

INDIANA ELECTRICITY PROJECTIONS: THE 2009 FORECAST

Presented by:

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Presented to:

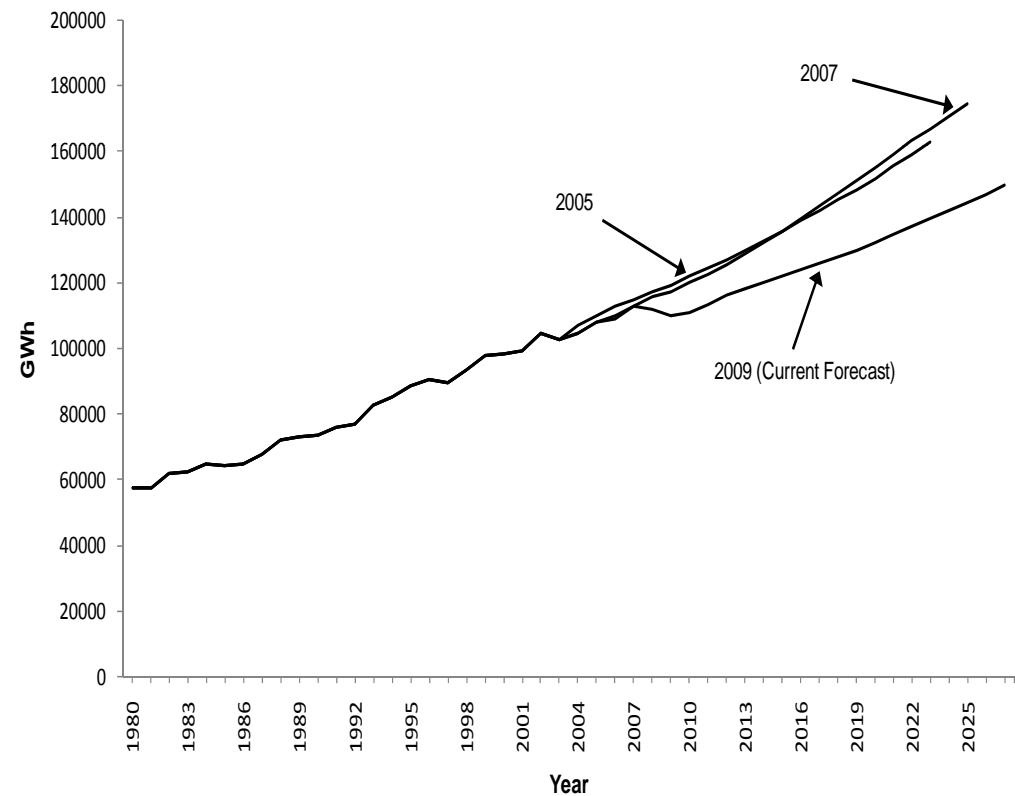
Indiana Utility Regulatory Commission

Indianapolis, IN

December 29, 2009

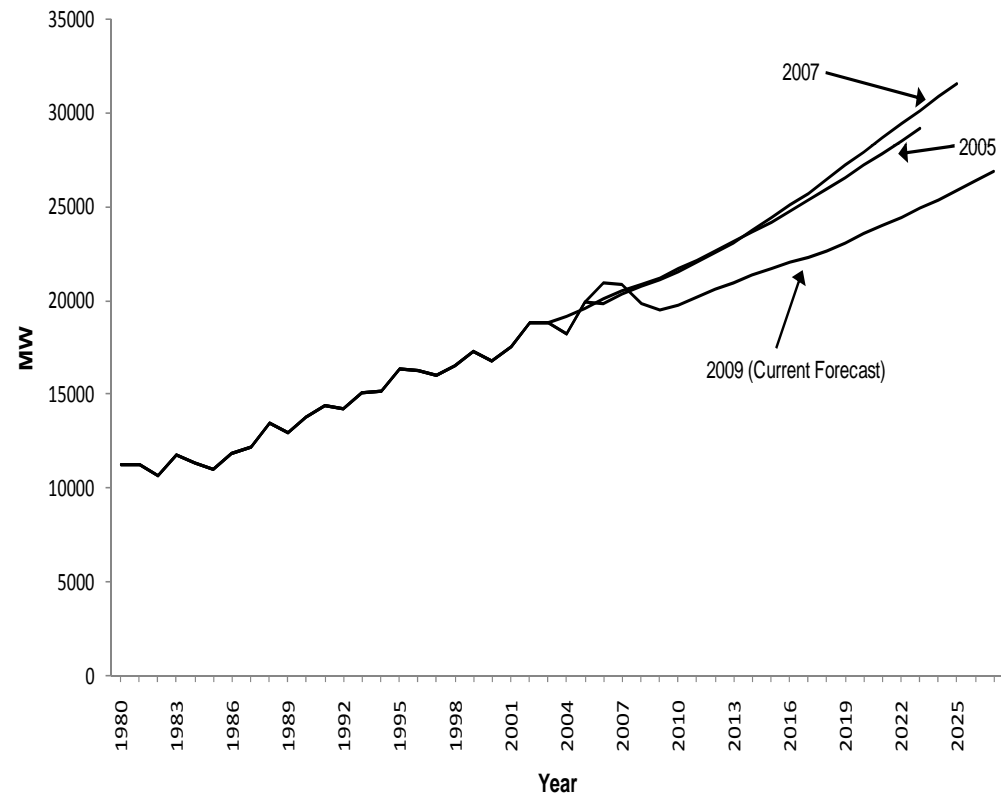
Indiana Electricity Requirements

- Retail sales by investor owned and not-for-profit utilities
- Includes estimated transmission and distribution losses
- Growth rates
 - 2009 forecast: 1.55%
 - 2007 forecast: 2.46%
