August 28, 1998

Wayne E. Penrod
Senior Manager, Environment
Sunflower Electric Power Corporation
P.O. Box 1649
Garden City, KS 67846

Re: PSD - Holcomb Station

Dear Mr. Penrod:

Regarding your letters to the regional office dated 7/6/98 and 7/30/98 (the letter received by FAX on 8/10/98), we reviewed several documents pertaining to our 1980 review of Sunflower's application for a PSD permit for a proposed steam-electric generating plant near Holcomb, KS. The following briefly summarizes our findings:

As indicated by the information set forth in Table II-2 of the permit application sent to the regional office under cover letter dated 8/27/79, the scope of the approved project is indicated, in part, by the following factors: -

Max. Heat Input, Boiler: 3389 MMBTUs/hr
Max. Operating Hrs: 8760 hrs/yr
Worst-Case Fuel: subbituminous coal with the following approximate characteristics -- 1% sulfur content, 7800 BTUs/Ib heating value, 11.6% ash; w/assumed 100% sulfur conversion to S02; and, lead and fluorine (HF) contents as specified in the table.

The above factors (and other considerations) were used for purposes of PSD applicability/nonapplicability decisions and/or dispersion modeling studies. It doesn't appear that the **megawatt capacity** of the turbine-generator set was a significant consideration regarding the regional office's review or subsequent approval of the proposed project. Such is not the case regarding the factors listed above. Since the megawatt rating of the turbine-generator does not appear to be a significant factor, we could if deemed necessary append the PSD permit to so indicate; another option would be a letter stating that the EPA regional office has decided to not enforce the matter in question.

Our primary concern, however, is the possibility that a physical change at the source (i.e., the upgrading changes involving the turbine) may have caused a significant increase at the source of pollutants regulated by the state's PSD regulation. In assessing this possibility, the above-listed relevant factors regarding original applicability/review/approval decisions are not necessarily taken into consideration. Physical/operational changes at a source, unless exempted by the regulation, are assessed for PSD applicability by the use of an "historical actual-to-future potential to emit (PTE)" basis rather than a "(re-change) PTE-to-(post change) PTE" basis. From the information provided us, we do not view the changes to the turbine as routine maintenance or replacement in that the modified unit incorporates redesigned/upgrading blades. The current version of the regulation allows a "historical actual-to-future representative actual annual emissions" basis for modified steam-electric generating units; this option may not be applicable to Sunflower's situation if the boiler itself has not been modified -- rather, if-this is the case, the source has been modified via the turbine upgrade and the modification may have caused a significant emission increase (on an actual-to-PTE basis) at the source subject to PSD review/permitting.

If the turbine-related changes trigger PSD review, the question of BACT applicability arises. The turbine would not be subject to the BACT requirement if it is not an emissions unit (we understand the turbine to be a conventional steam turbine rather than a combustion turbine). The boiler might also not be subject to the BACT requirement if it has not been physically modified and has not undergone an operational change. However, all other elements of PSD review, including PSD permitting, would probably have to be addressed. A statement in your 7/30/98 letter indicates that the boiler may now be able to operate over a greater operating capacity (e.g., relative to pre-turbine change steaming levels and heat inputs) as a result of the turbine upgrade. If such is the case, we might have difficulty with a position that the boiler has not experienced an operational change. The resulting situation may reflect a "debottlenecking" of the boiler (that probably would not have occurred if the company had selected the use of "original design" blades (Options 1 and 2, mentioned in your letter of 7/6/98) when the turbine was renovated rather than "re-designed/upgrading" blades (Option 3, same letter)) that should be addressed for PSD applicability possibly on a "historical actual-to-future representative actual" basis and, if needed, on a source-wide contemporaneous emissions netting basis.

If you have any questions regarding our comments, please contact me or Dan Rodriguez of my staff at 913-551-7616.

Sincerely,

Donald C. Toensing
Chief
Air Permitting & Compliance Branch

cc: H. Agarwal
KDHE