



California Energy Commission

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

SDG&E Planning Area Forecast

First Floor, Hearing Room A

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10 a.m.

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DOCKET

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DATE SEP 21 2009

RECD SEP 22 2009



SDG&E Forecast Overview

- Consumption Forecast is 3% higher than draft in 2010 growing to 5% higher by 2018
- Consumption Forecast is still lower than CED 2007 by about 5%
- Peak forecast is over 2% lower in 2018 than draft
- Consumption forecast includes self generation while peak excludes self generation
- Per capita consumption and per capita peak constant
- Load factor higher but continues decline



SDG&E Planning Area Forecast Results

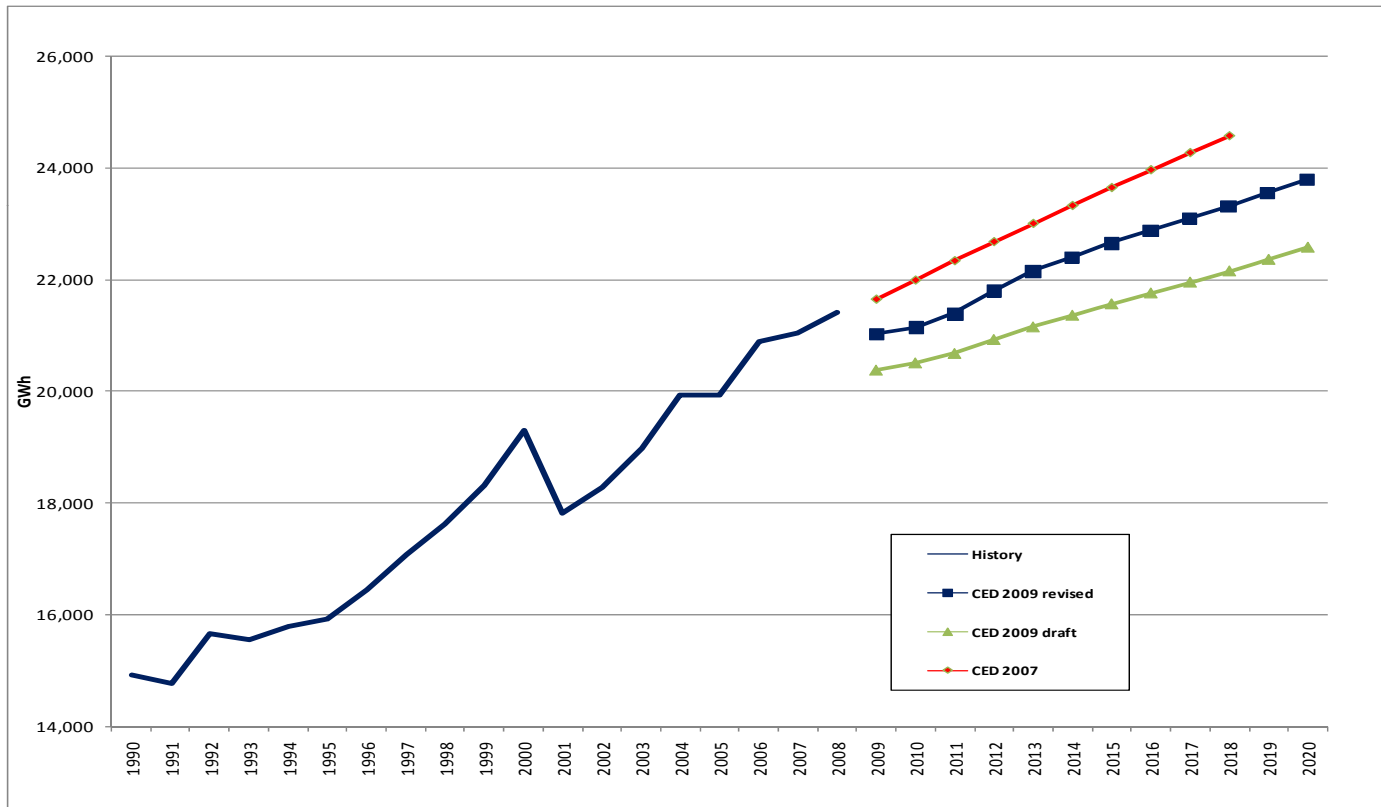
- Revised consumption higher revised peak lower (increased self-generation)

Consumption (GWH)					
	<i>CED 2007</i> (Oct. 2007)	<i>CED 2009 Draft</i> mid-rate case (June 2009)	<i>CED 2009 Revised</i> (Sept. 2009)	Percent Difference <i>CED 2009 Revised</i> / <i>CED 2007</i>	Percent Difference <i>CED 2009 Revised</i> / <i>CED 2009 Draft</i>
1990	14,926	14,926	14,926	0.00%	0.00%
2000	19,294	19,294	19,294	0.00%	0.00%
2008	21,304	20,361	21,411	0.51%	5.16%
2010	21,991	20,502	21,136	-3.89%	3.09%
2015	23,643	21,568	22,648	-4.21%	5.01%
2018	24,567	22,160	23,321	-5.07%	5.24%
Average Annual Growth Rates					
1990-2000	2.60%	2.60%	2.60%		
2000-2008	1.25%	0.67%	1.31%		
2008-2010	1.60%	0.35%	-0.64%		
2010-2018	1.39%	0.98%	1.24%		
Peak (MW)					
	<i>CED 2007</i> (Oct. 2007)	<i>CED 2009 Draft</i> mid-rate case (June 2009)	<i>CED 2009 Revised</i> (Sept. 2009)	Percent Difference <i>CED 2009 Revised</i> / <i>CED 2007</i>	Percent Difference <i>CED 2009 Revised</i> / <i>CED 2009 Draft</i>
1990	2,961	2,961	2,978	0.57%	0.57%
2000	3,471	3,471	3,485	0.40%	0.40%
2008	4,568	4,596	4,369	-4.36%	-4.94%
2010	4,714	4,621	4,513	-4.26%	-2.34%
2015	5,023	4,923	4,845	-3.54%	-1.58%
2018	5,247	5,115	5,009	-4.54%	-2.07%
Average Annual Growth Rates					
1990-2000	1.60%	1.60%	1.58%		
2000-2008	3.49%	3.57%	2.87%		
2008-2010	1.59%	0.27%	1.63%		
2010-2018	1.35%	1.28%	1.31%		



SDG&E Electricity Consumption Forecast

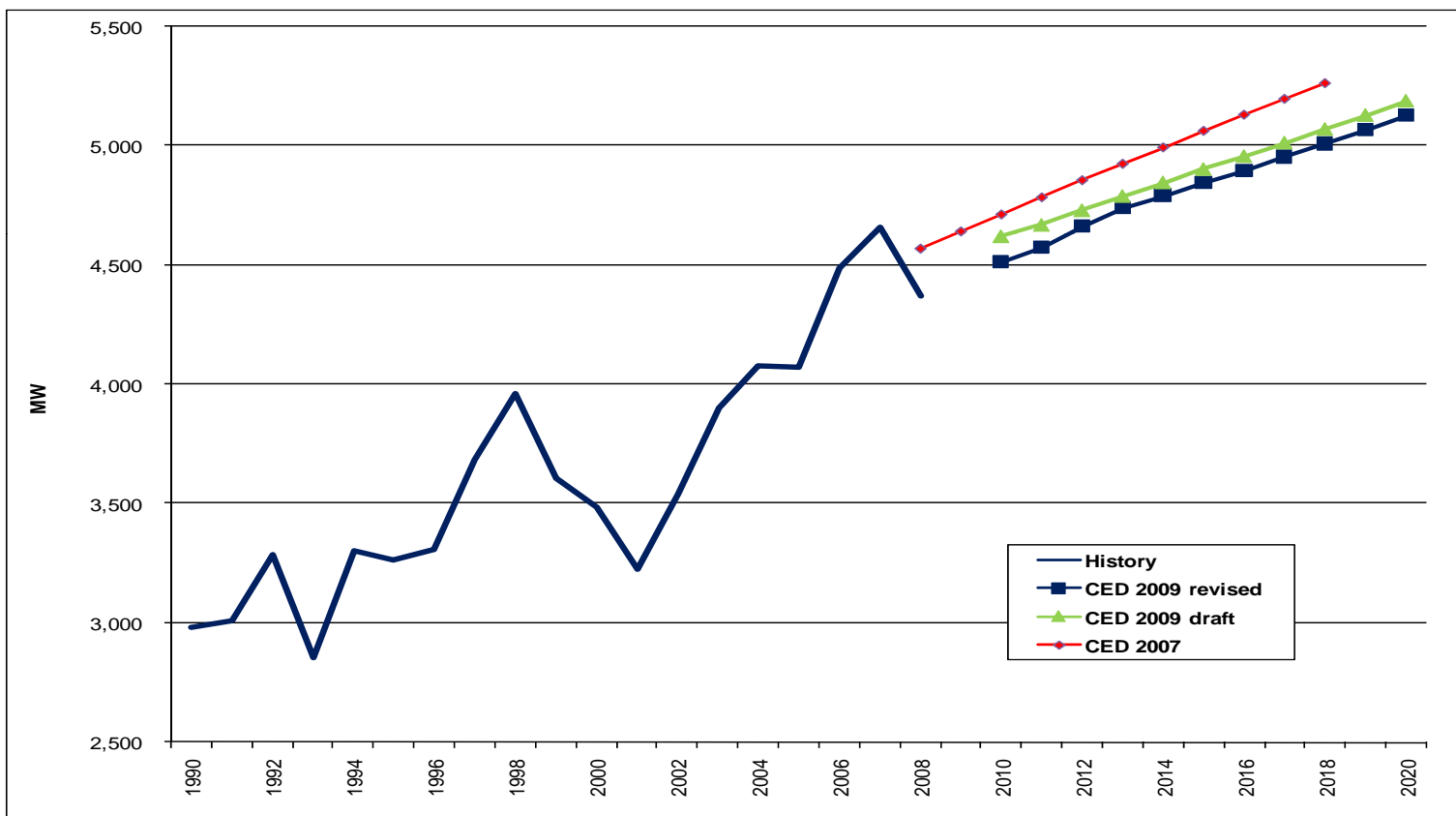
- Higher starting point and similar growth





