

Emission Legislation and Rules

Presentation to the Annual Conference
Missouri Public Utility Alliance



*By Floyd Gilzow
Director of Member Relations
and Public Affairs
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Agenda

1. Climate Change Legislation
2. Tailoring Rule
3. RES
4. Transport Rule

GHG / Climate Change

- The House passed the Waxman/Markey Bill June 26, 2009
- Senate repeatedly faltered in 2010
 - Boxer-Kerry
 - Cantwell Collins – Cap and Dividend
 - Kerry-Liberman-Graham (never filed)
 - Kerry-Liberman
 - The Legislative Effort died over the Summer '10
- No evidence that it will be taken up during a 'lame duck' session

GHG / Climate Change

- Environmental Groups have announced they will abandon national cap and trade legislation in favor of state initiatives
- May be an effort to run cap and trade under CAA by regulation pushed by selected utilities
- California – Prop 23 Vote in November
 - Suspends California's 2006 state cap and trade system until unemployment rate drops to 5.5% for 12 months (currently 12%)
 - Closely watched in Congress
 - Nationally funded on both sides – Over \$12M by Sept 1
 - National polls show the measure even among likely voters in early Sept

Tailoring Rule

- Use of CAA to regulate Carbon Emissions
- Bypasses standard process under CAA
 - ✓ Use science to set a national ambient air quality standard (NAAQS - the goal)
 - ✓ Identification of attainment and non-attainment areas
 - ✓ State implementation program identified for non-attainment areas
 - ✓ Emitters required to demonstrate for new permits that mitigation and controls will prevent significant deterioration of air quality (PSD)
 - ✓ Limits for emissions over 250 tons annually

Tailoring Rule

- EPA has essentially declared all of the US in non-attainment, but with no standard NAAQS for GHG
- Admit that they (and the states) can't administratively handle millions of permits at the 250 ton limit
- They have promulgated a modification to the limit and set it at 100,000 tons

1/1/11 – only for permits that would have been required for other air emissions and emit 100,000 tons GHG

7/1/11 – for any new project emitting 100,000 tons or 'major modification' of a current project at 75,000 tons

At the end of 5 years, evaluate lower limits

No Grandfathering of permits not issued! Permits in process 1/1/11 have to start over

Tailoring Rule

- Issue of “Major Modification”

Permit good until a major modification is made to the unit

What EPA considers “major modification” is undergoing revision

Likely that emitters will trigger a new permit in the next five years.

- Role of Best Available Control Technology

BACT analysis is required if you emit over the threshold

What BACT will be for GHG Emissions is unclear – May be fuel switching

No longer will BACT be a negotiated evaluation

EPA Guidance Document is at OMB for White House Approval

- Rule currently subject to a suit by over four dozen plaintiffs – including MJMEUC

RES Legislation

- Introduced Sept 2010 by Senator Bingaman (D-NM) and Brownback (R-KS)
 - Requires certain utilities to get 3% of their electricity from renewable sources by 2012 and 15% by 2021
 - One quarter of the limit can be satisfied by Energy Efficiency Practices
 - Required of Utilities selling more than 4M MWh of power per year at retail
 - Seeking a total of 60 co-sponsors
- Similar to a bill passed in Summer '09 by Bingaman's Energy and Natural Resources Committee
- Reid has reportedly promised floor time after the Election
- May pass the Senate, unlikely to pass the House

Election Impact on GHG Legislation and Regulation

- This Administration has undertaken the most aggressive environmental regulatory agenda since the original laws were passed
 - Typically EPA has tackled two or less major environmental regulations per cycle. Over a dozen are underway.
 - A loosely knit group of key leaders from environmental groups are publicly suggesting that a pro-environmental presidential candidate challenging Obama would receive a lot of Democrat support.
 - Public Discussion of Environmental Advisor Carol Browner leaving WH in 2010
- If the Administration loses the House
 - No cap and trade
 - Effort to limit new EPA regulations through the budget process
 - Expect an effort to force the Senate and/or the Administration to block legislation based on employment numbers to suspend certain environmental regulations.

