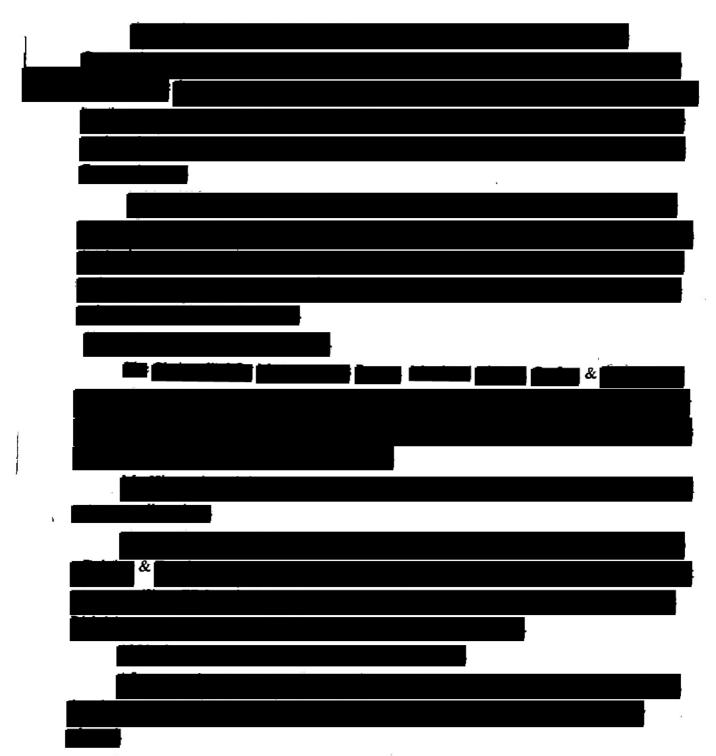
#### BIG RIVERS ELECTRIC CORPORATION REGULAR BOARD OF DIRECTORS MEETING AUGUST 20, 2010

The regular meeting of the Board of Directors of Big Rivers Electric Corporation was called to order at 8 a.m., CDT, on Friday, August 20, 2010, at 201 Third Street, Henderson, Kentucky 42420.





Tom Shaw, manager environmental services, reviewed the proposed Clean Air Transport Rule (CATR) and its potential impact on utilities.

# Clean Air Transport Rule (Proposed)

CATR



#### Clean Air Transport Rule

- Replaces the current Clean Air Interstate Rule (CAIR) program that was overturned by the D.C. Circuit Court of Appeals in 2008.
- Will require reductions in SO<sub>2</sub> and NOx in 31 States and the District of Columbia.
- SO<sub>2</sub> emissions from the affected states and the District of Columbia will be reduced overall by 71% over 2005 levels.
- NOx emission from the affected states and the District of Columbia will be reduced overall by 52% over 2005 levels.



### CATR Regulatory Options

- EPA's Preferred Approach
  - Set a pollution budget for each of the 31 states and the District of Columbia.
  - Limited interstate trading among power plants.



### **CATR Regulatory Options**

- EPA's first alternative
  - Set a pollution budget for each of the 31 states and the District of Columbia.
  - Trading limited to power plants within the state.



### CATR Regulatory Options

- EPA's second alternative
  - Set a pollution budget for each state.
  - Specify the allowable emission limit for each power plant.
  - Allow for some averaging.



#### Impact to Big Rivers Electric Corp.

- EPA's Preferred Approach
  - ❖ System wide SO₂ reduction of 8% by 2012.
  - ❖ System wide SO₂ reduction of an additional 4% by 2014.
  - System wide NOx annual reduction of 16% by 2012.
  - System wide NOx ozone season reduction of 12% by 2012.
  - Limited interstate trading may reduce the cost of compliance.

## EPA Transport Rule Allocations Big Rivers Electric Corp.

	Transport Rule Allocations and Projected Reductions			
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		Allocation Tons		
Year	2012	2014	2012	2012
Facility	SO2	SO2	Annual NOx	Ozone Season NOx
HMP&L Unit 1	1,647.0	959.0	293.0	1.14:0
HMP&L Unit 2	2,750.0	997.0	305.0	118.0
Coleman Unit 1	624.0	1,569.0	1,646.0	704:0
Coleman Unit 2	854.0	1,569.0	1,671.0	715:0
Coleman Unit 3	1,003.0	1,621.0	1,713.0	733:0
Green Unit 1	1,774.0	1,018.0	1,530.0	595:0
Green Unit 2	1,352.0	1;027.0	1,505.0	585.0
Reid Unit 1	1,136:0	1,872:0	734.0	284:0
Reid Gas Turbine	0.0	0.0	0.0	0.0
Wilson	8,195:0	7,866.0	697.0	305:0
Total Allocation	19;335.0	18,498.0	10,094!0	4,153.0
2009 Emissions	19;099.0	19,099.0	10,874:0	4,308.0
2009 Emissions + 10%	21,008.9	21,008.9	11,961.4	4,738.8
Reductions Needed	8%	12%	16%	12%



#### Impact to Big Rivers Electric Corp.

- EPA's first alternative
  - ❖ Will not likely affect the overall SO₂ and NOx reduction for the system beyond EPA's preferred alternative.
  - May affect the cost of compliance based upon the ability to offset emission through other utilities within the state.



#### Impact to Big Rivers Electric Corp.

- EPA's second alternative
  - ❖ Will not likely affect the overall SO₂ and NOx reduction for the system beyond EPA's preferred alternative.
  - Averaging within the system may affect the overall cost of compliance.



#### Conclusion

- The time to achieve compliance is limited.
- Alternate fuel such as Natural Gas will need to be considered to meet compliance.
- Equipment additions such as SCR's may be difficult to design, purchase and install by 2012.
- Increasing SO<sub>2</sub> removal efficiency with existing scrubbers may be difficult achieve.
- Questionable data used by EPA.
- Additional NOx reductions are likely for 2014.
- Thanks to Steve Noland.

