Committee on Clean Coal & Advanced Energy Technologies Collaboration

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Kentucky Power Company
AEP Generation Before MATS

- **Coal/Lignite** (Red)
- **Natural Gas** (Purple)
- **Wind** (Green)
POWER PLANTS TO BE CLOSED BY EPA REGULATION*

- TOTAL MW TAKEN OFFLINE: 34,705
- THAT’S NEARLY 10% OF OUR COAL ENERGY CAPACITY - GONE
- EACH RED DOT MEANS LESS ENERGY FOR THE U.S. ECONOMY

*EACH DOT REPRESENTS A POWER PLANT WHERE ONE OR MORE ELECTRIC GENERATING UNITS ARE EXPECTED TO CLOSE. SEE HTTP://INSTITUTEFORENERGYRESEARCH.ORG/EPA-POWERPLANT-CLOSURES

Courtesy: Institute for Energy Research 6/12

A unit of American Electric Power
U.S. Generation Capacity After MATS

Electricity Generation Capacity to be Shut Down by EPA’s CSAPR and MATS Rules

- EPA Claimed: 9,500
- NERC Strict Case: 16,350
- DOE "Stringent" Test: 21,000
- Actually Announced: 25,279
- EPA Modeling and Actual Announcements: 34,705

Courtesy: Institute for Energy Research 6/12

A unit of American Electric Power
Kentucky Power’s Big Sandy Plant

2012: Filed to install scrubbers on Unit 2
- 30% impact on consumer rates
- Significant rate resistance
- No political support
- Withdraw filing/Seek other options

2013: Filed to transfer generation from Mitchell Plant
- Plant’s units are scrubbed
- 15% impact on consumer rates
- 780 MW transfer approved

2015: Retire BSP Unit 2; Convert Unit 1 to Gas

Unit 1: 278 MW (1963)
Unit 2: 800 MW (1969)

Both Units Coal-Fired

Location: Louisa, KY
AEP’s Mitchell Power Plant

- Both units are “scrubbed” and expected to meet pending environmental regulations
- Experienced staff/work force to operate plant
- Known plant history, operating costs, etc.
- Asset transferred at net book value; less expensive than adding scrubbers to Big Sandy Unit 2

Unit 1: 770 MW (1971)
Unit 2: 790 MW (1971)

Both Units Coal-Fired

Location: Moundsville, WV
AEP Chairman & CEO Says . . .

AEP continues to diversify its overall generation fleet as it retires nearly 6,600 megawatts of coal-fueled generating capacity between now and 2016 due to environmental regulations and market conditions, and increases its use of natural gas, renewables and energy efficiency resources.

- Message to shareholders 4/14

Between 2005 and 2013, AEP reduced its carbon dioxide emissions by 21 percent, exceeding President Barack Obama’s Climate Action Plan target of achieving a 17 percent reduction by 2020. In addition, AEP’s emissions of sulfur dioxide and nitrogen oxide each have been reduced by more than 80 percent since 1990, and mercury emissions have declined by nearly 60 percent since 2001.

- Message to shareholders 4/14
AEP Chairman & CEO Says . . .

American Electric Power is "repositioning its assets" for a "more sustainable fuel mix. "It doesn't simply mean a shift from coal to gas, although that's a large element . . ."Several factors are driving us in this direction, including new environmental regulations; the economics of coal versus natural gas; the operating cost, age and efficiency of some coal units; increased competition; and grid reliability" . . . “This effort to create a more sustainable balance of our generation resources will be very challenging and expensive, but will provide long-term fuel stability and allow us to adapt to the major upcoming market and operational changes," he said.

- Message to shareholders 4/13
"coal is indigenous in many parts of our footprint," Akins said, "and that's why we maintain there needs to be a balanced energy portfolio." Akins added that controlled coal units can help limit the impact on the environment while providing essential support to local economies through taxes, continued employment, etc.

- CNBC ‘Mad Money’ 4/13