



**HOOSIERENERGY**  
RURAL ELECTRIC COOPERATIVE, INC.

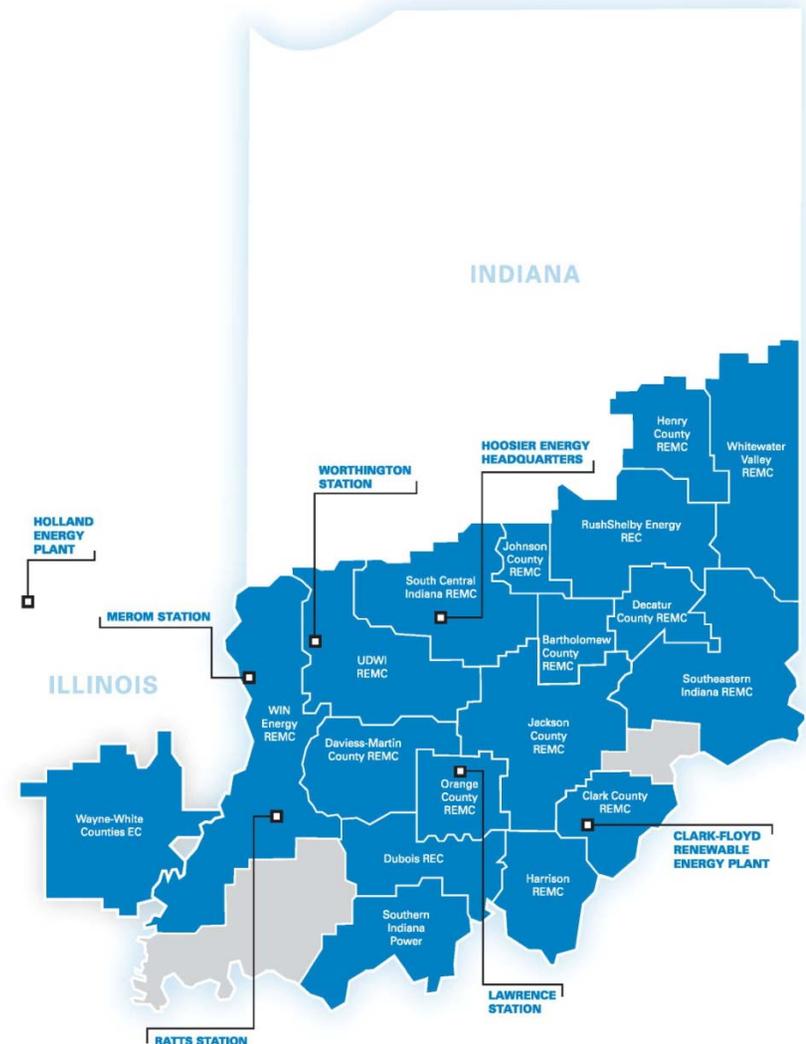
**Summer 2013**  
Presentation to  
**Indiana Utility  
Regulatory Commission**

