



Bureau of Air Quality

Energy Effects of EPA's Proposed Clean Power Plan

Pennsylvania Senate Environmental Resources and Energy Committee Harrisburg, PA June 27, 2014

- EPA proposed State Specific goals by 2020 and 2030
- EPA's Final rule by June 2015
- State Plans Due to EPA by June 2016
- EPA may grant extensions
 - Individual State Plans for 1 year
 - Multi State Plans for 2 Years



 EPA proposed CO2 emission reduction goals for Pennsylvania.

\circ Interim Goal by 2020

o 37% from 2005 level
o 23% from 2012 level

 $_{\odot}\,$ Final Goal by year 2030

 $_{\odot}$ 44% from 2005 level

 $_{\odot}$ 31% from 2012 level



- EPA established CO2 emission targets using:
 - Coal-fired boiler heat rate improvements (assumed 6%)
 - Switching to natural gas fired units
 - Switching to additional nuclear power
 - More renewable energy
 - Energy efficiency programs ("outside the fence")



- The EPA's Clean Power Plan makes Section 111(d) the State Energy Plan, rather than a component of the State Energy Plan.
- EPA claims that these measures represent the "Best System of Emission Reduction" (BSER) which has been "adequately demonstrated."



- EPA proposed Pennsylvania's final goal using the following rate reduction contributions:
 - Redispatch of natural gas (11%)
 - Redispatch of additional nuclear (7%)
 - Renewable energy (43%)
 - Energy efficiency programs (27%)
 - Coal-fired heat rate improvements (11%)



• Pennsylvania's coal fleet annual capacity

Year	Capacity Factor	Coal Consumption	Reduction in Coal Consumption from 2005
2005	73.4%	43.4 million tons	N/A
2012	54.6%	33.0 million tons	24%
2020	23.7%	12.5 million tons	71%
2030	16.9%	10.5 million tons	76%



PA's Section 111(d) White Paper

- PA's White Paper offers a "no regrets" strategy.
 - Process efficiency improvements
 - Addresses the single greatest impediment to efficiency improvements
 - Framework is based on facilitating compliance
 - Regulates only the truly affected sources
 - CO₂ reductions achieved from other sectors



PA's Section 111(d) White Paper

- PA's framework results in:
 - -Cleaner air
 - -A fuel diverse energy profile
 - -Lower electricity prices
 - -More jobs





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