SDG&E Planning Area Peak Forecast

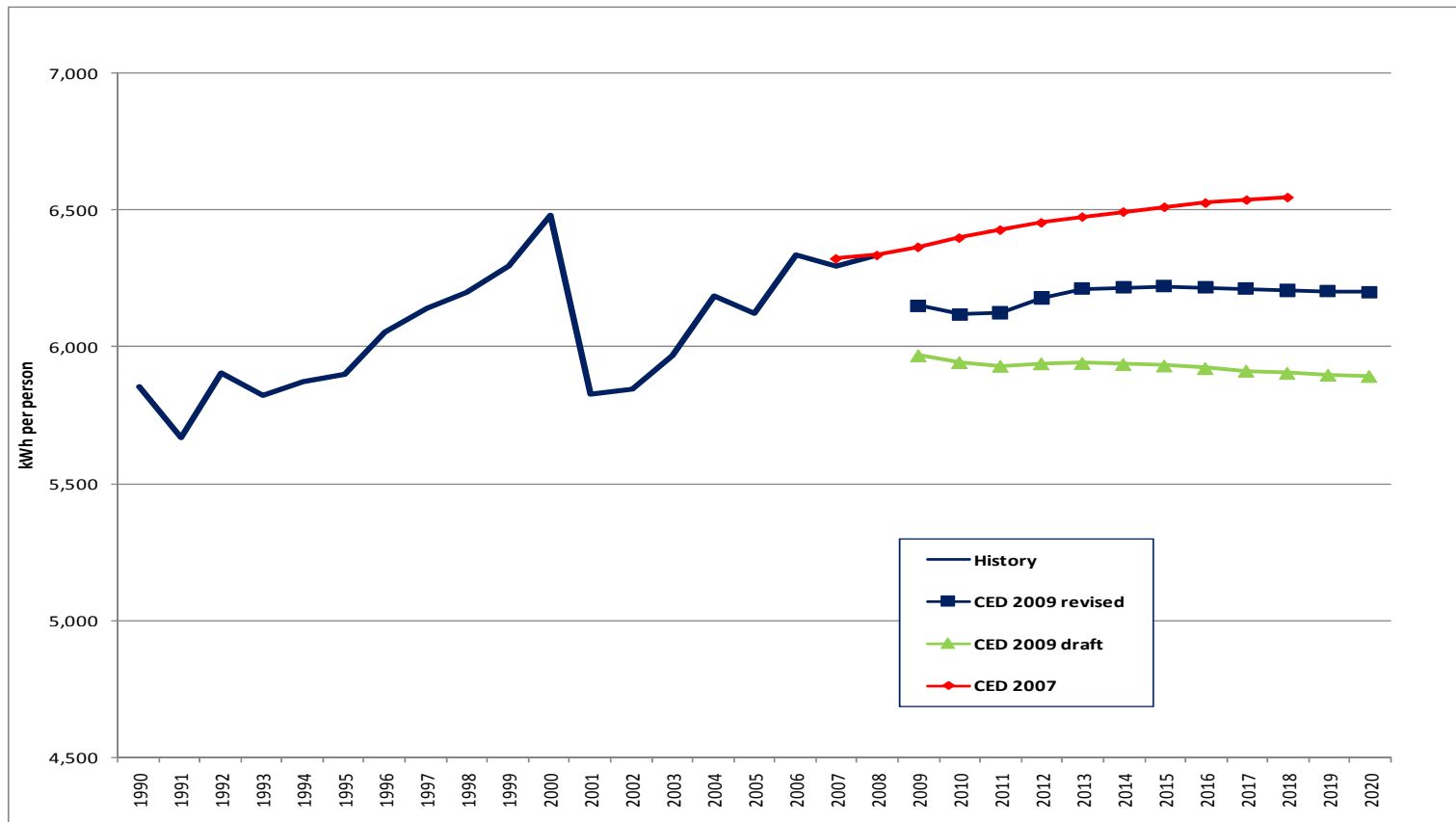
- Lower starting point, similar growth





SDG&E per Capita Consumption

- Higher than draft, relatively constant over time

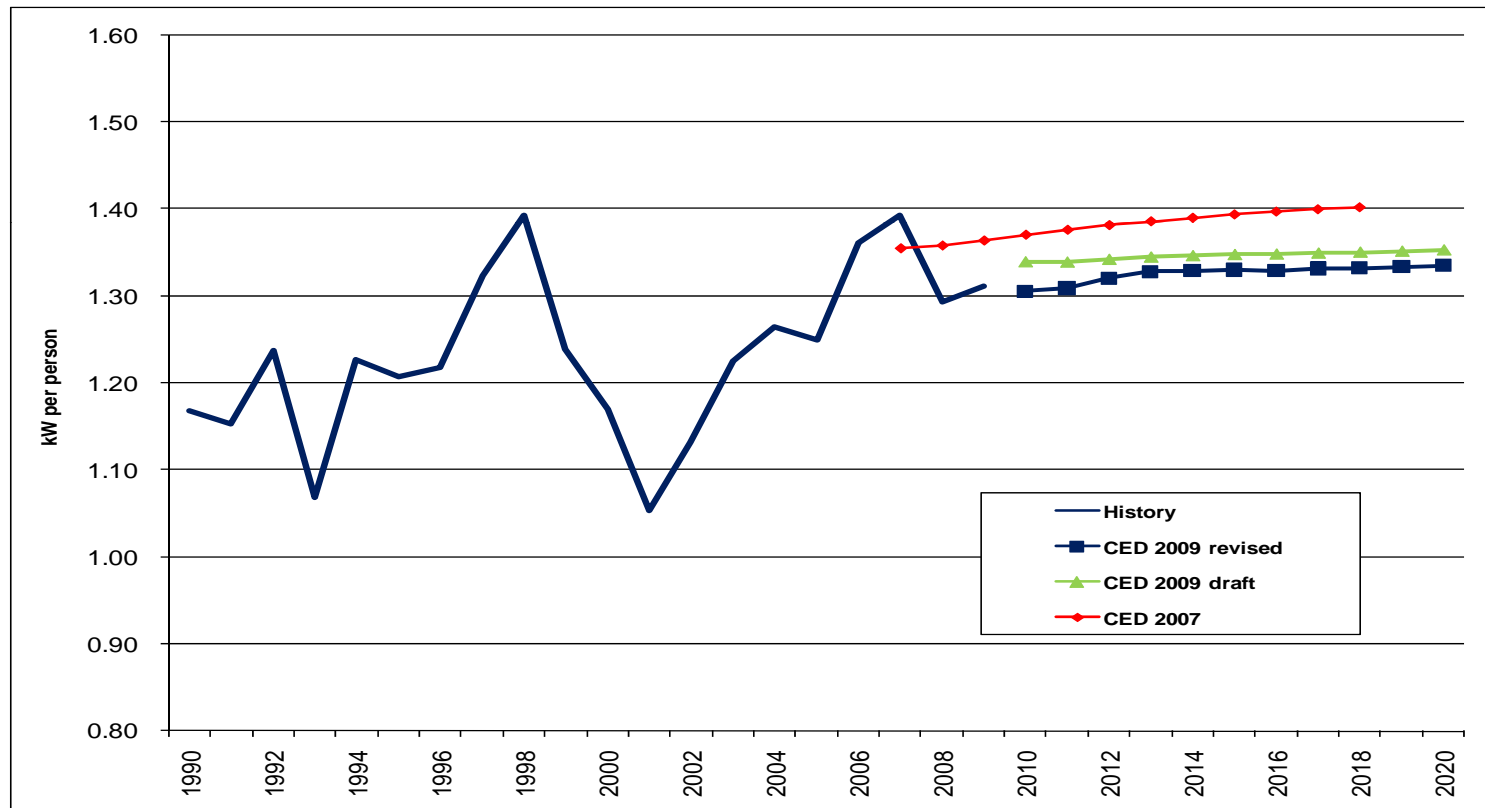




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SDG&E per Capita Peak

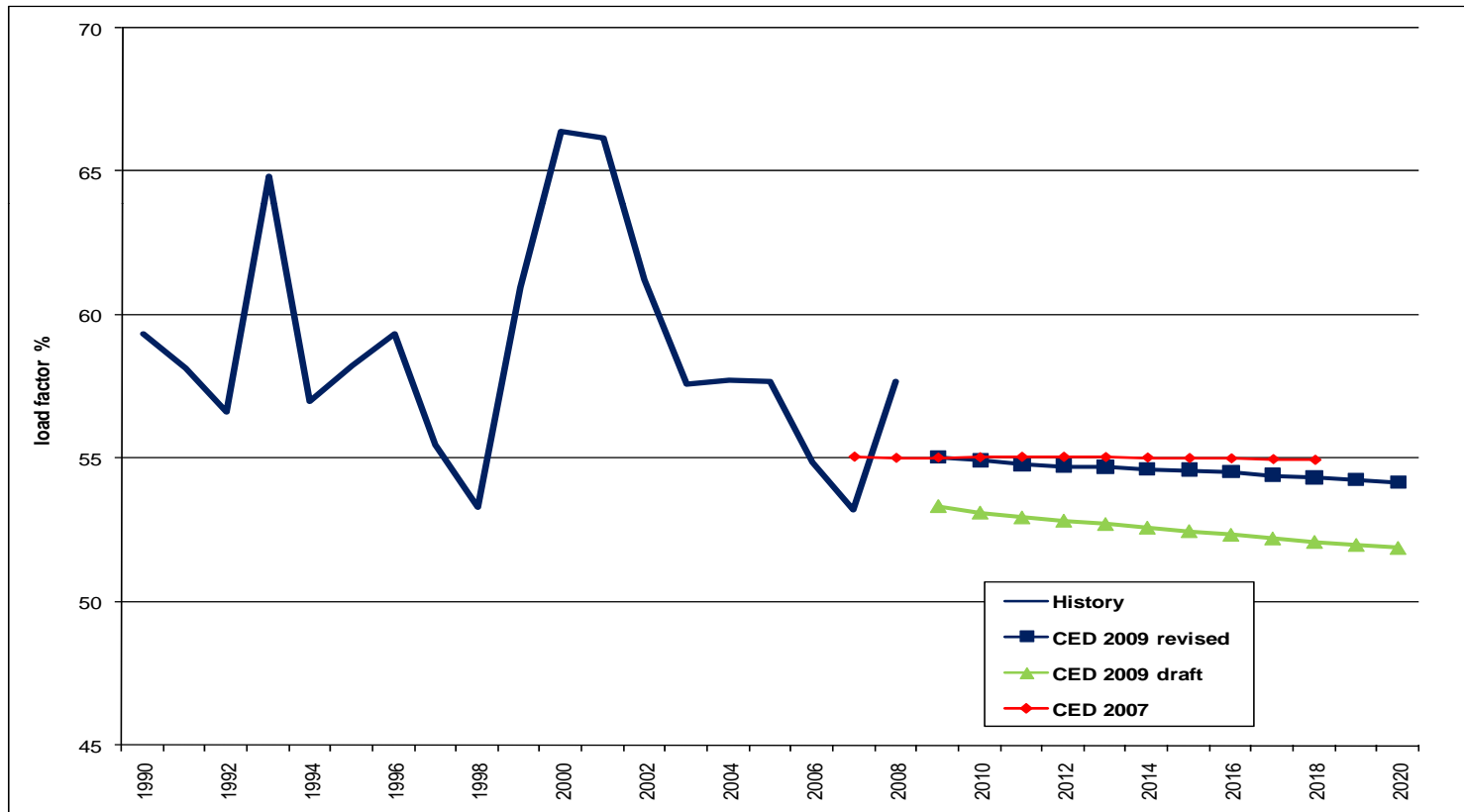
- Lower starting value, constant growth after recovery





