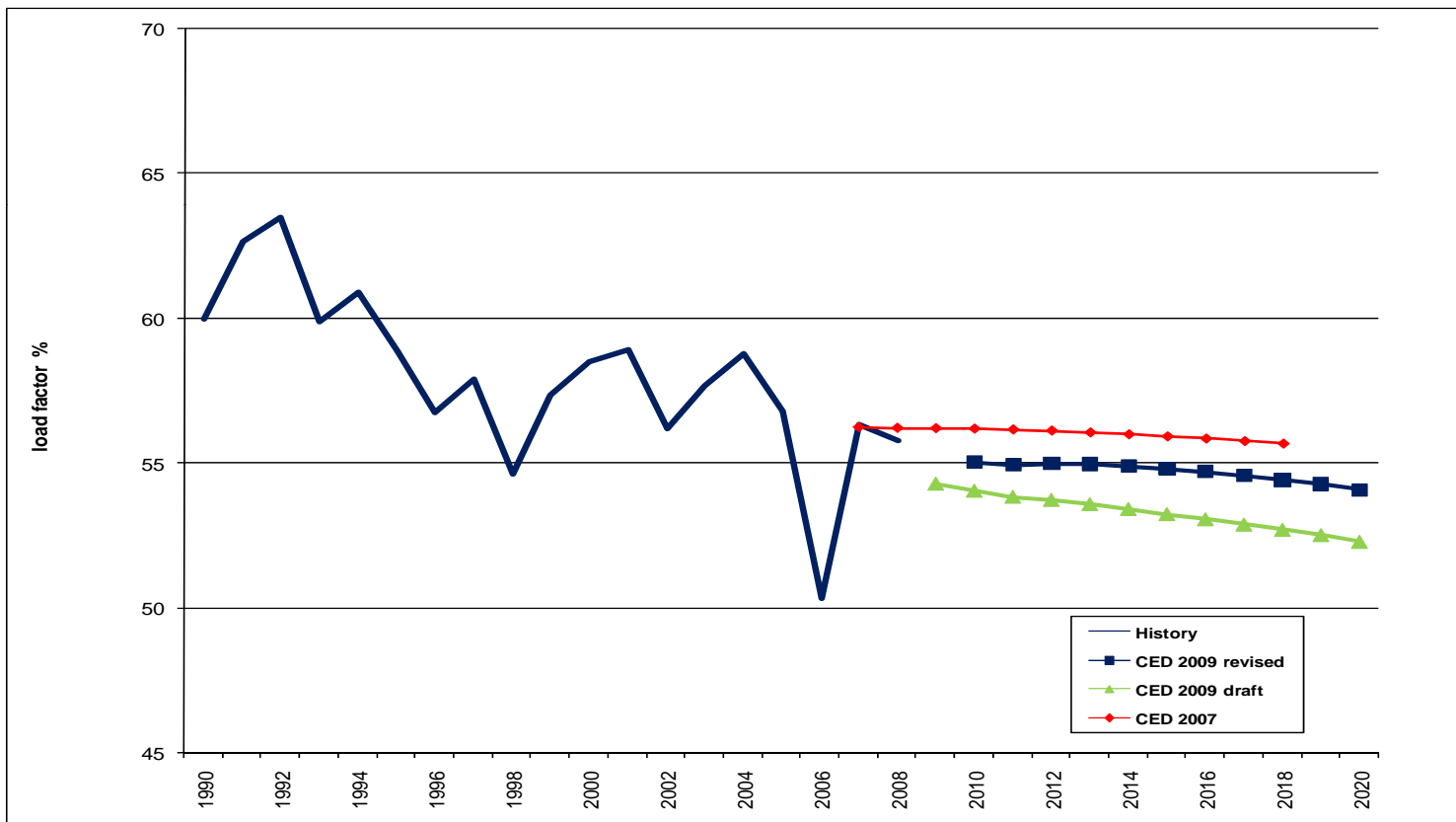
- slight decline after 2012





PG&E Planning Area Load Factor

- higher starting value, continues decline of the historic trend





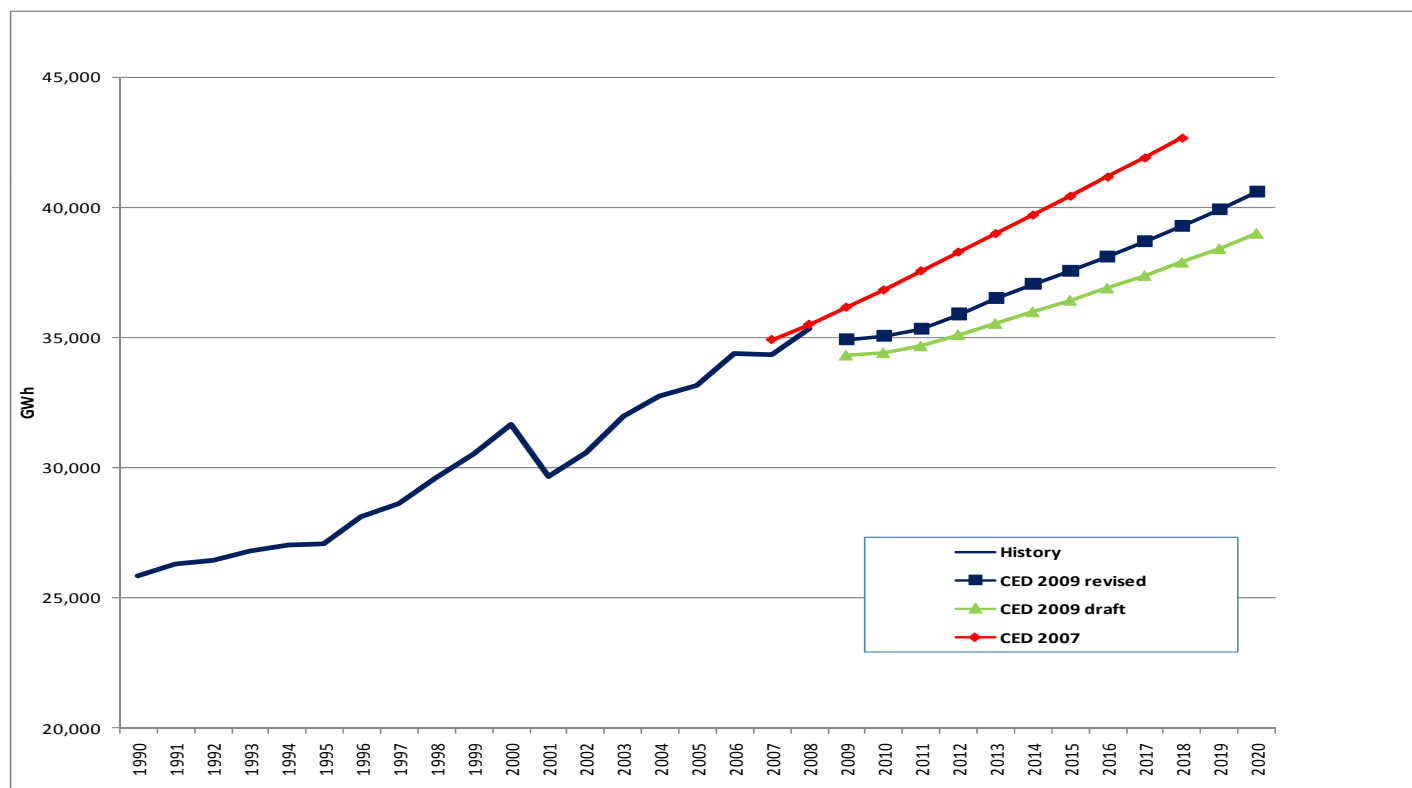
PG&E Residential Forecast

- 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
- Lighting savings from CFL's (as a result of currently committed DSM programs) reduces total use per household approximately 5% by 2011 and beyond from 2004 levels
- Peak grows at similar rate from a similar starting value



PG&E Residential Consumption

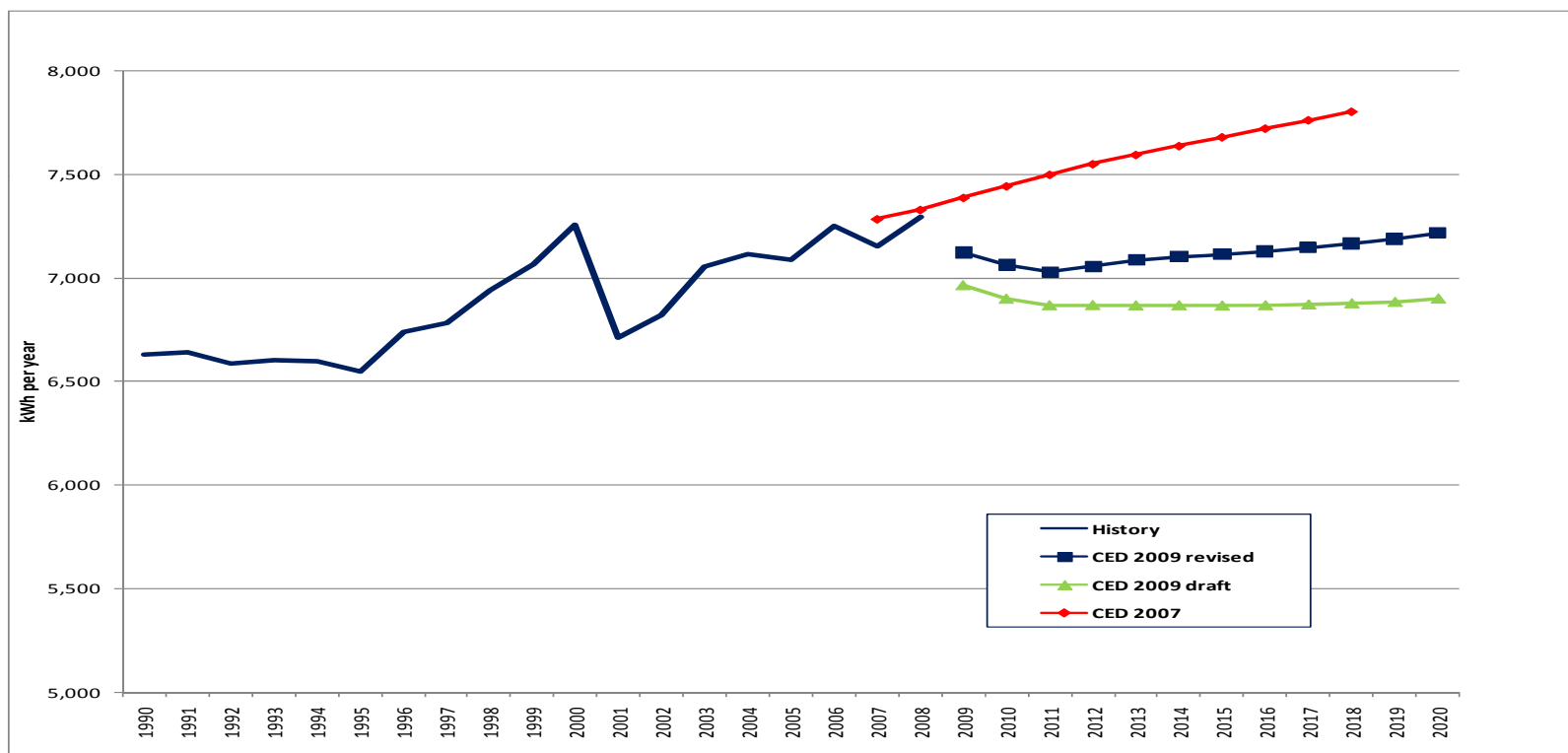
- higher starting value, slightly higher growth than draft





