



IN REPLY REFER TO:

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904



January 8, 2008

ER 07/958

Mr. Richard A. Hargis, Jr.
NEPA Document Manager, M/S 922-178C
U.S. Department of Energy
National Energy Technology Laboratory
P.O. Box 10940
Pittsburgh, Pennsylvania 15236-0940

Dear Mr. Hargis, Jr.:

The Department of the Interior (Department) has reviewed the November 2007 Draft Environmental Impact Statement (DEIS) for the Mesaba Energy Project, Itasca and St. Louis Counties, Minnesota.

The EIS describes the potential environmental consequences of the U.S. Department of Energy's (DOE's) proposed action to provide a total of \$36 million in co-funding, through a financial assistance cooperative agreement, for the design and one-year operational demonstration of a coal-based, Integrated Gasification Combined Cycle (IGCC) electric generating facility on the Iron Range of northern Minnesota. The facility would be demonstrated through a cooperative agreement between DOE and Excelsior Energy Inc. (Excelsior) under the Clean Coal Power Initiative (CCPI) program. The goal of the CCPI program, as established by Congress, is to accelerate the commercial development of advanced coal-based technologies that can generate clean, reliable, and affordable electricity. The DEIS states that \$22 million has already been made available to Excelsior. The facility is proposed to be built in two phases; each phase would nominally generate 606 megawatts of electricity. Although DOE's proposed action would be applicable to only the first phase, the EIS considers the combined impacts of both phases as connected actions.

Because the proposed facility is considered a Large Electric Power Generating Plant, the Project is subject to the Minnesota Power Plant Siting Act (MPPSA), which requires the preparation of a state-equivalent EIS. The EIS requirements under NEPA and MPPSA are substantially similar, DOE prepared this draft EIS in cooperation with the Minnesota Department of Commerce to fulfill the requirements of both laws. The Proposed Action for the State of Minnesota is to approve, through the Public Utilities Commission (PUC), as supported by the Department of Commerce, the preconstruction joint permit application for the project. The mission of the PUC is to create and maintain a regulatory environment that ensures safe, reliable, and efficient utility

services at fair and reasonable rates through, among other things, emphasizing energy resources that minimize damage to the environment.

State rules established for the MPPSA require the applicant for a site permit to identify at least two sites for the power plant—a preferred site and an alternative site. Excelsior identified the West Range site (Taconite, Itasca County, Minnesota) as its preferred site and the East Range site (Hoyt Lakes, St. Louis County, Minnesota) as its alternative site. The Department offers the following comments and recommendations for your consideration.

AIR QUALITY – GENERAL COMMENTS

The location preferred by Excelsior for the facility would place it near the town of Taconite in northeastern Minnesota. At this location, the facility would be 139 kilometers from Voyageurs National Park (NP) and 346 kilometers from Isle Royale NP, both of which are Class I wilderness areas administered by the National Park Service (NPS).

As the Federal Land Manager (FLM), representing the Department, the NPS has an affirmative responsibility to protect the air quality-related values of the Class I wilderness areas it administers, as specified in the Federal Clean Air Act. The NPS also has a specific role on this project in providing technical expertise in the review of air quality impacts.

As the DOE is aware, an air emissions permit is necessary for this project. It is through this process that the NPS's concerns are normally addressed, in cooperation with the permitting Agencies - the Minnesota Pollution Control Agency (MPCA) and the Environmental Protection Agency (EPA) - and other FLMs, such as the U.S. Forest Service. The air permit process for this project is ongoing. While the NPS will continue to work with its State and Federal partners through the air permit process, the NPS also reviewed the sections of the DEIS relating to the air quality impacts from this project on the NPS Class I areas and determined that it is important to comment on the DEIS.

The Department has two major concerns about potential project impacts on air quality. The first is that Excelsior is not proposing to include emission controls that may significantly reduce emissions and which have been specified on other IGCC projects in the United States. The second concerns the modeled impacts to visibility in Voyageurs NP. We view the visibility impacts predicted from this project at either site as significant. We do not agree that the modeled impacts can be ignored due to weather conditions or other reasons. Such an approach is not in agreement with current FLM guidance. In the NPS experience, proponents of projects showing impacts at levels similar to those modeled for the Mesaba project have worked with the MPCA to develop mitigation plans in an attempt to offset impacts. In addition, the NPS typically does not entertain mitigation proposals until the facility in question has reduced its emissions to the level of Best Available Control Technology (BACT). The FLMs do not agree that the emission rates shown in the current DEIS and air permit application represent BACT. It is clear from their October 19 letter to Excelsior that the MPCA is of the same opinion on this issue. In past communications with Excelsior, the NPS has strongly suggested that Excelsior consider reducing their emissions as a way to eliminate the modeled impacts. With this letter, the Department and the NPS continue to advocate that position.