 - 2005 forecast: 2.22%



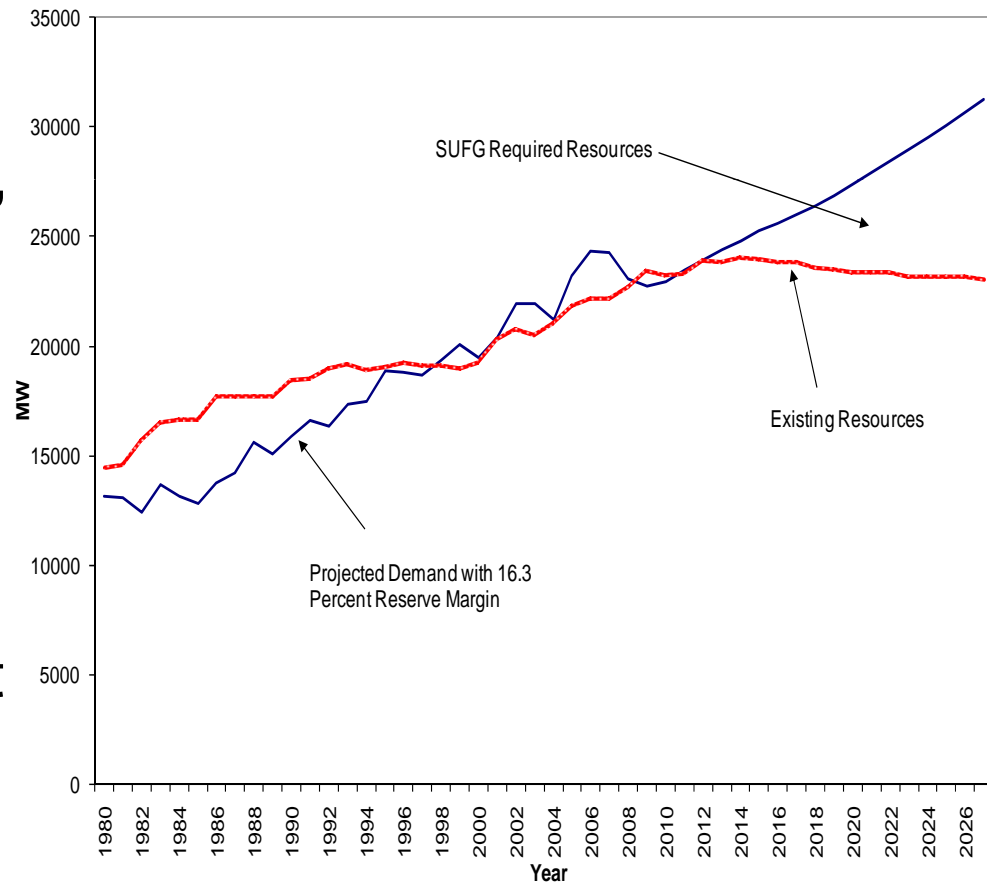
Indiana Peak Demand Requirements

- Peak demand is net of DSM and interruptible loads
- Growth rates
 - 2009 forecast: 1.61%
 - 2007 forecast: 2.46%
 - 2005 forecast: 2.24%



Indiana Resource Requirements

- Resources may be provided by conservation measures, contractual purchases, purchases of existing assets, or new construction
- Existing resources are adjusted into the future for retirements, contract expirations, and IURC approved new resources