**May 15, 2013**

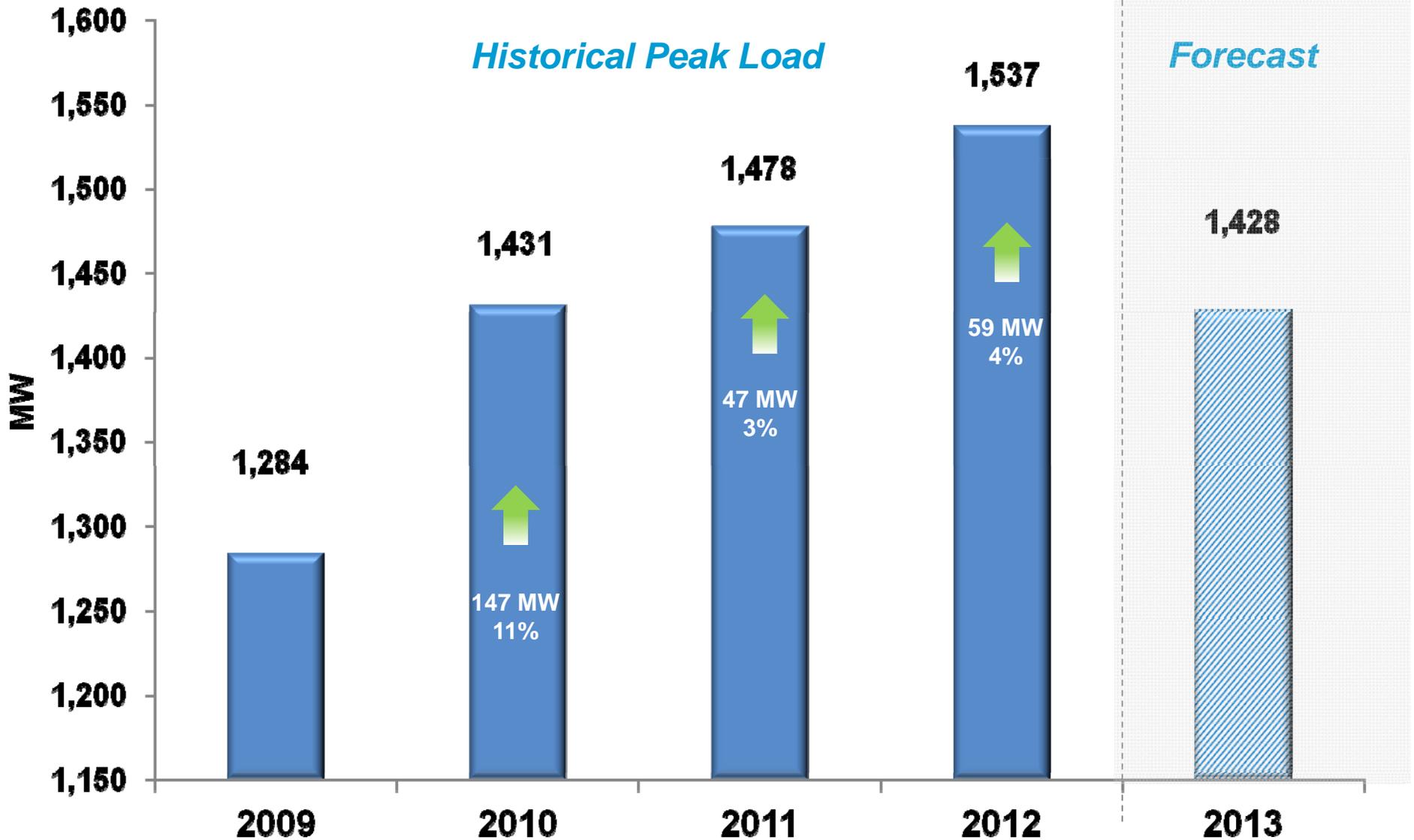
Mike Mooney  
Manager, Corporate Planning

