


# The EPA's Effect on Your Co-op's Rates

Tri-State REMA Financial Manager's Conference  
August 19, 2011  
Breezy Point, MN



**National Rural Electric  
Cooperative Association**

A Touchstone Energy® Cooperative 



# Where does your electricity come from?

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# Your power comes from...

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Basin Electric Power Cooperative  
In 2010, 81.17% was coal-based generation

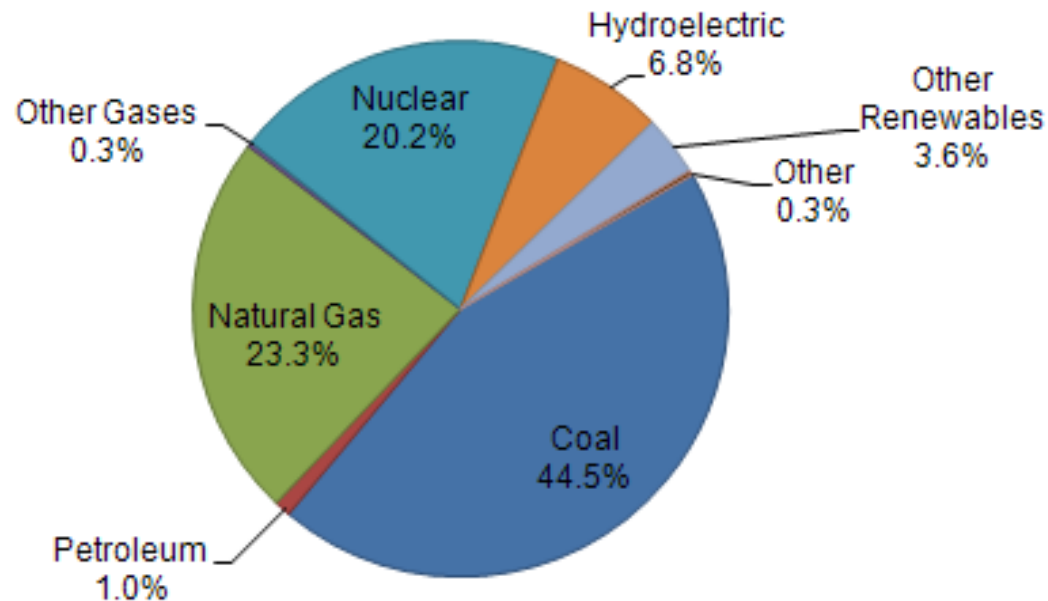
Great River Energy  
In 2009, 73.45 % was coal-based generation