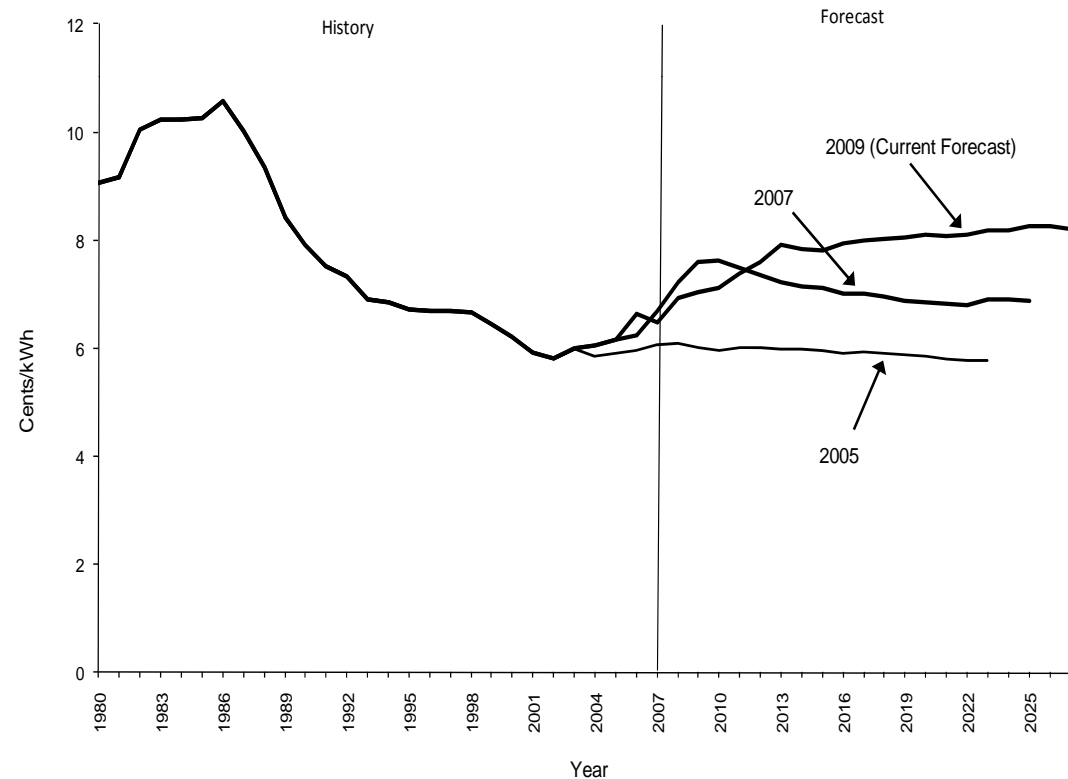
Indiana Resource Requirements

	Uncontrolled Peak Demand	Interruptible	Net Peak Demand	Existing/Approved Capacity	Incremental Change in Capacity	Projected Additional Resource Requirements				Total Resources	Reserve Margin
						Peaking	Cycling	Baseload	Total		
2007				22,129							
2008	20,687	855	19,832	22,656	527	110	200	220	530	23,186	17
2009	20,394	864	19,530	23,417	762	0	0	10	10	23,427	20
2010	20,611	870	19,741	23,208	-209	10	0	0	10	23,218	18
2011	21,036	880	20,156	23,275	66	170	20	90	280	23,555	17
2012	21,481	884	20,597	23,874	599	280	40	130	450	24,324	18
2013	21,860	894	20,966	23,774	-100	350	120	260	730	24,504	17
2014	22,252	911	21,341	24,036	262	420	150	380	950	24,986	17
2015	22,623	928	21,695	23,918	-118	480	300	540	1,320	25,238	16
2016	22,962	944	22,018	23,796	-122	610	400	780	1,790	25,586	16
2017	23,298	957	22,341	23,796	0	730	460	990	2,180	25,976	16
2018	23,650	971	22,679	23,509	-287	810	750	1,300	2,860	26,369	16
2019	24,046	971	23,075	23,475	-34	980	830	1,550	3,360	26,835	16
2020	24,521	971	23,550	23,320	-155	1,300	920	1,830	4,050	27,370	16
2021	24,963	971	23,992	23,316	-4	1,410	990	2,180	4,580	27,896	16
2022	25,421	971	24,450	23,326	10	1,560	1,050	2,510	5,120	28,446	16
2023	25,875	971	24,904	23,166	-160	1,690	1,260	2,830	5,780	28,946	16
2024	26,360	971	25,389	23,166	0	1,920	1,360	3,090	6,370	29,536	16
2025	26,839	971	25,868	23,158	-8	2,040	1,420	3,450	6,910	30,068	16
2026	27,325	971	26,354	23,141	-18	2,090	1,460	3,960	7,510	30,651	16
2027	27,844	971	26,873	22,991	-150	2,340	1,530	4,360	8,230	31,221	16

- 1 Uncontrolled peak demand is the peak demand without any interruptible loads being called upon.
- 2 Net peak demand is the peak demand after interruptible loads are taken into account.
- 3 Existing/approved capacity includes installed capacity plus approved new capacity plus firm purchases minus firm sales.
- 4 Incremental change in capacity is the change in existing/approved capacity from the previous year. The change is due to new, approved capacity becoming operational, retirements of existing capacity, and changes in firm purchases and sales.
- 5 Projected additional resource requirements is the cumulative amount of additional resources needed to meet future requirements
- 6 Total resource requirements are the total statewide resources required including existing/approved capacity and projected additional resource requirements.