PG&E Residential Use per Household

- short term decline, then increases with income projection

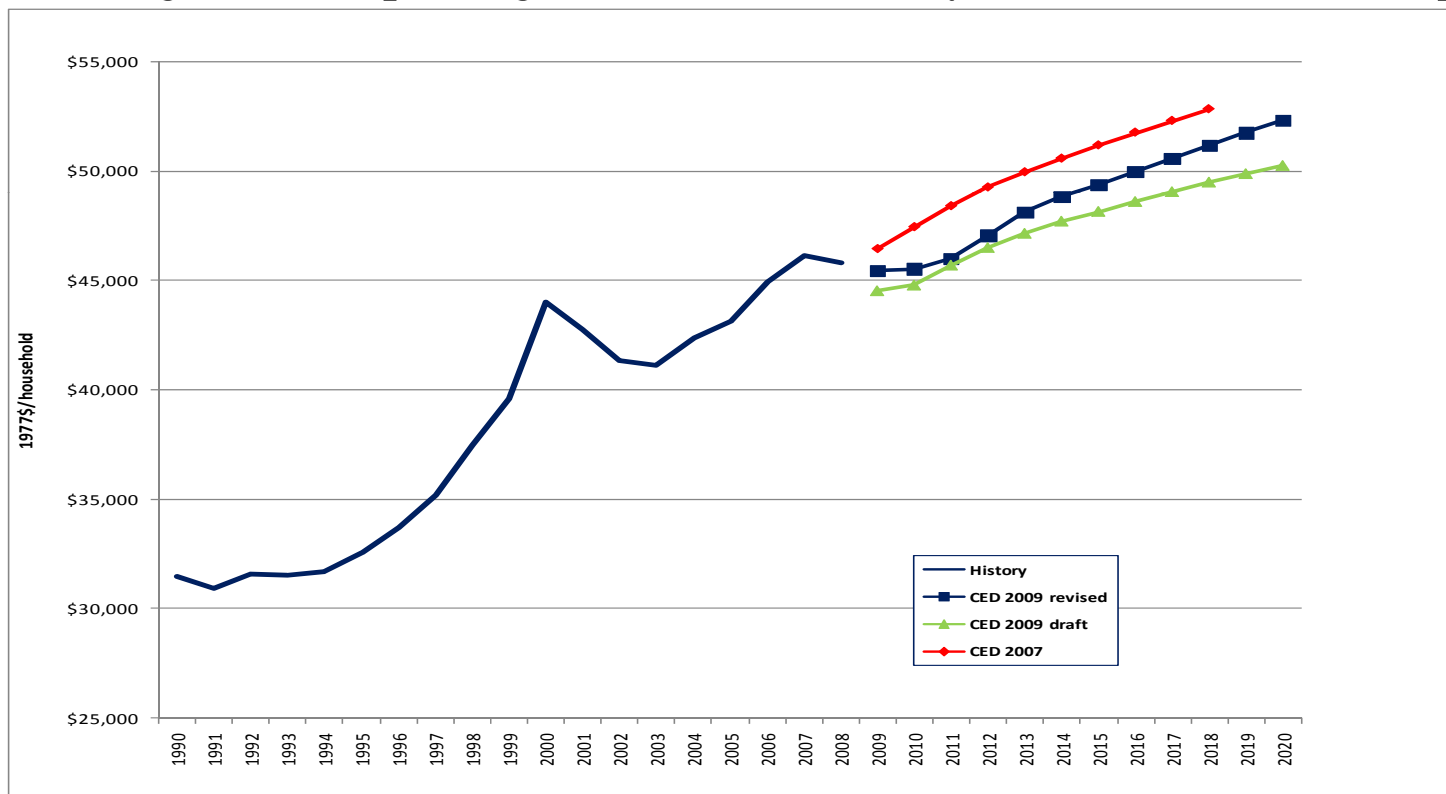




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PG&E Household Income

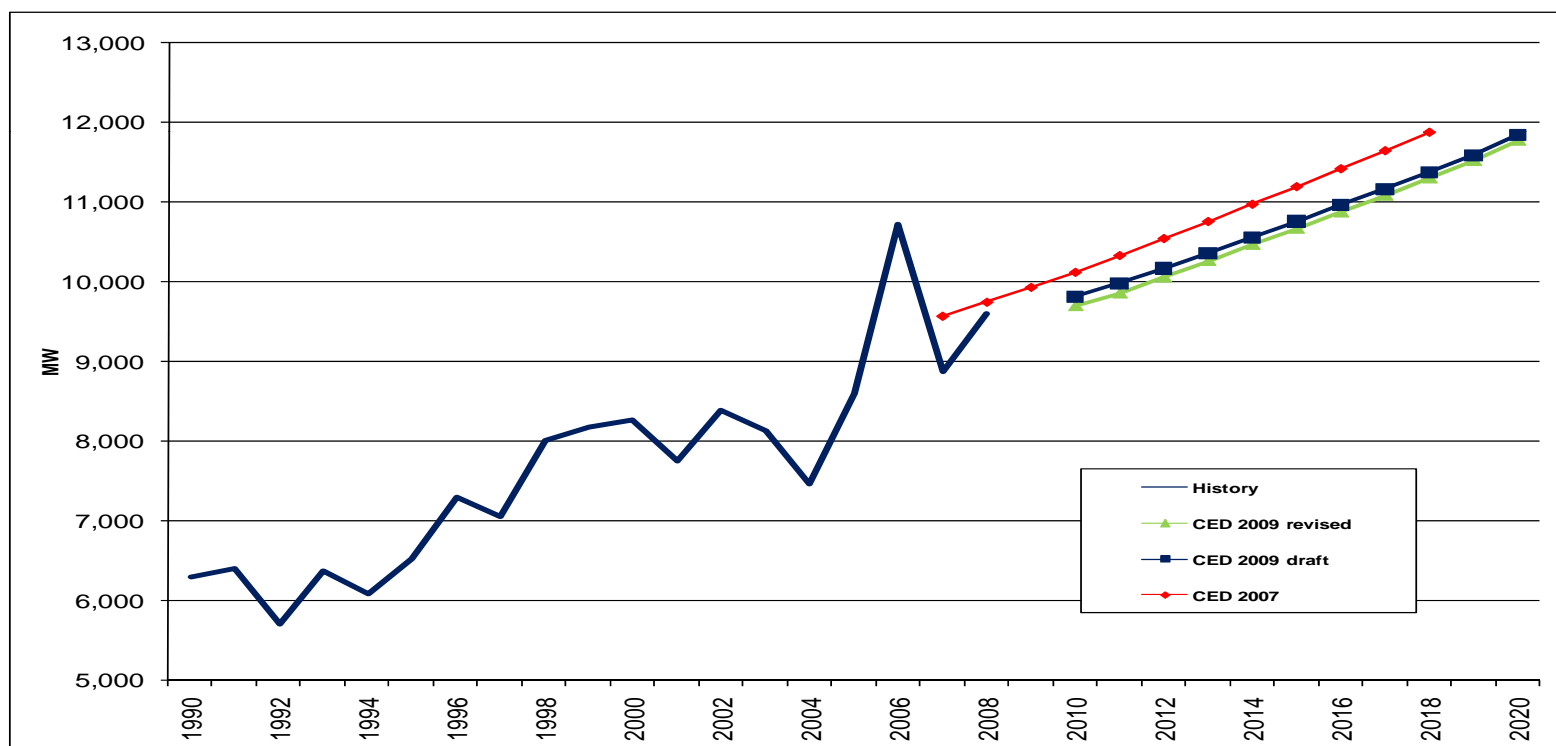
- now higher anticipated growth after recovery, smaller short term dip





