

Memorandum of Meeting

DNREC – Air & Waste Management

Air Quality Management Section

Meeting Date: April 6, 2006

Location: Delaware Room, State Archives Building, Dover, DE

Purpose: Workgroup Meeting #3, Delaware Electric Utilities Multi-Pollutant Regulation Development

The purpose of this workgroup is to establish a committee of interested parties to assist the Department in the development of the regulatory requirements and associated language to facilitate a reduction of sulfur oxides (SO_x), nitrogen oxides (NO_x), and mercury (Hg) from Delaware's coal and residual oil-fired electric generating units (EGUs). DNREC personnel, other state agencies, persons with environmental interests, persons impacted by power plant emissions, and power plant owners and operators were present at the meeting (please see attendance list following this memo).

This was the third in an anticipated series of five or more workgroup meetings. The specific purpose of this meeting was to allow representatives from the public and environmental groups an opportunity to present to the workgroup their position and comments regarding the multi-pollutant regulation development. During the previous meeting, representatives from the potentially affected electric power generating facilities made presentations concerning their perspective of the multi-pollutant regulation.

The meeting was conducted by DNREC's Ron Amirikian. After welcoming everyone, Ron indicated that there had been a comment that the past meeting minutes were not sufficiently detailed regarding comments made during the meeting. Ron asked if there were any other comments regarding the last meeting minutes; none were stated. Presentations were then made by representatives from environmental organizations.

Citizens for Clean Power

The first presentation was given by Bill Zak and John Austin, representing the organization Citizens for Clean Power (CCP). CCP was described as a grass roots citizens group whose goal is to help protect the public health by ensuring public awareness or regulatory mechanisms and actions that could affect the public health. CCP is concerned with the impact of the Indian River Power Plant on the public health. CCP cited public health statistics that demonstrated a negative impact from power plant emissions.

Referenced data indicated that SO₂ reductions can be achieved at a cost of approximately \$300/ton, but the public health impact is \$7000/ton. CCP indicated that Delaware's SO₂ emissions were over 30,000 tons in 2004.

CCP presented data identifying federal emissions limitations, neighboring state emissions limitations, and actual Delaware unit recent emissions data.

CCP's position includes the following concerns:

- 90% or more reductions of SO₂, PM, and mercury. These reduction percentages are more stringent than EPA CAIR/CAMR requirements. Reduction requirements should be in line with the stringent requirements of neighboring states. Trading should not be allowed.
- 80% or more reduction in NO_x. This reduction percentage is more restrictive than the EPA's CAIR requirement. Reduction requirements should be in line with the stringent requirements of neighboring states. Trading should not be allowed.
- Address all coal-fired, petroleum coke-fired, and residual oil-fired units.
- Address all mercury emissions from all sources, not just power plants.
- No trading of mercury allowances. The goal is to reduce mercury loading in Delaware. Selling allowances that could increase mercury transported into Delaware from out of state doesn't make sense. Allowing the purchase of allowances would defeat the goal of reducing mercury emissions in Delaware.

- Accelerated compliance schedule. Get all emissions reductions in place in 2010 to 2012. This will reduce the impact on public health.

Any new integrated coal gasification combined cycle (IGCC) unit should have strict limits. An IGCC plant is acceptable only as a replacement for existing facilities, not as an addition.

Alternative energy supply, such as wind generation, could serve to reduce coal burning and provide other economic benefit to the state.

New air emissions limitations may negatively impact solid wastes generated by the power plants. Heavy metals may tend to leach out. Improved landfill design may be necessary.

CCP stated that the purpose of a new regulation should be to protect the health of Delaware's citizens, not a tool to balance public health and corporate profits. Data indicated that the emissions from these power plants could be cleaned up with strict environmental controls without a cost to consumers.

In addition to public health benefits, Delaware should realize other economic benefits from the power plant emissions reductions. These benefits included reduced health care costs, maintaining the tourism industry, maintaining real estate development and values, improved agricultural production, and fishing industry improvements.

CCP believes it would be prudent to conduct studies to investigate the possibility of nitrate and heavy metal contamination around the Indian River site and the extent of mercury poisoning in humans and fish in the area.