Election Impact on GHG Legislation and Regulation

- If the Administration also loses the Senate
 - Expect budget blocks on EPA spending or major cuts in its budget
 - Don't be surprised if the Administration sustains an aggressive environmental position
 - Unlikely that Congress will significantly or successfully change either CAA or CWA
- If California passes Proposition 23, expect to see a significant shift to the right by all vulnerable candidates

Air Transport Rule - Purpose

Designed to Reduce Ozone Levels - especially from the transport of SO₂, NO_x and fine particulate material across state boundaries beginning in 2012

Responds to a lawsuit the EPA lost on CAIR in 2008

Requires advanced Air Pollution Control Equipment on EGU's with only minimal controls.

256 page rule published August 2, 2010

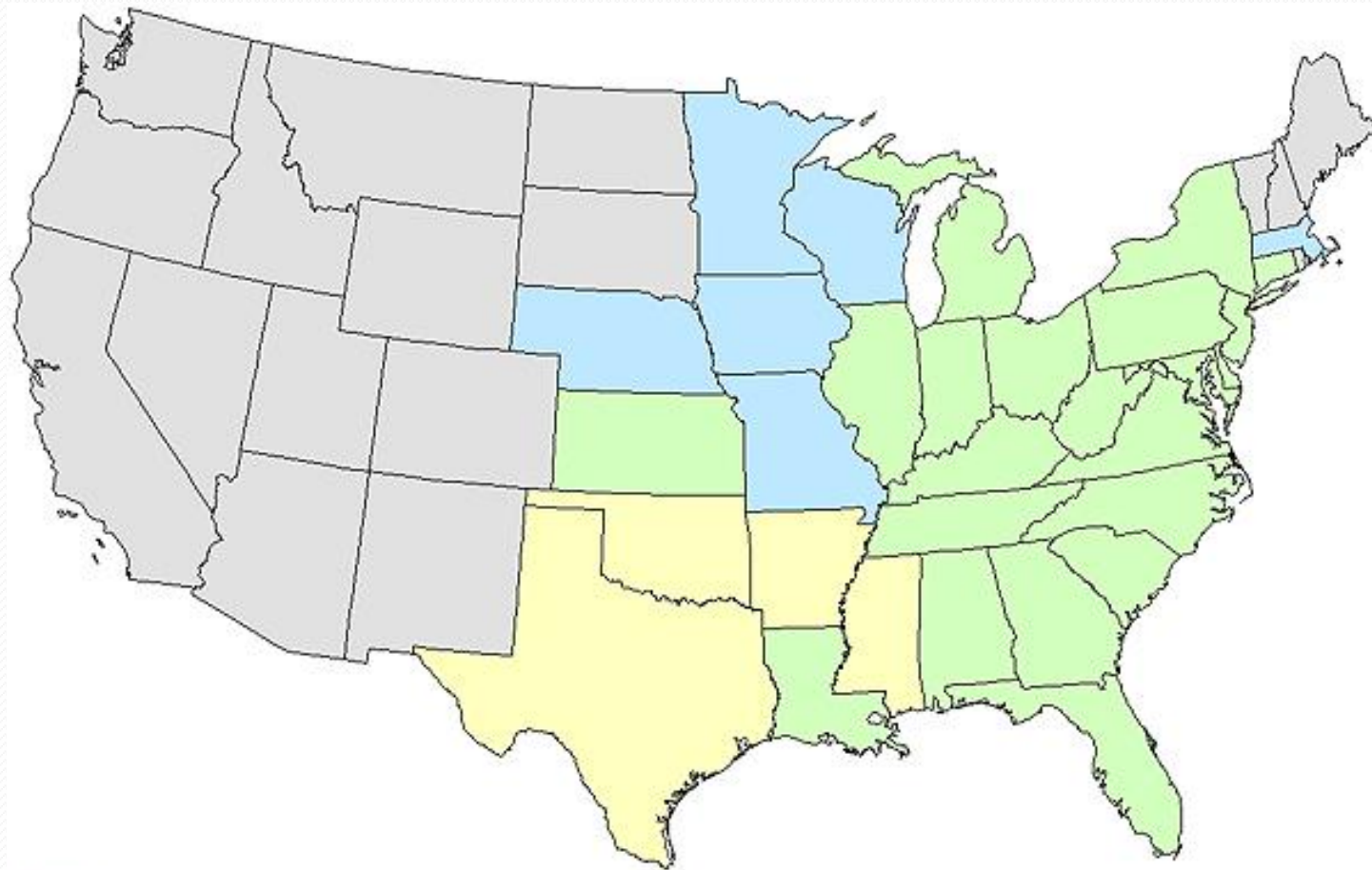
- Comments accepted until 10/1/10 – MJMEUC Filing