PG&E Residential Peak

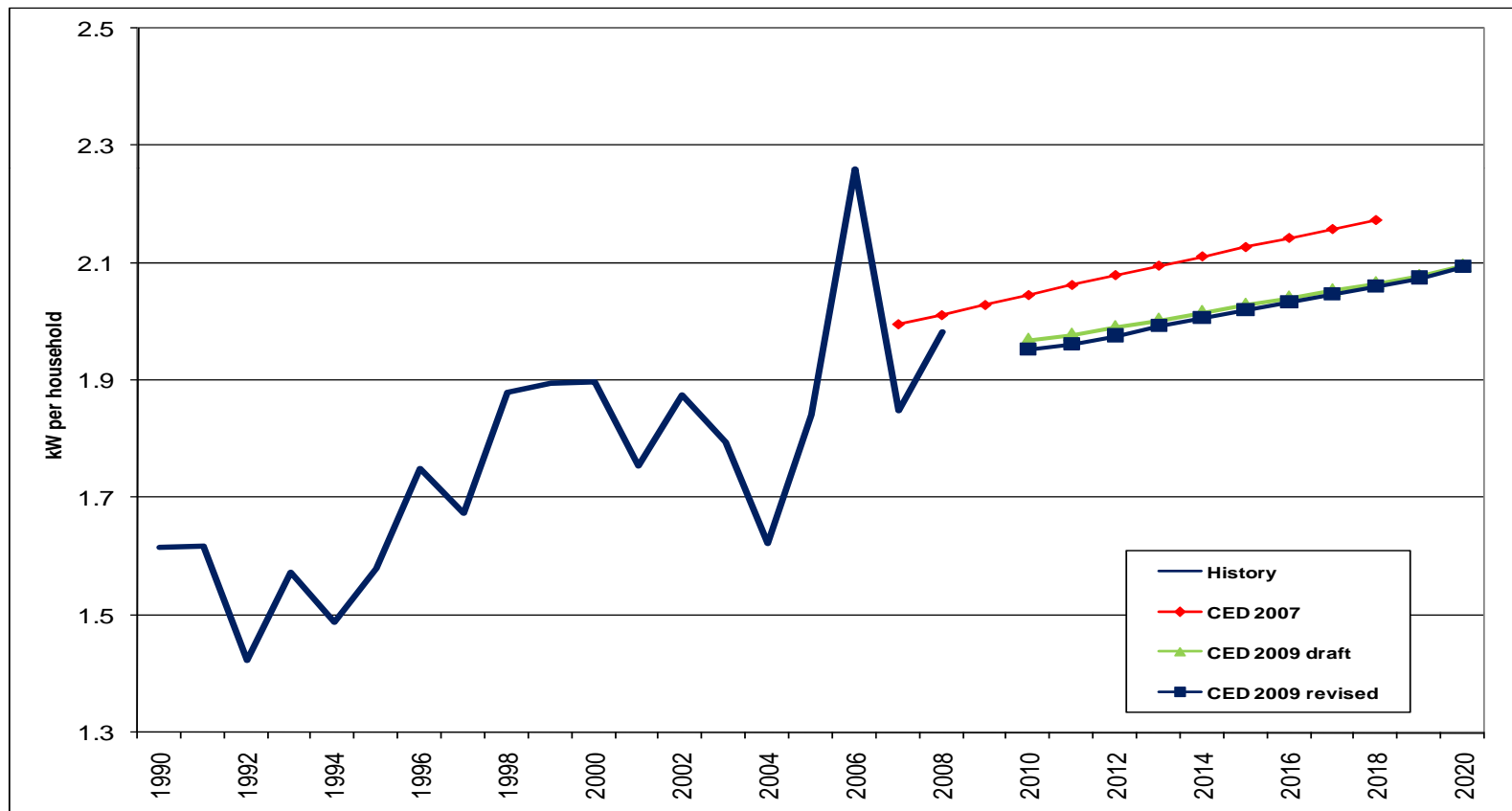
- slightly higher than draft





PG&E Residential Peak Use per Household

- similar growth to draft forecast





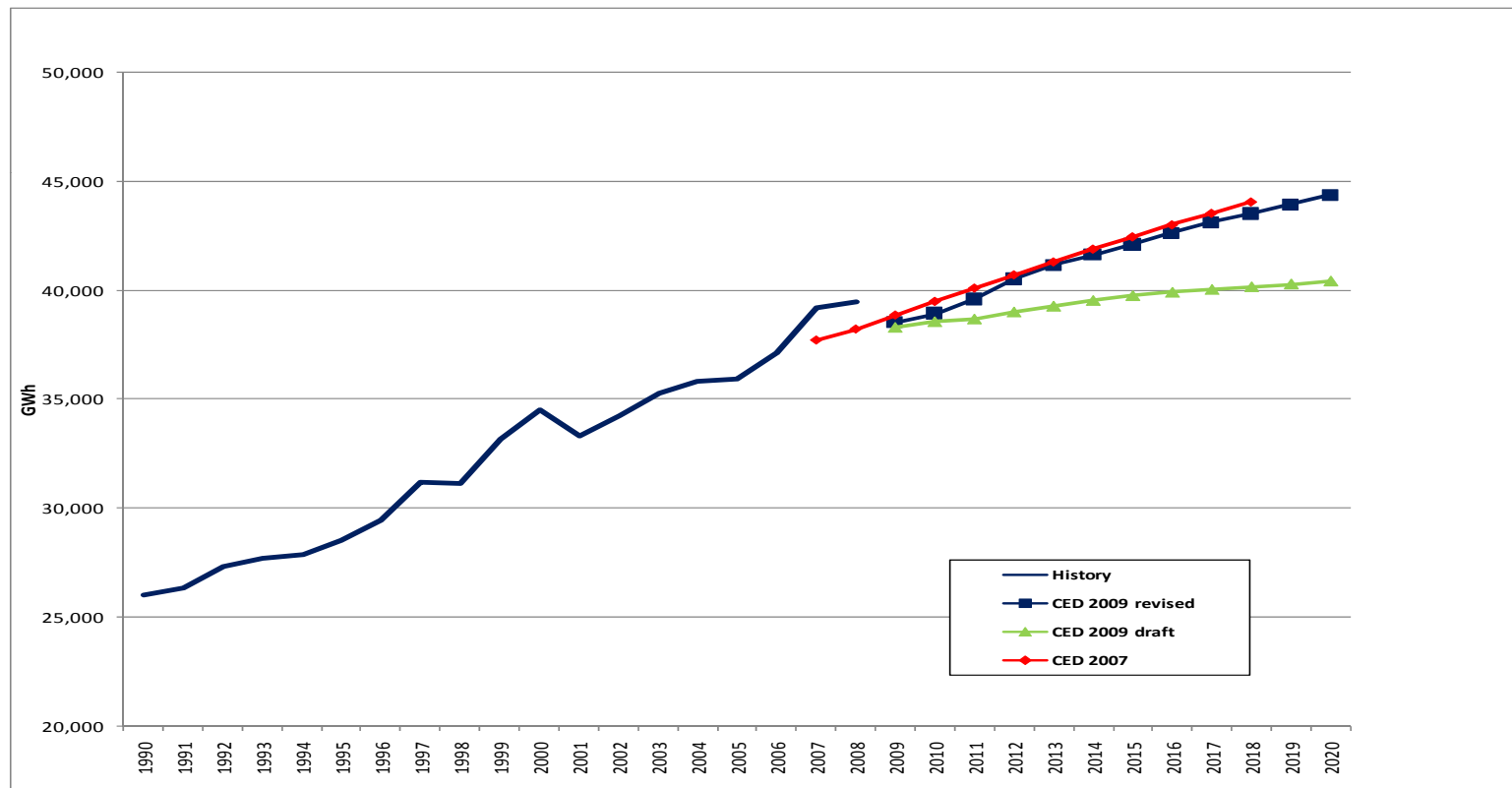
PG&E Commercial Building Sector

- Revised consumption forecast now similar to CED 2007
- Projected floor space closer to CED 2007 levels
- Use per square foot declines
- Peak results mirror consumption forecast



