EPA Clean Power Plan

How will implementation work?
Legal & Implementation Challenges

Arkansas

[Image of a gavel and scales of justice]
CO$_2$ EMISSION RATE REDUCTION TARGETS

State targets range from 215 – 1,783 lb-CO$_2$/MWh

SPP REGIONAL CPP NUMBERS
% Emission Reduction Goals for States in SPP

Total CO₂ Emission Reduction Goals (%)

Average of SPP States = 38.5%

*Includes Future States with IS Generation in SPP (N. Dakota, S. Dakota, Montana, and Wyoming)
EPA’s Proposed Glide Path

Weighted Average CO₂ Emission Rates for SPP States (lbs/MWH)

*Includes states with IS generation that will be in SPP by 2015 (N. Dakota, S. Dakota, Montana, and Wyoming)
EPA Projected 2016-2020 EGU Retirements
(For SPP and Select Neighboring States)

*Extracted from EPA IPM data
**THESE RETIREMENTS ARE ASSUMED BY EPA – NOT SPP!
Impact of EPA’s Retirements on Reserve Margin

*Includes current load forecasts, current planned generator additions and retirements, and EPA’s projected retirements
SPP Reserve Margin Assessment

• Used current load forecasts supplied by SPP members, currently planned generator retirements, currently planned new generator capacity with GIAs, and EPA’s assumed retirements

• SPP’s minimum required reserve margin is 13.6%

• By 2020, SPP’s anticipated reserve margin would be 4.7%, representing a capacity margin deficiency of approximately 4,600 MW

• By 2024, SPP’s anticipated reserve margin would be -4.0%, representing a capacity margin deficiency of approximately 10,100 MW

• Out of 14 load serving members assessed, 9 would be deficient by 2020 and 10 by 2024
Projects Constructed 2005-2014
Transmission Build Cycle in SPP

Transmission Planning Process
- Planning Study (12-18 mo.)
- NTC Process (3-12 mo.)
- Construction (2-6 yr.)

GI and Transmission Service Process
- GI Study (12 mo.)
- TS Study (6 mo.)
- NTC Process (3-12 mo.)
- Construction (2-6 yr.)
LEGAL AND IMPLEMENTATION CHALLENGES
BSER is Based on Four Building Blocks

<table>
<thead>
<tr>
<th>Block</th>
<th>Assumption</th>
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<tbody>
<tr>
<td>1. Improve efficiency of existing coal plants</td>
<td>6% efficiency improvement across fleet, assuming best practices and equipment upgrades</td>
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<td>2. Increase reliance on CC gas units</td>
<td>Re-dispatch of Natural Gas CCs up to a capacity factor of 70%</td>
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<td>3. Expand use of renewable resources and sustain nuclear power production</td>
<td>Meet regional non-hydro renewable target, prevent retirement of at-risk nuclear capacity and promote completion of nuclear capacity under construction</td>
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<td>4. Expand use of demand-side energy efficiency</td>
<td>Scale to achieve 1.5% of prior year’s annual savings rate</td>
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*Uses 2012 data for existing units and estimated data for units under construction.
Additional Information

2014 Reliability Assessment Report
http://www.spp.org/publications/CPP%20Reliability%20Analysis%20Results%20Final%20Version.pdf

2014 Letter to EPA

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