AIR QUALITY - SPECIFIC COMMENTS

DEIS Page 3.3-11: The purchase of acid rain allowances by affected units in amounts required by the Acid Rain Program is not mitigation. These purchases are already required by the Clean Air Act to satisfy the goals of the Acid Rain Program.

DEIS Page 4.3-14: While a number of other approaches are presented, Method 2 is the currently applicable method for visibility analyses per the FLM interagency guidance document for conducting air quality related value analyses, *Federal Land Managers' Air Quality Related Values Workgroup (FLAG) Phase I Report (December 2000)*. Although characterized as “small” in the DEIS, we see 9 to 18 days¹ in 3 years over a 10 percent change in visibility as an impact that, if included in the final permit and EIS for this facility without other mitigation, would likely be declared adverse. As such, we do not place much value on the alternate analyses presented (i.e., Method 6)² which also predicted significant impacts to visibility at Voyageurs NP.

DEIS Page 4.3-22: Mesaba’s contribution to sulfur deposition at Voyageurs NP is predicted to exceed the NPS Deposition Analysis Threshold (DAT) for 2 of the 3 years modeled.³ We view a contribution to sulfur deposition that is 11 percent above the DAT as something more serious than “slight.” The DOE appears to have taken it upon itself to determine what is and is not an adverse impact.⁴ It is our understanding this is a prerogative reserved to the FLM by the Clean Air Act.

DEIS Page 5.2-3: Regarding the cumulative analysis, we do not understand the basis of the emission rates used for the facilities. While they may be appropriate for an increment analysis, it is inappropriate to not include emissions of sulfur dioxide and/or nitrogen oxides from existing utilities and taconite plants in the visibility analysis. Since the emission inventory is the basis for the cumulative analysis, it is hard to draw any conclusions from it, especially with regard to visibility. The assessment of cumulative visibility impacts is probably best dealt with through the regional haze program and plan being developed by the State of Minnesota. Please note that for their recent air permit application, Minnesota Steel conducted a PM₁₀, 24-hour Class I cumulative increment analysis (an analysis of airborne particulate matter with particles less than 10 micrometers in diameter) and determined the cumulative increase to be 7.0 microgram per cubic meter (µg/m³). A similar analysis for the proposed Mesaba project shows an increase of about 2.1 µg/m³. The final EIS should provide an explanation and thorough discussion of the large discrepancy between these two analyses.

DEIS Page 5.3-16: It is inappropriate for the DOE to describe certain control technologies as “characterizing” or “taking a step in the continuum toward” BACT or lowest achievable emission rate or “one extreme of the continuum.” Although Excelsior may maintain that the

¹ Higher impacts result from the eastern location; lower impacts from the western location.

² Even those Method 6 analyses predict 35 days in 3 years with change in extinction > 5% for the western site. Those impacts indicate that Mesaba would significantly contribute to visibility impairment at Voyageurs NP if this source were an old source subject to the Regional Haze Program.

³ DOE attempts to dismiss this as a statistical anomaly. We believe that, if emission from Mesaba were to be modeled for its full lifetime, it is likely that higher impacts would be predicted.

⁴ DOE states, “Based upon these considerations, it has been concluded that S and N deposition from the Mesaba Energy Project would not cause adverse effects in VNP [Voyageurs NP]”

current facility design represents BACT, the MPCA, in consultation with the EPA, will determine BACT. We note that in its October 19 letter, the MPCA concludes that the Selexol[®] process is BACT for sulfur dioxide. The MPCA also concludes that selective catalytic reduction (SCR) is technically feasible for nitrogen oxides and requests more information to make its determination of economic feasibility and, thereby, the final BACT determination. As such, it is inappropriate for the DOE to promote Excelsior's BACT position in the DEIS. We request that the text be modified in the final EIS to more accurately reflect what the MPCA has determined for BACT.

Lastly, we recommend that a model be run which shows the visibility impacts of the facility with installation of the Selexol[®] process and SCR. The results of the modeling should be provided in the final EIS.