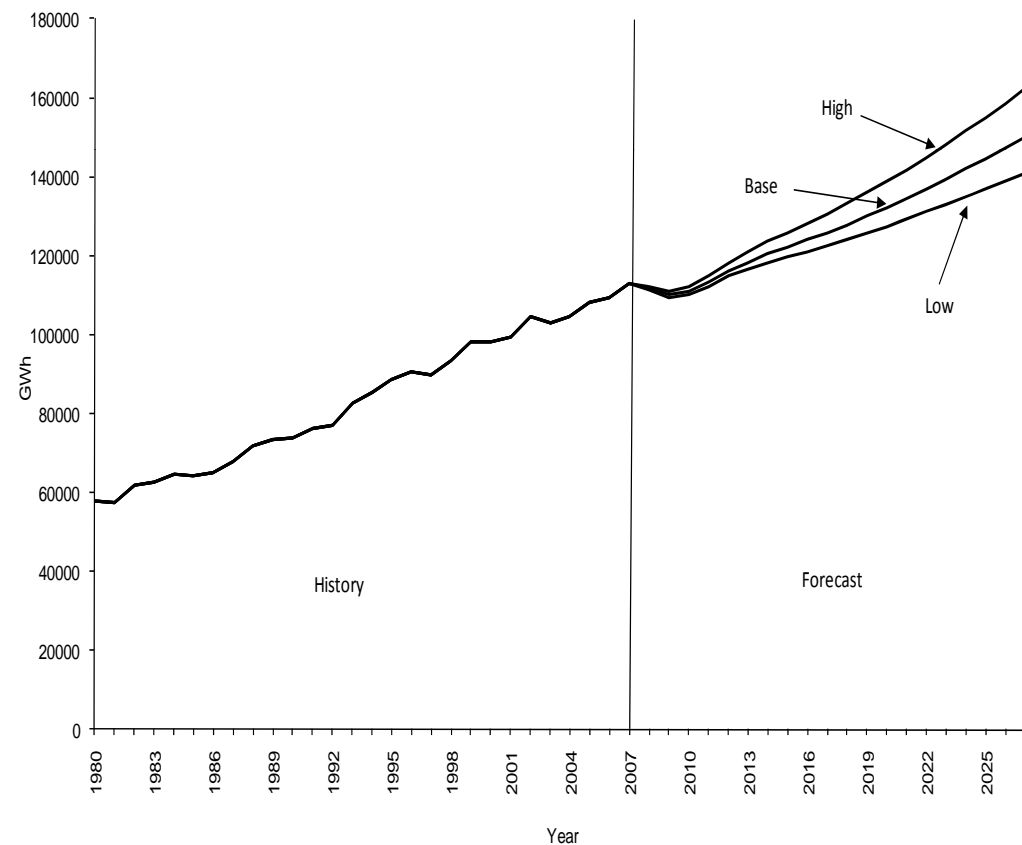
Indiana Real Price Projections (2007 \$)

- Effect of inflation removed
- Includes the cost of meeting CAIR
- Includes the cost of new resources
- Does not include CO2 restrictions or RPS