PG&E Commercial Building Consumption

- Higher growth than draft, similar to CED 2007

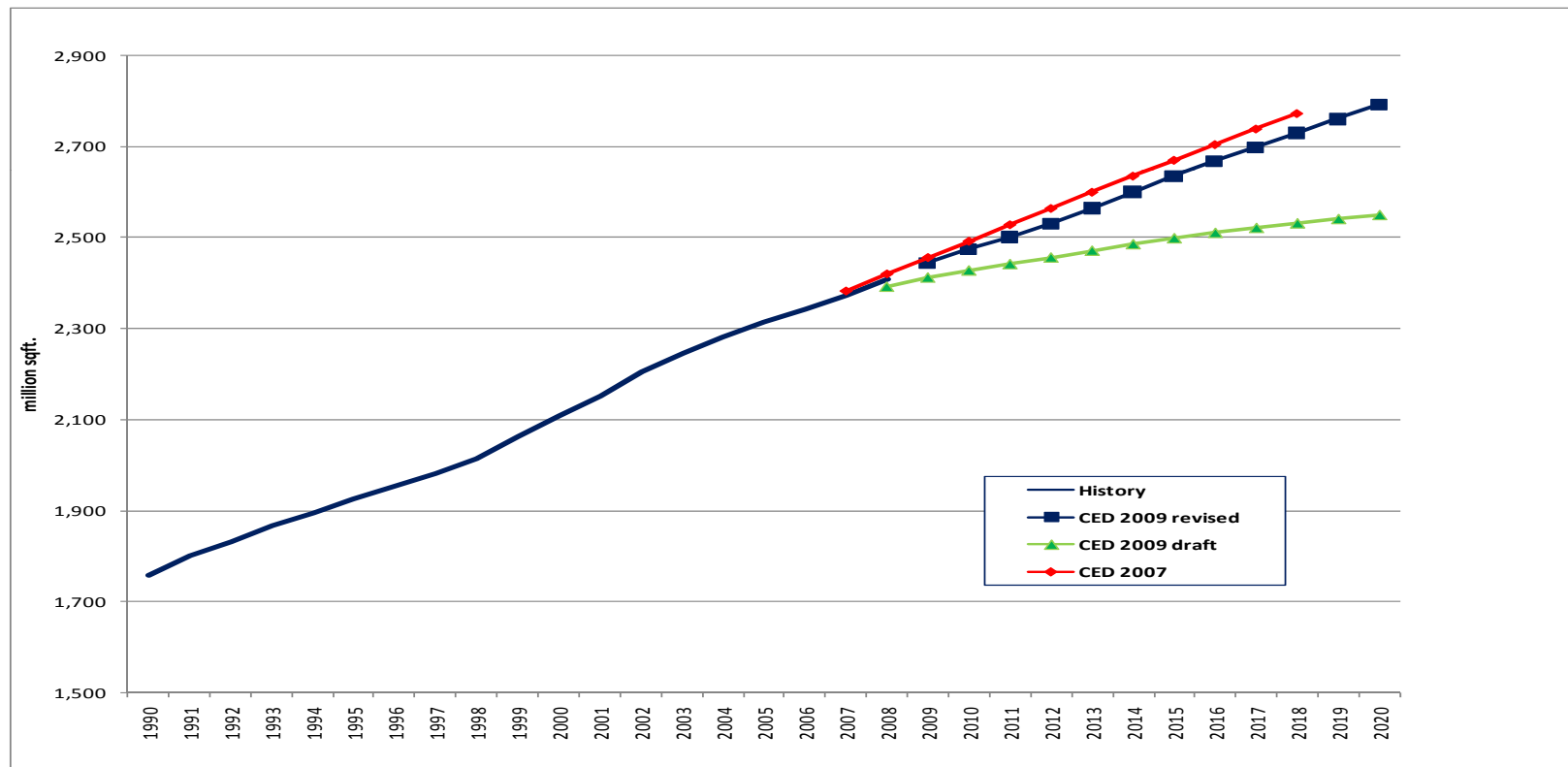




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PG&E Commercial Floor Space

- Higher growth and starting value than draft

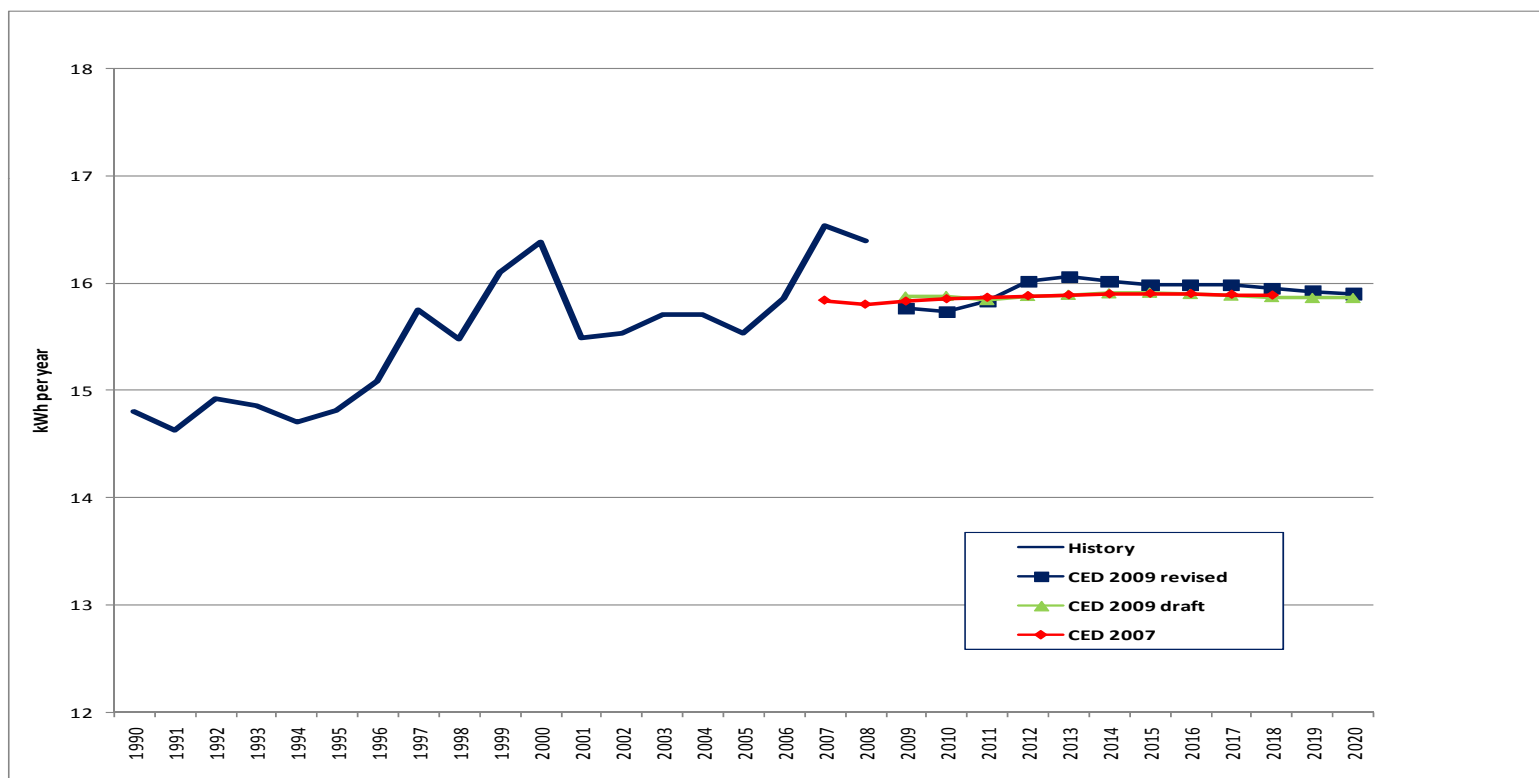




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PG&E Commercial kWh per Square Foot

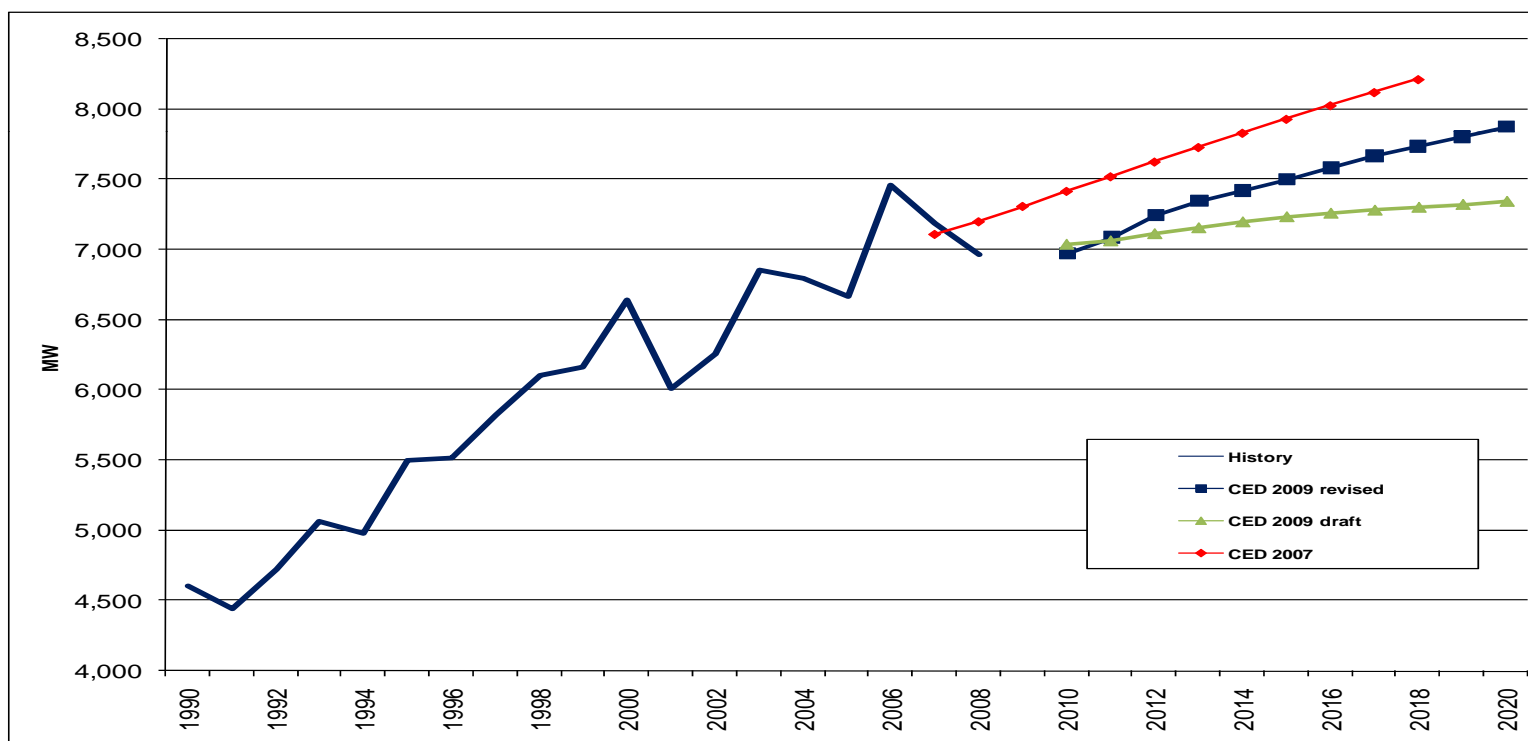
- now increases with economic recovers and holds constant