CCP closed saying that the multi-pollutant regulation should not balance industry concerns with clean-up costs, but rather facilitate the clean-up of the affected units as completely as current technology allows.

The slide presentation given by CCP at the meeting may be viewed on the DNREC multi-pollutant regulation website: <http://www.dnrec.delaware.gov/awm/Info/Regs/AQMMultiPReg.htm>.

Following the CCP presentation, Sen. Bunting asked why these issues had not been raised in the hearings that were underway concerning the proposed Conectiv electric rate increase. Mr. Muller indicated that while he could not say if the situation has improved, it was his opinion that in the past the public had not been made to feel welcome at such proceedings, and perhaps that contributed to low attendance. Mr. Zak indicated that while he had read in the papers that such hearing were taking place, those sources of information were limited and therefore some of the public may not have been aware of the significance of the meetings. Mr. Austin questioned the relationship of this regulatory development process to the rate hearings, as the regulatory development process is a very narrow scope with little visible impact on the rate hearings. A number of people complimented Sen. Bunting's interest and presence at this regulatory development meeting.

Delaware Audubon Society

The second presentation was given by Nick DiPasquale, Conservation Chair of the Delaware Audubon Society. It was stated that the Delaware Audubon Society supported the position outlined in the Citizens for Clean Power position regarding the implementation of a multi-pollutant regulation (described above).

It was stated that the failure of the federal government to implement sufficient emission reduction programs to protect the public health and environment makes it necessary for states to enact such regulations, and that several states around Delaware have either already enacted similar multi-pollutant regulation or were in the process of doing so.

Emissions reduction technologies capable of attaining the stringent emission reductions and timeline outlined in the Citizens for Clean Power presentation were commercially available for installation on existing generating units.

The Indian River Generating Station and the Edge Moor Generating Station are the two largest sources of pollution in the state, and that statements by the utilities that cleaning up and/or shutting down units would lead to severe adverse impacts were misleading.

High removal efficiency mercury emissions reduction technologies are available, and the utilities were misleading the public by stating otherwise.

It was stated that emissions reductions from the subject facilities will not occur absent a regulatory mandate.

In summary it was reiterated that these units should either be cleaned up or shut down.

An outline of Delaware Audubon Society's presentation, Statement of Delaware Audubon on Delaware's Multi-Pollutant Regulation for Electric Generating Units, may be viewed on the DNREC multi-pollutant regulation website: <http://www.dnrec.delaware.gov/awm/Info/Regs/AQMMultiPReg.htm>.

Following the Delaware Audubon Society presentation, Dan Skedzielewski of Conectiv made a comment wanting to correct what he felt was a misinterpretation of Conectiv's position regarding mercury emission controls at Edge Moor. Mr. Skedzielewski indicated that Conectiv had not stated they could not or would not install mercury emissions reduction technologies, but had stated that due to the technologies not being mature Conectiv could not guarantee what levels of reductions they could actually achieve at Edge Moor.

Environmentalists for Truth

The third presentation was given by John Kearney, representing Environmentalists for Truth. Mr. Kearney stated that power plant emissions effect on public health is well documented, and that public health should be the driving factor for regulation.

A report was cited that indicated that 90% reductions are possible for power plant emissions, and that some plants are already achieving those levels.

A document was cited from the Pennsylvania DEP to the USEPA (during the mercury emissions control rulemaking process), indicating that mercury removal efficiency of 90% to 95% was possible with demonstrated equipment.

A letter was cited from members of congress to the USEPA indicating that existing technologies could achieve mercury reductions greater and sooner than those proposed in USEPA's mercury emissions rulemaking.

Mr. Kearney provided the following recommendations for this rulemaking:

- The regulation should cover five pollutants, not three: NOx, SO2, mercury, PM2.5, and carbon. It was indicated that addressing all these pollutants together would be more cost effective than addressing them separately.
- The costs for reducing emissions from the existing plants should be borne by the utilities and not passed on to the customers.
- All of the called for emissions reductions should be complete within 10 years.
- Emissions reductions should be as follows: 85% NOx reduction from 1997 levels; 95% SO2 reduction from Phase 2 Acid Rain levels; 95% mercury reduction from 1999 levels; 95% PM2.5 reduction from current levels; and carbon reductions held at 1990 levels.

