

Memorandum of Meeting

DNREC – Air & Waste Management

Air Quality Management Section

Meeting Date: January 30, 2006

Location: DNREC AQM Conference Room, Priscilla Bldg., Dover, DE

Purpose: Workgroup Meeting #1, Delaware Electric Utilities Multi-Pollutant Regulation Development

The purpose of this workgroup meeting was to establish a committee of interested parties to assist the Department in the development of the regulatory requirements and associated language to reduce sulfur oxides (SO_x), nitrogen oxides (NO_x), and mercury (Hg) emissions from Delaware's coal and residual oil-fired electric generating units (EGUs). A list of the persons attending this meeting is at the end of this memo.

The meeting was conducted by DNREC's Ron Amirikian. After welcoming everyone, Ron stated that the goal of this effort was to require a significant reduction in air emissions from Delaware's coal and residual oil-fired power plants. Ron gave a PowerPoint slide presentation detailing the reasons/need for a new regulation, the pollutants targeted by the regulation, the electric generating units targeted by the regulation, candidate emission reduction technologies that the Department is aware of, the regulatory development timeline, and proposed schedule for future workgroup meetings. (Handouts of the slide presentation were available to the attendees, and the slide presentation has been posted on the AQM website http://www.dnrec.state.de.us/air/aqm_page/Multi-PRegulation.htm.)

During and following the presentation a number of questions and comments were made, some with considerable discussion. The following summarizes those items:

- Regarding the emission rates identified on one of the slides, it was asked where the emission rates were obtained as they did not appear to be correct for some units. It was stated that the information came from emissions inventory data. Research after the meeting indicated the rates were calculated from 2002 5-month ozone season heat input and emissions data from Delaware's emission inventory (i.e., 5-month average).
- It was asked if mass emissions, in addition to emission rates, could be added to one of the charts provided in the presentation. This information, for 2004, is now on the multi-P website.
- It was asked if emissions data from other power plants could be presented to provide a comparison between other units and the Delaware units. New Jersey's newer coal fired units and other regional and OTC units were suggested. This information, for 2004, is now on the multi-P website.
- It was asked if heat rate data could be provided. The Department indicated that the power plant owners and operators could best provide that information, but that the Department would provide links to the websites where public data was available to determine unit heat rates. This information is now on the multi-P website.
- Regarding the repowering option, it was pointed out that there were additional benefits besides emissions reductions, including improvements in heat rate (thermal efficiency) and water quality impact.
- A question was raised regarding the Regulatory Development Timeline slide, which indicated a compliance date of January 2008/9. The department indicated that the timing requirement was to satisfy rate of further progress requirements that made it necessary to achieve reductions in 2007 though 2009 to demonstrate compliance in 2010.
- It was asked if the slides representing SO₂ emissions (and the EGU's portion of total emissions) took into account reductions already made at the refinery. The Department indicated that the slide in the presentation was in error, and the presented data did include the reductions already made at the refinery.
- It was stated that the TRI Hg emissions chart appeared more realistic than that shown in some past TRI Hg data for Delaware's units. The individual indicated that in the past there was a discrepancy between the ways the utilities accounted for the emissions; one facility assumed much of the Hg was in the ash and the other assumed most of the Hg was gaseous and released through the stack. The Department indicated that this data issue had been addressed and the presented data was presumed to be accurate.

- It was asked the relationship between this regulatory development process and any CO2 emissions regulatory development process. The Department indicated that CO2 emissions were expected to be addressed through a separate regulatory development process in the 2009 timeframe for 2012 implementation.
- It was brought up that other initiatives, such as demand side management (DSM), could bring about emissions reductions (total mass emissions). While the department agreed that DSM could bring about mass emission reductions, the Department's focus in this regulatory process was the reduction in emission rates from the power plants.
- It was noted that there was a related issue regarding the use of scrubbers for SO2 control, that problem being the generation of the sludge/residue. This is an item that would have to be addressed by the power plants that decide to utilize such emission control devices.
- It was noted that primary particulate emissions was not addressed in the presentation, and that the existing units relied on precipitators rather than baghouses for particulate control. It was also noted that scrubbers can sometimes cause an increase in particulate emissions. The Department indicated that these issues would be reviewed when looking at emissions reduction proposals, but that secondary particulate emissions (related to the NOx and SO2 reductions) is one of the focal points for this rulemaking process.
- It was asked if there were any incentives available that could be utilized to facilitate the installation of emissions control technologies or repower the existing units. Potential incentives mentioned included staging implementation deadlines (compliance timing), loans and bonds, and cost recovery timelines. The representative from the PSC indicated he would bring this issue up at the PSC. The utilities indicated they would bring up economic impact in their presentations at the next meeting.
- Regarding incentives, it was also brought up whether incentives are really necessary, or should it be strictly a compliance/enforcement issue. The commenter suggested incentives should not be emphasized.
- It was noted that while the costs of implementation are going to be presented, there are also significant cost benefits to be obtained from emissions reductions regarding improvement in public health (improvement in infant mortality, asthma rates, etc). It was indicated that these savings should not be overlooked.

Following presentation and subsequent discussion, the meeting was closed. During the next meeting the power plant owners and operators will have an opportunity to present their views regarding the potential impact of the regulation and propose alternate regulatory provisions for committee consideration. Environmental interest and impacted persons will have an opportunity to present their views at the subsequent (third) meeting.

Subsequent to the meeting, several participants indicated scheduling problems with the proposed workshop schedule. The Department will attempt to resolve the conflicts and any schedule changes will be sent to the attendees of this workshop and will also post the changes on the AQM website.

January 30, 2006 Meeting Attendance List

<u>Name</u>	<u>Affiliation</u>	<u>Phone</u>	<u>E-Mail Address</u>
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