USDA United States Department of Agriculture | Forest Service | Monongahela National Forest | 200 Sycamore Street Elkins, WV 26241 304-636-1800

File Code: 2580-3
Date: February, 23 2006

William F. Spires
Division of Air Pollution Control
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43216-1049

Dear Mr. Spires:

American Municipal Power-Ohio, Inc. is seeking to construct a pulverized coal-fired electric generating unit in Meigs County, Ohio. The proposed facility, American Municipal Power Generating Station (AMPGS), is located within 300 kilometers of four Class I areas, three of which are managed by the USDA Forest Service and one that is managed by the National Park Service. I am the designated Federal Land Manager (FLM) per the responsibilities identified in the Clean Air Act for two of these areas, Dolly Sods and Otter Creek Wildernesses. As such this letter constitutes my preliminary comments regarding this facility's Permit-to-Install and the associated Class I analyses for Dolly Sods and Otter Creek Class I areas.

The proposed AMPGS facility will be located approximately 193 and 218 kilometers from Otter Creek and Dolly Sods Class I areas, respectively. It will consist of two baseload 480 MW-net pulverized-coal (PC) boilers which will result in combined annual emissions of roughly 6,820 TPY of sulfur dioxide, 3,184 TPY of nitrogen oxides, 1,132 TPY of PM-10 (filterable and condensable) and 341 TPY of sulfuric acid. Short-term emission rates for each pollutant were also identified and are listed in table 1 below.

Table 1: Proposed Short-Term Emission Rates for AMPGS

Pollutant	Max Emission Rate: per Boiler (lbs/hour)	Max Emission Rate: Total (lbs/hour)
SO_2		
3-hour Average:	1,246	2,492
24-hour Average:	955	1,910
NO_x		
24-hour Average:	519	1,038
PM-10[1]		
24-hour Average:	129	258

Your agency sent my staff an email notifying the FLMs of where to find the Permit-to-Install Application and the supporting Class I Analyses for the proposed facility. My staff and I have reviewed the materials available through the identified website and have several comments and concerns that I would like to highlight. But first, I want to preface many of these points by stating that we did not have all of the necessary information to complete a thorough review

[1] PM-10 Emissions include filterable + condensable rates listed in Permit-to-Install Application.

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(these missing pieces of information are identified in detail below) and as such, our comments may change as more information is presented. However, our intent in identifying these concerns upfront is to generate open dialog between our agencies regarding potential problems in effort to minimize impacts on the administrative process. I would like to recommend that a conference call between the respective agencies and the applicant may be beneficial to identifying and resolving some of these issues.

Best Available Control Technology (BACT) Analysis

The emissions rates, and in particular the short-term emission rates, from this proposed project appear to be much higher than what we have recently seen from new coal burning electric generating stations, including new PC units. Specifically, the SO_2 emissions appear unusually high, but we need more information including fuel quality data (heating value and percent sulfur) to get a better understanding of what the applicant is proposing. The 24-hour average NO_x emissions at .10 lb/mmBtu are much higher than what we are now seeing from other PC units; we have examples of seven PCs proposing 24-hour NO_x limits in the 0.05 - 0.08 lb/mmBtu range. Likewise, filterable PM-10 at 0.015 lb/mmBtu is much higher than what we are now seeing from other PC units; we have examples of ten PC units proposing filterable PM-10 limits in the 0.010 - 0.013 lb/mmBtu range.

As such, associated modeled impacts in the Class I areas from this facility are also much higher than what we have seen in recent permitting activities; although it is difficult to identify what the impacts specific to Dolly Sods and Otter Creek are, as they were not reported on a Class I area basis. In light of current initiatives to improve and protect the visibility in Class I areas, I am concerned about how the proposed facility fits into the larger scheme of reasonable progress, when modeled single source impacts are so high. While we have several questions regarding the modeling analyses that we would like you to address, we first would like to discuss our concerns related to the facility emissions and BACT analysis before correcting any modeling issues, in an effort to minimize the number of modeling runs necessary. We request that your agency and applicant discuss the BACT analysis with the FLMs and identify why higher control efficiencies and lower emissions cannot be achieved for this facility.

CALPUFF Modeling Analyses

As stated previously, it was difficult to identify what the impacts specific to individual Class I areas are, as it appears that only maximum impacts were reported cumulatively and not on a Class I area basis. We request that the applicant report this information per Class I area, per modeled year. Additionally, it appears the website only provides the CALPOST output files for review. In order to complete a thorough review of the modeling analyses we need all modeling input and list files including the CALPUFF, CALMET and CALPOST and any additionally supporting postprocessor or preprocessor files, the meteorology (3D and observational) files and geological data to necessary to replicate the modeling analyses. Until this information is submitted, we cannot specifically comment on the modeling analyses.

