

September 28, 2007

William L. Neal
Omaha Public Power District (OPPD)
444 South 16th Street Mall
Omaha, Nebraska 68102

RE: Best Available Retrofit Technology (BART) Analysis for Nebraska City Station

Dear Mr. Neal:

The Nebraska Department of Environmental Quality (NDEQ, Department) has begun reviewing the BART Analysis submitted by OPPD for Nebraska City Station (NCS), Unit 1 on August 7, 2007. At this time, the Department has identified several items which need to be clarified, revised, or submitted. If you wish to discuss these items further, please contact Sara Speser at (402) 471-2951 or via email at sara.speser@ndeq.state.ne.us.

- 1) OPPD indicated that it is unknown if the installation of Low Nitrogen Oxide (NO_x) Burners will trigger New Source Review (NSR) for carbon monoxide (CO), volatile organic compounds (VOC), or other pollutants due to changes in combustion conditions. Recently the Department has issued a permit in accordance with NSR for an increase in CO due to the installation of Low-NO_x burners on a unit similar in size and type as NCS Unit 1. OPPD can assume that other pollutant emissions will not increase, however emissions monitoring will be required in order to prove that emissions have remained constant or have not increased in levels that exceed the significance thresholds. If emissions do increase in amounts greater than the significance thresholds contained in the Prevention of Significant Deterioration (PSD) program, OPPD would be in violation of modifying a unit without obtaining a PSD permit prior to commencing construction. Therefore if OPPD would prefer to complete and submit the appropriate materials to the Department in order for the Department to process this permitting action for the increase in other pollutants, the necessary materials include, but are not limited to, construction permit application forms, Best Available Control Technology (BACT) Analysis, Air Dispersion Modeling Analysis, and Additional Impacts Analysis. A second construction permit application fee is not required, as this information would be an addendum to the current permitting project. Please reference application number 07-0049 if additional information associated with the BART permitting action is submitted.
- 2) There are several questions concerning the BART analysis for sulfur dioxide (SO₂) and nitrogen oxides (NO_x). The five basic steps of a Case-by-Case BART Analysis, as stated in 40 CFR 51, Appendix Y, are 1) Identify all Available Retrofit Control Technologies; 2) Eliminate Technically Infeasible Options; 3) Evaluate Control Effectiveness of Remaining Control Technologies; 4) Evaluate Impacts and Document the Results, and; 5) Evaluate Visibility Impacts. The BART analyses submitted for SO₂ and NO_x lacks information concerning steps 2 and 3. Specifically all of the available retrofit control technologies that have been identified have not adequately been dismissed as being technically infeasible (i.e.

not available and not applicable). Each control technology must be evaluated to be deemed technically feasible or not prior to evaluating control effectiveness and/or cost of the controls.

- 3) Each pollutant should be evaluated individually with regard to the Visibility Impacts Analysis. OPPD evaluated four scenarios in the visibility impacts analysis. The four scenarios being: 1) Existing Pre-BART Control; 2) Low NO_x Burner including an overfire air port system (LNB/OFA); 3) LNB/OFA and Spray Dryer Absorber (SDA); and 4) LNB/OFA + SDA and Selective Catalytic Reactor (SCR). OPPD should have evaluated scenarios including installing NO_x and SO₂ controls separately. Therefore OPPD should evaluate a LNB/OFA and SCR scenario and an SCR only scenario prior to evaluating any scenarios where the NO_x and SO₂ control options are combined.
- 4) The costs associated with ID Booster Fan Equipment and Electrical Modifications were established based on the assumption that both an SDA and SCR would be required for both units. These cost items should have been evaluated as if these changes would need to occur if only one of the two control devices were to be required. It is not appropriate to only evaluate the cost of the units together since the cost may decrease significantly if only one or the other control device would be required for BART.
- 5) Complete results of the visibility impacts analysis, i.e. air dispersion modeling, was not submitted to the Department. It is necessary for the Department to have more information than the summary provided, including input files, output files, and other information in case this information needs to be reviewed or provided to other states or federal agencies.
- 6) Some additional questions are listed below:
 - What is the remaining useful life on Unit 1's existing burners? In other words, when would the existing burners on Unit 1 need to be replaced if BART was not being evaluated at this time?
 - How much money is expected to be recouped when the recovered metal, due to demolition, is sold?

We appreciate your timely response to our questions. If clarification is needed please contact Sara Speser at (402) 471-2951 or via email at sara.speser@ndeq.state.ne.us.

Sincerely,

Shelley Kaderly
Air Quality Division Administrator