

# Fall 2012 RETAC Meeting

## Electric Segment Report

# Current Status

- Record coal inventory levels across the industry
- Record high railroad velocity
- 2012 will have the lowest US steam coal burn since 1995
- Utilities taking many actions to accommodate reduced coal burn
  - Deferring tons, storing tons, contract buy-outs
- Dispatch is changing
  - Coal moved from base-load to intermediate resource
  - Coal also moving to peaking resource
- Planning challenges
  - Coal is the marginal fuel – as a result, coal volumes are less predictable
  - Due to mild weather, coal burn continues to be below projections in some areas
- Purchasing changes
  - More tons uncommitted in near future

# Shifting Fundamentals: Present

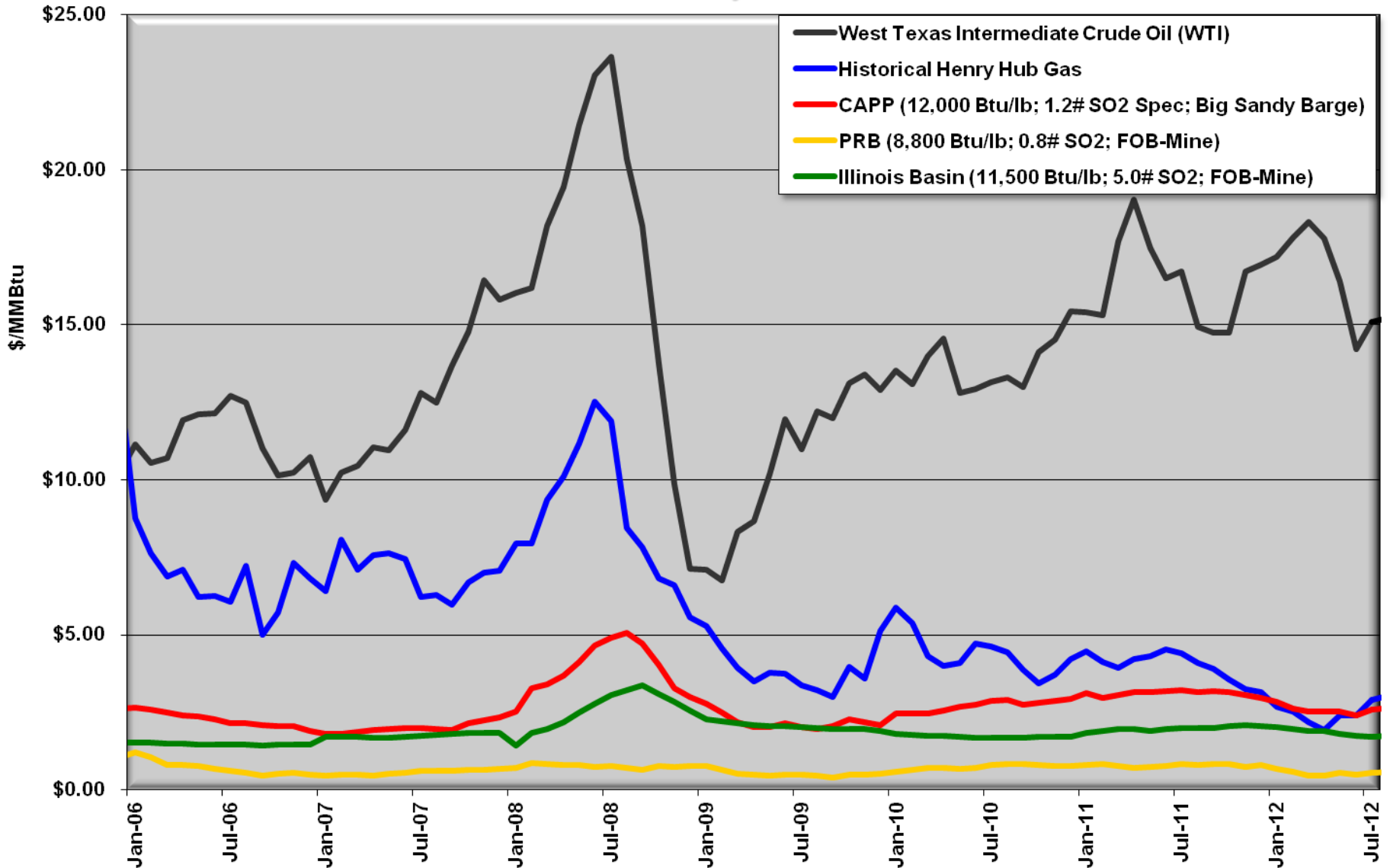
- Low natural gas prices here to stay?
  - Gas is at least on par with PRB
  - In the Southeast: natural gas prices can almost double and bituminous coal units will still dispatch behind CC units
  - In the Southeast: at the current forward price curves for natural gas and Eastern coals, bituminous coal units are not competitive until after 2020
- Low load growth
  - Will economic conditions continue to depress load growth?
  - Slow economic recovery → low commercial and industrial growth
- Weather
  - Mild winter nationwide → low residential demand for electricity and gas
  - Summer weather mixed across the nation:
    - Hot summer in some regions resulted in higher coal burn than anticipated earlier in the year
    - Hot summer tapered off early in other areas like the Southeast (mild August)

