EPA 111(D) PROPOSAL
REGULATING GHGS

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December 9, 2014
Supreme Court Decision—EPA has the authority to regulate GHGs
EPA regulated GHG emissions from autos
EPA proposed 111(b) regulation of new power plants (NSPS)
111(b) proposal triggers 111(d) for GHGs
OVERVIEW OF EPA PROPOSAL

- State Goals: Building Blocks
- Alternative Blocks Available
- Planning for 111(d) and Timeline
- Plan Requirements
- Questions
Four Building Blocks

- **Block One** — Heat Rate Improvement, 6%
- **Block Two** — Natural Gas Combined Cycle, 70% utilization and dispatch
- **Block Three** — Renewable Energy, Regionally 15% in 2012
  - Alternatives
    - State assessment of technical and market potential
      - Quantify each technology
      - Market potential for each of the technologies
    - Nuclear capacity increase
- **Block Four** — Demand Side Energy Efficiency
Alternative Blocks

- Fuel Switching at Individual Units
- Carbon Capture and Sequestration
- New Natural Gas Combined Cycle
- Assessment of Heat Rate Improvement at other than coal-fired units
- Co-firing lower carbon fuels (biofuels)
- Combined Heat and Power
- Distributed Generation
- Retirements
June 2014
Draft rule issued

June 2015
Rule finalized

June 2017
State plan due (with 1 year extension)

January 2020-29
Interim goal in effect

December 1, 2014
Deadline for comments to EPA

June 2016
State plan due

June 2018
Multi-state plans due (with 1 year extension)

January 2030 onwards
Proposed goal in effect

January 2020-29
Interim goal in effect
EPA Goals are proposed as a rate-based, lbs of CO2/GWh

Conversion to a mass-rate, lbs of CO2/yr, is not straightforward

Uncertainty on how to make future adjustments with mass-rate approach
Goals in the Blocks can shift to accommodate the State plan

“Remaining useful life” of units should be considered.

Rate-based or Mass-based

Direct or Portfolio Approach

- Direct means limits apply to individual EGUs
- Portfolio means enforceable obligations on a 3rd party other than the owner/operator of the EGU
State Plan Requirements

- Enforceable measures to reduce CO2
- Projected CO2 reduction or equivalent actions to meet EPA established goals
- Quantifiable and verifiable emission reductions
- Reporting process on implementation progress toward goals and implementation of corrective actions, if necessary
NODA

- 2020-2029 Glide Path—pre-2020 reduction credit
- Phase in of block 2—allow a “ramp-up” of NGCC
- Stringency of Block 2—several issues: regional availability, co-firing at steam boilers, and costs and benefits
- Block 3 Methodology—in-state and out-state RE as well as regionalization
- Formula for goal setting—inequity among states and requests comment on potential approaches for revision
- 2012 data year—request comment on three year average
QUESTIONS?