Dairyland Power  
In 2010, 88.7% was fossil-based generation

# U.S. Power Generation

Figure ES 1. U.S. Electric Power Industry Net Generation, 2009

Total = 3,950 billion kWh



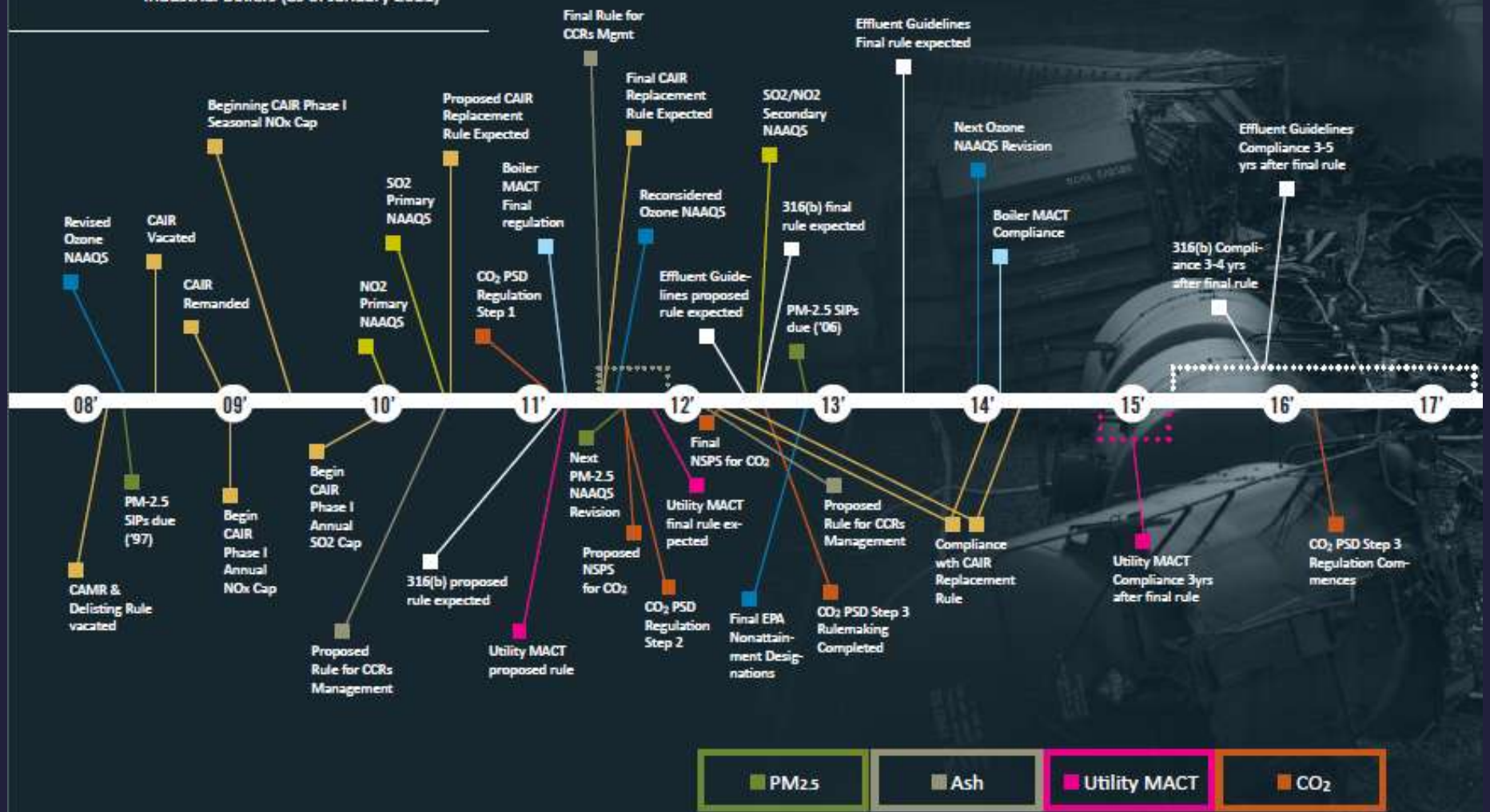
Electric Utility Plants = 60.1%

Independent Power Producers and Combined Heat and Power Plants = 39.9%

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

# EPA's Regulatory Train Wreck

Currently Estimated Regulatory Timeline for Coal-Fueled Power Plants and Commercial Industrial Boilers (as of January 2011)



**Table 1. Timing of EPA Rules and Impacts on Coal-Fired Utilities**

Rule or Standard	Final Rule	EPA Estimate of Costs/Impacts <sup>a</sup>
Cross-State Air Pollution Rule	Finalized July 6, 2011	\$2.4 billion/year <sup>b</sup>
Utility MACT Rule	Expected November 16, 2011	\$10-\$11 billion/year
National Ambient Air Quality Standard (NAAQS) for sulfur dioxide	Promulgated June 22, 2010	\$1.5 billion/year for all sources, but limited impact on electric generating units (EGUs) <sup>a</sup>
NAAQS for ozone	Expected July 2011	\$19-\$25 billion/year for all sources but limited impact on EGUs <sup>a</sup>
NAAQS for particulate matter	Not yet proposed; expected in 2012	Unknown
New Source Performance Standards for Greenhouse Gases	Not yet proposed; expected May 26, 2012	Unknown
Cooling Water Intake Structure Rule	Expected July 27, 2012	\$319 million/year
Clean Water Effluent Limitation Guidelines Rule	Not yet proposed; expected January 31, 2014	Unknown
Coal Combustion Waste Rule	Expected 2012 or later	\$587 million-\$1.5 billion/year

Source: Compiled by CRS.

- a. Costs as estimated by EPA. See text for discussion of costs and impacts of specific rules.
- b. Of the \$2.4 billion annual cost, \$1.6 billion is attributed to the Clean Air Interstate Rule (CAIR), a 2005 rule that the Cross-State Rule is replacing.

# “The Big Five”

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- Cross- State Air Pollution Rule
- Hazardous Air Pollutants Rule
- Coal Ash Regulations
- Cooling Water Intake Rule
- Greenhouse Gas Regulation

# Cross-State Air Pollution Rule





# Hazardous Air Pollutants

- Metals, including mercury, arsenic, chromium, and nickel
- Acid gases, including hydrogen chloride and hydrogen fluoride
- Particulate matter



# Coal Combustion Residues

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# Cooling Water Intake Structures

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# Greenhouse Gas Emissions

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- Endangerment Finding
- Tailoring Rule
- Best Available Control Technology
- New Source Performance Standards

# So, what does this mean for rates?

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## From Minnkota's 2010 Annual Report

In total, for Young 1 and Young 2, in excess of \$425 million will be spent on this emission control equipment by the end of 2011. Significant work on all these facilities occurred during 2010.

## From Basin Electric's 2010 Annual Report

By 2012, Basin Electric and its subsidiaries will have invested more than \$1.4 billion in various types of environmental controls on their facilities with annual expenses of \$153 million.

# For more information...

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# Questions and Answers

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<https://www.cooperative.com/InterestAreas/Environmental/Pages/default.aspx>

Environmental Bulletin