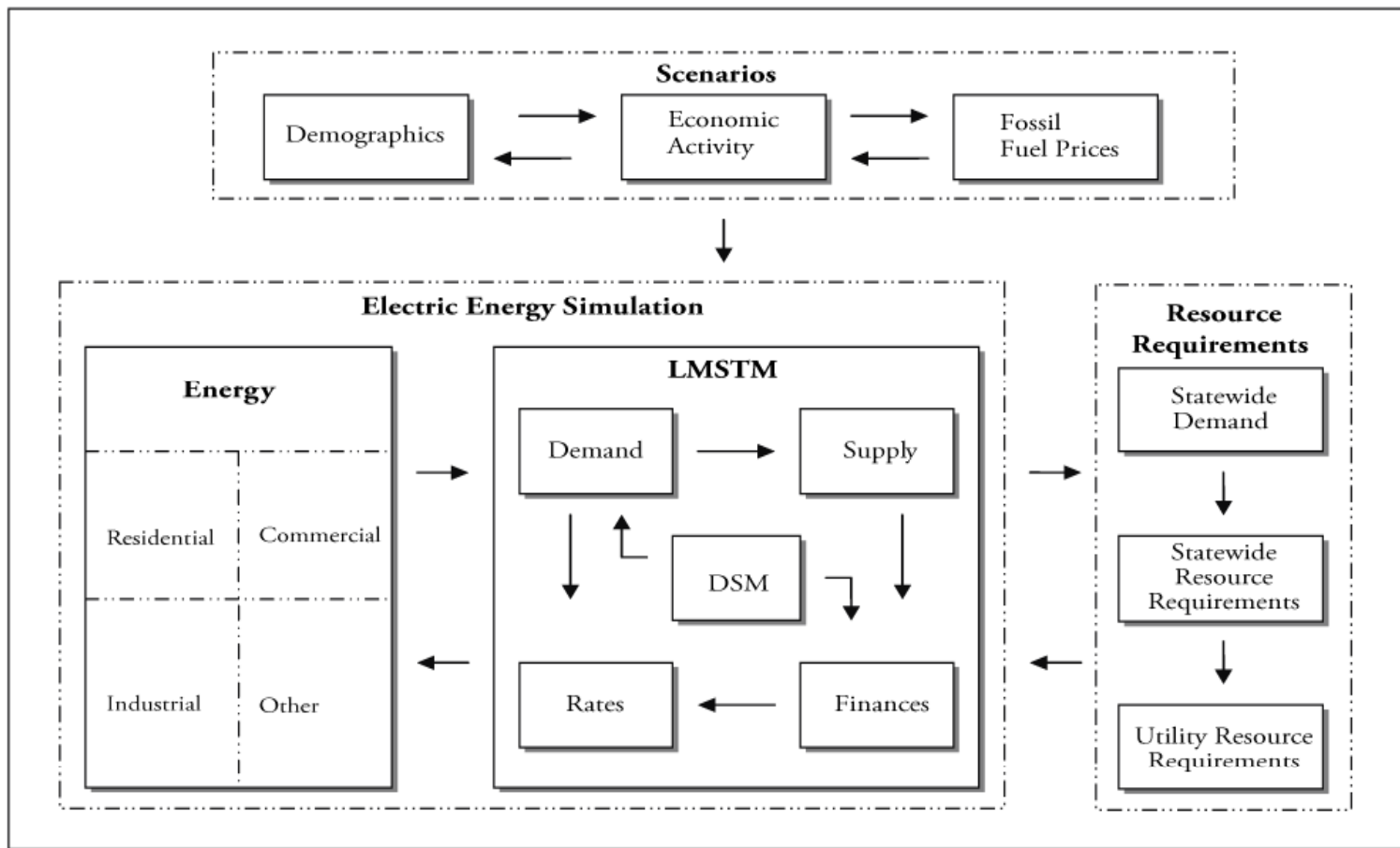


Alternative Scenarios

- Any forecast contains uncertainty
- CEMR provides alternative low and high growth econometric forecasts
- Low and high growth scenarios are intended to give a plausible bound to uncertainty