PG&E Commercial Building Sector Peak

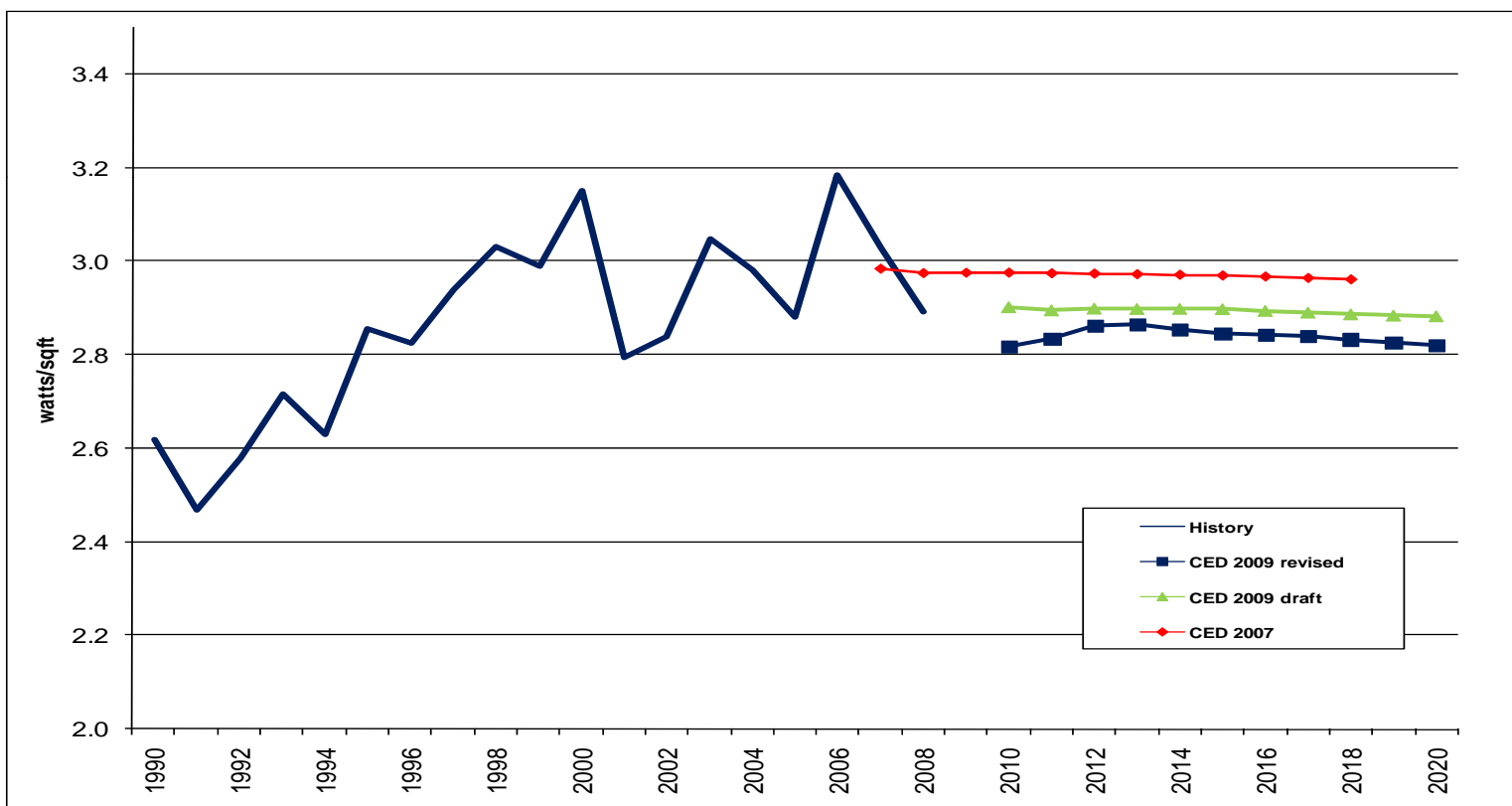
- mirrors consumption forecast result





PG&E Commercial Peak per Square Foot

- lower assumed starting value





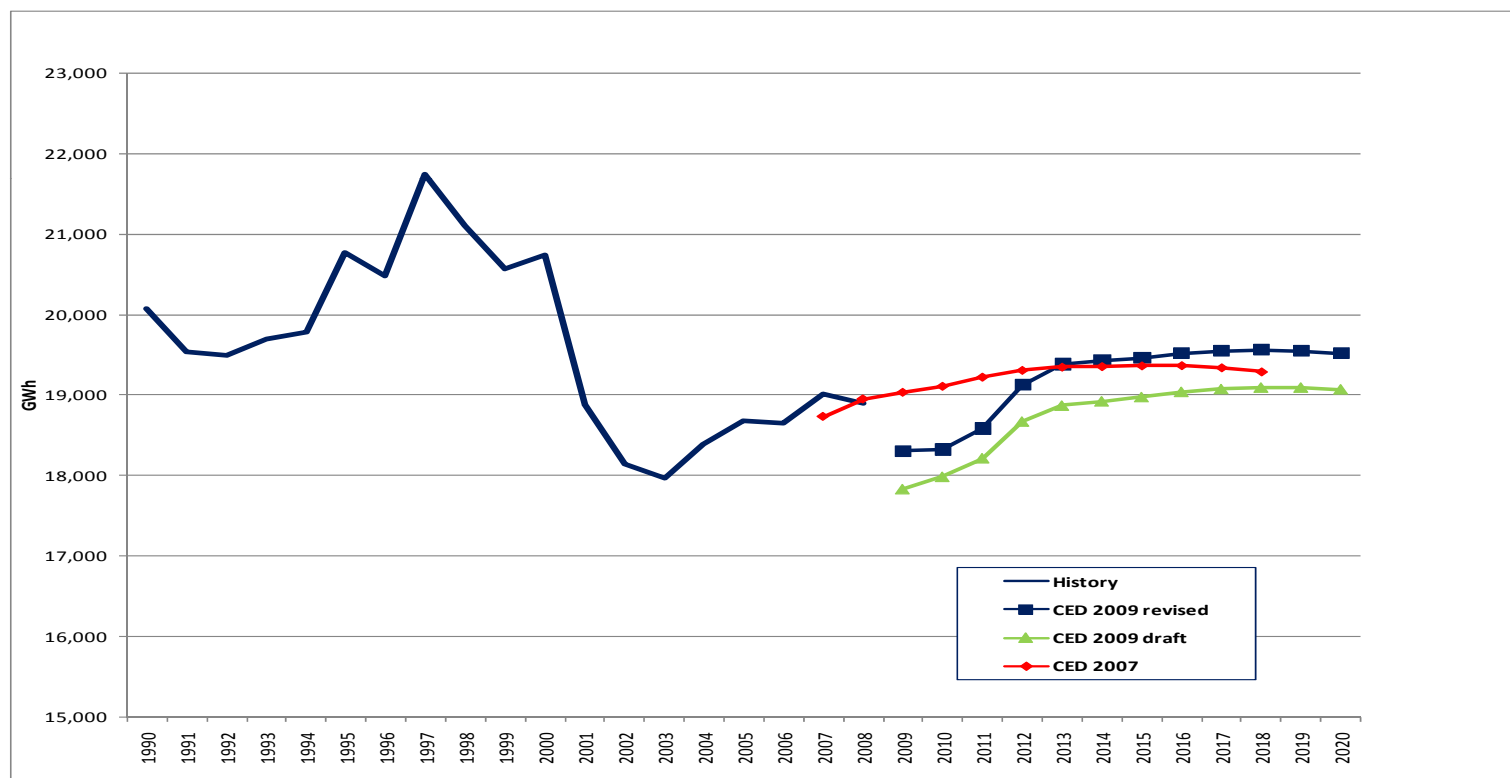
PG&E Industrial Sector

- Now higher forecast after recovery
- More rapid recovery than other sectors
- Peak forecast higher



PG&E Industrial Sector Consumption

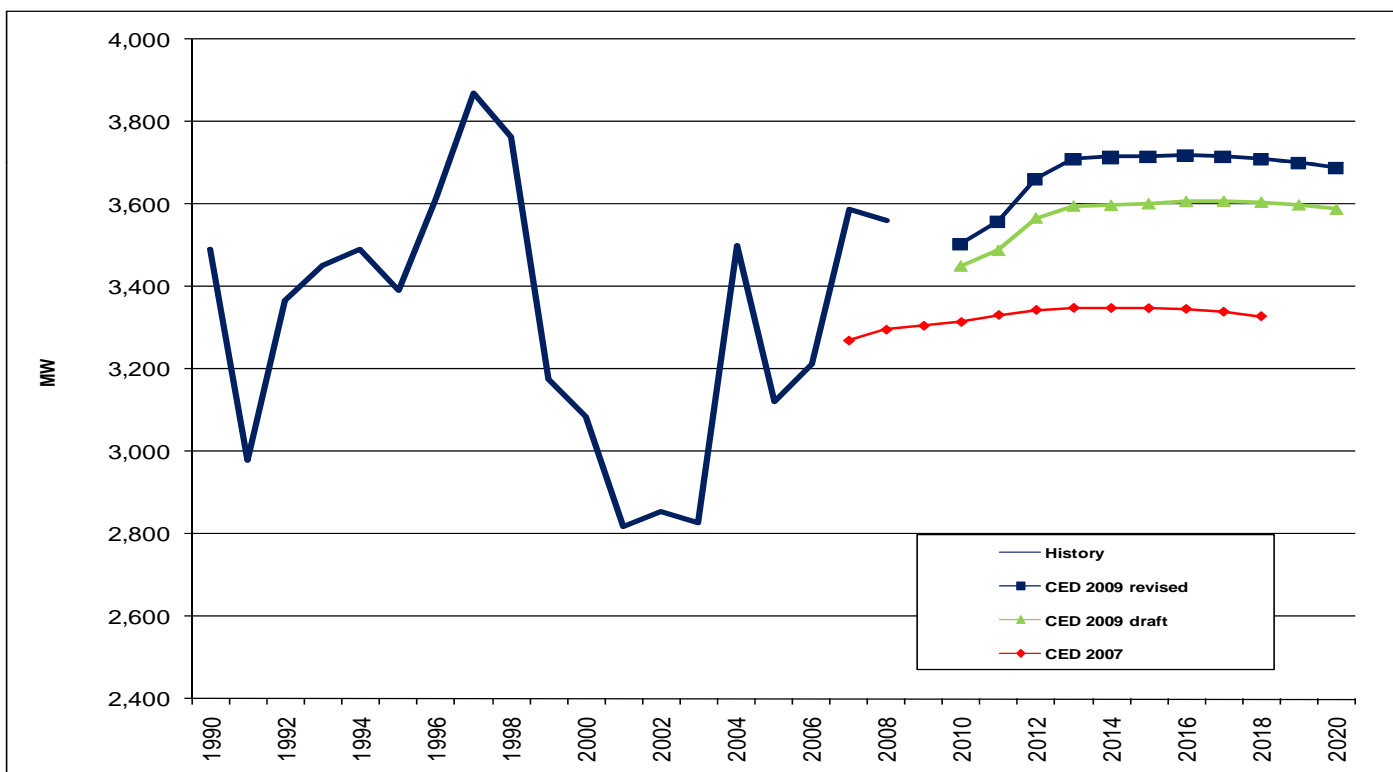
- higher starting point , greater recovery





PG&E Industrial Sector Peak

- higher forecast caused by assumed starting value





PG&E Other Sectors

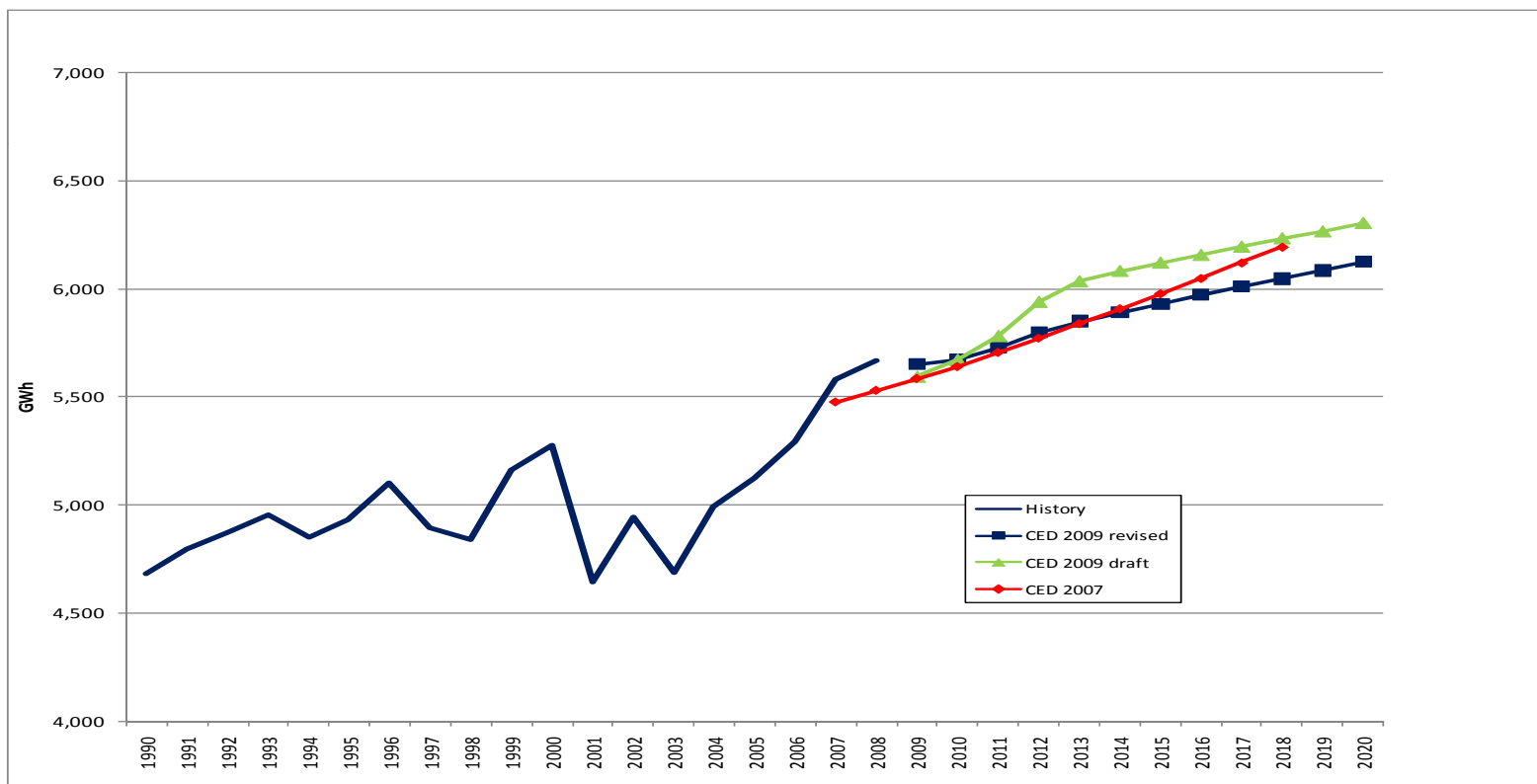
- Remaining sectors comprise 15% of total consumption:
 - 5% Transportation, communications and utilities (lower starting point)
 - 6% Agriculture and Water Pumping
 - 3% Mining, Oil Extraction and Construction
 - 1% Street lighting
- Other sectors comprise only 4% of peak.