# Background

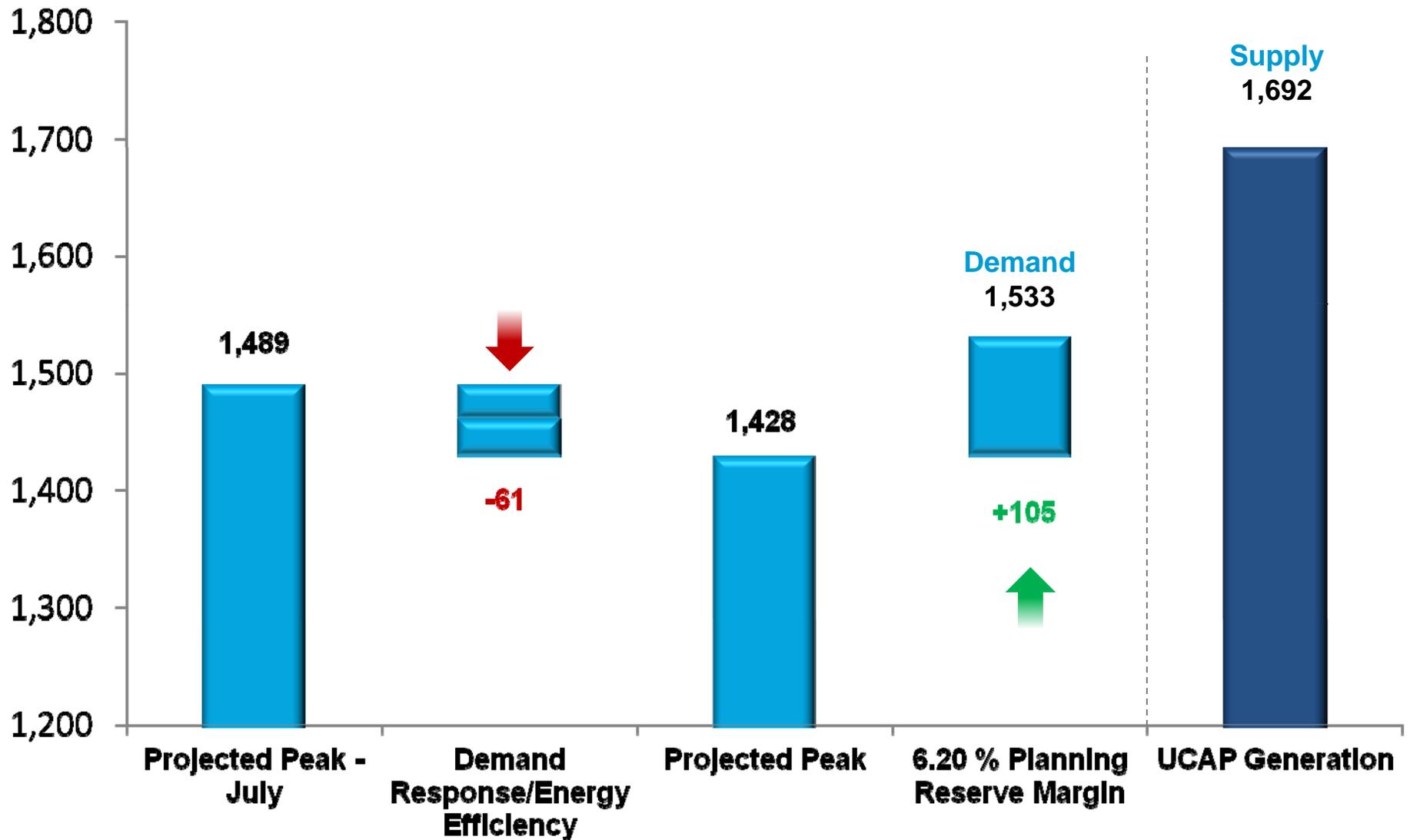
- **Membership**
  - 18 member cooperatives
  - ~300,000 retail customers
  - 7.1 million MWh sales
- **Generation**
  - 1,950 MW of capacity
  - 6.5 million MWh
- **Transmission**
  - 1,700 miles of transmission
  - Member of Midwest ISO