SDG&E Planning Area Load Factor

- Higher than draft but still declining





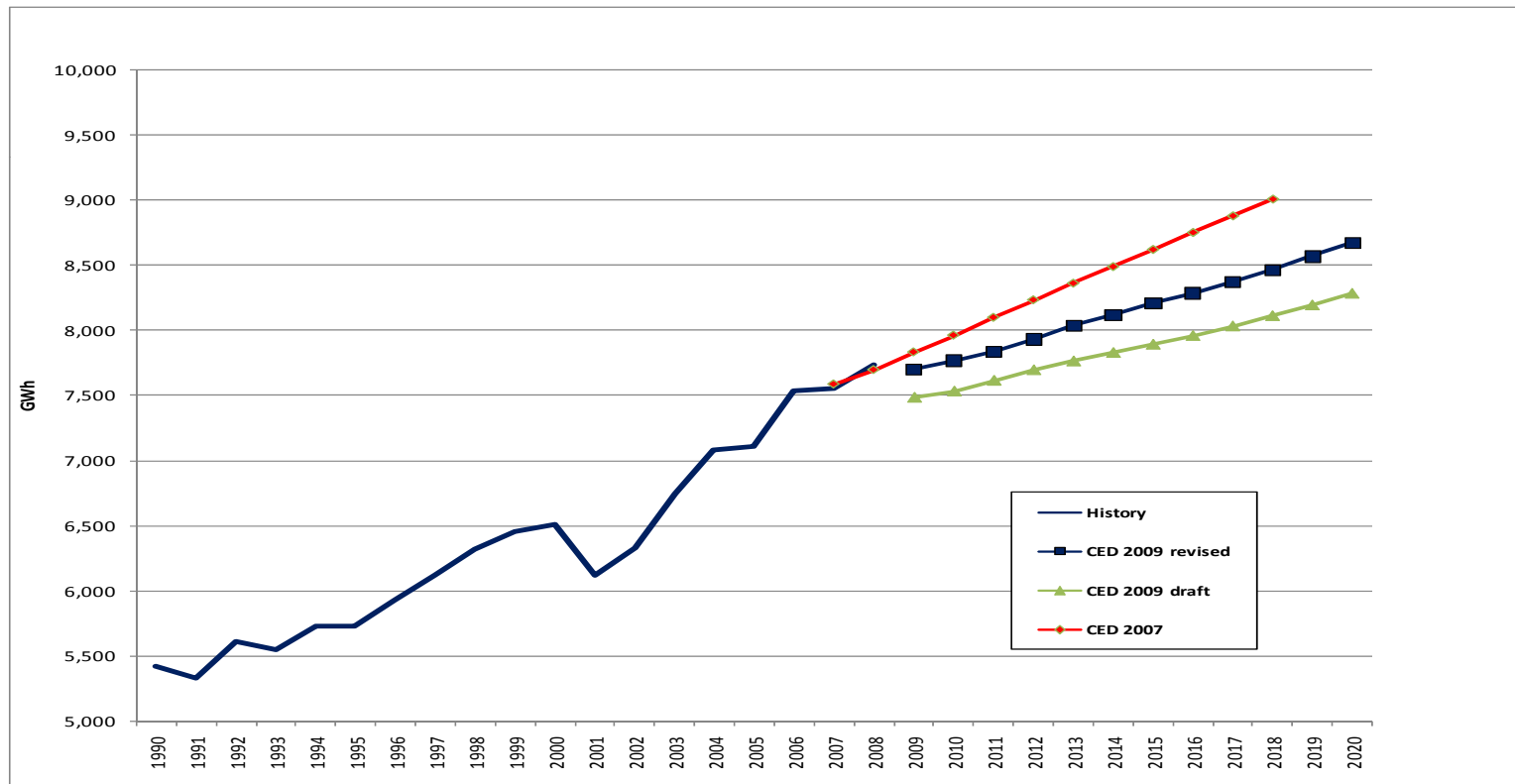
SDG&E Residential Forecast

- Starting point adjusted upward for 2008 consumption
- Grows at a slightly faster rate
- Use per household now increases slightly
- Household income now grows at higher rate after recovery
- No difference in peak caused by increased self-generation (PV)