# Shifting Fundamentals: Near Future

- What does the future regulated world look like?
  - CSAPR (Cross State Air Pollution Rule)
    - Rule vacated on August 21, 2012. Appeal likely.
    - Possible CAIR replacement
    - Down-wind states file suits again?
  - MATS (Mercury and Air Toxics Standard)
    - Effective compliance date of April 2015, possible extensions
- Coal still faces regulatory challenges
  - NAAQS SIP (National Ambient Air Quality Standard State Implementation Plan)
  - CCR Rule (Coal Combustion Residual)
  - 316(b) Rule (Water)
  - Effluent Guidelines (Water)
  - NSPS (New Source Performance Standards)
  - GHG Rules (Green House Gas)

# Comparison of Coal, Oil, & Gas

Ending July 2012

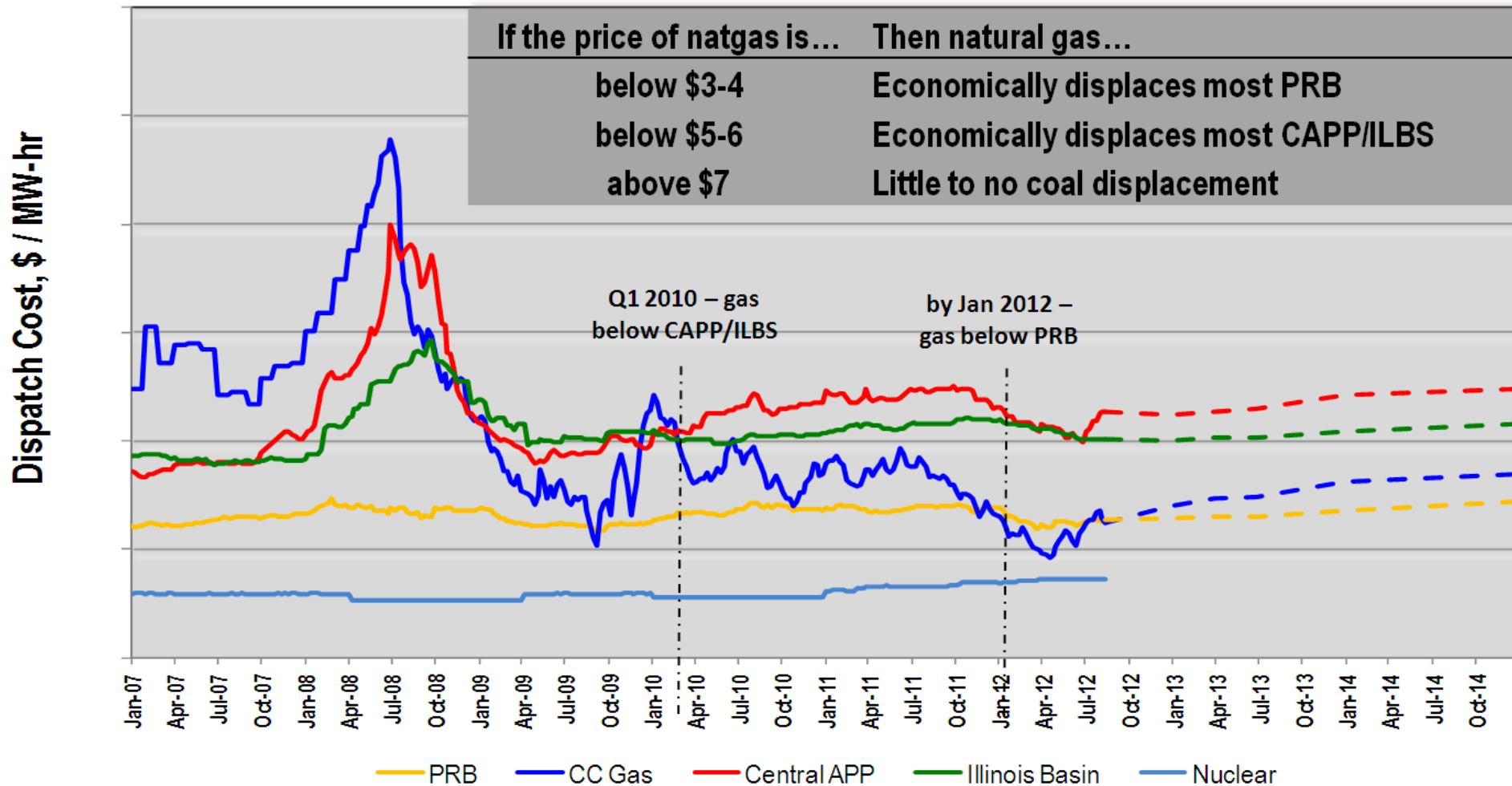


Note: Gas prices sourced from Platts. Coal prices sourced from ARGUS COAL DAILY.

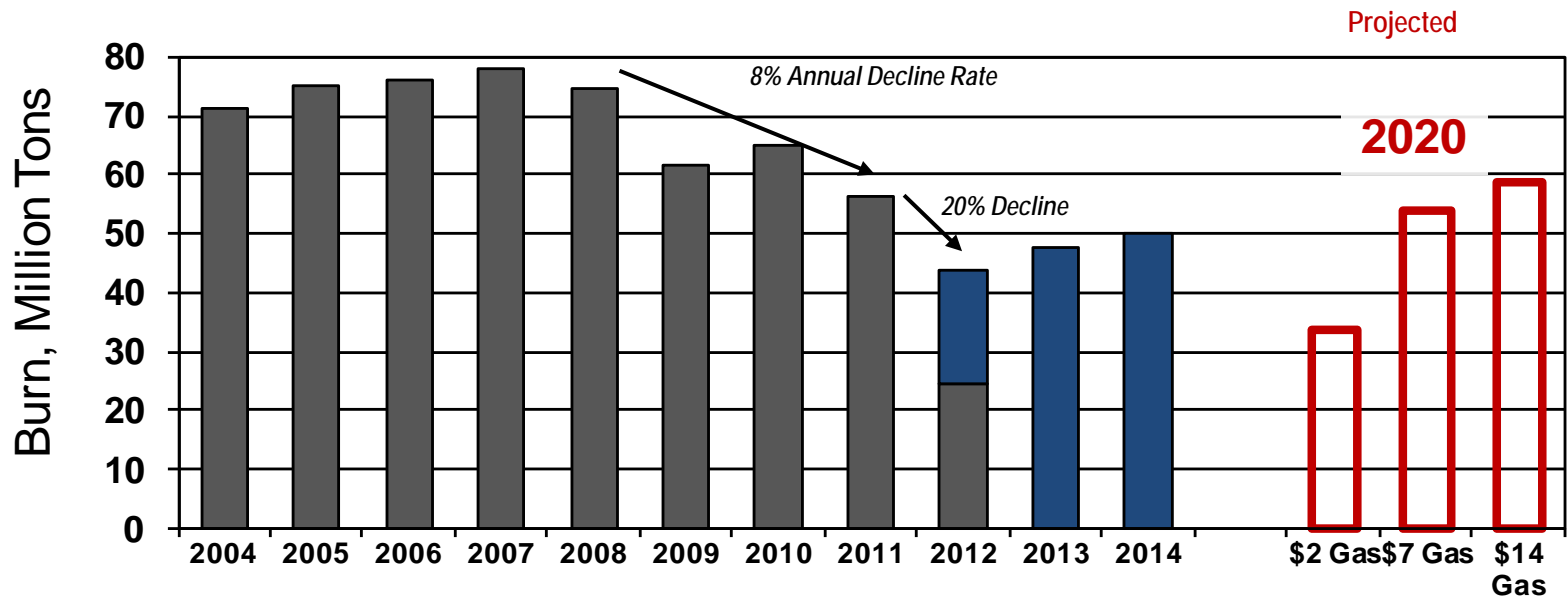
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# Fuel Prices Drive Generation Costs

**Estimated Dispatch Cost in the Southeast**  
 (based on commodity spot prices and estimated transportation)



# Southern Company Coal Burn: 2012 to 2020



- Coal burn projected to drop another 20-25% vs 2011
- Near-term coal inventory management challenges
- 2020 burn driven by natural gas prices