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PG&E Transportation, Communications and Utilities Sector Consumption

- lower growth caused by revised drivers

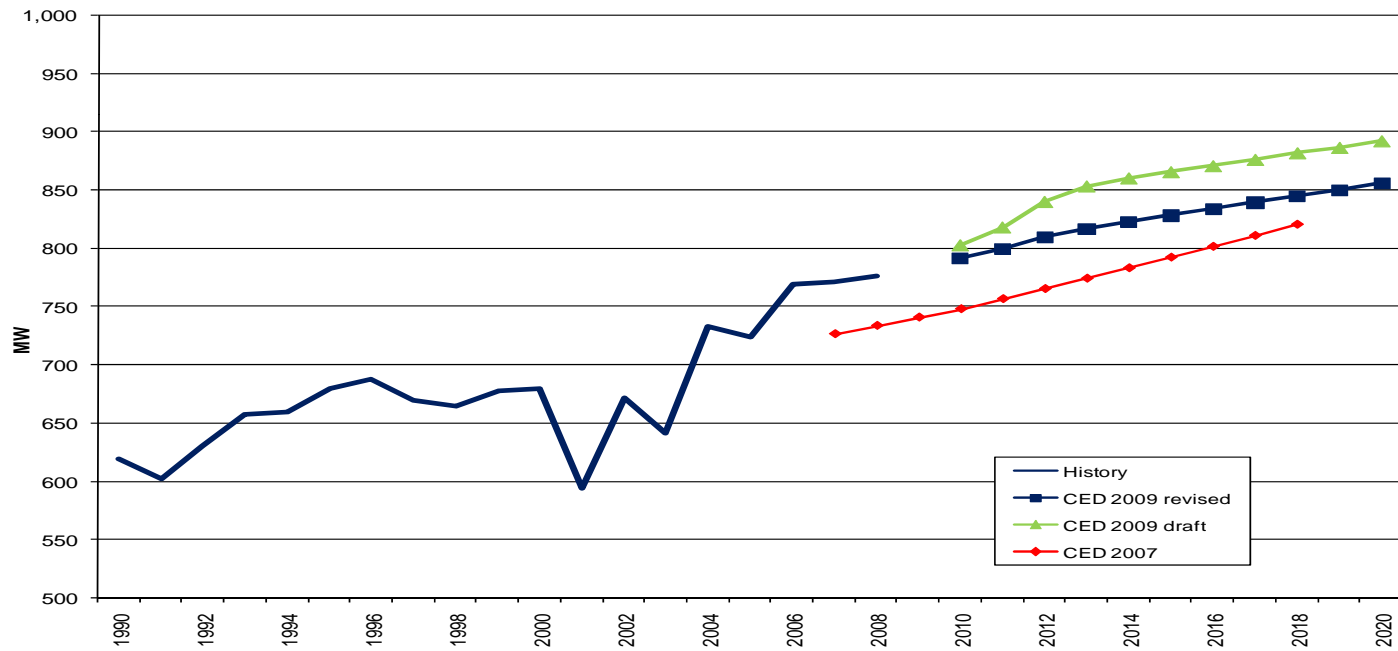




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PG&E Other Sectors Peak

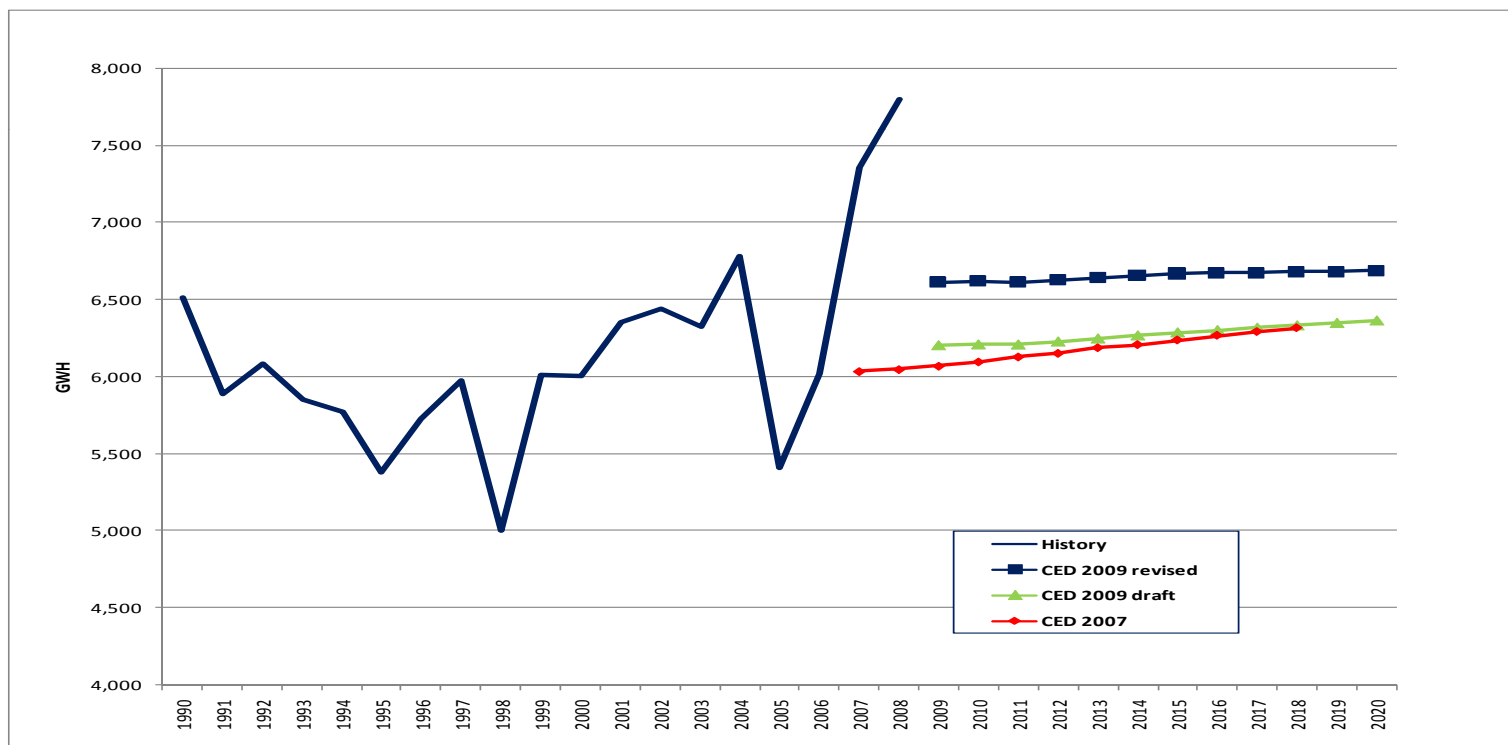
- difference reflects consumption differences





PG&E Agriculture and Water Pumping Sector Consumption

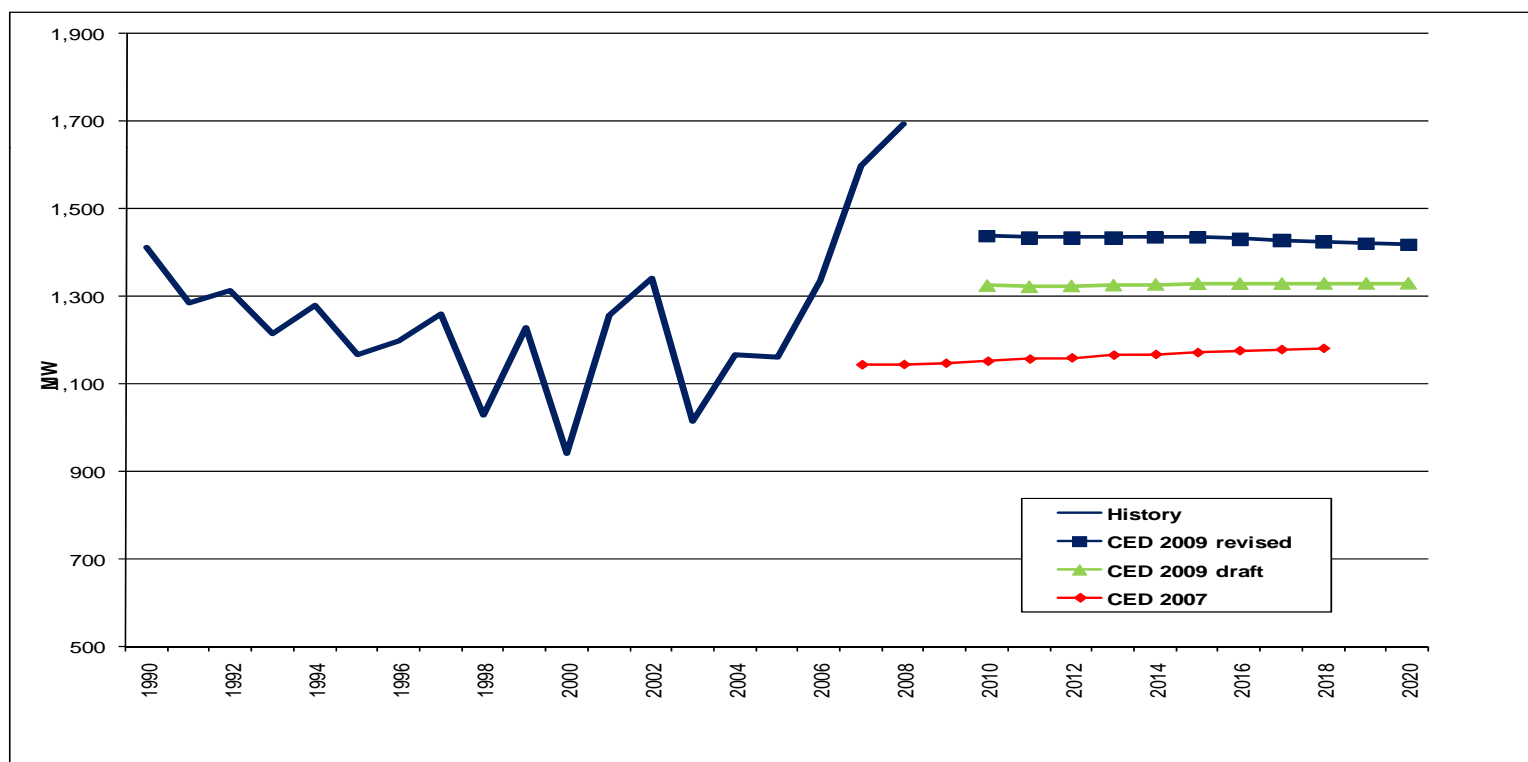
- Higher starting point, forecast based on normal rainfall





