



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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MAR 11 2010

Ref: EPR-N

Mr. Matt Marsh
NEPA Project Manager
Western Area Power Administration
P.O. Box 35800
Billings, MT 59107-5800

Re: Deer Creek Station Energy Facility Project
Draft Environmental Impact Statement
CEQ #20100030

Dear Mr. Marsh:

In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Draft Environmental Impact Statement (Draft EIS) prepared by Western Area Power Administration (WAPA) for the Deer Creek Station Energy Facility Project (Deer Creek) in Brookings County, South Dakota.

Project Description

The Draft EIS analyzes the potential environmental impacts from Basin Electric Power Cooperative's (Basin Electric) proposed construction and operation of a 300-MW natural gas-fired combined-cycle electric generation facility. The Draft EIS considers two alternative sites for construction of the Deer Creek Station near White, South Dakota. Under the proposed action, the electric generation facility would be constructed at "White Site 1" and would include a 13.2 mile natural gas pipeline, a 0.75 mile 345-kV transmission line, two water wells, and a 1.25 mile pipeline to provide cooling water. If the facility were to be constructed at "White Site 2", a 10 mile natural gas pipeline, a one-mile rural water pipeline extension, a one-half mile transmission line, and an on-site substation would also be constructed. In addition to the two action alternatives, the Draft EIS includes analysis of a no action alternative.

EPA's Comments and Recommendations

In completing our review, EPA has identified several recommendations for additional consideration and disclosure in the Final EIS. None of EPA's recommendations involve a significant modification to the proposed project; rather we hope to assist WAPA with the identification and implementation of important monitoring and mitigation tools.

1. Groundwater and Surface Water. The Draft EIS includes a number of mitigation measures to reduce the potential impacts to groundwater and water quality. In particular, EPA applauds the inclusion of monitoring wells to detect any potential hydrology issues which may influence the stream or wetlands adjacent to the groundwater well installation site. Monitoring can be an important tool in minimizing impacts to the environment. However for these tools to be effective, it is important that a monitoring strategy and framework be clearly identified at the outset. EPA recommends the Final EIS include more detailed information on the monitoring time frame, including when the monitoring will occur, how often, and by whom. In addition, EPA specifically recommends the Final EIS include more detailed information on the threshold or action trigger that may initiate the need to seek alternative water sources for the project.
2. Wetlands. As noted in the Draft EIS, the proposed project area for both alternative sites and associated facilities contains a high density of small prairie potholes or wetlands. White Site 1, White Site 2, and associated facilities each have the potential to impact wetlands, including wetlands that are likely jurisdictional waters. EPA commends the commitment to mitigation measures including: directional drilling of pipelines underneath larger wetlands; best management practices (BMPs) to avoid sedimentation; trenching during dry periods in the fall; buffers around surface waters and wetlands; and a commitment to wetland restoration. We recommend the Final EIS include more detailed and specific information on where directional drilling will be employed (i.e. what acreage of wetlands) along the pipeline route. The Final EIS should also include additional details on how wetland impacts will be monitored and mitigated, where necessary. EPA further recommends a 100 foot buffer be established around surface waters and wetlands to minimize sedimentation and potential impacts rather than the proposed 25 foot buffer.
3. Mitigation and Monitoring. EPA recommends the Final EIS and Record of Decision include the project-specific mitigation and monitoring measures. While Appendix F identifies the standard mitigation measures to be used by Basin Electric for the Proposed Deer Creek Station, a number of additional important, project-specific mitigation measures were identified in the Draft EIS and are not included in this list of standard measures. The project-specific mitigation and monitoring measures should also be detailed and summarized in a similar table in the Final EIS and the Record of Decision. EPA recommends this table include any additional air quality mitigation or Best Available Control Technology (BACT) that has been identified through the air quality permitting process.

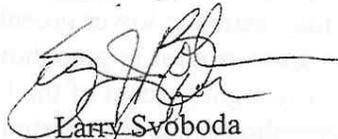
4. Air Quality. Basin Electric has initiated efforts to obtain an air quality permit and the Draft EIS includes some of the analysis that has been conducted for the permit. EPA recommends the Final EIS include additional information regarding the modeling efforts, potential emissions and potential impacts to air quality from the proposed facility. Much of this information is already available in Basin Electric's air quality permit application. Specifically, EPA recommends the Final EIS: (1) present the background ambient air conditions used for modeling purposes; (2) present the detailed project emissions as specified in Tables 3-11 through 3-13 of Basin Electric's Prevention of Significant Deterioration (PSD) permit application; (3) disclose the visibility modeling results conducted for the PSD permit application; and (4) describe and disclose the Best Available Control Technology (BACT) decision for this project. EPA has also recently lowered the one-hour National Ambient Air Quality Standard for nitrogen dioxide (NO₂). The new one-hour NO₂ standard is effective on April 12, 2010 and EPA recommends the Final EIS model disclose potential impacts from the proposed project to this standard.
5. Greenhouse Gases. EPA applauds the inclusion of greenhouse gas emission estimates from the proposed facility. EPA recommends the Final EIS identify and include analysis of any mitigation measures which may reduce the 1.02 million tons of annual greenhouse gas (CO_{2eq}) emissions from the proposed facility. In addition, EPA notes that while the combustion of natural gas may generate lower greenhouse gases compared to coal, the production of natural gas is a contributor to greenhouse gas emissions in the United States. While methane represents only eight percent of the U.S. greenhouse gas emissions, it is 23 times more effective as a greenhouse gas than carbon dioxide. Oil and natural gas systems are the biggest contributor to methane emissions in the U.S., accounting for 26 percent of the total (EPA's Natural Gas Star Program and the U.S. Emissions Inventory 2007: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005). The Final EIS should consider the indirect greenhouse gas emissions from the proposed action.
6. Demand Side Management. While demand side management may not meet all of the intermediate power needs, EPA recommends the Final EIS include conservation and management measures that may be implemented to help reduce the need for power.
7. Noise. Noise modeling conducted for the Draft EIS predicts increased noise levels from operation of the proposed facility at several sensitive receptors in the vicinity (Table 4-14). The increased noise levels, while below the guidelines recommended by the Department of Housing and Urban Development (HUD), will be noticeable nonetheless. EPA recommends WAPA explore and disclose mitigation measures in the Final EIS that may be applied to reduce the noise and potential impacts to neighboring residents and wildlife.

EPA's Rating

Consistent with Section 309 of the Clean Air Act, it is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. As WAPA did not identify a preferred alternative in the Draft EIS, EPA's rating is based on both the action alternatives, White Site 1 and White Site 2. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action, EPA is rating this Draft EIS as Environmental Concerns – Adequate Information "EC-1". The EC-1 rating means EPA identified environmental impacts that should be avoided or reduced with the application of mitigation measures. EPA believes the Draft EIS adequately discloses the environmental impacts of the alternatives and no further data collection is necessary. However, EPA did identify opportunities for additional information disclosure and mitigation. A full description of EPA's EIS rating system is enclosed.

If you have any questions regarding our comments or this rating, please contact me at 303-312-6004 or Joyel Dhieux of my staff at 303-312-6647.

Sincerely,



Larry Svoboda

Director, NEPA Program

Office of Ecosystems Protection and Remediation

Enclosure

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