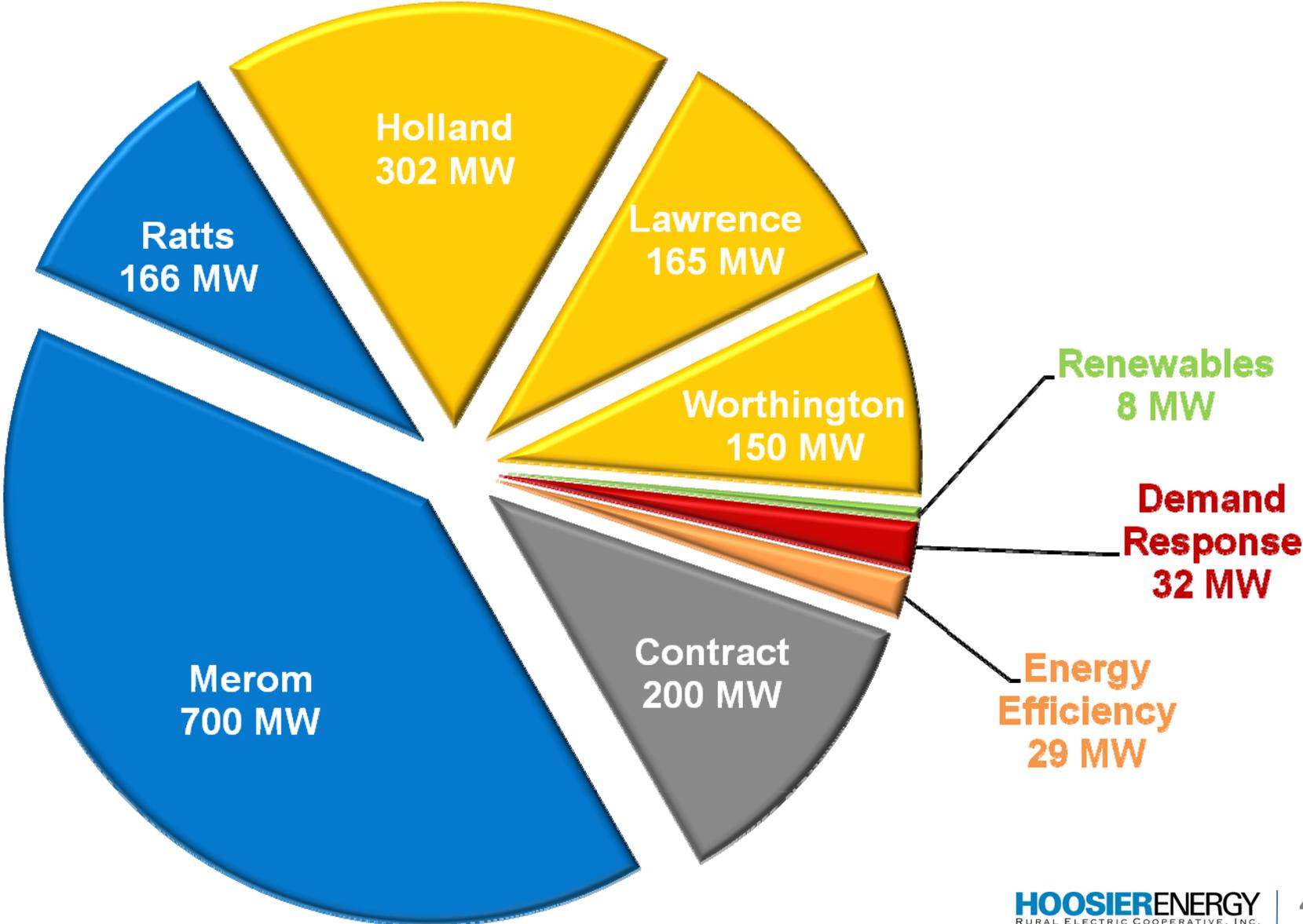
# Summer 2013 Peak Forecast



# Summer 2013 Supply / Demand Outlook



# Unforced Capacity, Summer 2013



# Demand Response and Energy Efficiency Programs

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<u>Program</u>	<u>Installed</u>	<u>2013</u>
Residential Lighting Program (CFLs)	1.4 million	200,000
Appliance Recycling (units)	4,143	1,500
Energy Efficient Heating and Cooling (rebates)	18,202	5,400
Residential Weatherization (homes)	3,267	800
Touchstone Energy Home Program	238	45
Commercial & Industrial Energy Efficiency	203	60
Demand Response – AC and WH control	12,020	3,500

# Fuel Supply

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## Coal

- No supply difficulties
- Summer 2013 requirements are fully hedged
- Inventory strategies to manage length

