



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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Ref: EPR-N

**JUN 28 2010**

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  
Final 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 Final Environmental Impact Statement (Final EIS) prepared by Western Area Power Administration (WAPA) for the Deer Creek Station Energy Facility Project (Deer Creek) in Brookings County, South Dakota.

EPA appreciates the additional information regarding groundwater, wetland, noise and air quality impacts included in the Final EIS in response to our March 11, 2010, comments on the Draft EIS. While the Final EIS addresses many of our questions and concerns, EPA remains concerned about the potential groundwater and surface water impacts from the production water wells. Based on the additional information included in the Final EIS, EPA has several recommendations regarding the well placement, monitoring and mitigation of the groundwater and surface water impacts which are detailed below.

Based on the more detailed information from the Test Well Report and Final EIS, EPA is specifically concerned that the groundwater well may not be placed far enough away from Deer Creek to avoid impacts to surface flows and adjacent wetlands. The Test Well Report indicates that a cone of influence for an operating well would be approximately 112 feet. As a result, Basin Electric would place the first production well at least 150 feet away from Deer Creek (Final EIS, page EPA-2). This would provide a minimum 38 foot buffer between the estimated cone of influence and Deer Creek. If the 112 foot cone of influence was determined based on the 30 gallon per minute pump test conducted over six hours, as is suggested by the Draft EIS (page 4-18), EPA does not believe that a 38 foot buffer will be sufficient to protect against drainage of Deer Creek and adjacent wetlands. WAPA and Basin Electric should consider a more extensive buffer zone from Deer Creek, to provide a greater margin for error and better ensure that the

production well will not impact the surface water and/or wetlands neighboring the creek.

The commitment to place the groundwater well at least 150 feet away from Deer Creek is more ambiguous than previously provided in the Draft EIS. The Draft EIS indicated that the groundwater wells would be placed approximately 280 feet from Deer Creek (Draft EIS, p 4-17). It is unclear to EPA whether the well location has potentially moved closer to Deer Creek or whether the location is pending the refined hydrologic site characterization. The Final EIS indicates that additional pump tests will be performed for the production wells. EPA recommends the additional pump tests be conducted at a higher draw down and for a longer timeframe to reflect the maximum potential withdrawal rate of 125 gallons per minute. The additional pump tests may assist Basin Electric and WAPA in locating the groundwater well far enough away from Deer Creek so as to ensure it will not have any impacts to surface flow and wetlands.

EPA supports the inclusion of two temporary and three permanent monitoring wells to detect any potential hydrology issues which may influence the stream or wetlands adjacent to the groundwater well installation site. Monitoring will be an important tool in ensuring there are no impacts to neighboring wetlands and Deer Creek. As noted in our comments on the Draft EIS, EPA recommends a monitoring strategy and framework be clearly identified at the outset. The strategy should include more detailed information on the monitoring time frame, including when the monitoring will occur, how often, and by whom. EPA suggests WAPA consider monthly monitoring in the first year and quarterly thereafter. In addition, EPA specifically recommends the monitoring strategy include more detailed information on the threshold or action trigger that may initiate the need to seek alternative water sources for the project. EPA further recommends the strategy include additional monitoring of stream flows in Deer Creek and neighboring wetlands. EPA recommends the monitoring strategy be developed and included in the Record of Decision.

If you have any questions regarding our comments on the Final EIS, please contact me at 303-312-6004 or Joyel Dhieux, the Lead NEPA Reviewer for this project, at 303-312-6647. EPA Region 8 hydrologist, Mike Wireman, is also available to answer any questions and may be reached at 303-312-6719.

Sincerely,



Larry Svoboda  
Director, NEPA Program  
Office of Ecosystems Protection and Remediation

cc: Theresa Martin, U.S. Army Corps of Engineers