ANTICIPATED IMPACT

- By 2014, the rule and other state and EPA actions would reduce power plant SO₂ emissions by 71 percent over 2005 levels. Power plant NO_x emissions would drop by 52 percent.
- Focuses on Plants larger than 25 MW in 31 States

MECHANICS

- Predominate winds carry Midwest air pollutants toward Eastern States where ozone is more severe - Good Neighbor Feature of CAA
- Rule focused solely on power plants "**because their emission reductions are most cost effective**"
- Estimated ANNUAL costs \$2.8B (2006\$) of installing and operating advanced control equipment, fuel switching (to natural gas or low sulfur coal) or both



- States controlled for both fine particles (annual SO₂ and NO_x) and ozone (ozone season NO_x) (21 States + DC)
- States controlled for fine particles only (annual SO₂ and NO_x) (8 States)
- States controlled for ozone only (ozone season NO_x) (4 States)
- States not covered by the Transport Rule

EPA COMPLIANCE ASSUMPTION

- Operate already installed control equipment more frequently
- Use low sulfur coal or
- Install control equipment such as low NO_x burners, Selective Catalytic Reduction, or scrubbers (Flue Gas Desulfurization).
- MJMUEC Projects - NC2, Iatan, Plum Point, Prairie State have the hardware - better able to handle compliance

EPA APPROACH

Each state receives a pollution limit or budget

- Option 1 - Intrastate trading and limited Interstate trading (EPA preferred)
 - 10% of that state's annual emissions budget on a yearly basis, and about 6% of that state's emissions budget on a three-year rolling average basis.
- Option 2 - Trading only among plants within a state
- Option 3 - Limits on each power plant and allow averaging among plants