SDG&E Residential Consumption

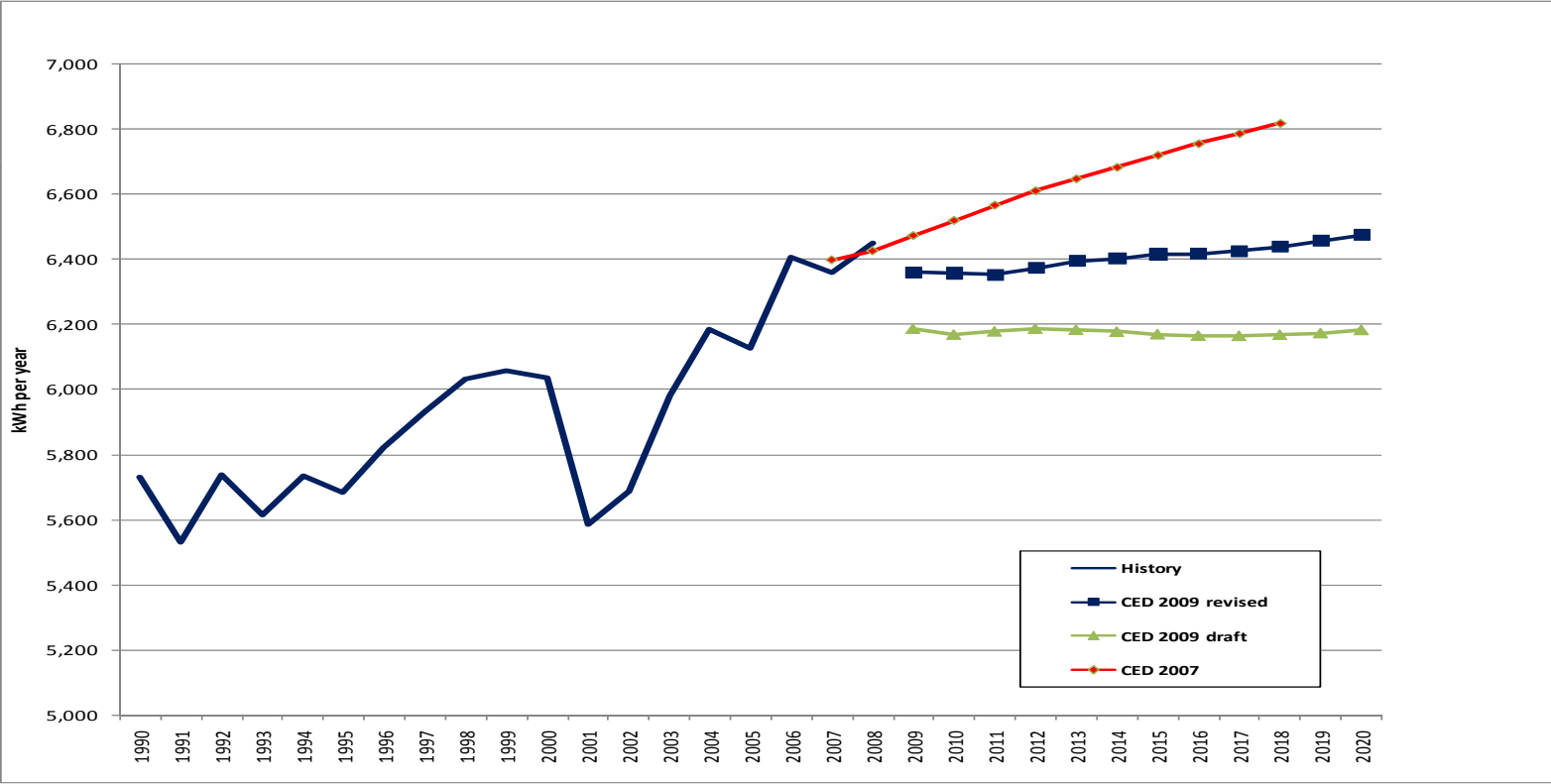
- higher starting value, similar growth





SDG&E Residential Use per Household

- increased starting value incorporates 2008 history

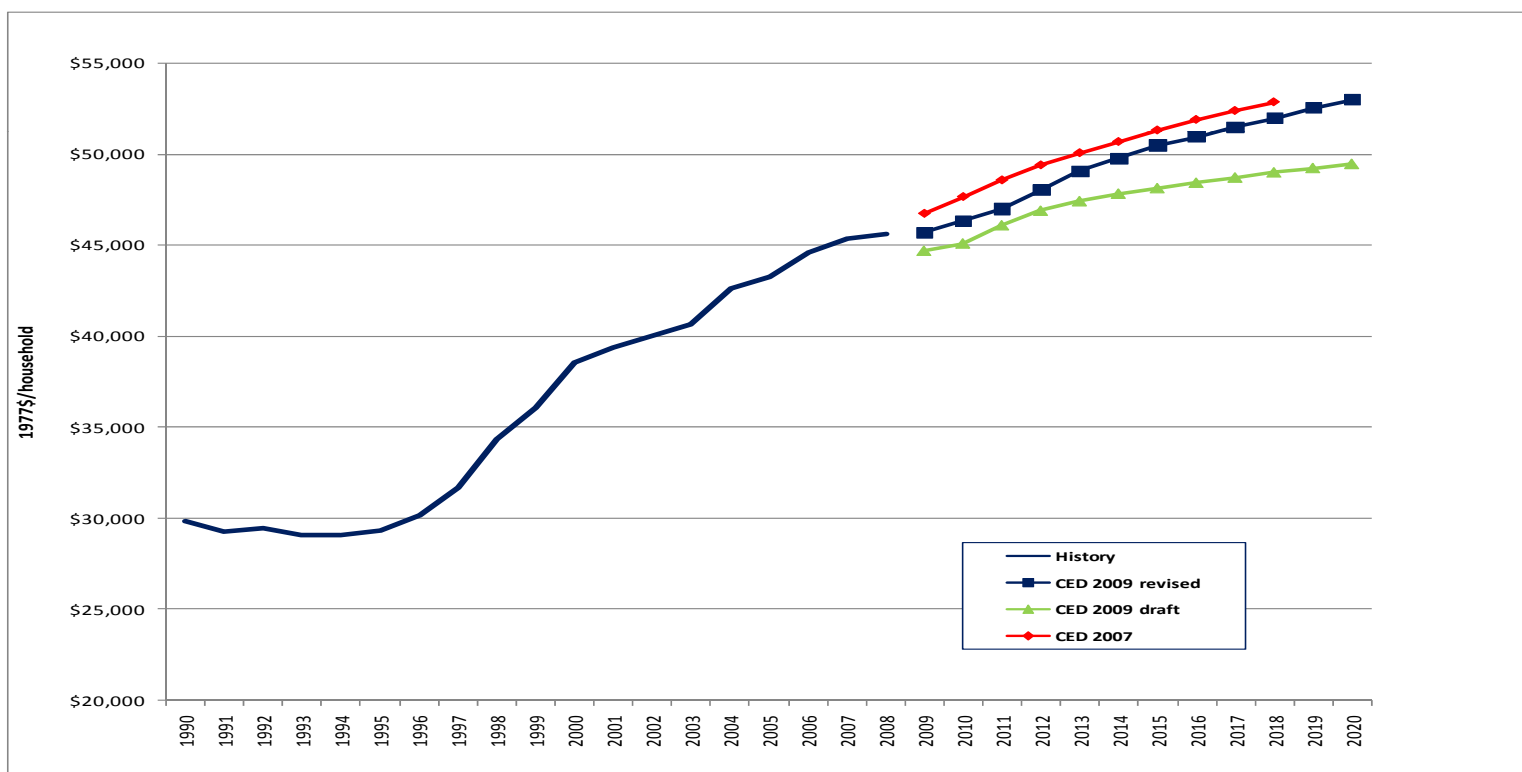




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SDG&E Household Income

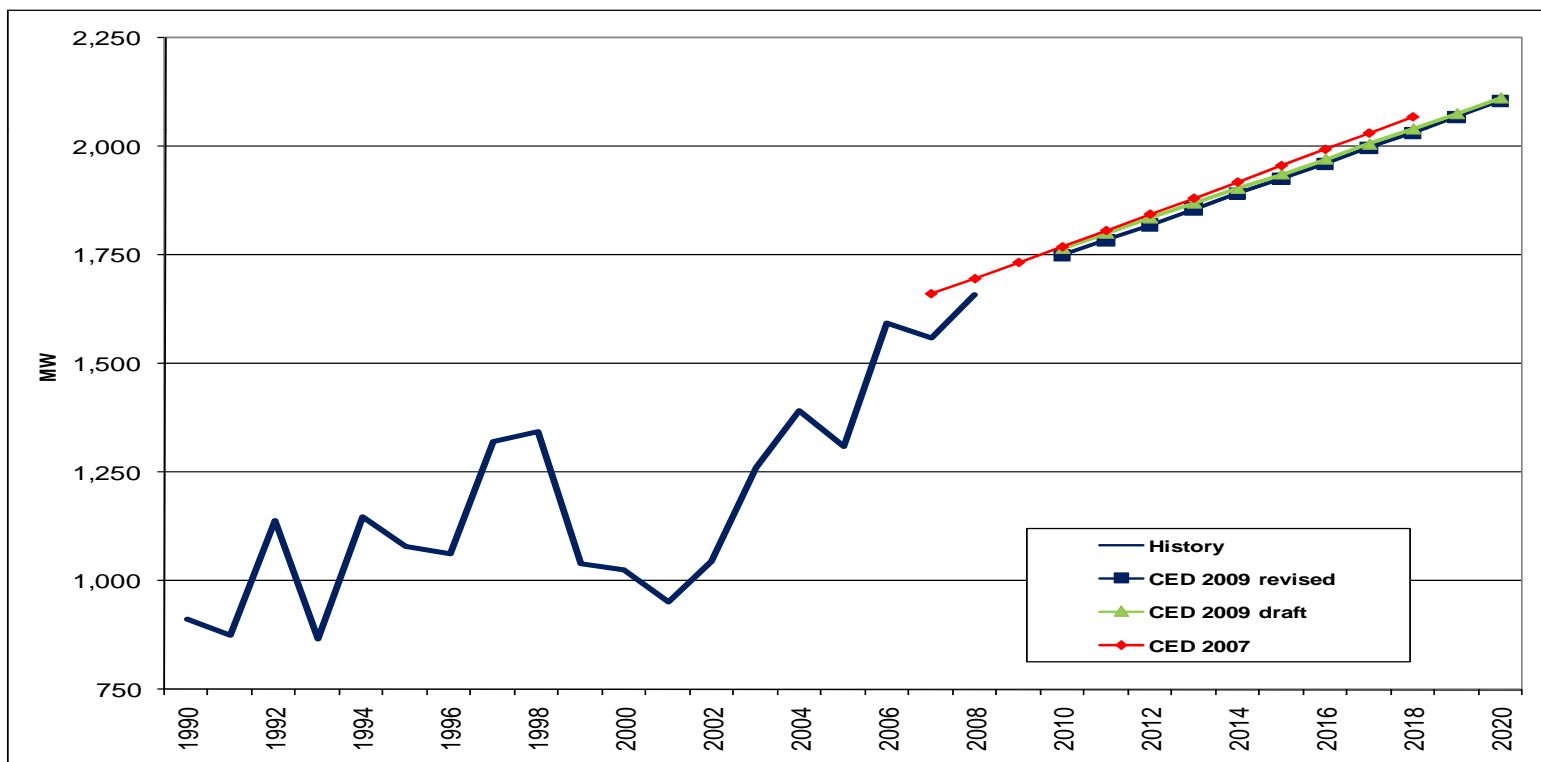
- now higher anticipated growth after recovery, no short term dip