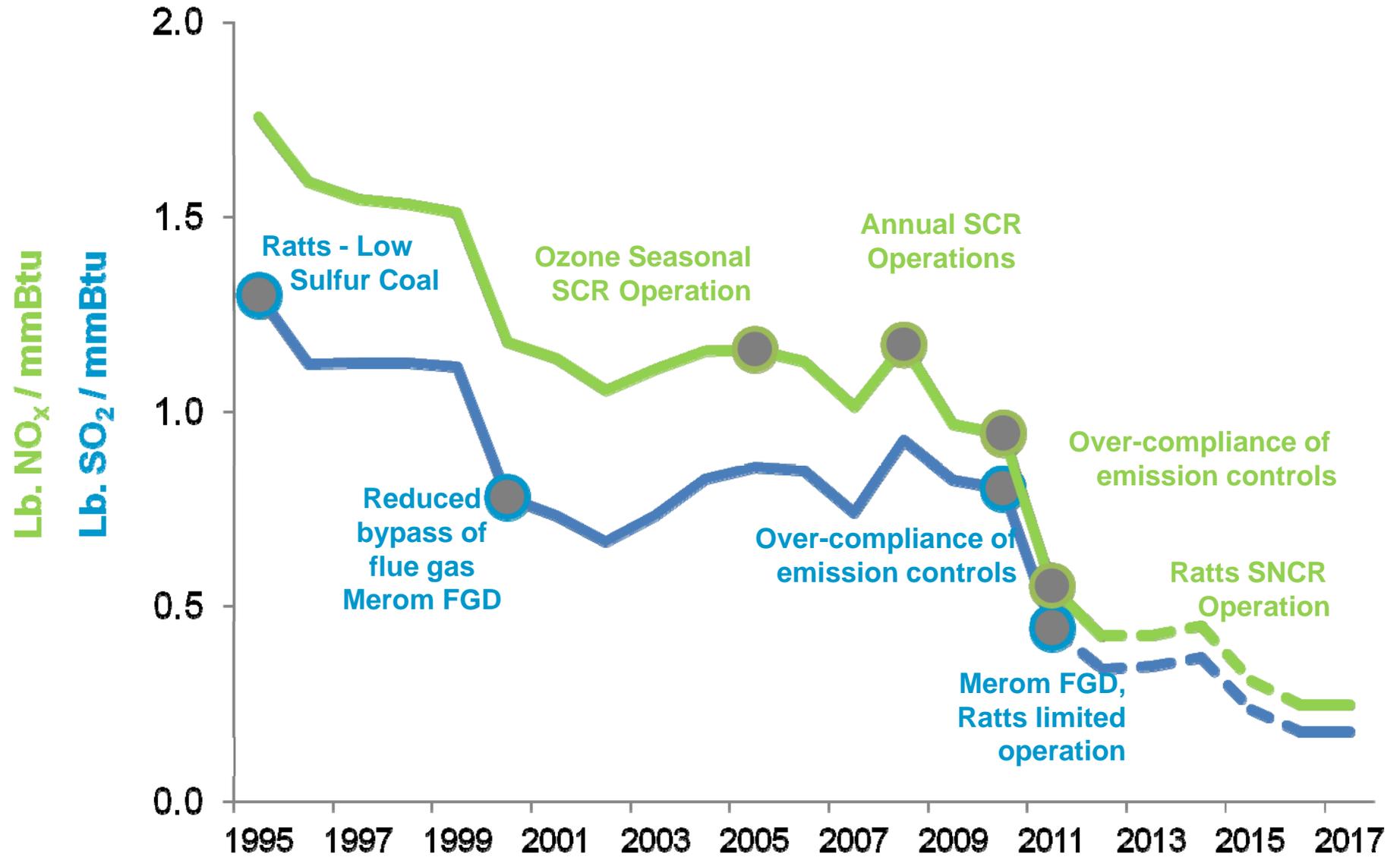


## Natural Gas

- Portion of transportation service is firm
- Physical location of generators
- Transportation agreements use suppliers with scale



