### Replacing the Clean Power Plan

Office of Management & Budget
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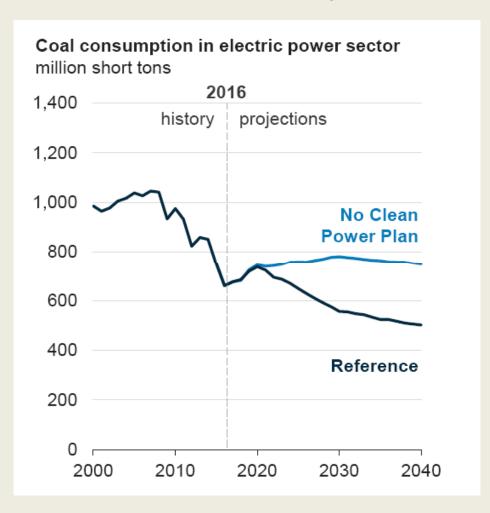
### **Labor Participants**

- AFL-CIO
- Int'l Brotherhood of Electrical Workers
- Int'l Brotherhood of Boilermakers
- SMART Transportation Division
- United Mine Workers of America
- Utility Workers Union of America

### The CPP is a job killer

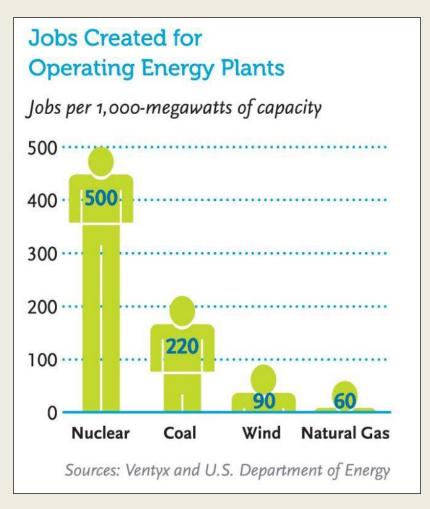
- Utility, coal and railroad jobs took a big hit as a consequence of 40,000 MW of coal plant closures due to the EPA 2012 MATS rule (per DOE/EIA 2017 AEO).
- Additional job losses due to low natural gas prices, lack of demand growth, effective NSPS ban on new coal plant construction.
- Rescinding the CPP is a critical step in reducing future job losses in the coal generation, transportation, and mining sectors.

# Current EIA projections: "No CPP" reduces coal losses by 230 MMTPY



Source: DOE/EIA Annual Energy Outlook 2017.

# Coal and nuclear have the most jobs per MWh of generation



### Rescinding the CPP

- The Clean Power Plan was specifically targeted by EO 13783 for review and revision.
- EPA issued an ANPR on March 28 announcing its upcoming review of the Power Plan.
- DC Circuit Order on April 28 put the CPP case in abeyance for 60 days with status reports thereafter (similar order issued March 30 for NSPS case, North Dakota, et al. v EPA).
- Awaiting DC Circuit decision on abeyance or remand.

### Legal Bases for Rescinding the CPP

- 28 states and over 150 petitioners opposed the rule.
- On Feb. 9, 2016, the Supreme Court stayed the rule, agreeing that petitioners were likely to prevail on the merits of the court challenge due to serious legal flaws in the rule.
- September 27<sup>th</sup> oral arguments before the DC Circuit focused on five "baskets" of legal issues.
- EPA rescission of the CPP should be based on the strongest legal arguments put forth in oral argument for invalidating the rule.

### Five baskets of legal issues

- Generation shifting (coal to gas and coal to new renewables)
- Section 112 exclusion ("scriveners error" are MACT sources exempt? See Tatel colloquy.)
- BSER "adequately demonstrated" and "achievability" issues
- State and Constitutional issues (WV and WI SGs, Prof. Tribe)
- Notice issues (final rule dramatically different)

# Strongest legal arguments against the CPP

- Strongest arguments against the CPP focused on—
  - generation shifting from coal to gas "outside the fence" (CPP Building Block 2), and
  - CPP Building Block 3 provision for states and utilities to enhance renewable energy sources, in effect subsidizing new renewable projects in other states.
- Section 111(d) requires "standards of performance" for sources reflecting Best System of Emission Reduction that has been "adequately demonstrated."
- Solar, wind are not "sources" regulated under section 111(d), and do not emit "pollutants" regulated under the Clean Air Act.
- EPA overstepped the bounds of "inside the fence" controls contemplated by section 111(d).