SDG&E Residential Peak

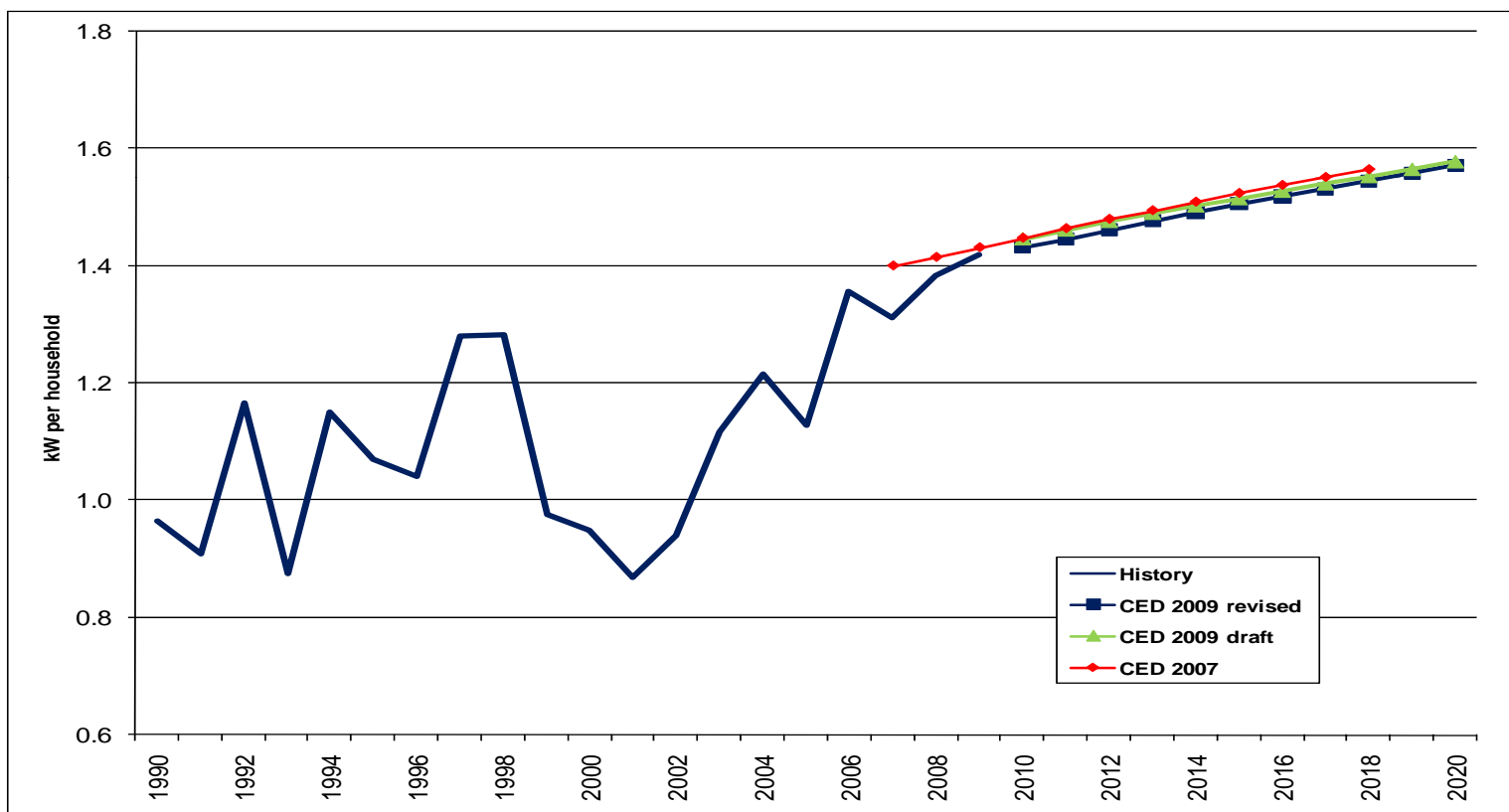
- similar to previous forecasts





SDG&E Residential Peak Use per Household

- higher starting value, similar growth to draft forecast





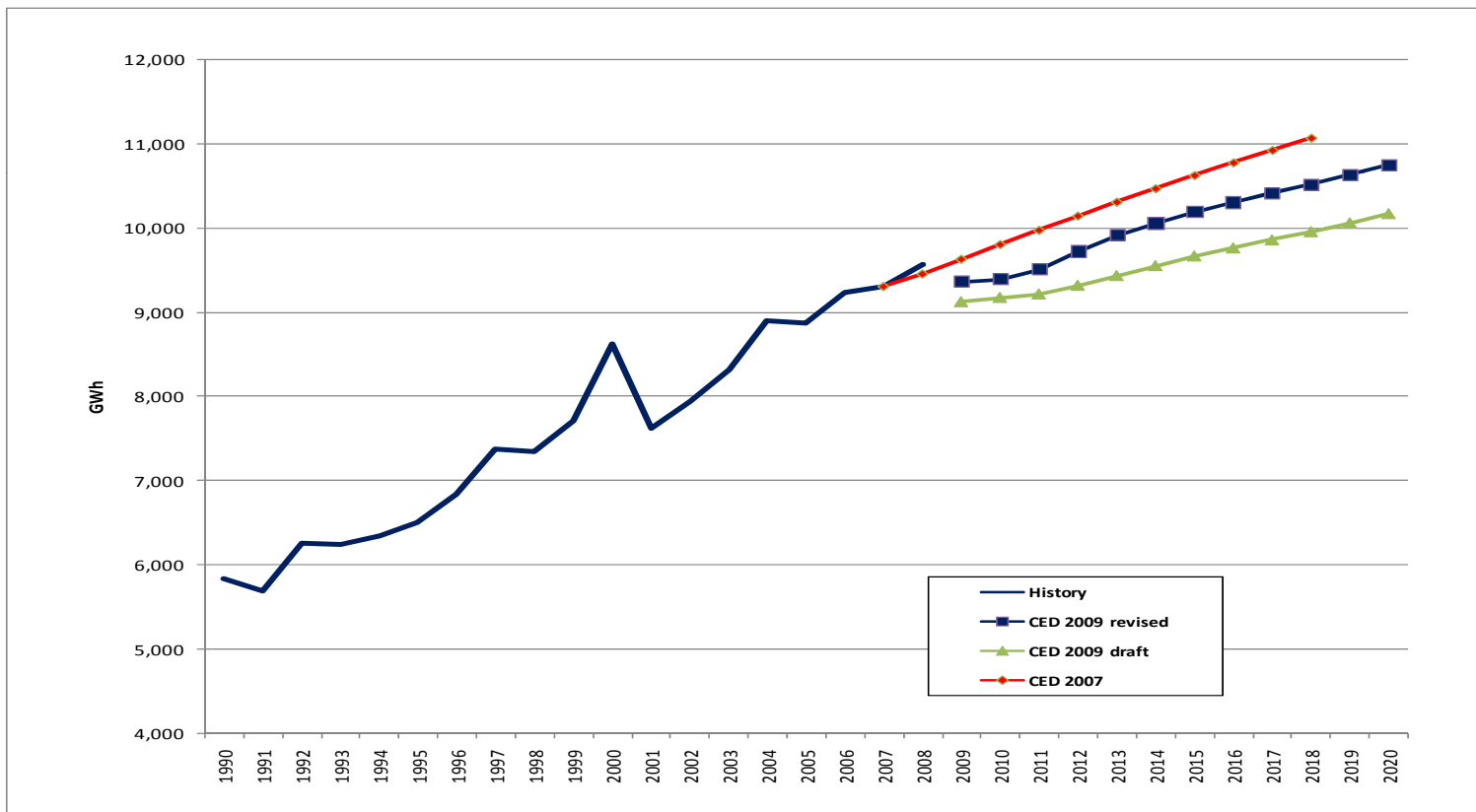
SDG&E Commercial Building Sector

- 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



SDG&E Commercial Building Consumption

- Higher growth than draft

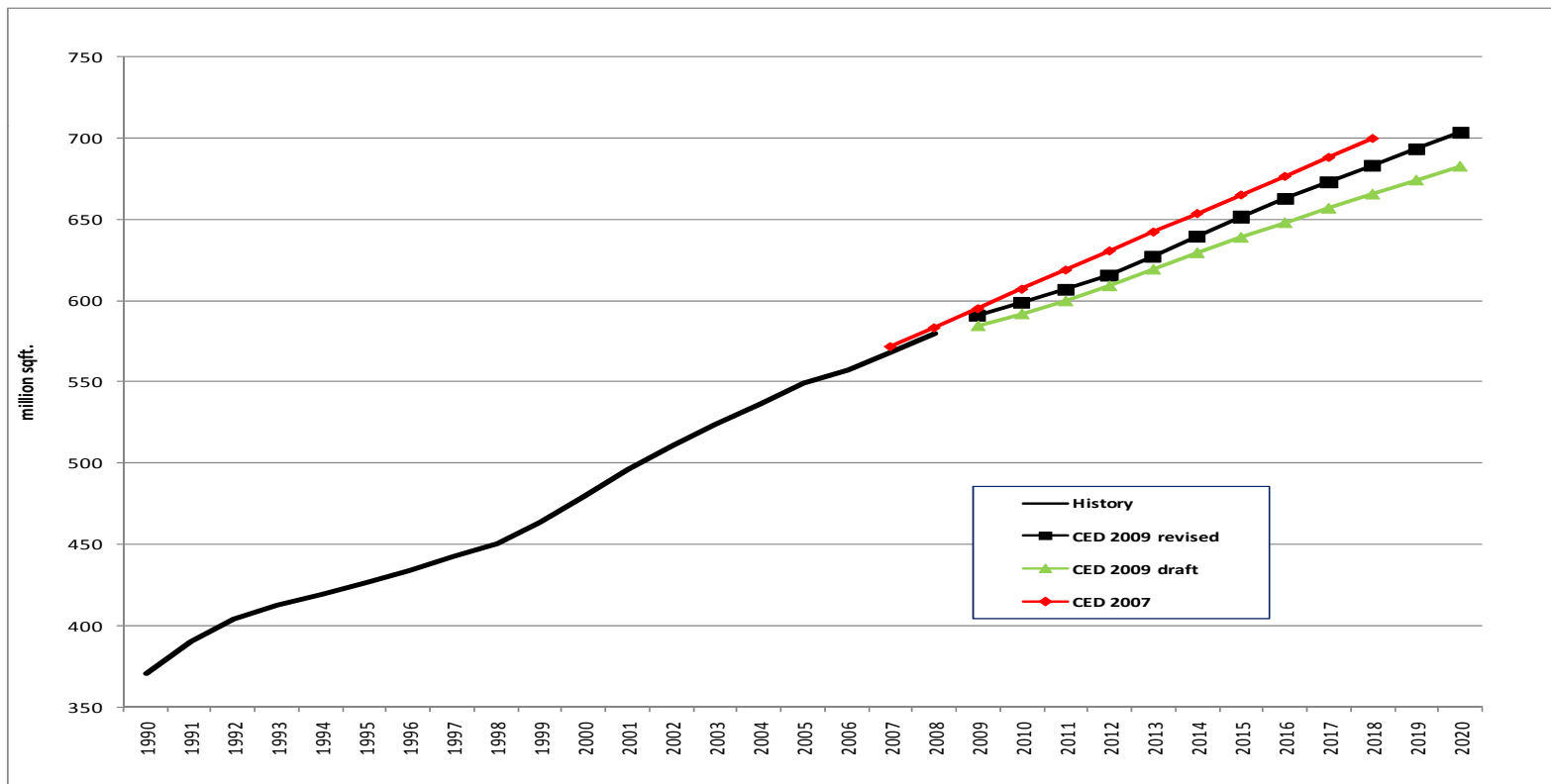




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SDG&E Commercial Floor Space

- Higher growth than draft

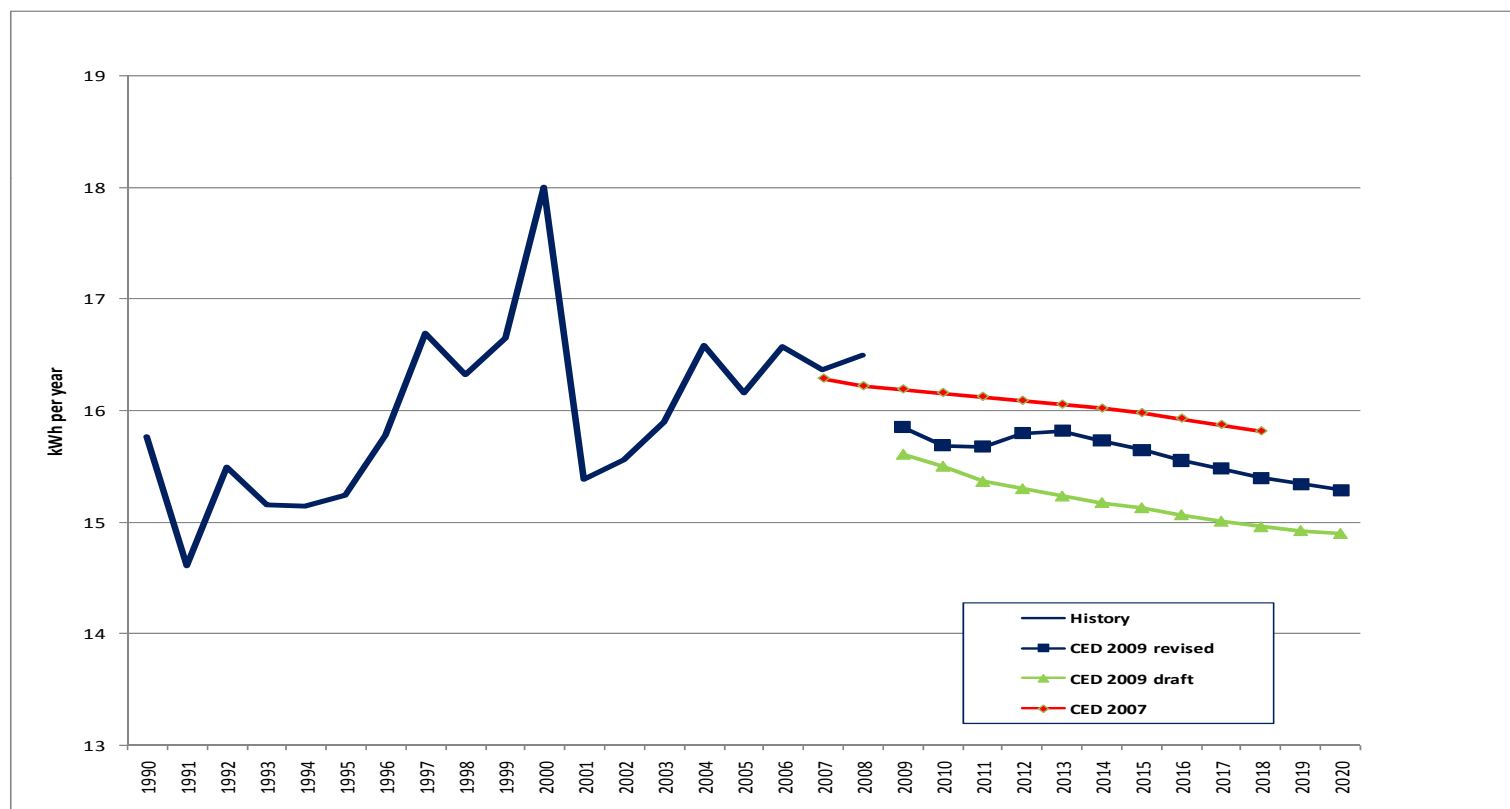




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SDG&E Commercial kWh per Square Foot