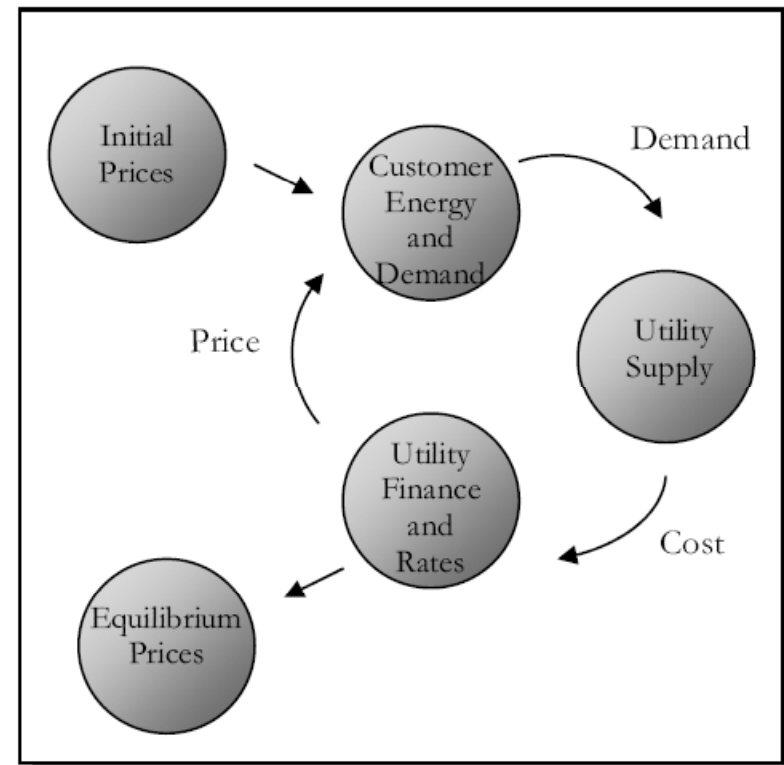


SUG's Modeling System

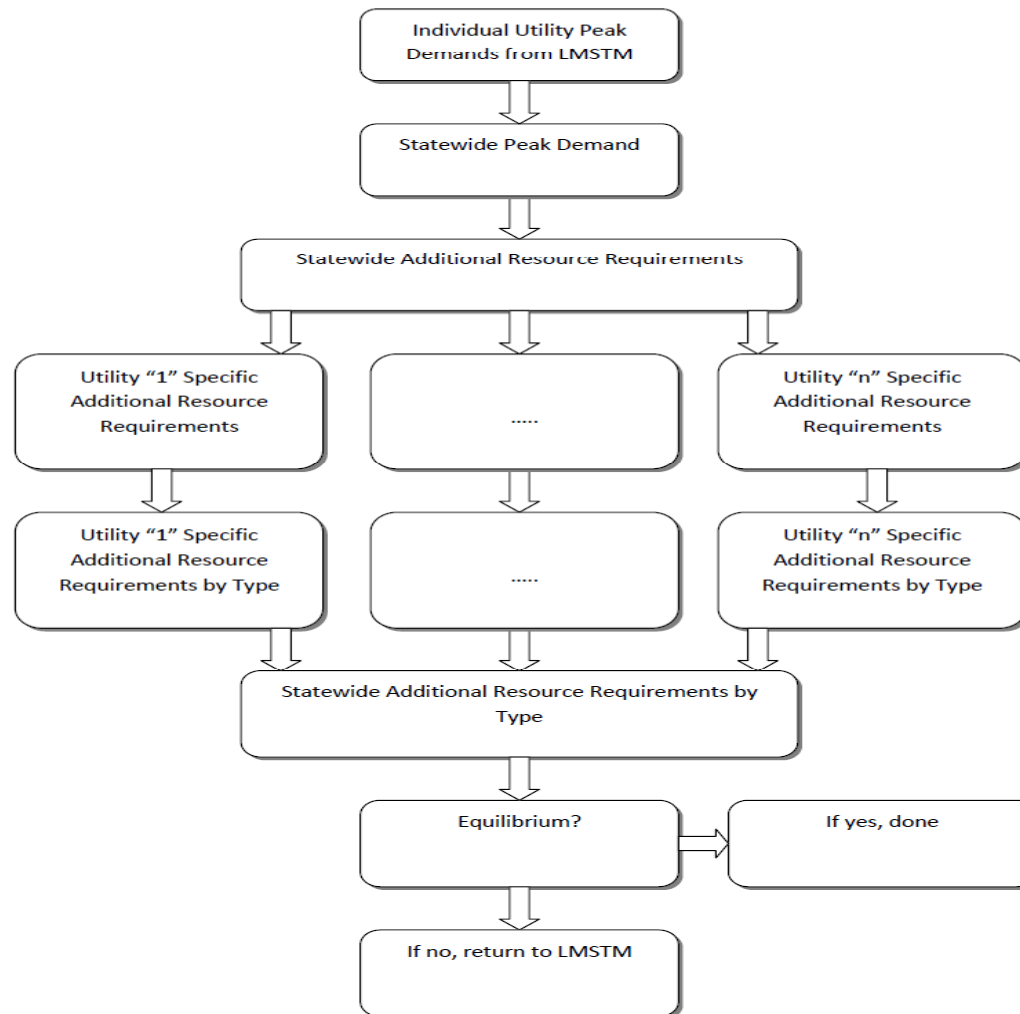


Cost-Price-Demand Feedback Loop

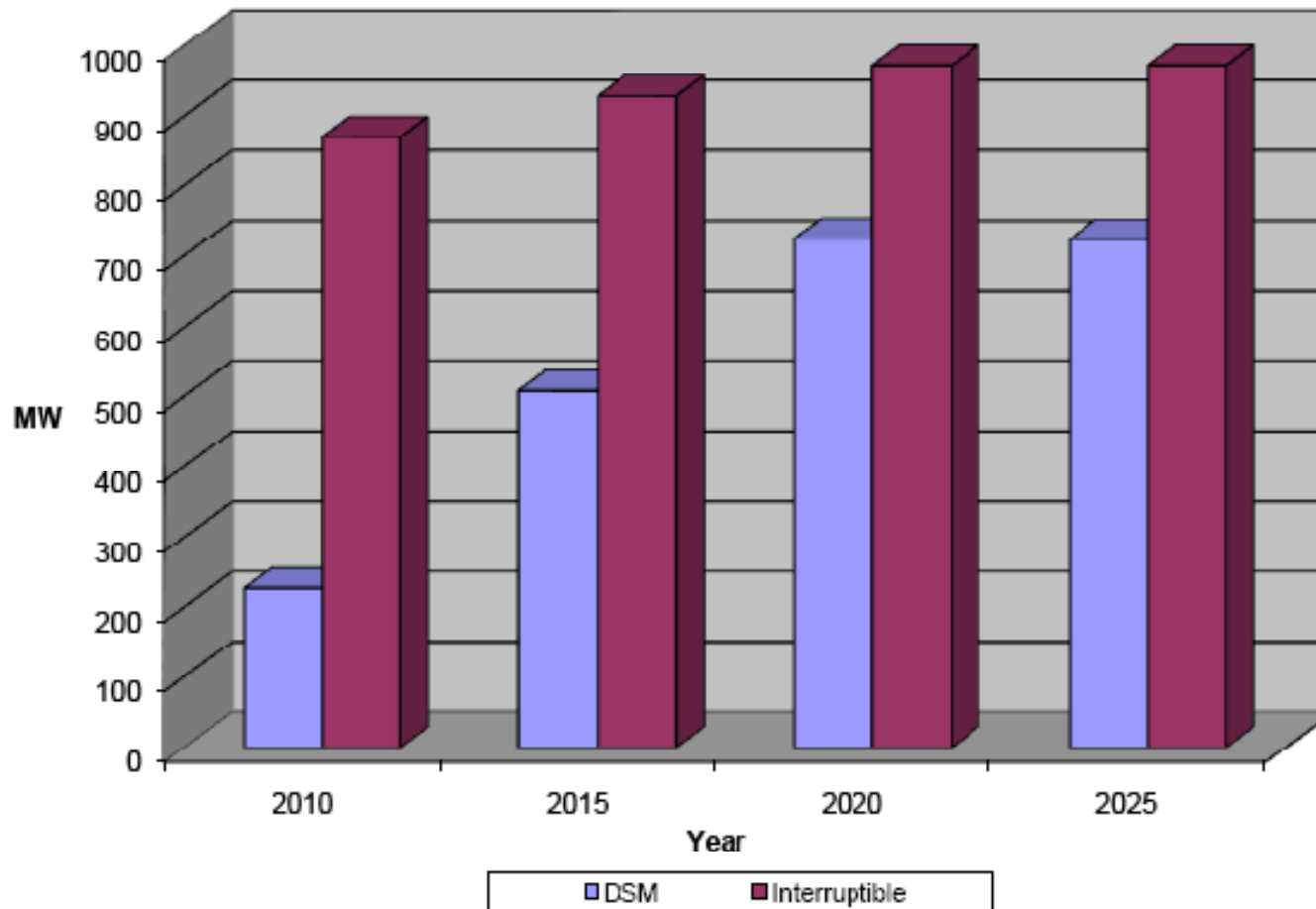
- Prices effect customer demand
- Demand effects utility supply costs
- Costs effect prices
- System is solved iteratively by going through the loop until the results are stable (no change in price from one iteration to the next)