However, some general comments on the modeling analyses include the applicant's use of the 1990, 1992 and 1996 MM4/MM5 datasets available through the NPS. In February of 2006, we commented on the Class I modeling protocol submitted by the applicant for the AMPGS project. In these comments we recognized the applicant's effort to use data we have recommended in other recent permitting activities. However, new MM5 datasets for the years 2001-2003 are

currently available through several states in the VISTAS Regional Planning Organization; including West Virginia. These new datasets are a higher quality and at a finer grid resolution than the older MM4/MM5 data. Because these new MM5 datasets represent the best data currently available, we would like the applicant to use them in their Class I modeling rather than the older MM4/MM5 data.

Additionally, it appears from the CALPOST output files that the applicant used the VISTAS version of CALPUFF. It has recently come to the EPA's and FLM's attention that the VISTAS CALPUFF modeling suite is not compatible with the EPA regulatory approved version (5.711a) and until EPA can fully review and approve the VISTAS version (5.756), the current regulatory approved version should be utilized. If after a thorough review of the modeling files and after BACT consultation with the FLMs, it is determined that the applicant will need to rerun CALPUFF, the most current regulatory approved version should be utilized.

Class I Impacts

While I cannot definitively speak to the impacts in Dolly Sods and Otter Creek alone for reasons state above, it appears that the over all Class I Air Quality Related Values (AQRVs) impacts in all four areas are quite high. For all Class I areas combined, there are a total of 120 days in three modeled years that exceed the 5% change in light extinction threshold, and 37 days in three modeled years that exceed the 10% change in light extinction threshold. The maximum modeled change in visibility, 45.49%, occurred in the modeled year 1992, although where this occurred is unclear. Modeled deposition of nitrogen and sulfur also exceeds the FLM modeled change threshold of .01 kg/ha/yr for each of these pollutants, with the sulfur deposition impacts from this facility exceeding the threshold by as much as four times, again it is unclear for which Class I area(s). Finally, the Class I increment analyses showed that predicted concentrations of SO_2 in several of the Class I areas for the short-term averaging periods exceed the Significant Impact Levels for these periods and thus a cumulative increment analysis was required. The cumulative increment analysis showed increment consumption for the 3-hour averaging period occurred in Dolly Sods Class I area, but it was determined AMPGS was not a significant contributor. A list of sources used in the cumulative increment analysis is provided in Appendix B, but due to the low resolution of the document, we were unable to read and review this table. In light of the modeled increment consumption for this and other recent PSD projects we are concerned that all appropriate increment consuming emission sources are included in the cumulative analysis, and would like to ensure that this is the case for the AMPGS project.

Class I Impact Determination

I want to again emphasize that due to lack of necessary information, I cannot make a final determination at this time, however based on the above reported results it seems likely that this project will result in an adverse impact to the AQRVs in one or both of the Class I areas for which I am responsible. Furthermore, I am concerned with the applicant's assertion that "compliance with CAIR and other regulatory programs can be used to offset the predicted exceedances of the FLM guidelines for visibility and deposition". In general the CAIR and PSD initiatives were developed for different intended purposes and I do not feel it is appropriate to utilize the initiatives of one program to alleviate the requirements of the other. In recent permitting actions, the FLMs have been willing to develop mitigation plans to offset adverse impacts from specific facilities, but FLM policy has dictated that emission reductions considered

for mitigation purposes should not be the result of any enforcement action or imposed regulatory initiative that would occur regardless of any action taken by the applicant seeking to offset their impacts. With that said, we are willing to work with AMPGS to address the potential adverse impacts from this project, and would first like to discuss the potential for lowering the emission rates for this facility as described above. Once we feel confident that this facility is as well controlled as possible, if it is still necessary, we are willing to work with your agency and the applicant to develop an appropriate mitigation proposal.

Thank you for the opportunity to review the Permit-to-Install Application for the AMPGS facility. My staff is willing to work with you to resolve these technical issues. Should you have any questions please feel free to contact our Air Quality Specialist, Andrea Stacy at 304-636-1800 extension 314.

Sincerely,

/s/ Clyde N. Thompson
CLYDE N. THOMPSON
Forest Supervisor

cc: John Benedict
John Bunyak
Maureen Hyzer
Charles E Sams