

EPA'S PROPOSED CLEAN POWER PLAN

SENATE UTILITIES COMMITTEE
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EPA's Proposed Clean Power Plan

- A **proposal** pursuant to Section 111(d) of the Clean Air Act
- Proposed rule would cover 1,000 US fossil fired power plants
- Applies to steam generating units and stationary combustion turbines with base load rating greater than 73 MW
- Comment period originally 120 days.....extended 45 days
- Allows states to work individually or in regional groups
- Proposed rule requires states to prepare and submit a plan for to EPA
- Different from other state plans KDHE routinely prepares
- If states do not submit a plan, EPA will issue a federal plan (FIP)

Timeline for Proposed Regulation

- **Summer 2015** – Final rule expected from EPA
- **Summer 2015** – Proposed Federal Plan (FIP) from EPA
- **Summer 2016** – State plan due date
 - Option for one year extension if time needed for legislative reasons and/or regional approaches
- **Summer 2017** – Complete individual plan due if state is eligible for a one-year extension
- **Summer 2018** – Complete multi-state plan due if state is eligible for two-year extension
- **2020** – Start date for interim progress goals
- **2030** – Date to meet final goal

Kansas affected EGUs

Coffeyville Mun. Power Plant Unit 4

Empire District - Riverton Unit 7/39

Empire District - Riverton Unit 8/40

Kansas City BPU - Nearman Unit 1

Kansas City BPU - Quindaro Units 1 and 2

KCP&L - La Cygne Units 1 and 2

Mid-Kansas Electric - Cimarron River Unit 1

Mid-Kansas Electric - Fort Dodge Unit 4

Mid-Kansas Electric - Great Bend Unit 3

Sunflower Electric - Garden City Unit S2

Sunflower Electric - Holcomb Unit 1

Westar Energy - Gordon Evans Units 1 and 2

Westar Energy - Hutchinson Unit 4

Westar Energy - Jeffrey Unit 1, 2 and 3

Westar Energy - Lawrence Units 3, 4 and 5

Westar Energy - Murray Gill Units 1, 2, 3 and 4

Westar Energy - Tecumseh Units 7/9 and 8/10

Winfield Mun. Power Plant #2, Unit 4

Basis for State Emission Rates

Emission Reduction Measures	Value Allocated in Goal-Setting Formula
Make fossil fuel power plants more efficient	Average heat rate improvement of 6% for coal steam electric generating units
Use low-emitting power sources	Dispatch combined cycle gas units up to 70% capacity factor
Use more zero- and low-emitting power sources	Dispatch to new nuclear and new renewable generation; and continued use of existing nuclear generation.
Use electricity more efficiently by reducing demand on power plants	Increase demand-side energy efficiency to 1.5% annually.

Kansas Emission Rates in Proposed Rule

- Future goals calculated from 2012 baseline
- Goals differ for each state based on state's generation mix
- Kansas 2012 baseline emissions
 - 1940 lbs CO₂/MWhr
- Interim average goal for period 2020-2029
 - 1578 lbs CO₂/MWhr
- Final goal for 2030 and after
 - **1499** lbs CO₂/MWhr
 - **23%** reduction from 2012 baseline

Potential Means to Comply

- Efficiency improvements at plant boilers and turbines
- New or retrofitted combined cycle gas turbines
- Retiring older high-emitting units
- Dispatch changes for existing units
- Increased use of renewable energy
- Demand side energy efficiency programs
- Transmission efficiency improvements
- Trading programs

State Plans

- States have flexibility within bounds of EPA guidance
- Guidance must outline “best system of emissions reductions” that has been “adequately demonstrated”
- State emission standards can be based on most cost-effective option
- Can take into account remaining life of facility
- EPA is proposing approaches “outside the fence” for the first time
- Challenges of incorporating KCC programs
- Failure by KDHE to act will result in a Federal Implementation Plan

Comments to EPA

- Developed through extensive outreach to KCC and stakeholders
 - EPA authority to regulate off the footprint
 - Insufficient time to develop plan
 - Difficulty in meeting 2020 goal
 - Calculation errors in goal setting
 - Heat rate improvement building block (6%) too high
 - Great potential for stranded utility assets in Kansas
 - Kansas unable to take credit for future merchant wind expansion in a Kansas plan

Next Steps

- Wait for final rule in Summer of 2015
- Review and comment on the proposed Federal Implementation Plan
- Coordinate with the KCC and the AG on legal issues
- Continue discussions with utilities
- Evaluate range of strategies to move forward

2014 KDHE to EPA Comment Letters

- GHG Standards for New EGUs
- GHG Standards for Existing EGUs – Section 111(d)
- 1-hour SO₂ Designations Consent Decree
- 1-hour SO₂ Data Requirements Rule
- Kansas 2008 Ozone i-SIP Approval
- New Standards for Grain Elevators
- Proposed ozone standard comments being developed

Questions / Links

- <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule> - CPP proposed rule page, including fact sheets
- <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents> - Technical documents
- <http://www2.epa.gov/cleanpowerplanttoolbox> - Resource page

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