

EPA's Proposed CO2 Rules

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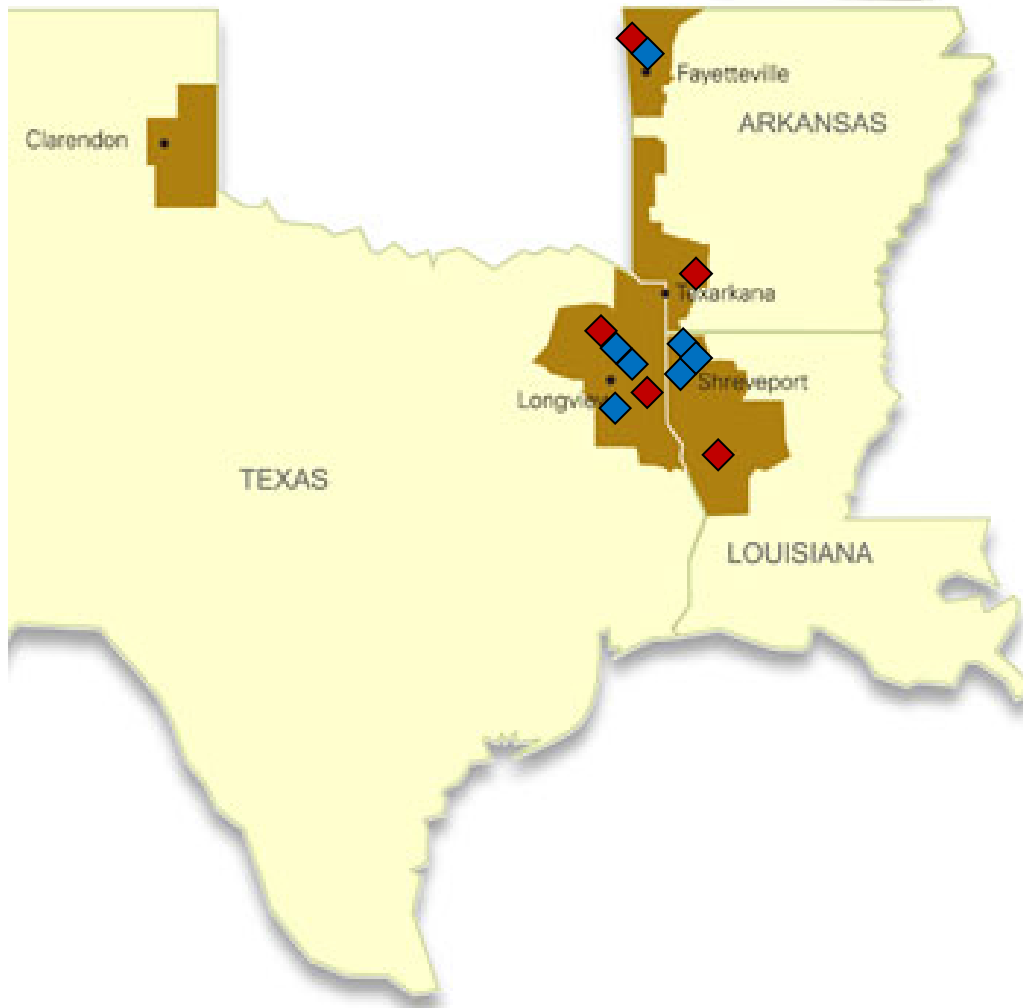
President, Southwestern Electric Power Company

Presentation to the Joint Committee on Insurance and Commerce

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SWEPSCO Generation



◆ Coal / Lignite

- 60% Base Load

◆ Natural Gas

- 40% Intermediate / Peaking



● Wind

- Power Purchase Agreements (from TX, OK, KS)

- **SWEPSCO Generation Capacity: 5,675 MW**
- **Wind power purchases: 469 MW**

- **SWEPSCO customers in 3 states: 524,000**
 - AR - 114,000
 - LA - 228,000
 - TX - 182,000