PG&E Agriculture and Water Pumping Peak

- difference reflects starting value assumption





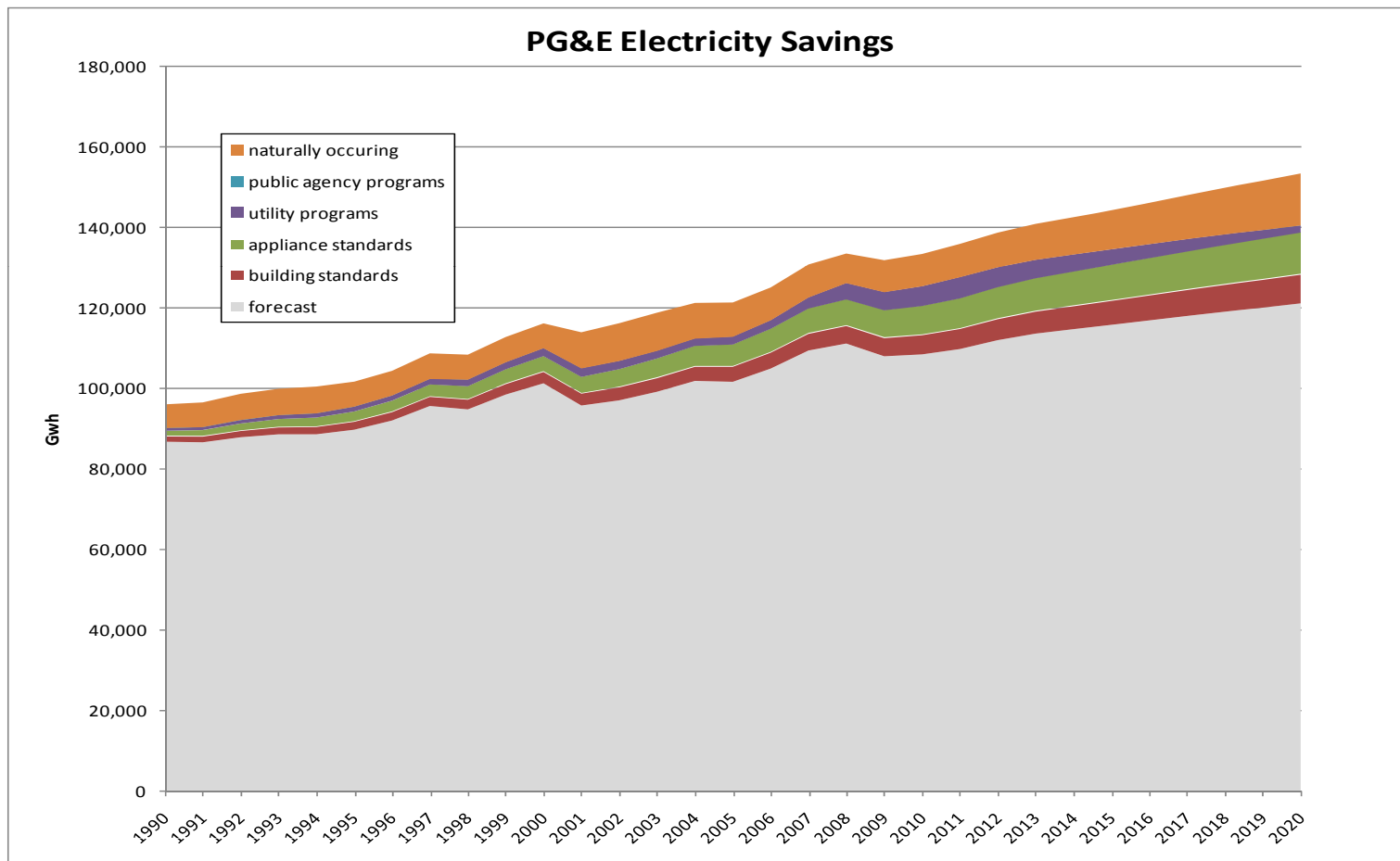
Efficiency Savings and Self Generation

- 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



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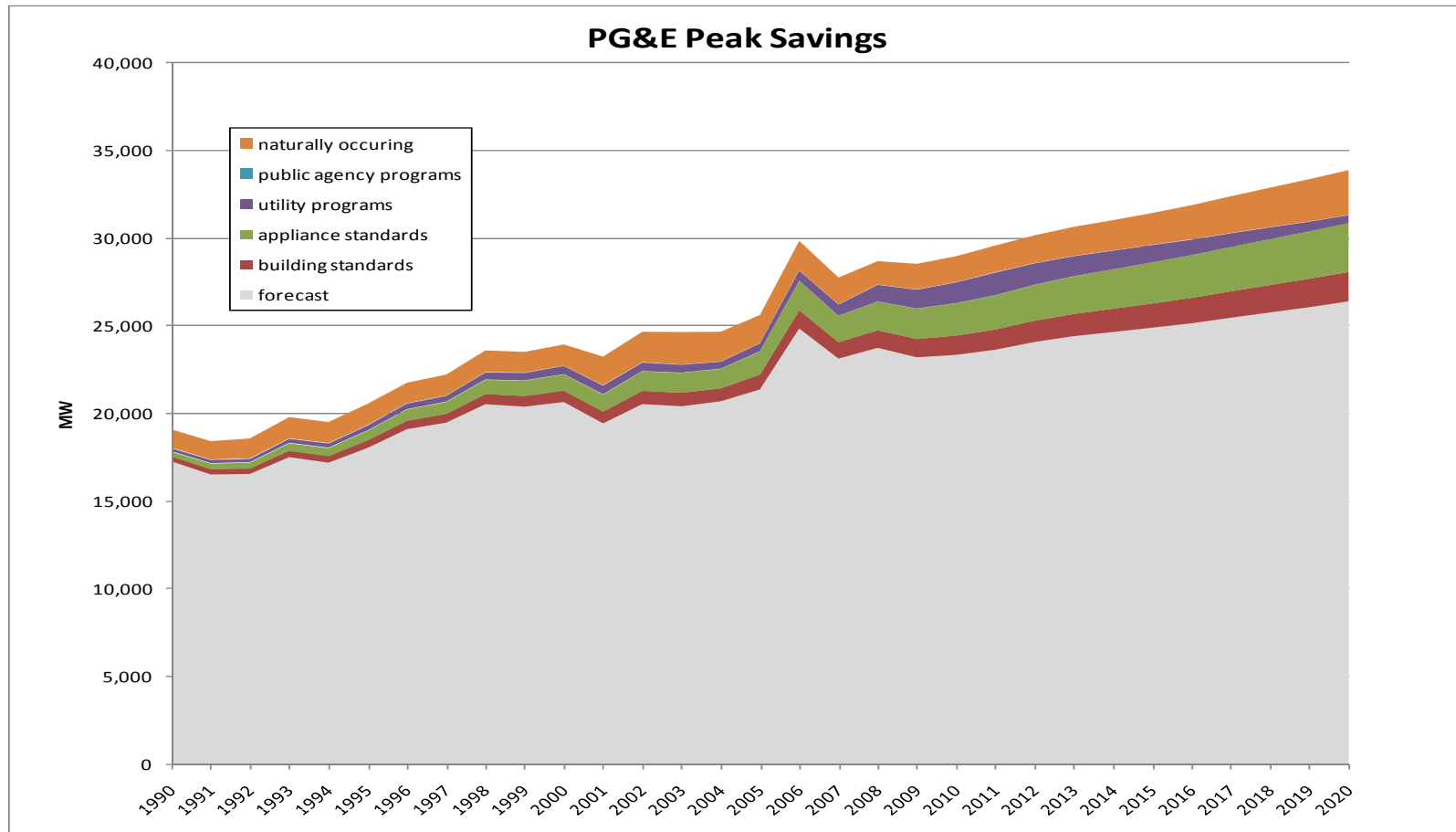
Total savings 26% of forecast by 2020





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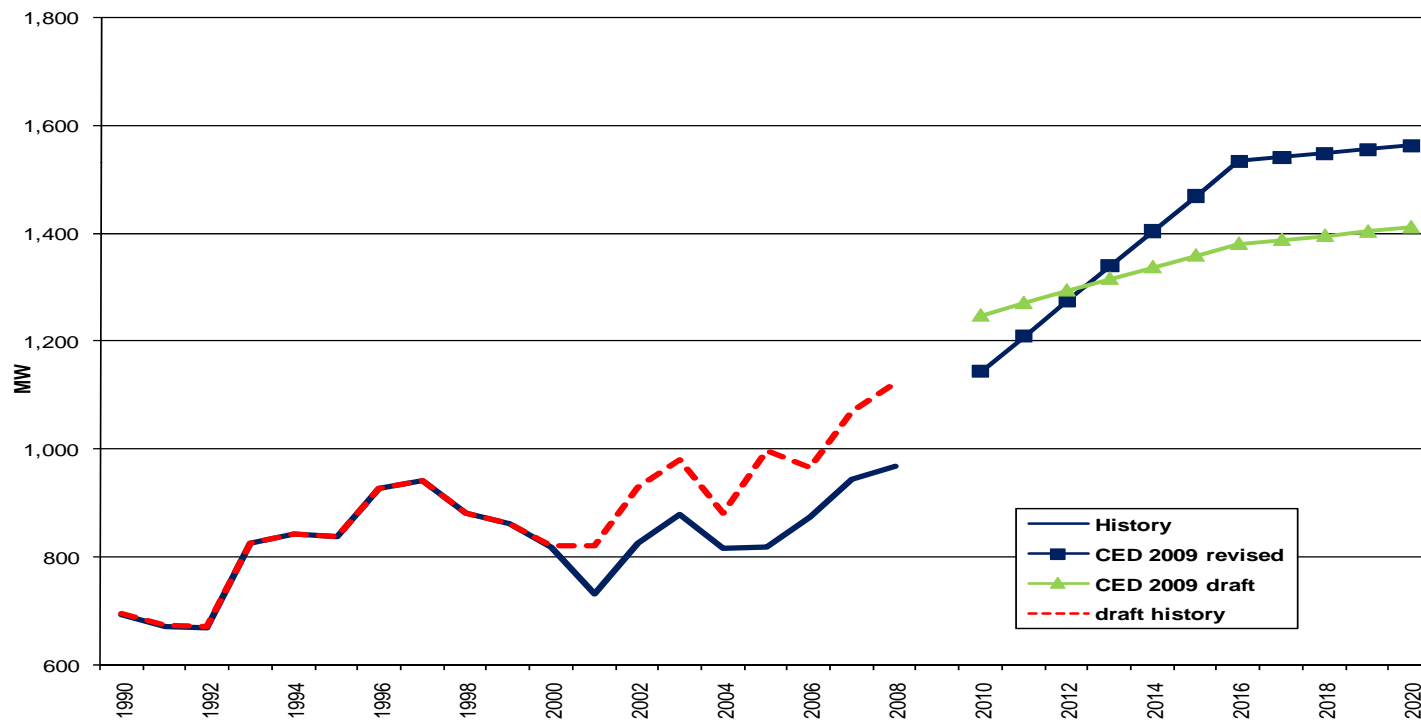
Total savings 28% of forecast by 2020