In response to a question, it was indicated that these levels should be attained without trading.

Analogies were made to litigation, not related to electric generation, where companies were held responsible for health problems that occurred as a result of historic actions or inactions by the companies. The analogy was made that in the future the impact of power plant emissions could potentially become legal issues in relation to property values, public health monitoring programs, and public nuisance claims.

Mr. Kearney indicated that he would provide some of his reference document to DNREC. DNREC will include these on the multi-pollutant web page when they become available. The multi-pollutant web page may be viewed at: <http://www.dnrec.delaware.gov/awm/Info/Regs/AQMMultiPReg.htm>.

Green Delaware

The fourth presentation was given by Alan Mueller, representing Green Delaware.

Mr. Muller started out indicating that there was a video concerning the Indian River Power Plant that he thought would be interesting for everyone to view, but that DNREC objected to him showing during the meeting for legal reasons. He invited anyone interested in seeing the video to contact him directly.

It was stated that Green Delaware supported the technical positions presented by Citizens for Clean Power. However, Green Delaware is also concerned about many related issues concerning the generating issues, including water pollution, solid waste, air pollution, public health, utility regulatory issues (such as controlled by a Public Service Commission), electric grid system responsibilities, and global warming. Because many organizations are responsible for pieces of these concerns, some items are not adequately addressed and overall impacts not thoroughly dealt with in a systematic approach. A number of examples were discussed including the following:

- Many of the units do not incorporate cooling towers, and the resulting extraction of large volumes of water causes destruction of fish and larvae.
- While CO₂ is not currently regulated, it soon will be and that impact should be considered before endorsing any new coal-fired capacity.
- Public health is negatively impacted by power plant emissions, yet the plant owners/operators do not account for this externality.
- Mercury is not only an issue regarding air emissions and bio-accumulation in fish, but also creates an ash disposal problem. Edge Moor coal ash is being disposed of at the closed Pigeon Point landfill. This is irresponsible action.

It was stated that control of power plant emissions is a political issue, not a technical problem. Grandfathering of existing power plants was an error in the Clean Air Act, and that political issues and deregulation have complicated correcting the errors. Because electricity is a vital product, the power industry has enjoyed strong political influence.

In the past, emissions reduction requirements were reduced for some units due to statements such as the units were too old to make the investment. However, the units continue to operate many years later. Any deferral of emissions control should include definitive requirements and actions.

While IGCC units are favored in many areas, there are problems associated with these units also.

Fuel switching to sub-bituminous coal is driven by economics, and all environmental impacts should be assessed.

Experience in Delaware indicates an incapacity to adequately regulate coal combustion. This should be rectified.

Green Delaware does not agree with statements in a prior workgroup meeting that Delaware's multi-pollutant regulation should not go beyond federal requirements.

Green Delaware recommended the following:

- Consider all of the varying aspects of electric generation in the rulemaking process.
- Existing unit emissions should be cleaned up to new unit levels
- If existing units can not be made to be as clean as new units, a hard commitment should be made to shutting the down.
- Carbon sequestration should be part of any new coal-fired unit consideration.
- Give serious consideration to alternative energy supplies, such as wind and solar.
- Conservation and efficiency can have an impact on generating needs.

The Green Delaware slide presentation may be viewed on the DNREC multi-pollutant regulation website: <http://www.dnrec.delaware.gov/awm/Info/Regs/AQMMultiPReg.htm>.

Common Cause

A statement was given by John Flaherty, representing Common Cause of Delaware. It was indicated that strong regulation was needed to help protect the public health. Deregulation, which is being used as an issue here, was brought about through strong lobbying by the utilities. Citizens must give the political push to make emissions reduction regulations happen.

Ron Amirikian closed the meeting thanking everyone for their participation. He also indicated that an additional meeting would be scheduled as several additional parties had indicated they would like to make presentations to the workgroup. That next meeting was tentatively scheduled for April 27, 2006, but Ron would notify everyone of the date, time and location of the meeting.

April 6, 2006 Meeting Attendance (Sign-In) List

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