- **Bentonville, Hope and Prescott**

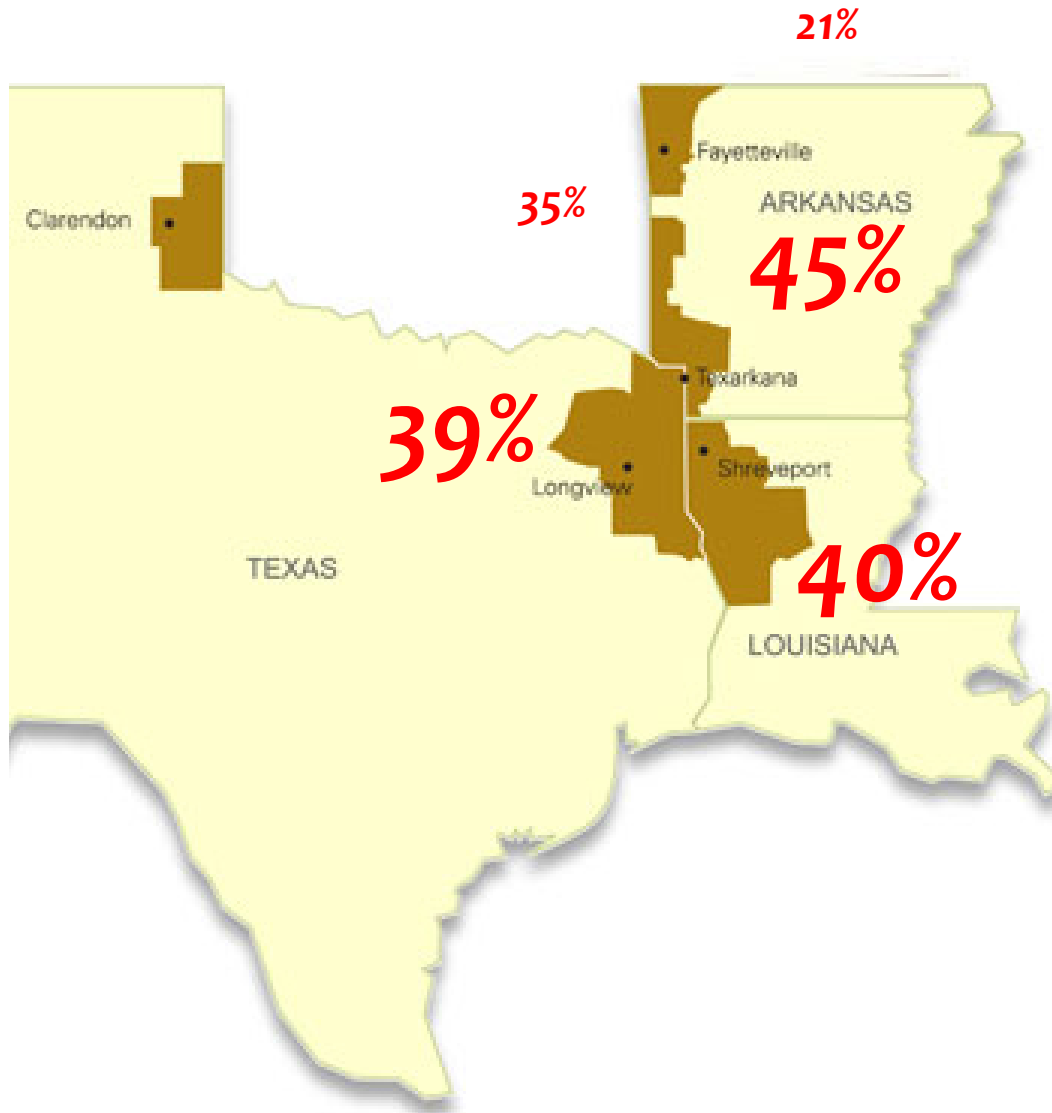
Quick History Lesson

Success of Solid Fuels

- Energy crisis of 1970s
- Powerplant and Industrial Fuel Use Act of 1978
- Solid-fuel construction
 - More than 2,744 MWs
 - Flint Creek 1978

“Old and Dirty”

Overly Aggressive State Targets



- SWEPCO states well above EPA national target of 30% by 2030

Arkansas reduction – 45%:

2012 emission rate:

1,640 lb./MWh

2030 goal:

910 lb./MWh

EPA's Four "Building Blocks"

1. Heat rate improvement for coal plants
2. Increase dispatch of natural gas plants to displace coal
3. Increase renewables and nuclear
4. Increase energy efficiency and demand-side management



Building Block #1: Plant Efficiency

- Coal Plant Heat Rate Improvements
 - Heat rate improvements lower fuel costs, and are regularly examined by operators
 - No recognition of different plant circumstances and capabilities
 - Turk
 - Remaining opportunities are likely higher cost and not justified by fuel savings
 - Intent of other building blocks is to reduce coal plant utilization; lower utilization increases heat rate

Building Block #2: Fuel Switching

- Increase NGCC Generation
 - Inadequate evaluation of constraints
 - Transmission grid
 - Firm gas
 - RTO seams
 - Forces additional premature retirements - more expensive replacement generation required
 - *Assumes 30% of SWEPCO capacity does not run by 2020*
 - Flint Creek
 - Delivered coal less expensive than natural gas
 - Retirements create reliability violations
 - Undermines prioritization of low-cost, economic resources
 - Undermines state regulatory authority

Building Block #3: Fuel Switching

- **Renewable Energy**

- Regions created by EPA do not reflect availability of cost-effective wind and solar resources
- Goals not consistent with sound resource planning
- Goals do not consider time required for planning, permitting and transmission interconnection
- No recognition that existing renewable resources in “renewable resource - rich” states have been built and paid for by utility customers in surrounding states

Building Block #4: Reduced Usage

- **Energy Efficiency**

- One-size-fits-all approach ignores differences in customer needs, usage patterns, and costs
- Past achievements primarily reflect more efficient lighting, which will no longer be available due to new federal standards
- Disregards cost of energy efficiency initiatives
- Monitoring and verification requirements will impose additional cost and uncertainty