Resource Requirements Flowchart

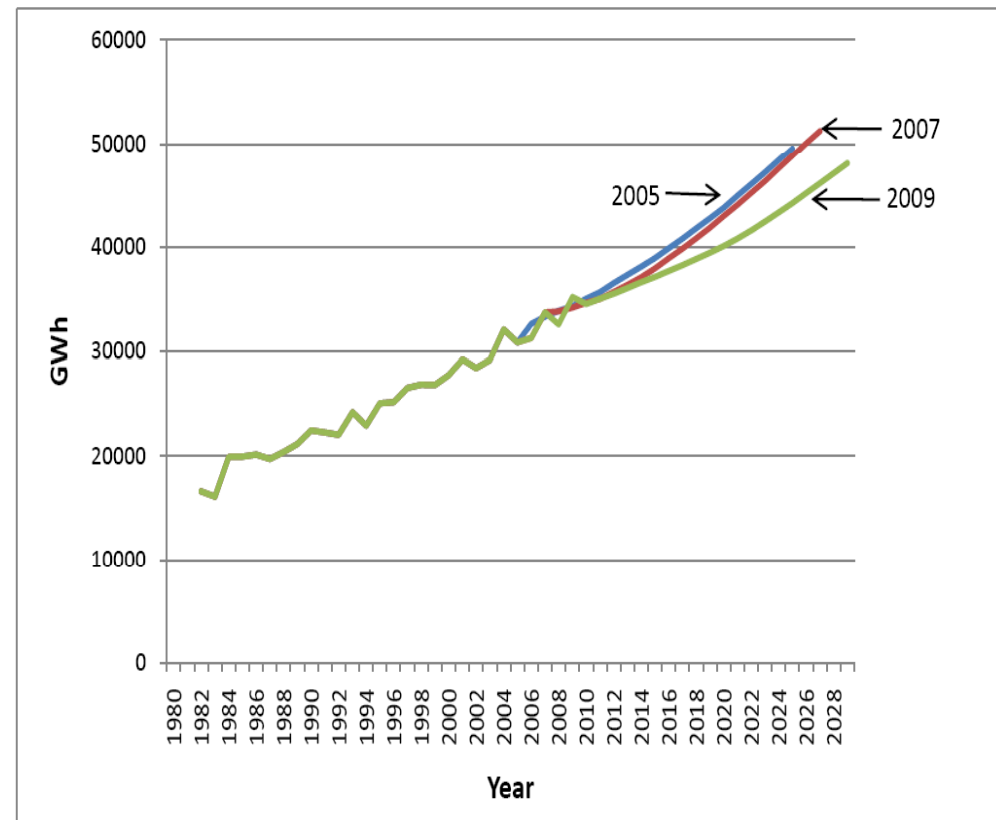


Incremental DSM and Interruptible Loads



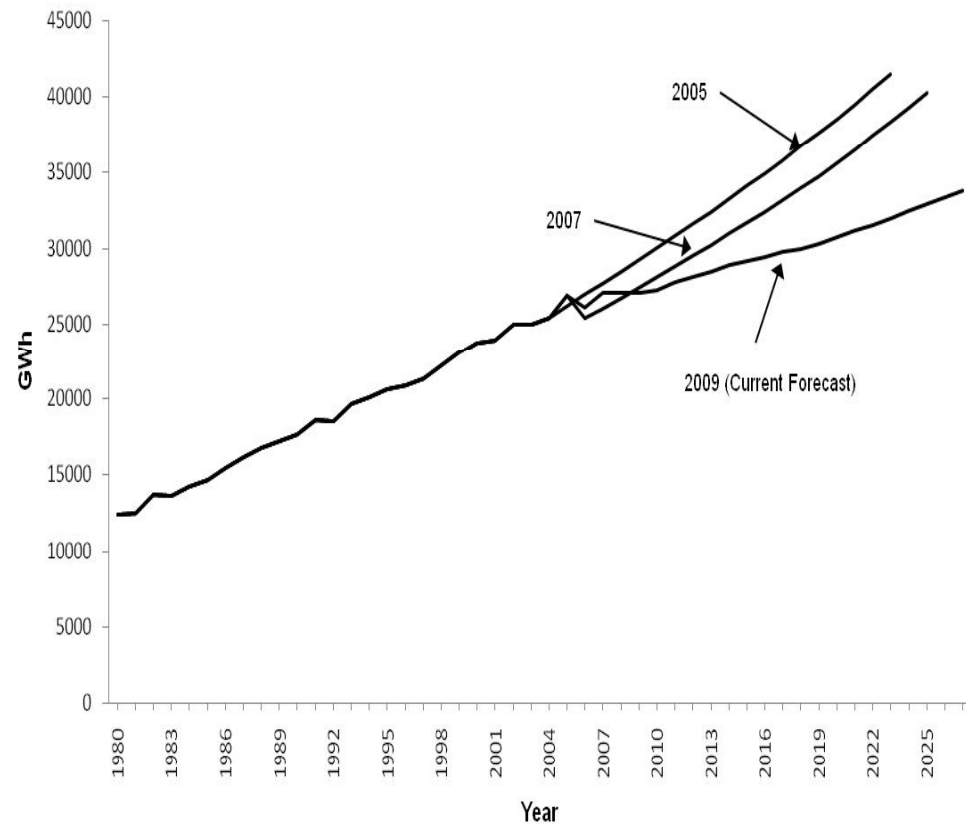
Residential Electricity Sales

- Estimated from:
 - demographics
 - households
 - household income
 - energy prices
- Growth rates
 - 2009 forecast: 1.75%
 - 2007 forecast: 2.21%
 - 2005 forecast: 2.22%



Commercial Electricity Sales

- Estimated from:
 - floor space inventory
 - end use intensity
 - employment
 - energy prices
- Growth rates
 - 2009 forecast: 1.18%
 - 2007 forecast: 2.46%
 - 2005 forecast: 2.61%



Industrial Electricity Sales

- Estimated from:
 - GSP by industry
 - energy prices
- Growth rates
 - 2009 forecast: 1.63%
 - 2007 forecast: 2.67%
 - 2005 forecast: 1.99%