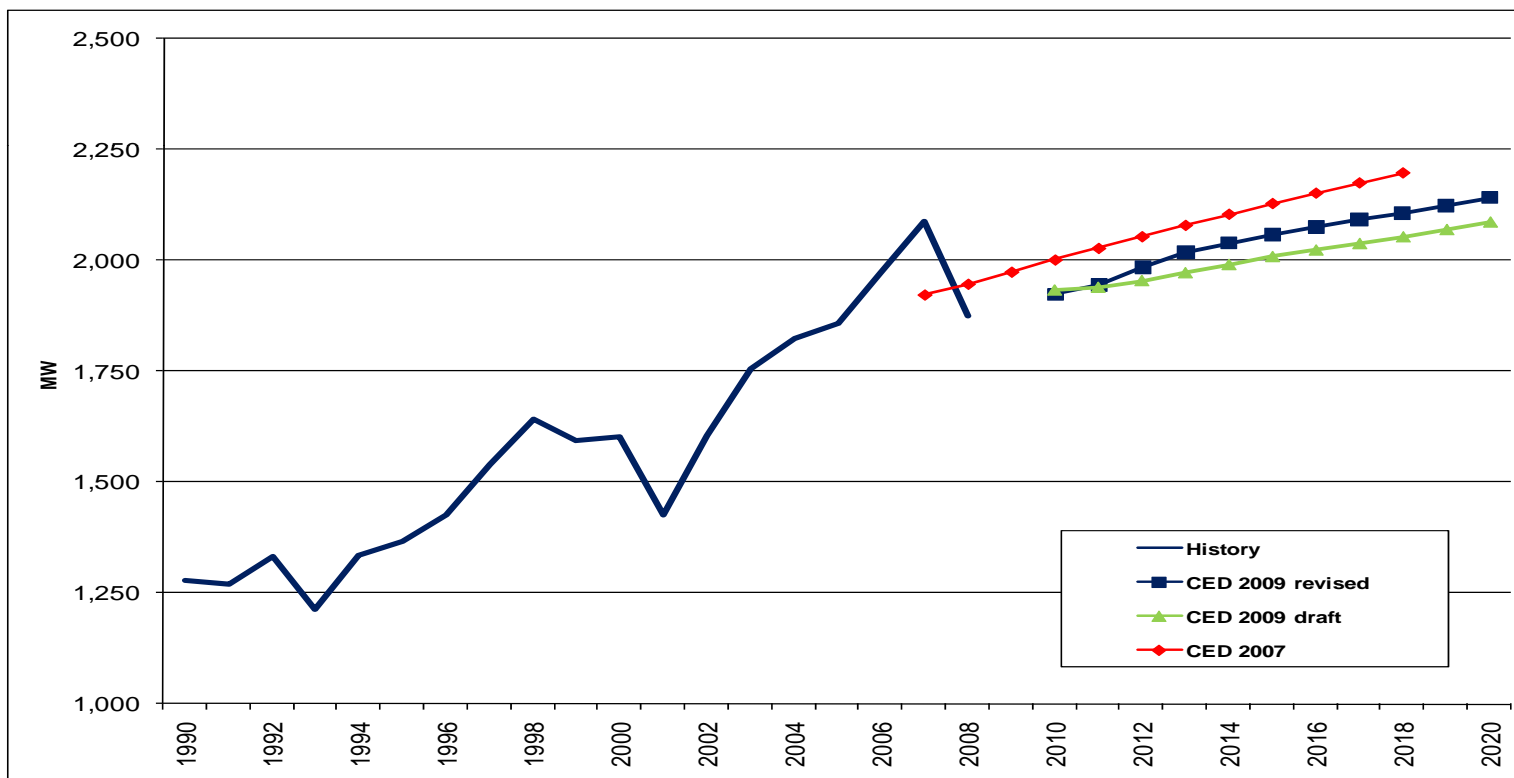
- declines less than draft





SDG&E Commercial Building Sector Peak

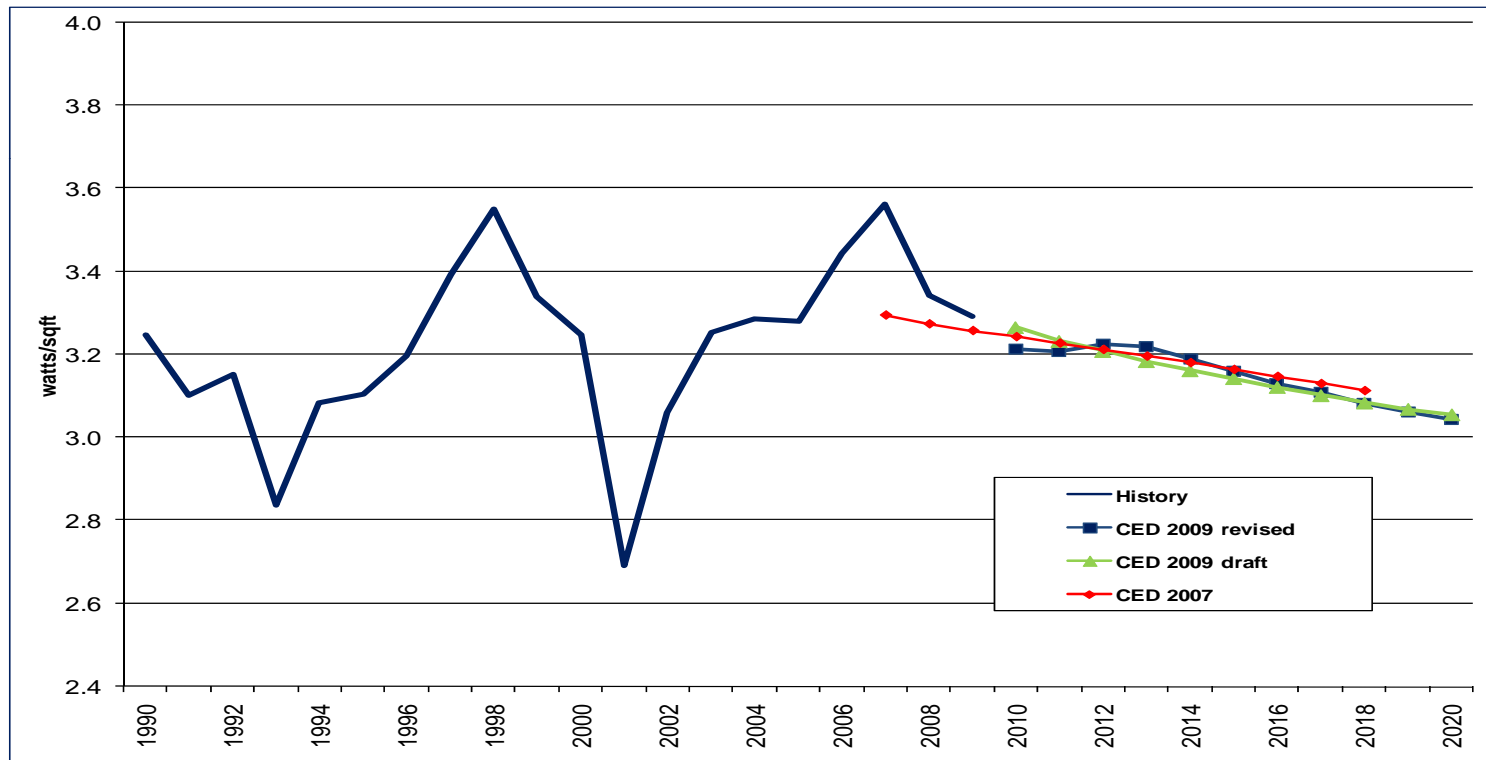
- higher growth than draft





SDG&E Commercial Peak per Square Foot

- similar projection to draft





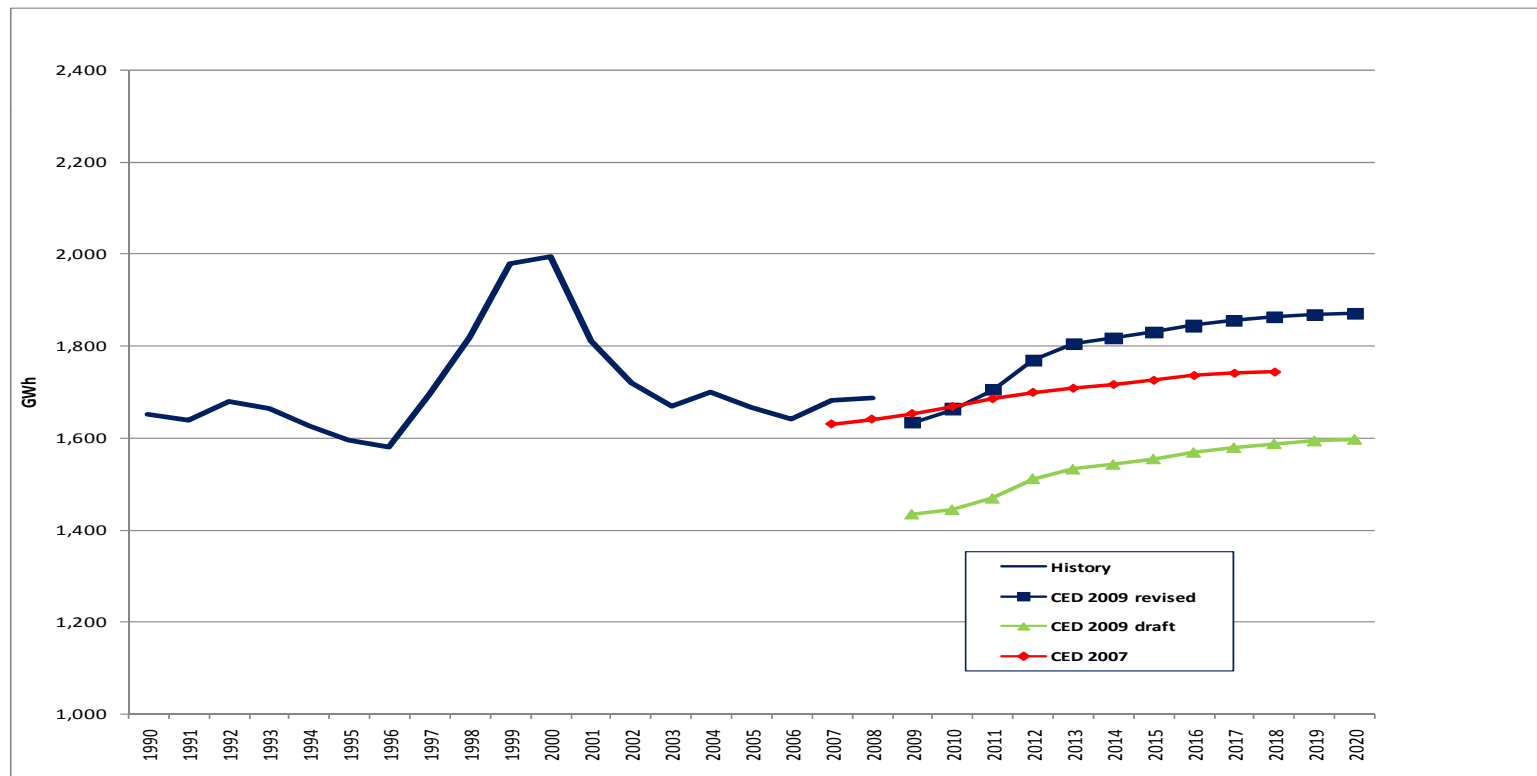
SDG&E Industrial Sector

- Now higher forecast after recovery
- More rapid recovery than other sectors
- Energy and Peak forecasts now higher than CED 2007



SDG&E Industrial Sector Consumption

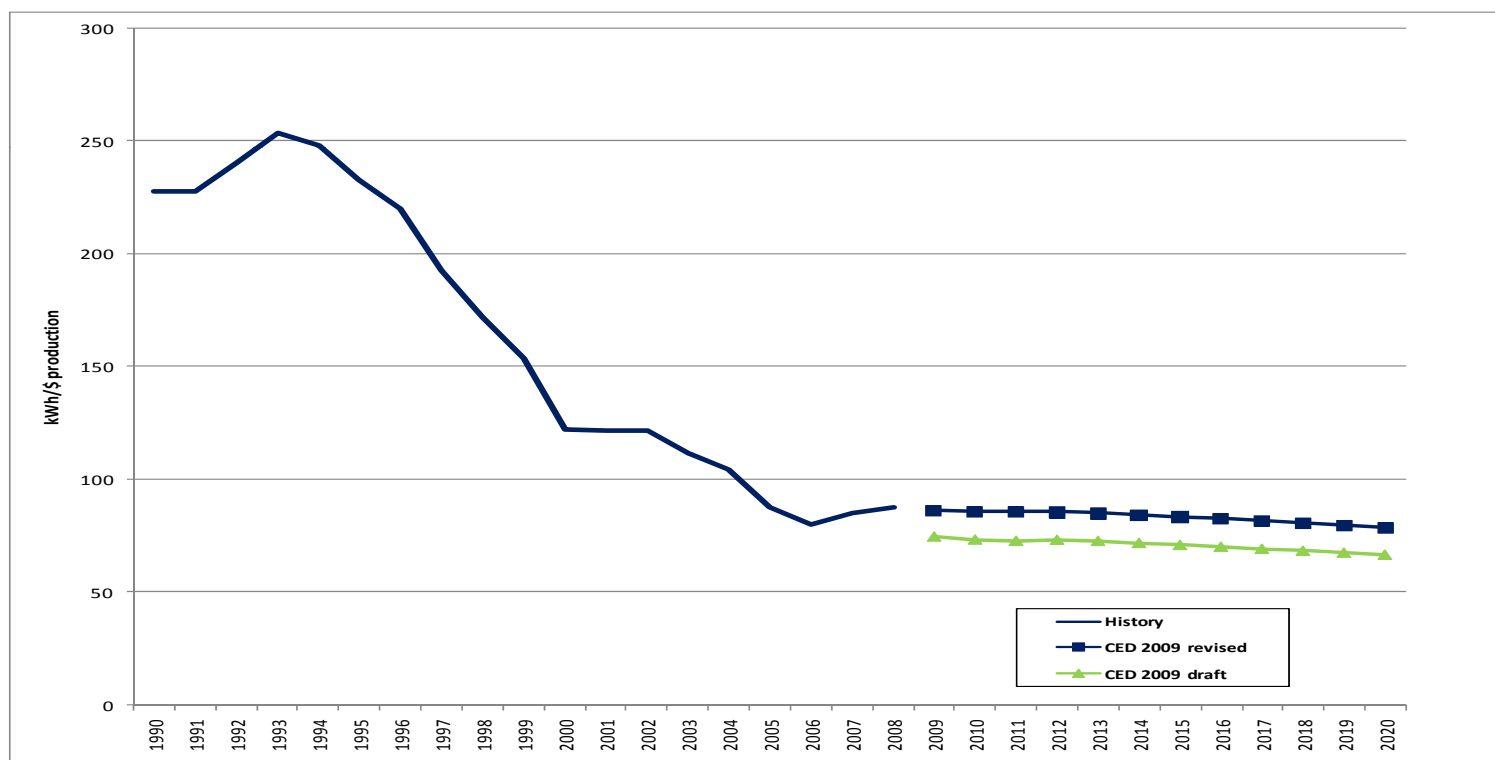
- higher starting point , greater recovery than draft





