



Bureau of Air Quality

# Energy Effects of EPA's Proposed Clean Power Plan

Citizens Advisory Council Meeting

July 15, 2014

# EPA's Section 111(d) Proposal

- 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's Section 111(d) Proposal

- EPA proposed CO2 emission reduction goals for Pennsylvania.
  - **Interim Goal by 2020**
    - 37% from 2005 level
    - 23% from 2012 level
  - **Final Goal by year 2030**
    - 44% from 2005 level
    - 31% from 2012 level

# EPA's Section 111(d) Proposal

- 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”)

# EPA's Section 111(d) Proposal

- 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's Section 111(d) Proposal

- 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%)

# EPA's Section 111(d) Proposal

- 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
  - CO<sub>2</sub> 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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DEPARTMENT OF ENVIRONMENTAL PROTECTION



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