TROUBLE WITH ALL THREE

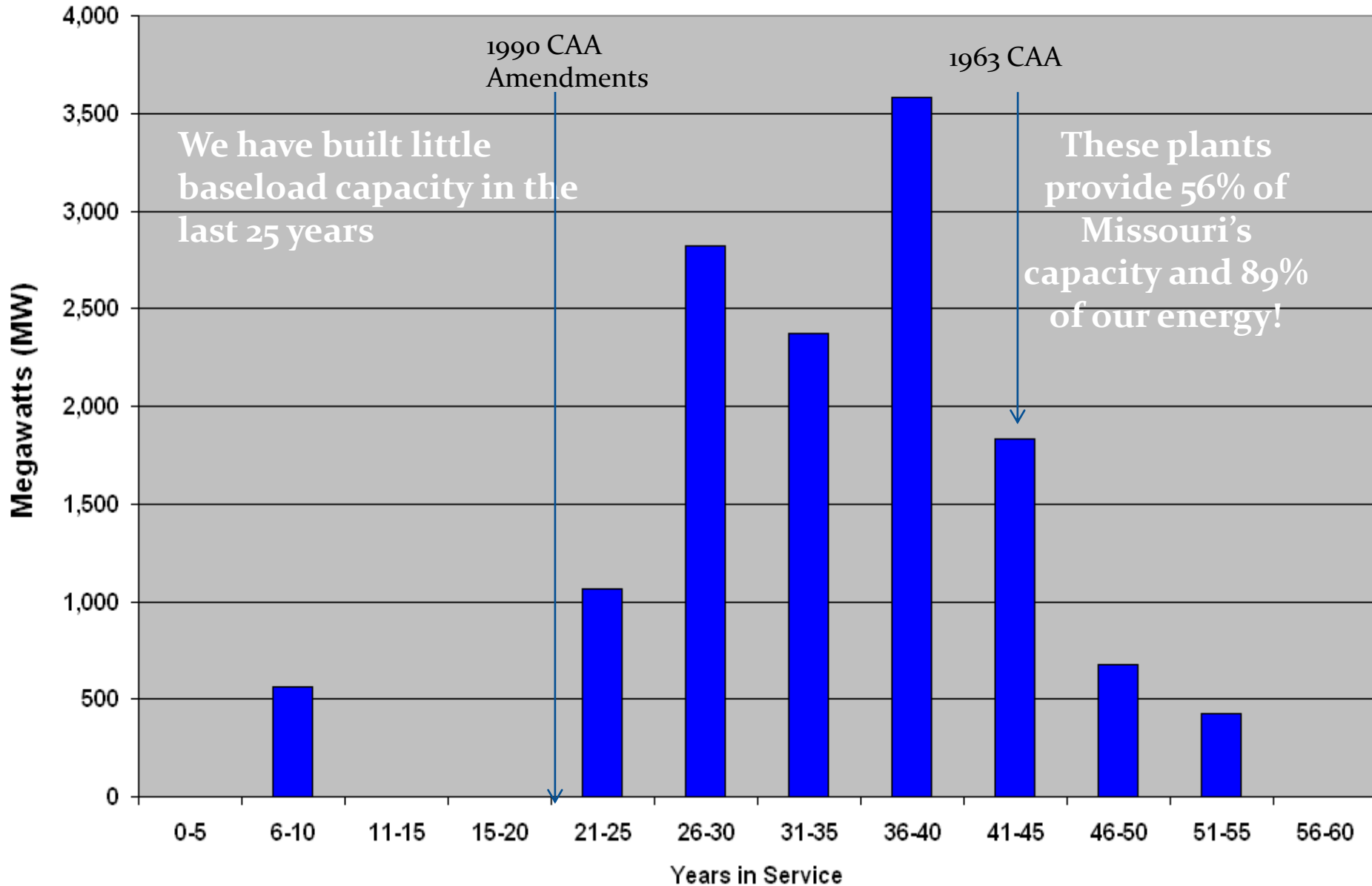
- Provides approximately as little as six months to come into compliance and to set up the mechanics of the trading program
- Each uses a cap and trade system
- It is not known until the end of the year whether a state exceeded its cap
- If the state exceeds its limit, the EPA determines which companies/plants led to the violation and requires double allowances
- Would be regulated by a Federal Implementation Plan (FIP) rather than a State Implementation Plan (SIP) although states can later adopt a SIP with similar or more stringent requirements

General Impact on Electric Sector

1. Increased amount of investment in older plants
2. Increased cost of operation for older plants
3. Increased pressure to retire some plants earlier
4. Some have suggested less availability/higher price for general market power

Recent studies have suggested that low energy prices and new emissions rules could lead to the retirement of between 25 and 40 gigawatts of the nation's 1,030 gigawatts of capacity through 2015. (LA 6.2 gigawatt peak 9/27/10)

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MJMEUC IMPACT

MJMEUC shifting to energy sources better equipped to comply with the new rules

There will be some financial impacts on all EGU powered by fossil fuel

ITS NOT OVER

- New Ozone NAAQS this year that will require more reductions not included in this regulation.
- Transport II Rule to further reduce NO_x emissions

Summer 2011

Finalized in Summer 2012

Questions?