PG&E Planning Peak Self-Generation

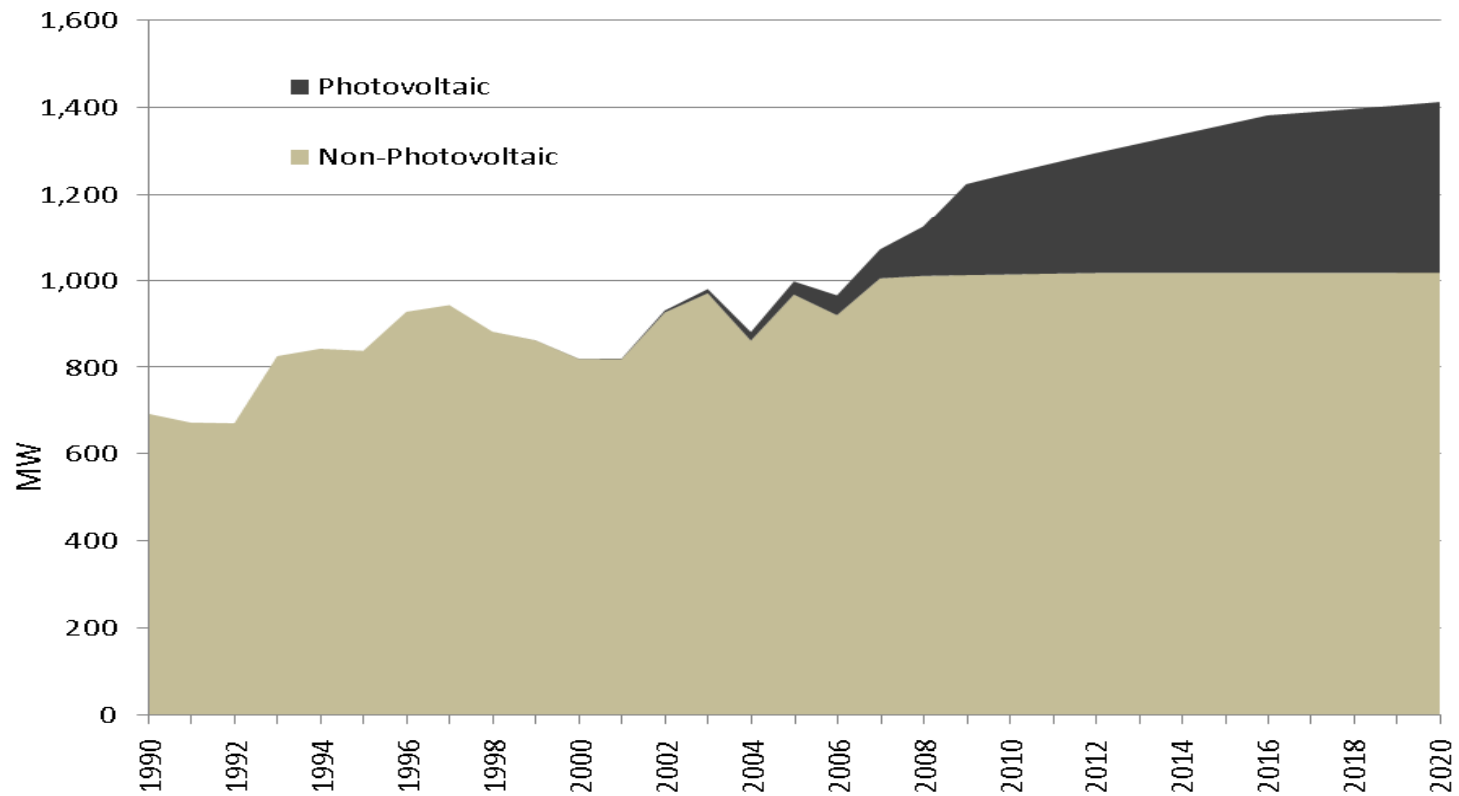
- lower history, higher forecast





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PG&E Self Generation Peak Estimates



Source: California Energy Commission, 2009



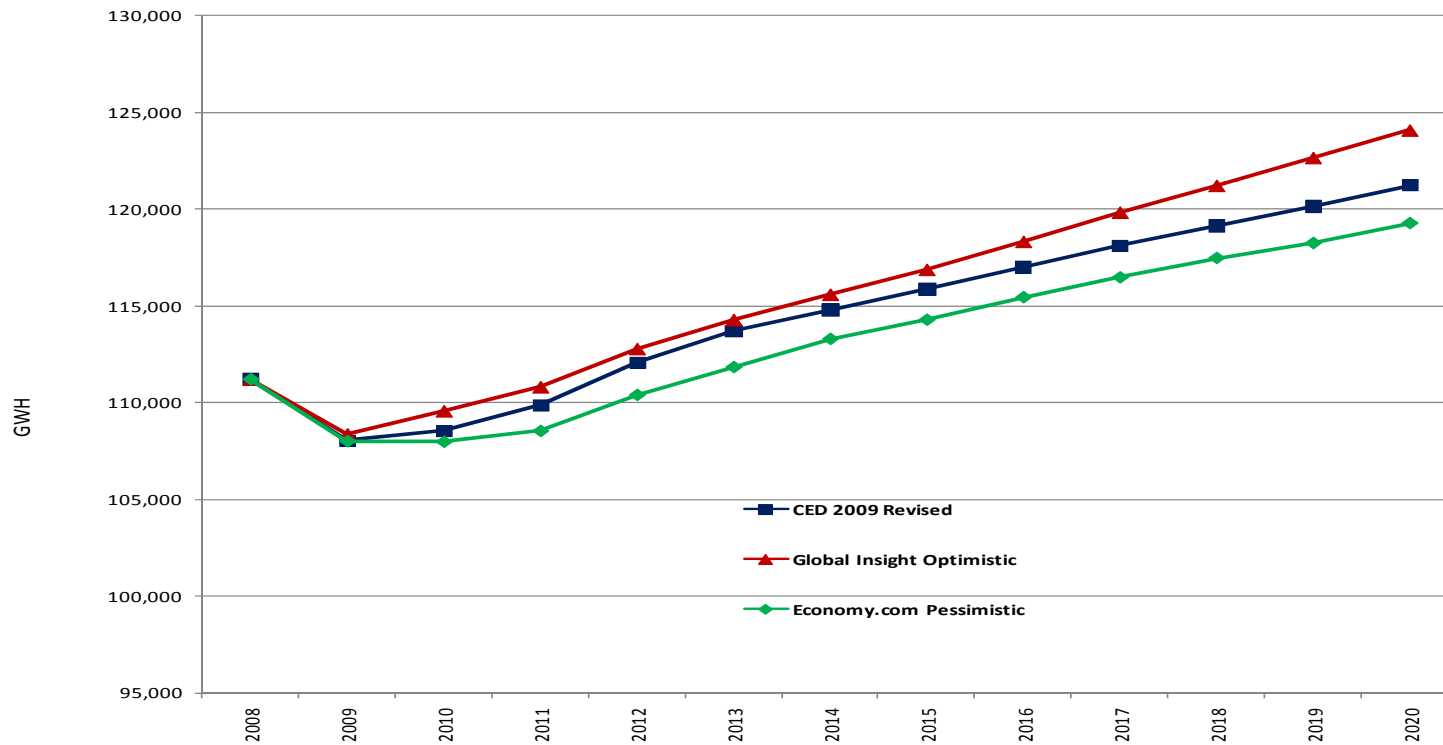
Economic Scenarios

- Consumption and peak increase about 2.3% in high case
- Consumption and peak decrease about 1.8% in low case



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PG&E Economic Scenarios (consumption)

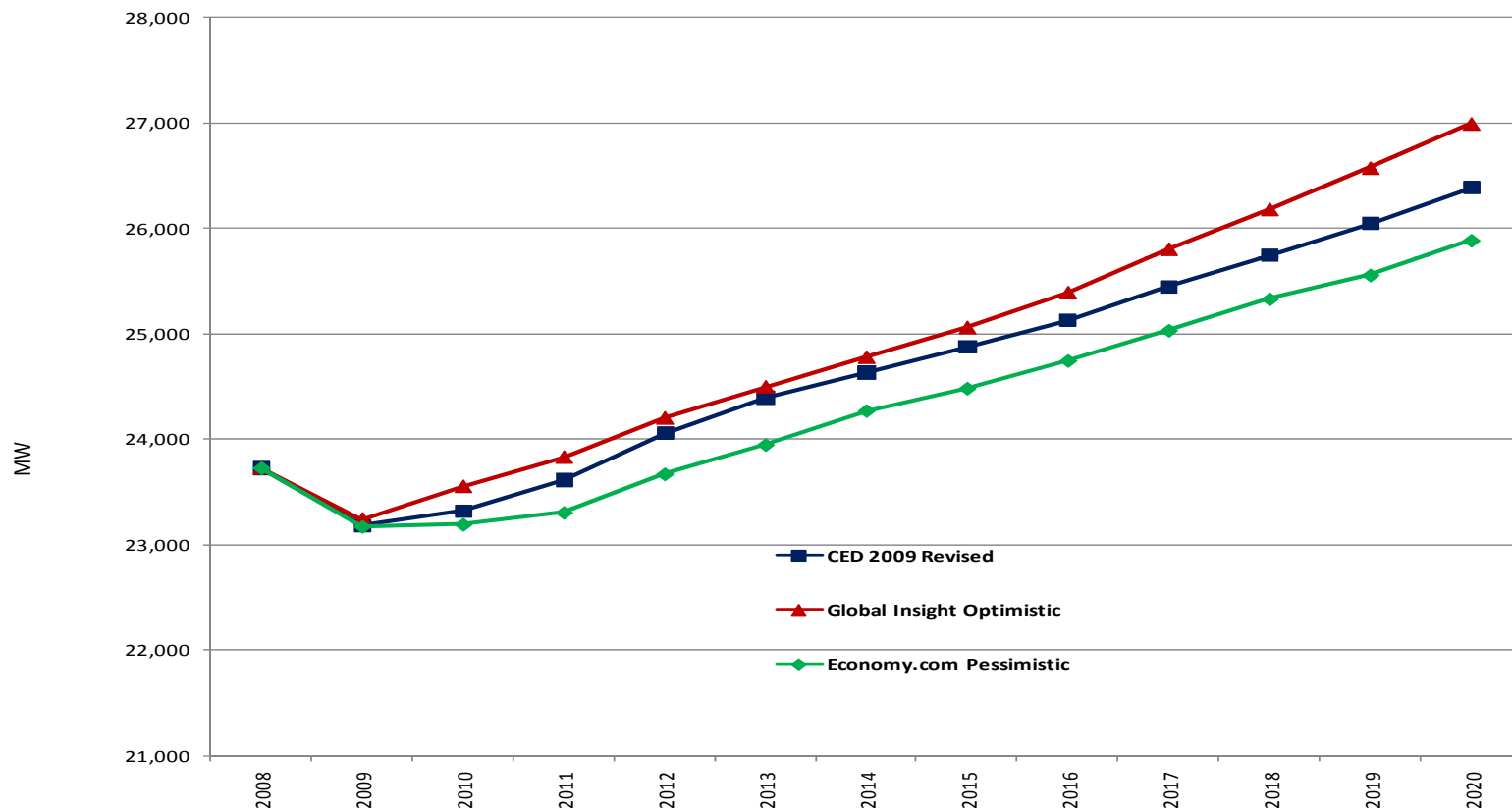


Source: California Energy Commission, 2009



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PG&E Economic Scenarios (peak)



Source: California Energy Commission, 2009