INDIANA ELECTRICITY PROJECTIONS: THE 2009 FORECAST

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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** is the peak demand without any interruptible loads being called upon.
- **Interruptible demand** includes any demand that can be temporarily reduced or eliminated.
- **Net peak demand** is the peak demand after interruptible loads are taken into account.
- **Existing/approved capacity** includes installed capacity plus approved new capacity plus firm purchases minus firm sales.
- **Incremental change in capacity** is the change in existing/approved capacity from the previous year. This change is due to new approved capacity becoming operational, retirements of existing capacity, and changes in firm purchases and sales.
- **Projected additional resource requirements** is the cumulative amount of additional resources needed to meet future requirements.
- **Total resource requirements** are the total statewide resources required including existing/approved capacity and projected additional resource requirements.

<table>
<thead>
<tr>
<th>Year</th>
<th>Uncontrolled Peak Demand</th>
<th>Interruptible Demand</th>
<th>Net Peak Demand</th>
<th>Existing/Approved Capacity</th>
<th>Incremental Change in Capacity</th>
<th>Projected Additional Resource Requirements</th>
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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
SUFG’s Modeling System

[Diagram showing the modeling system with boxes for Demographics, Economic Activity, Fossil Fuel Prices, Energy, Residential, Commercial, Industrial, Other, Demand, Supply, DSM, Rates, Finances, LMSTM, Statewide Demand, Statewide Resource Requirements, Utility Resource Requirements]
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%