WETLANDS (DEIS SECTION 3.7)

Due to the number of sub-alternatives for utility corridors nested within the components of the East and West site location alternatives, there are a very confusing number of potential wetland impacts (Table S-6, Summary Comparison of Impacts, page S-33). This is further complicated with discussion of impacts occurring within temporary versus permanent right-of-ways and/or construction zones. It is also unclear as to the exact definition of temporary versus permanent impact, and consequently, the discussion of necessary mitigation remains largely unaddressed. However, it appears that even a project focused solely on minimization and avoidance of wetland impacts will result in a need for restoration of several hundred acres of wetland, and in all likelihood, much more. Given that the majority of these impacts are likely to occur in wetlands which are difficult to restore and require multiple growing seasons to achieve full function (i.e., forested wetlands and peatlands), it is imperative that a realistic review of potential mitigation strategies be provided in the final EIS.

The assertion in Section 4.7.7.1 that "the Proposed Action would be designed to minimize impacts to wetlands wherever feasible, including the placement of the facility footprint ... and routing infrastructure to avoid wetland areas" is too vague and unsupported. The EIS "shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts ..." (40 CFR 1502.1). The EIS shall also discuss the "...means to mitigate adverse environmental effects." (40 CFR 1502.16(h)) Mitigation for direct and indirect project-induced unavoidable adverse impacts may, by itself, be considered a significant environmental impact, and should be described within the final EIS.

OTHER BIOLOGICAL RESOURCES (DEIS SECTION 3.8)

The subsections dealing with mammals and birds are overly vague and appear fairly random in their discussion of species occurrence. For example, there are several types of wetlands listed as present in the West Range Site, but Table 3.8-3 lists only those birds using peatland habitat. The complex of habitats at both the West and East locations are populated with a diversity of avian species only partially represented in the DEIS.

Per the Migratory Bird Treaty Act, the U.S. Fish and Wildlife Service (FWS) is responsible for management of migratory birds within the United States and should be consulted regarding species in the project area which may be affected by project construction and long-term operation. In addition to species with populations low enough to be formally recognized as threatened or endangered under the Endangered Species Act, the FWS maintains a regional list of Species of Concern. The FWS also administers a number of programs and management strategies coordinated through the Migratory Birds Division which focus on conserving species with declining populations. It appears that the only contact DOE has had with the FWS thus far has been in relation to federally listed species. Therefore, we are concerned that the section on project impacts and potential mitigation needs in the DEIS is correspondingly incomplete and should be expanded in the final EIS.

FEDERALLY PROTECTED SPECIES – (DEIS SECTION 3.8.3.1)

The DEIS summarizes the coordination which has occurred thus far between DOE and the FWS regarding species listed under the Endangered Species Act of 1973, as amended. Discussions subsequent to the last official contact between the two agencies (FWS letter dated March 6, 2007) has centered on the appropriate consultation path given the changes in listed species' status (i.e., delisting of the American peregrine falcon) and the completion of additional biological resource surveys in the West and East alternative locations. These discussions have resulted in DOE's decision to withdraw its earlier determination of effects and to reinstate consultation based on a review of the most current information. The FWS fully supports this position and expects to begin the process as early as January 2008.

The FWS will be working closely with DOE as they prepare a biological assessment for the proposed project. This document may include:

- (1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally;
- (2) The views of recognized experts on the species at issue;
- (3) A review of the literature and other information;
- (4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies.

In the absence of a preferred alternative, it will be necessary for DOE to complete a detailed analysis of effects for both the East and West Site Alternatives and each of the number of utility corridor sub-alternatives nested within each of the site alternatives.

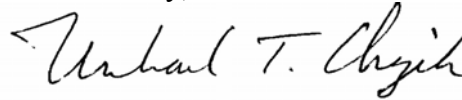
SUMMARY COMMENTS

The Department has a continuing interest in working with Excelsior and DOE to ensure that project impacts to resources of concern to the Department are adequately addressed. For questions and further coordination with NPS concerning the comments on air quality, please contact Environmental Engineer Don Shepherd, NPS, Air Resources Division, Policy, Planning, and Permit Review Branch, P.O. Box 25287, Denver, Colorado 80225, telephone: (303) 969-2075. For matters related to fish and wildlife resources and federally listed threatened and

endangered species, please continue to coordinate with Tony Sullins, Field Supervisor, Twin Cities Field Office, U.S. Fish and Wildlife Service, 4101 East 80th Street, Bloomington, Minnesota 55425-1665, telephone: (612) 725-3548.

We appreciate the opportunity to review and comment on the document.

Sincerely,

A handwritten signature in black ink that reads "Michael T. Chezik". The signature is written in a cursive style with a large, sweeping initial "M".

Michael T. Chezik
Regional Environmental Officer

cc:

D. Shepherd, NPS, Denver, CO

T. Sullins, FWS, Bloomington, MN

L. MacLean, Fort Snelling, MN