EPA Rule Update - Targeting U.S. Coal to Address Global Climate Change:

All Pain, No Gain

RMCMI Regional Meeting
May 8, 2014
Discussion Outline

• Brief Recap New Court Cases on EPA Rules
• Overview of EPA’s NSPS for GHGs
• Projecting the Pain and the Gain
• Where Things Go From Here
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Recent Court Cases Impacting EPA Rules

Cross-State Air Pollution Rule

- Rule stayed by D.C. Circuit on December 30, 2011 (for all practical purposes, THIS is the war was won)
- Rule reversed by D.C. Circuit on August 21, 2012
- Supreme Court Reverses & Remands on April 29, 2014
- Future of CSAPR still uncertain for several reasons
  - D.C. Circuit still has to act on the pending stay
  - EPA may turn to alternatives instead of pressing CSAPR
  - D.C. Circuit still has to consider pending “as-applied” challenges, including the types specifically acknowledged by the Supreme Court (Texas facts are the best)
Texas’ Alleged “Significant Contribution”

- EPA found anything over .15 micrograms/m$^3$ to be a “significant contribution” (.12 now)
- EPA alleges that Texas contributes this amount to a single receptor in Illinois (and that no state in between the two is responsible, so they are not subject to CSAPR).
- What does this “significant contribution” look like in reality?
  - Assuming that a single human being inhaled the maximum amount of exterior air, every day of a 70 year lifetime, that person would breath in <91 milligrams.
  - If you take a package of Splenda and sprinkle it on the table, dividing it into ten piles, each of those piles would be about 100 milligrams.

So, EPA’s View of “Significant contribution” is so small that it would take a lifetime to inhale 1/10$^{th}$ of a Splenda packet of PM
Recent Court Cases Impacting EPA Rules (cont.)

Mercury & Air Toxics Standards Rule

- Final Rule published on February 16, 2012
- Requires coal-fired power plants to reduce Mercury emissions by 90% in four years (major PM and HCL reductions required – driving older unit retirements)
- EPA adjusted new-unit requirements on March 28, 2013, relaxing limits in response
- DC Circuit upheld MATS on April 15, 2014
  - Practical compliance date: April 16, 2016 (after extension)
  - Low-rank subcategory upheld despite environmental suit
GHG Rules (Timing & Tailoring Rules)

• Supreme Court granted review on EPA’s regulation of stationary sources under the New Source Review (NSR) program (Timing Rule) & left in place the Endangerment Finding & Tailpipe Rule

• Oral Argument was held on February 25, 2014 and Court’s questions clearly indicate that Tailoring Rule is also up in the air along with Timing Rule

• Even if appeal is successful, the practical benefit for EGUs is somewhat limited – NSPS GHG rules not subject to these challenges (and explicitly recognized as okay in briefs/questions)
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New Source Performance Standards (NSPS) for GHGs

- April 13, 2012 - Proposed New Plant NSPS Rule published
- January 8, 2014 - New Plant Rule re-proposed in FedReg
- February 26, 2014 - NODA issued on EPACT Issue
- May 9, 2014 - Comment deadline on New Plant Rule & NODA
- June 2014 - EPA anticipated FINAL Rule on new plant GHG NSPS and PROPOSED Rule on existing plant rule
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The “PAIN” of NSPS for GHGs

NEW PLANT RULE:
- Effectively, no new coal-fired power plants can be built in the United States after March 2013 (CCS mandated at that point)

EXISTING PLANT RULE (Using NRDC model as basis):
- Double-digit power price increases (11.4% [res]; 11.7% [comm])
- Up to $109 billion increase in costs of electricity services
- Up to $54 billion increase on non-power natural gas costs
- Up to 2.85 million lost jobs due to adverse economic impacts
- Up to 83 GW of coal retirements (more than ¼ of the fleet)
The “GAIN” of NSPS for GHGs

(based on EPA analysis/methodology in light duty vehicle rule and assuming accuracy IPCC projections):

• Addresses only 0.18% of world’s CO₂ emissions.

• Global temperature reduced by only 0.01 degrees C

• Mitigation of 0.016 inch of sea level rise; the thickness of 4 sheets of paper or 1/3rd the thickness of a dime)
Targeting U.S. Coal to Address Global Climate Change

ALL PAIN, NO GAIN

PAIN:
- Increase in electricity price of up to 11.4% for residential and 11.7% for commercial.
- Up to $109 billion increase in costs of electricity services.
- Up to $54 billion increase on natural gas costs (not for electricity).
- Up to 2.85 million lost jobs due to adverse economic impacts.
- Up to 83 GW of coal retirements (more than ¼ of the fleet).

GAIN:
- Addresses only 0.18% of world’s CO₂ emissions (see pie chart).
- Global temperature reduced only 0.01°C.
- Mitigation of 0.016 inch of sea level rise; the thickness of 4 sheets of paper.

"Pain" data is through 2033 and is based on NERA’s analysis of NRDC’s proposed standards for regulating greenhouse gases from existing coal-fired power plants. NERA predicts U.S. electricity sector emissions reductions of between 20% to 30%, depending on the design of the compliance program. "Gain" data assumes a 33% reduction in emissions by 2050. The shaded area of the highlighted wedge on the right of the graphic indicates the amount of global man-made carbon dioxide emissions (35%) that are absorbed by the world’s oceans and vegetation & land. This is over eleven times the amount of U.S. coal electricity CO₂ emissions. Sources: NERA Economic Consulting, A Carbon Dioxide Standard for Existing Power Plants: Impacts of the NRDC Proposal (March 2014); The Global Carbon Cycle, based on data from Figure 7.3, IPCC, Fourth Assessment Report: Climate Change 2007 (AR4); ACCCE, Climate Effects of Carbon Regulations for the U.S. Coal Fleet (Sept. 2013).
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Come Join the BET Coalition!

**Railroads**
- BNSF
- Union Pacific

**Electric Power Generators**
- AEP
- South Texas Cooperative
- San Miguel Elec. Cooperative
- Luminant / EFH
- Texas Municipal Power Agency

**PRB & Lignite Coal Producers**
- Arch
- Cloud Peak
- Kiewit
- Luminant Mining
- North American Coal Corporation
- Peabody
- Westmoreland

**Associations**
- ACCCE
- TMRA
- Tx Electric Coop. Assoc.
Things to Remind Policy Makers

• Coal is responsible for 39% of electricity generated in U.S.
• $118 billion has been invested by the coal fleet through 2013, which has resulted in SO2, NOx, PM being reduced by almost 90% per kWh.
• An additional $27 billion investment is expected for emission controls between 2014 and 2016.
• 62,000 MW of coal have announced retirement by 2025 …. 51,000 MW linked to EPA policies.