Special Education Session

General Investigation of the EPA's Final Rule
on Carbon Pollution Emission Guidelines
Docket No. 16-GIME-242-GIE
January 12, 2015

Jeff McClanahan, Director Utilities Division



Key Changes in Compliance and Interim Goal Dates

2015

- EPA Issues Final Rule with significant changes
- EPA Issues Proposed Federal Implementation Plan
- Motion for Stay filed by West Virginia et.al

2016 – 2018

- •Proposed Rule Compliance Plan with final Rules and Regs due by Sept. 2016; possibility of one or two year extension
- •Final Rule
- •Compliance Plan or a Request for Extension is Due by Sept. 2016.
- •"Commitment" to a Plan (e.g., Single or Multi-State, Mass or Rate) and Rules and Regs due by Sept. 2017.
- •Final Plan due Sept. 2018
- Continued Litigation is expected.

2022 – 2029

- Proposed Rule Compliance period began in 2020 and had "steep cliffs"
- Final Rule Compliance period begins in 2022 and establishes a "glide path". Interim goals are phased in over three "steps"

2030

- Proposed Rule Kansas's emission reduction was 36% (1,499 lbs co2/MW)
- Final Rule Kansas's emission reduction is 44% (1,293 lbs co2/MW)

In its Final Rule, EPA establishes Building Blocks 1 and 3 (BB1) and (BB3) goals based on the NERC regions

North American Electric Reliability Corporation Interconnections EASTERN INTERCONNECTION WESTERN INTERCONNECTION ELECTRICITY RELIABILITY COUNCIL OF TEXAS INTERCONNECTION

Key Changes from the Proposed Rule

Changes to the Building Blocks

- **BB1 Heat Rate Improvements:** Was 6% under Proposed Rule. Final Rule calculates heat rate improvement percentages by analysis of each NERC region:
 - Eastern Interconnection: 4.3% (Kansas)
 - Western Interconnection: 2.1%
 - ERCOT: 2.3%
- **BB2 Re-dispatch of Coal to NGCC:** Bases utilization of NGCC plants on 75% of their net summer capacity, as opposed to nameplate capacity.
- **BB3 Renewable Energy:** Proposed Rule used regional RPS goals as basis for RE expansion. Final Rule bases BB3 on historical RE capacity growth identified through modeling projections of each NERC region.
- **Energy Efficiency:** Formerly BB4, EE was removed from the BSER but is still an eligible compliance strategy.

Key Changes from the Proposed Rule

• "At Risk" Nuclear Removed from the Final Rule

- Under-Construction Nuclear may contribute to state goals. Under the proposed rule, Under-Construction Nuclear counted as an existing EGU and could not contribute towards state goal.
- Uprates at existing plants may also contribute to goals. (Uprate: An increase in available electric generating unit power capacity due to a system or equipment modification. An uprate is typically a permanent increase in the capacity of a unit.).

• Reliability "Safety Valve" for individual EGUs

- Reliability-critical affected EGU or EGUs may be granted a 90-day window in which they are not required to meet the state emissions standards, and this will not affect final performance toward state goals.
- Will not affect final performance toward state goals.
- For use in situations in which an immediate, unforeseen, emergency situation threatens reliability.
- EPA did not adequately address long-term reliability concerns.

Rate-Based Emission Goals:

• Statewide emission performance goals represented as an adjusted output-weighted-average, lbs. CO2/Net MWh from all affected EGUs.

Mass-Based Emission Goals:

- Statewide emission performance goals represented as an adjusted output-weighted-average, total tons CO2 from all affected EGUs.
- Final Rule provides equivalent rate-based and mass-based goals for each state.

- States may submit plans according to two types of plan approaches:
 - <u>Emissions Standards Approach:</u> Federally enforceable emissions standards imposed directly on affected EGUs .
 - Available for both rate and mass approaches.
 - <u>"State Measures Approach":</u> Comprised of various measures implemented by the state that are not federally enforceable but result in the affected EGUs meeting the requirements of the rule's emissions guidelines.
 - A state measures plan *must also* include a backstop of federally enforceable standards on affected EGUs that fully meet emissions guidelines—this would be triggered only if the state measures fail to result in the affected EGUs achieving required reductions on schedule.
 - Available <u>only</u> for mass plan approaches.

Trajectories and Interim Goals

- EPA has established three interim goal periods: 2022-24, 2025-27, 2028-29, as well as an interim goal for the 2022-2030 compliance period.
- States may use an emissions reduction trajectory that differs from the trajectory defined by the three interim goal periods if the overall interim goal is met on average over the compliance period, and the final goal is achieved in 2029.

Progress Tracking and Reporting

- **Plan Requirements:** "State plans must contain requirements for tracking and reporting actual plan performance during implementation, which includes reporting of CO2 emissions from affected EGUs."
- State Progress Reporting: States must submit a report to the EPA containing the emissions performance comparison for each reporting period no later than July 1 following the end of each interim goal period.

- **Leakage:** Under a mass-based plan, EPA identified a potentially perverse incentive whereby new CO₂ emitting sources, *not regulated by the CPP*, may have an incentive to increase generation as a substitute action for reducing emissions at affected EGUs
 - As a result, state mass-based plans must include requirements that align incentives to prevent leakage.
- "Trading Ready" and "Ready-for-Interstate Trading": States may design plans that contain features necessary and suitable for their affected EGUs to engage in trading with other states without developing a multi-state plan or formal arrangement (e.g., trading with EPA tracking systems).

- The Clean Energy Incentive Program (CEIP):
 - The CEIP was not in the proposed rule.
 - Under the CEIP, states may generate early action Emission Reduction Credits (ERCs) (Rate-based plans) or Emission Allowances (Mass-based plans).
 - EPA will match early action ERCs or Emission Allowances up to 300MM short tons of CO2.
 - ERCs or Allowances may be used for compliance by an affected EGU.

Key Issues

• Stranded Assets:

- The potential for stranded assets was addressed extensively in comments on the proposed rule.
- The Final Rule does not adequately address stranded assets.
- EPA asserts stranded assets will be addressed by the additional compliance time and the use of trading programs.

• Remaining Useful Life:

- The remaining useful life issue was also addressed extensively in comments on the proposed rule.
- In the Final Rule, EPA does not allow states to adjust its goal to accommodate the remaining useful life of an EGU.
- EPA's rationale is based the additional compliance time and the use of trading programs will allow plants with remaining debt or useful life to continue to operate.

Next Steps

- Select consultant.
- Consultant to work with individual utilities to review each utility's preferred/feasible compliance options.
- After Consultant completes review with utilities, stakeholders discuss and decide which compliance options to model on a state-wide basis.
- Stakeholders present selected options to Commission for its review.

Overview of the Clean Power Plan

Next Steps

- Additional educational sessions or presentations?
- Timeline due February 1, 2016.