Rule Threatens Recent Investments

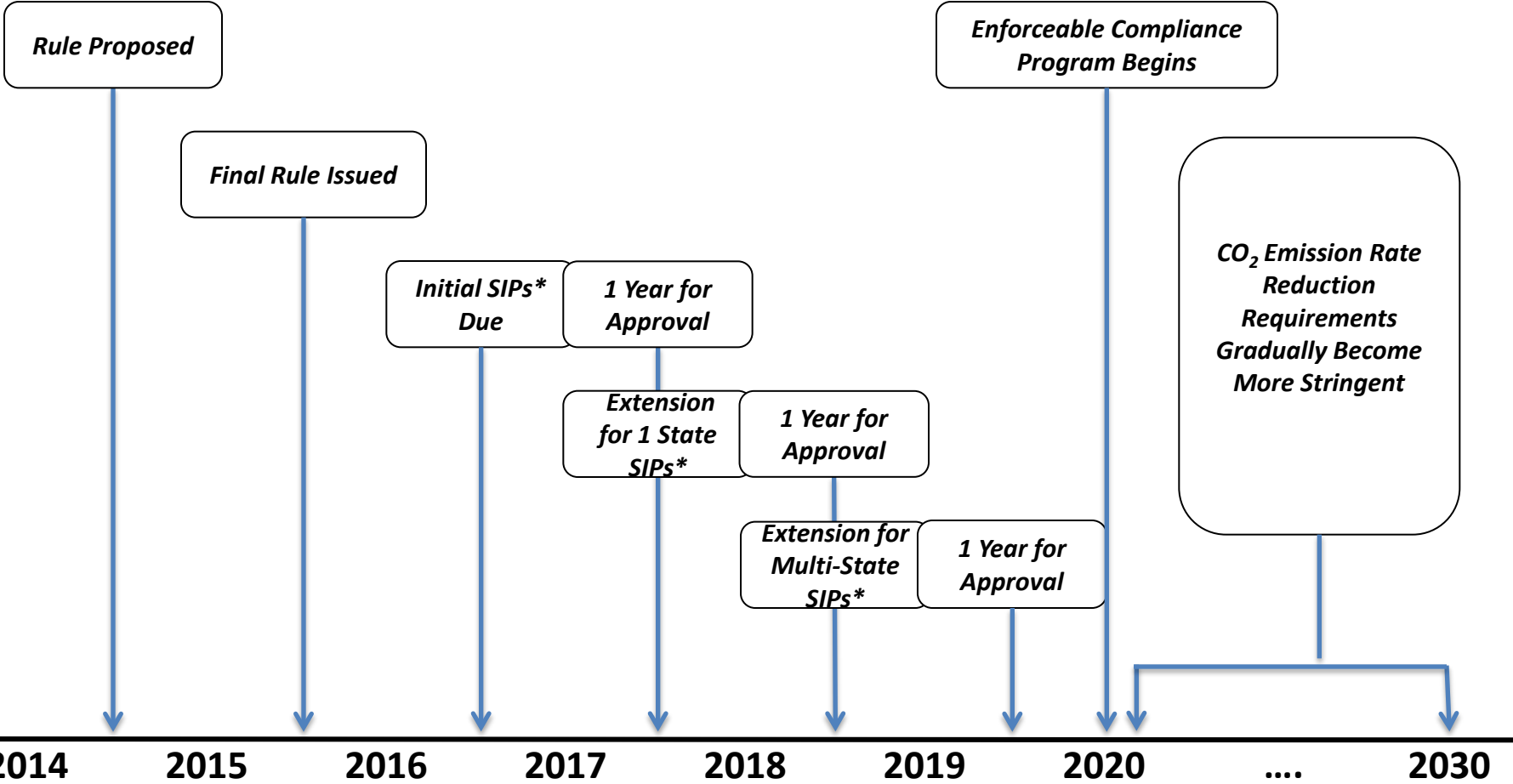
- The rules as proposed threaten customers' investments in power plants to meet previous EPA regulations:
 - AEP is retiring more than one-fourth of existing coal-fueled power plant fleet in the next few years
 - The plants that remain are most efficient in our fleet and equipped with more than \$10 billion worth of emission
 - Flint Creek



Aggressive Time Line

- Ultimate reduction targets by 2030
- Bulk of reductions must occur by Jan. 1, 2020
- State implementation plans likely won't be finalized and approved until 2018 or 2019
- This tight timeframe limits the actions that can be taken to achieve the 2020 goals
- Significant action will be necessary by 2020 in many states

Proposed Time Line



*SIP: State Implementation Plan

Recommendations

- Extend timeframe for comments
- Aggressive comments on behalf of consumers
 - Practical and technical flaws in the proposal
- Examine legal protections

- Legislation to protect reliability and current investment
- Adjust regulation for life after Clean Power Plan

Effect on global climate?