# Electric Utility Response: Near Future

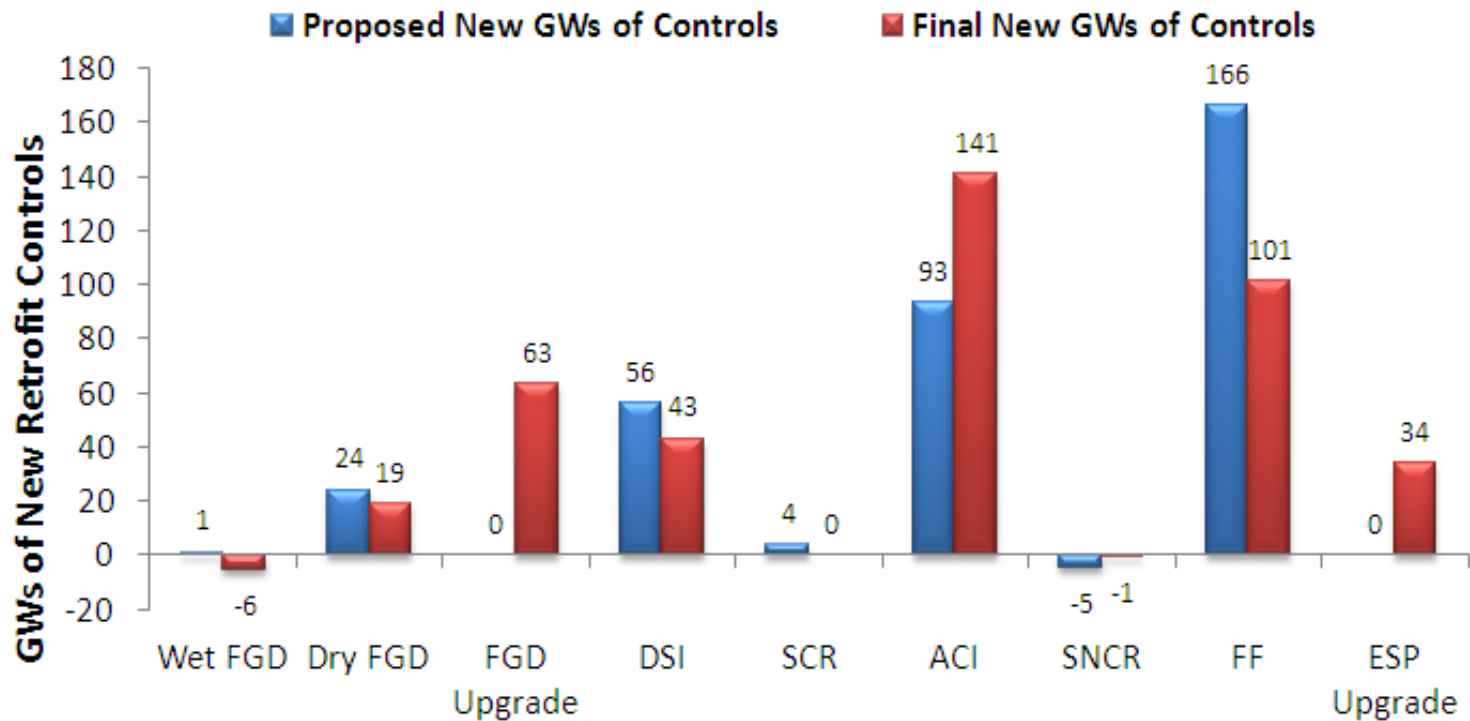
## Seeking a “No Regrets” strategy

- Retirements
  - Oldest, most inefficient units
- Controls and Conversions
  - Suite of controls being utilized
  - There are optimal combinations of coals and controls that achieve results
  - Conversions to gas where economic
- Changes in Coal Procurement Strategy
  - Lower capacity factors may drive companies to a larger spot program
- Changes in Coal Sourcing
  - Moving west: companies may seek savings from Illinois and Powder River Basins