SDG&E Industrial Sector use per production dollars

- higher starting point , similar growth

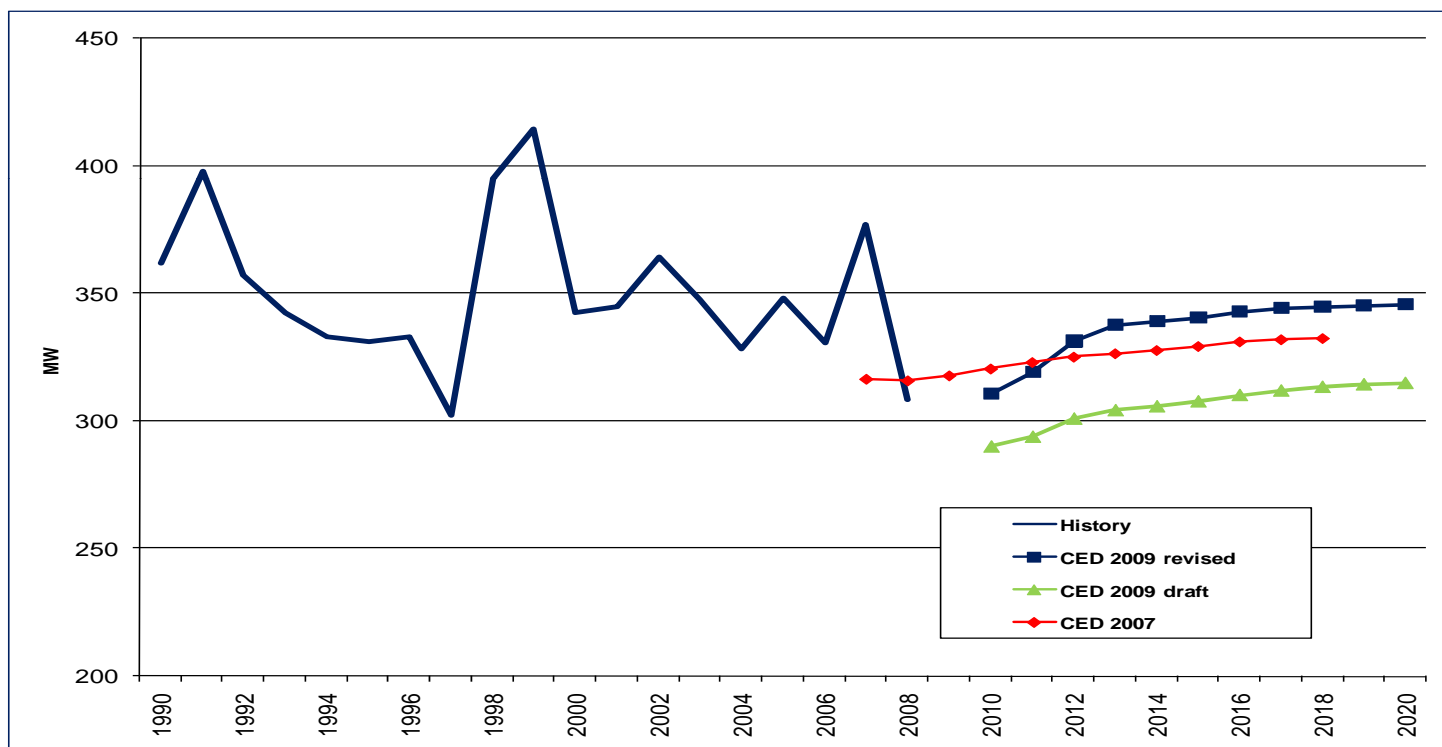




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SDG&E Industrial Sector Peak

- now higher than CED 2007





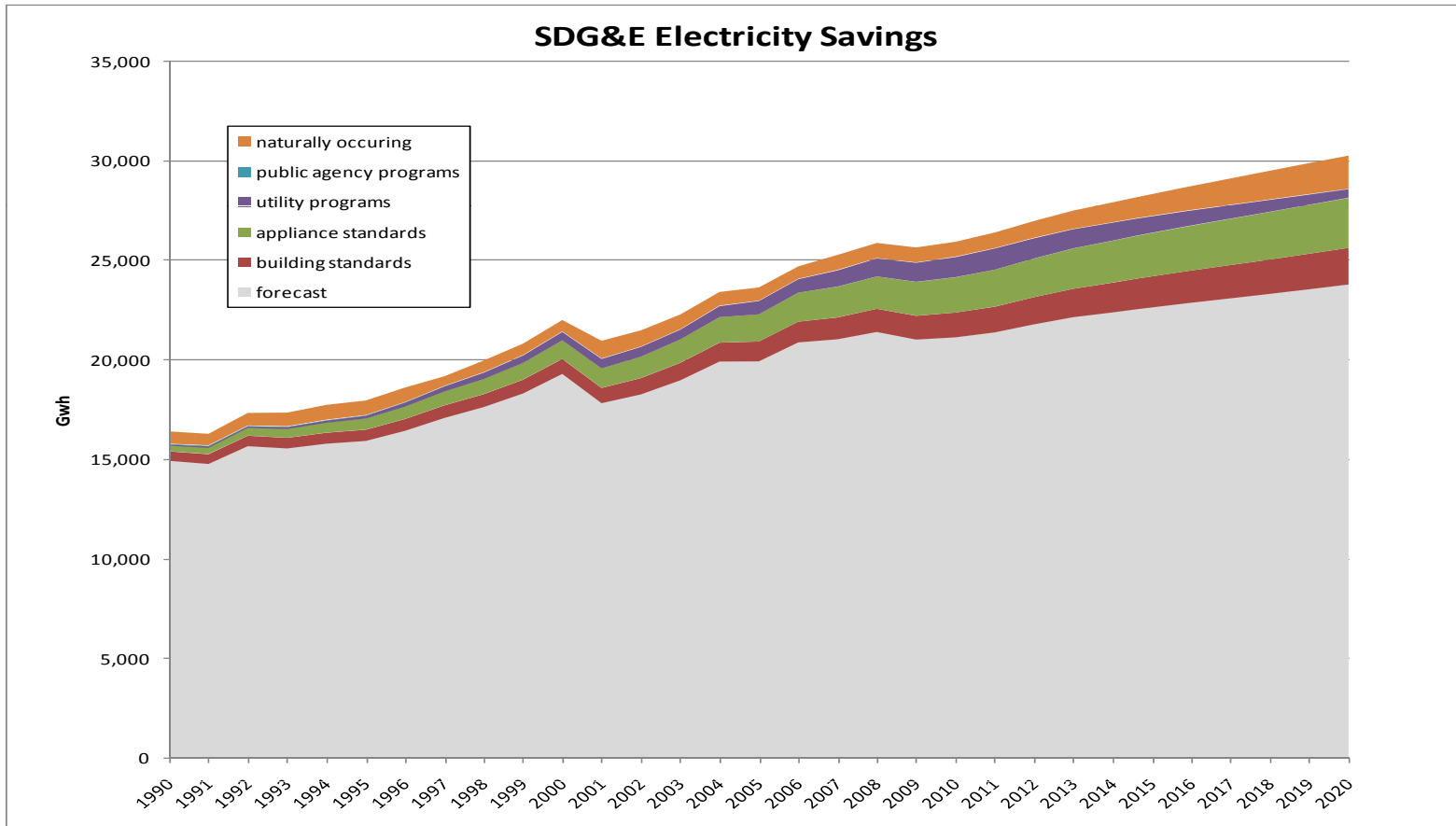
Efficiency Savings and Self Generation

- 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 reduces peak 100 MW



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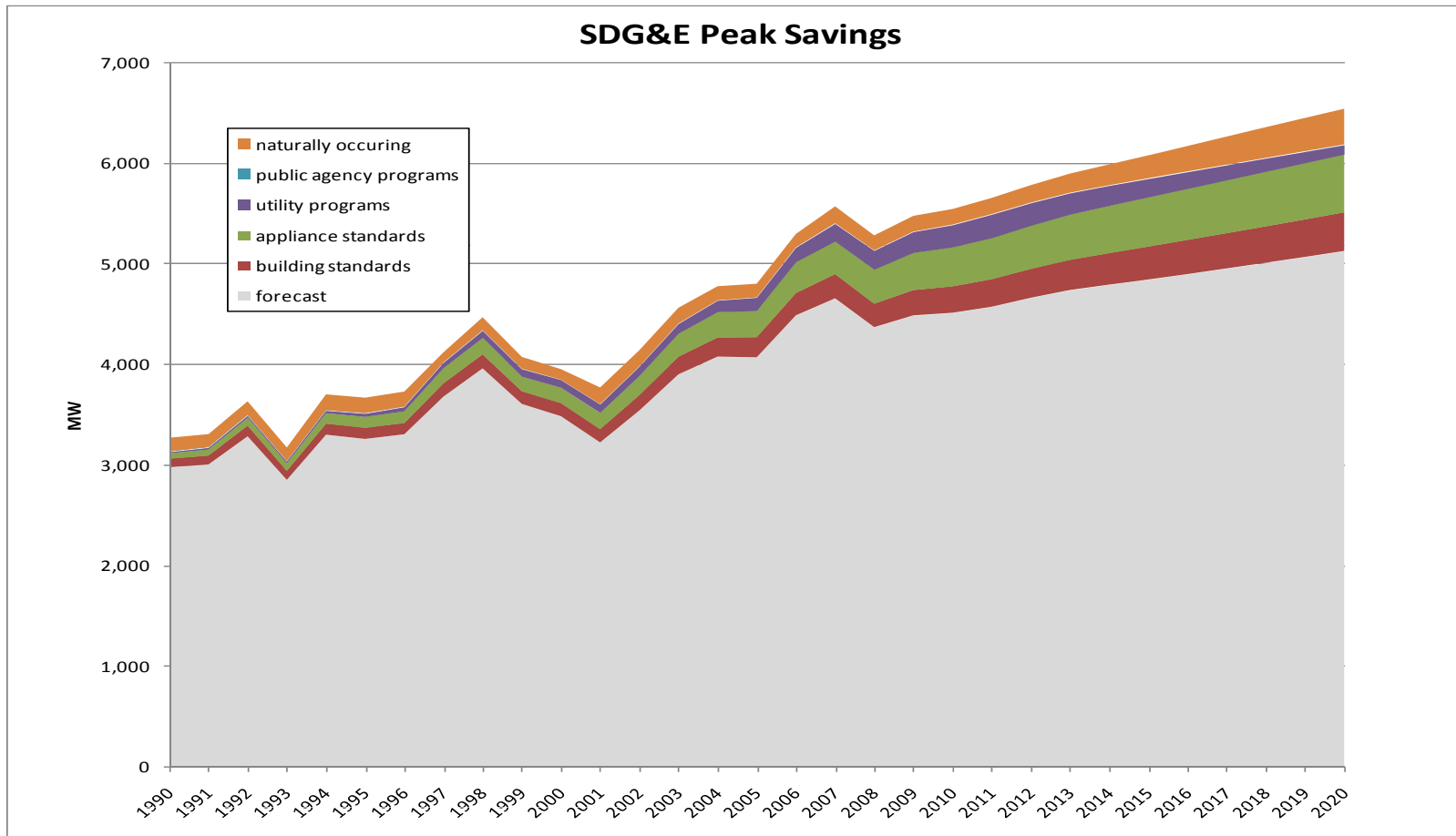
Total savings 26% of forecast by 2020