# Environmental Performance

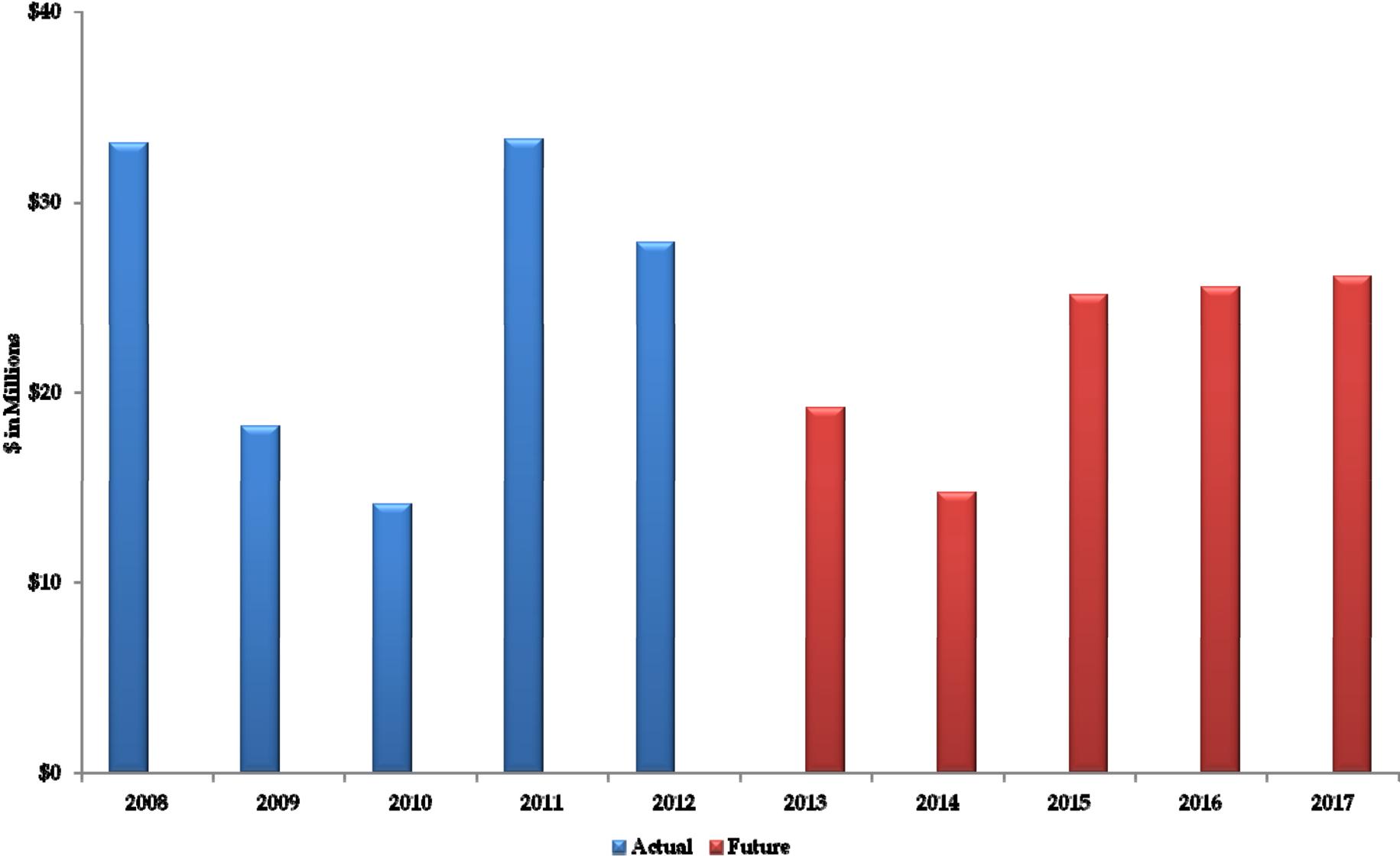


# Compliance with EPA Regulations

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- \$220 million of capital investment since 2009
  - Rate impact is approximately \$2 - \$3/MWh
  - Anticipate \$265 million of additional EPA related capital spending by 2017
- CO2 regulations are questionable
- Other regulations
  - 316(b) – Currently examining best way to address compliance
  - CCR – Little impact at Merom; Closing of ash ponds at Ratts

# Power Delivery Capital Projects



# Total Bulk Electric Transmission Investment

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<b>Investment timing</b>	<b>Total Costs</b>	<b>Costs/Year</b>
Future (next 5 years)	\$110,000,000	\$22,000,000

## Reliability Investment Breakdown

<b>Load Serving Projects</b>	<b>Total Costs</b>	<b>Costs/Year</b>
Future (next 5 years)	\$56,600,000	\$11,320,000

<b>Reliability Projects</b>	<b>Total Costs</b>	<b>Costs/Year</b>
Future (next 5 years)	\$27,300,000	\$5,460,000

<b>Primary Station Projects</b>	<b>Total Costs</b>	<b>Costs/Year</b>
Future (next 5 years)	\$26,100,000	\$5,220,000

# Generation - Coal vs Natural Gas

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- Price point that favors natural gas generation over coal in Indiana is approximately \$3 - \$4/mmBTU.
- Not a completely economic decision
  - Large baseload coal units in MISO
  - Transmission impact upon new construction
  - Lead time required to construct new gas generation
- Regional differences in price point
  - Coal
    - BTU content of coal
  - Natural Gas
    - Availability of transportation

# Renewable Energy

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- Project evaluation
  - Performed on a project specific basis
  - Economics
  - Operational merits
    - Intermittency requires backup generation
  - Transmission
    - Basis risk due to generation remote from load
  - Construction lead time
- Existing projects
  - Wind generation - 25 MW PPA
  - Landfill gas and coalbed methane

# Lessons Learned from 2012 Drought

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- Low river flow
- Discharge temperatures
  - Temporary cooling towers at Ratts
  - Examining feasibility of cooling towers at Merom
- Impacts were regional
  - Reliability concerns
  - Congestion issues
  - What if a number of plants are forced offline due to weather conditions?

# Cost Drivers Behind Increasing Rates

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- Compliance with EPA regulations
  - Increasing capital costs of new construction
  - Increasing operating costs as new technology is added
    - Fuel
    - Chemicals
- Renewable generation additions
- Increasing Energy Efficiency
  - Lower load
  - Increased costs spread over flat or lower sales equals higher rates

# Rate Comparisons with Surrounding States

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- Neighboring states have restructured the retail market
  - Competition to attract customers
  - Suppliers price is based upon variable costs only
  - In the short-term – consumers benefit with lower bills
  - In the long-term – prices increase to recover fixed costs
    - Suppliers must recover their cost of service
  - Other concerns:
    - Incentives to build new generation
    - Ability to finance

**Questions?**

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