111(D) REQUIREMENTS FOR EXISTING FOSSIL-FUEL EGUS

NARUC Winter Committee Meetings

February 9, 2014

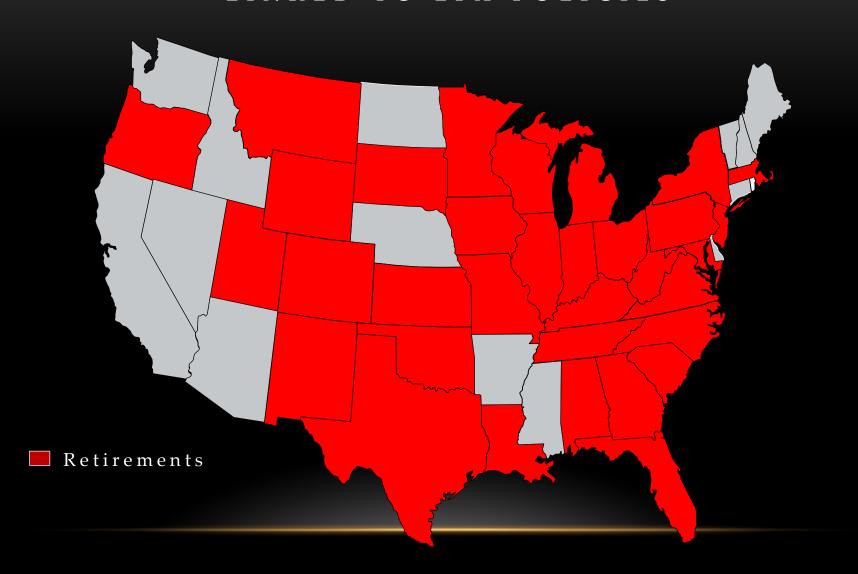
Paul Bailey
American Coalition for Clean Coal Electricity

NUMBERS

 Coal responsible for 39% of electricity generated during 2013.

- SO2, NOx, PM reduced by almost 90% per kWh.
- \$118 billion invested through 2013 to reduce emissions. Additional \$27 billion 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.

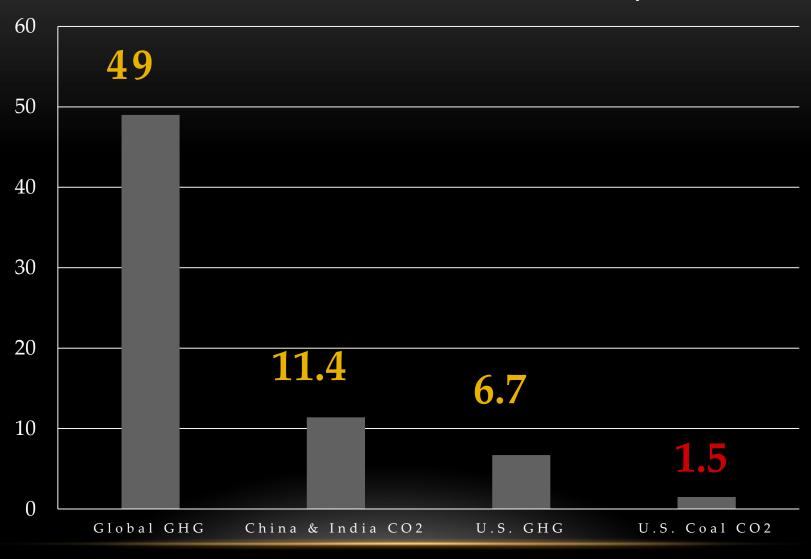
COAL RETIREMENTS IN 33 STATES LINKED TO EPA POLICIES



NUMBERS (CONTINUED)

- U.S. electric sector has reduced CO₂ emissions by 16 percent below 2005 levels.
- Coal fleet CO₂ emissions have declined by almost 24 percent.
- EIA projects CO₂ emissions from coal fleet will be 19 percent below 2005 levels in 2020.

GHG EMISSIONS (billion tonnes/yr)



ACCCE PRINCIPLES FOR CARBON REGULATION UNDER 111(D)

- Keep electricity affordable and reliable
- Base requirements on what is economically achievable at each generating unit
- Respect state primacy
- Avoid additional premature coal retirements and stranded investments
- Provide compliance flexibility and allow time for compliance
- Remove barriers to efficiency improvements

111(D) STANDARDS

- ✓ Set inside-the-fence standards based on what is achievable at each coal-fired and gas-fired unit. Standards should not be based on fuel switching or reduced utilization.
- ✓ Once inside-the-fence standards are set, allow outside-the-fence flexibility measures to comply.

SOME IMPACTS OF A SYSTEM-BASED PROPOSAL

Consumer costs	\$116 Billion to \$151 Billion
Coal retirements	35,000 MW to 83,000 MW
Cost of natural gas for non-electric sectors	\$8 Billion to \$54 Billion
Job losses	Less than 1,000/yr to 178,000/yr
Electric sector CO2 reduction	12% to 23%

A FEW MAJOR POLICY CONSIDERATIONS

78 Republicans

- ✓ Fuel diversity
- ✓ Reliability/deliverability
- ✓ Compliance costs
- Energy price increases
- ✓ Stranded investments
- Climate change benefits