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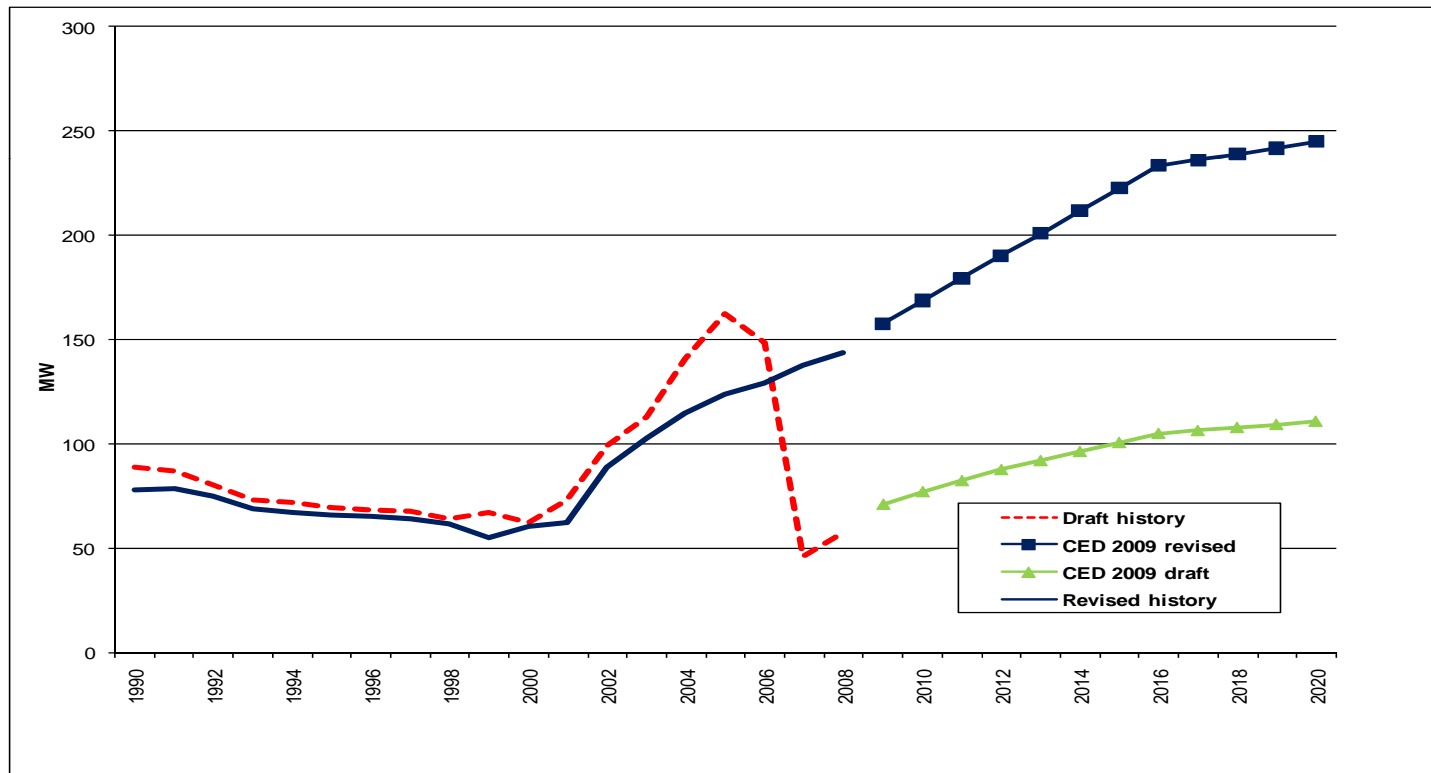
Total savings 27% of forecast by 2020





SDG&E Planning Peak Self-Generation

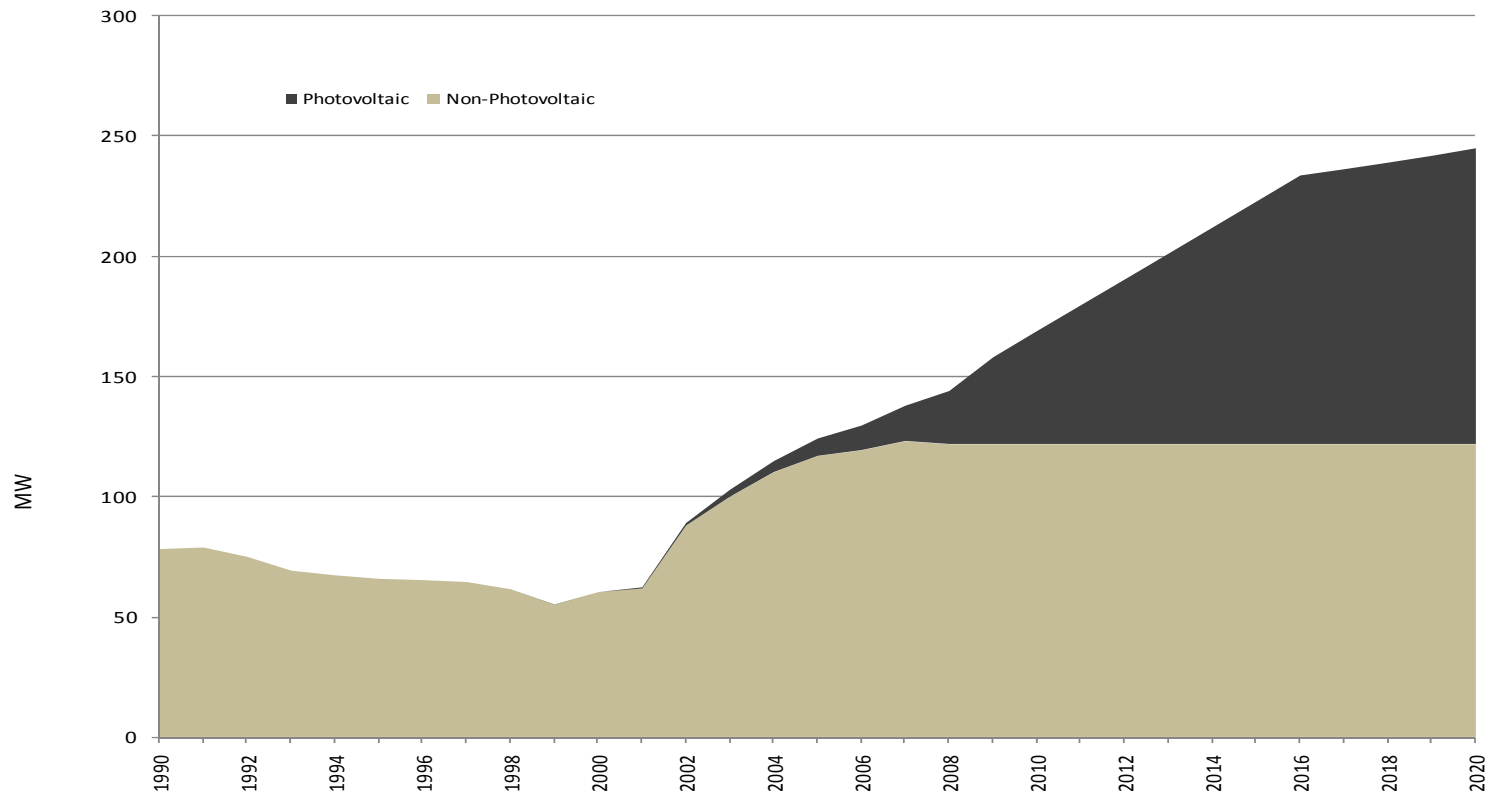
- revised history, higher forecast





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SDG&E Self Generation Peak Estimates



Source: California Energy Commission, 2009



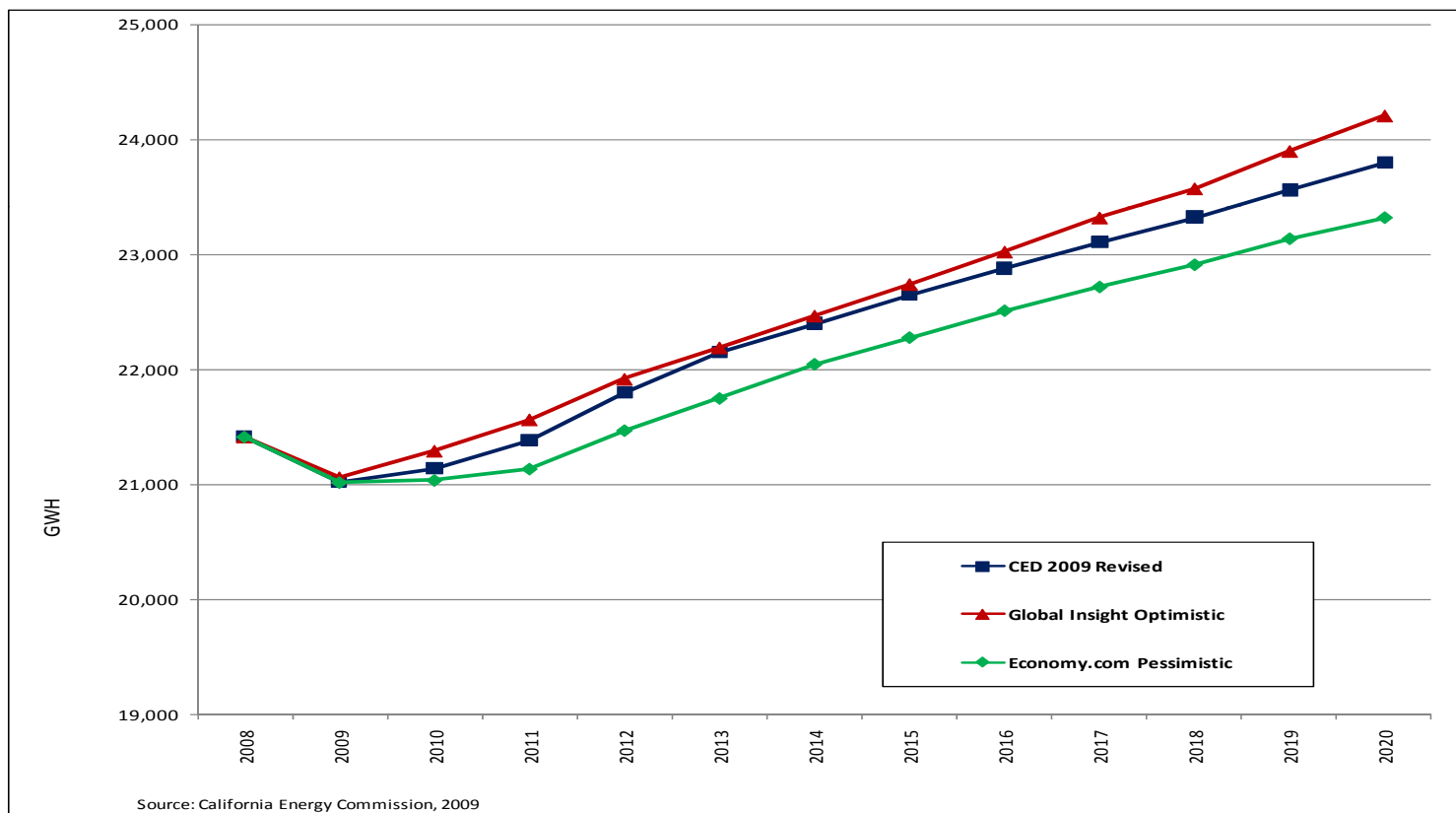
Economic Scenarios

- Consumption and peak increase about 1.7% in high case
- Consumption and peak decrease about 2.1% in low case



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SDG&E Economic Scenarios (consumption)





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SDG&E Economic Scenarios (peak)