### Policy Reasons for Rescinding the CPP

- Even if EPA had authority to adopt the CPP, there are strong policy reasons for why EPA should not set standards based on "outside the fence" measures. Notable examples include the following—
  - The rule seeks to transform the power sector and usher in a new "clean energy" economy without clear congressional authorization.
  - The rule effectively regulates the energy sector on issues that are outside of EPA's area of expertise.
  - The rule intrudes on states' traditional sovereign authority to regulate the generation and use of electricity.
  - The rule fails to provide states with lead role and broad latitude in the implementation of reduction requirements.

# Background: utilities already have achieved 2/3rds of CPP CO2 reductions

### U.S. Power Sector Carbon Dioxide Emissions Declining (2005-2016)

- 1/3 of U.S. power generation comes from zero-emissions sources
- As of 2016, industry CO<sub>2</sub> emissions were nearly 25 percent below 2005 levels
- Trajectory will continue based on current trends



### Legal Bases for a Replacement Rule

- EPA authority to regulate CO2 established under Mass. v. EPA (S.Ct. 2007).
- Endangerment finding remains in place.
- Section 111(d) is the vehicle for regulating power plant CO2 – UARG v. EPA (S. Ct. 2015) and transcript.
- Building Block #1 "inside the fence" plant efficiency improvements unanimously agreed as valid by state and non-state petitioners.

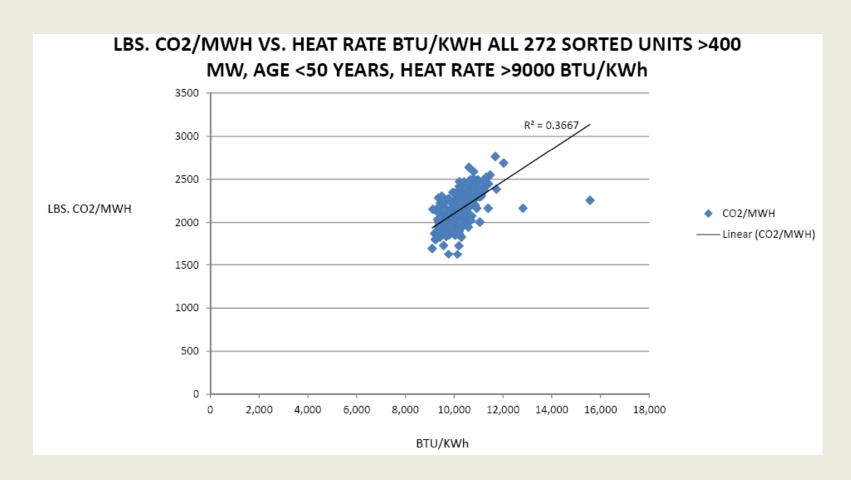
## Heat rate improvements are not very effective in reducing CO2 emissions

- Analysis of the NETL coal power plant data base shows weak correlation between heat rates and CO2 emission rates.
- Original CPP approach to Building Block 1 believed to achieve only 2-3% reductions of CO2.

## NETL Data Sort: Identify units likely to survive MATS rule

- Coal units >400 MW
- Age <50 years</li>
- Heat rate >9000 BTU/kwh
- 272 units totaling 176,700 MW
- 141 BIT units
- 110 SUB units
- 21 LIG units

## Regression results: heat rate vs. CO2 emission rate (R2=0.37)



Source: UMWA analysis of NETL 2005 Coal Plant Data Base.

## Setting a standard of performance "inside the fence"

- Statistical analysis of "best performing units" could be used to set state targets (e.g., top 20%, top 25%) in tons or emission rates.
- Trading should be allowed "outside the fence" to minimize cost.
- Need to consider baseline to provide credit for past reductions.
- NSR reform can dramatically improve plant efficiency.

### Reforming NSR is key to major efficiency improvements

- The NSR program has stymied investment in the existing coal fleet due to concerns about triggering BACT and other onerous NSR permitting requirements.
- To enhance the effectiveness of a replacement CPP rule, EPA must streamline NSR regulations to incentivize major investments in areas such as boiler and turbine upgrades.
- Substantial efficiency improvements would result in the existing coal fleet, along with reduced CO2 emission rates.

### **Options for Fixing NSR**

- Revisions to existing NSR regulations
  - Clarify that reliability, efficiency, and safety improvement projects performed routinely within the electric power sector (and not only those projects performed routinely at the specific power plant) qualify for the NSR exemption for routine maintenance, repair, and replacement.
  - Replace the current annual emission increase test with the current NSPS emission increase test based on maximum hourly emissions
- Scope of Fix
  - Could apply to all projects undertaken by any industry, or
  - Could be limited to those projects undertaken by power generation sector