# Potential Retirements and Controls

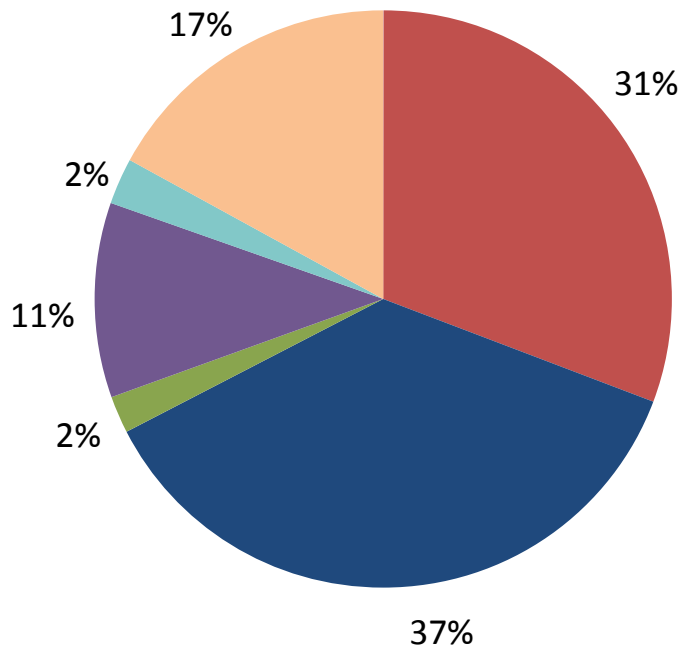
- Coal unit retirement estimates have ranged from 5 GW (EPA) to 80 GW (EEI)
- Large capital expenditures will be required to add a suite of controls as indicated below



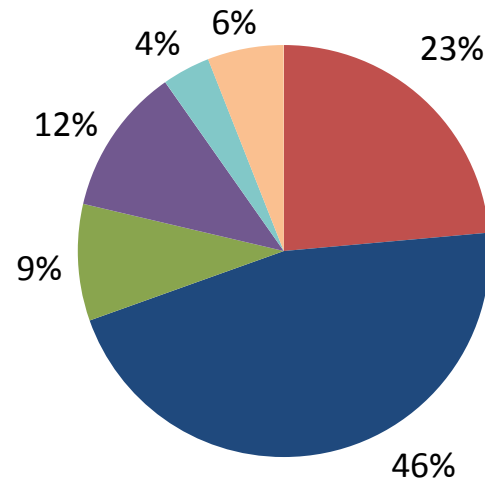
Source: EPA Final MATS RIA, Dec. 2011

# Evolution of Southern's Coal Sources (100%)

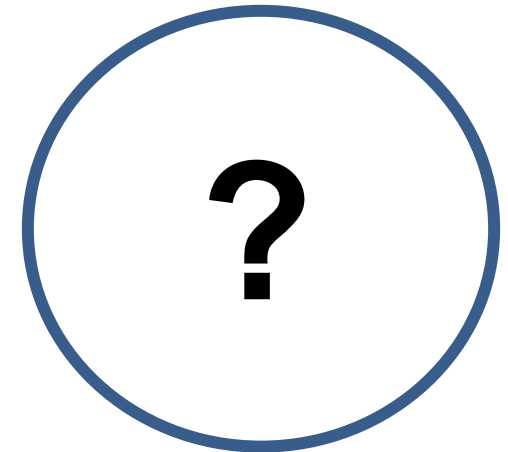
2007



2012



2020



Central APP PRB ILL Basin Alabama Colorado Import

# A Diverse Generation Portfolio Benefits our Customers

## Southern Company's Generation Mix by Fuel Source

	<i>Average '07-'08</i>	<i>Projected 2012</i>	<i>Potential 2020 Range</i>	
			<i>Low Gas Price High Coal Price</i>	<i>High Gas Price Low Coal Price</i>
Natural Gas	16%	45%	57%	34%
Coal	69%	36%	22%	45%
Nuclear & Other	15%	19%	21%	21%

The reliability of our generation fleet and the flexibility to utilize the least expensive fuel source keeps retail prices lower and less volatile.

# Changes in Coal Procurement Strategy

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- Lower capacity factors on coal units may move companies to larger spot programs
- How will the railroads provide more flexibility in their transportation contracts?
  - More optionality – term and volume
- How are the railroads preparing to adjust their planning processes?
  - Rail crews
  - Rail power
  - Rail maintenance

# Changes in Coal Sourcing

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- Some companies are migrating away from Central Appalachian (CAPP) to Illinois Basin (ILB) and PRB coals
- Impact on the economies along these rail routes?
  - Coal business along CAPP routes will decline
  - Coal business along ILB and PRB routes will increase
- Impact on planning for rail crews?

# Coal Deliveries: What's in store?

- Number of destinations will decrease due to plant retirements, but the overall tonnage stays the same. Why?
  - 2012 coal consumption at an all-time low
    - Low natural gas prices, mild winter weather, slow economy
  - Outlook for 2013+:
    - If gas increases and weather is “more normal”:
      - Coal burn increases
      - Coal could potentially regain its place as a base-load/intermediate resource (even with MATS)
    - Increase in coal burn does not necessarily mean increase in coal deliveries
      - Coal inventories still very high
      - Thus deliveries for 2013 and 2014 may remain low despite potential increases in burn

# Appendix

# EPA Regulatory Actions Timeline

