

**Responses**

**Comment 53-10**

See response to Comment 38-03, which addresses the same concerns on noise and dust impacts to residential receptors from the rail transport of coal.

With respect to traffic delays at rail crossings, the potential impacts to emergency responders are discussed in Sections 4.13.2.2 and 4.13.3.2 (under subsections *Emergency Response*) and Section 5.2.7.1 (Volume 1). Under Minnesota law, train crossing times are limited to a maximum of 10 minutes (Minnesota Statute 219.383, Subd.3). The EIS estimated that the time for a train to cross a road intersection would be 9 minutes, which is considered a conservative estimate as it assumes the train's speed would be 10 mph. Even under this worst-case scenario, the potential train crossing time falls under the state limit. Therefore, a comprehensive study is not considered necessary. However, DOE recognizes that although the delay times would be below the state limit there could be negative effects on road traffic, as described in Sections 4.13.3.2 and 5.2.7.1 (Volume 1).

**Comment 53-11**

See response to Comment 3-01, which addresses the same concern.

**Commenter 53 – Ron Gustafson and Linda Castagneri**

Why would the DOE even entertain these types of comments by a private developer in 2007? What person, by title and position deemed these comments acceptable at the DOE and the State of Minnesota?

**53-09  
(cont'd)**

What are the many actions that will be taken in the future? I am requesting a specific list.

How will these actions improve air quality and visibility?

I request that Excelsior Energy provide specific information as to the expected actions to be taken to improve air quality and visibility.

Rail

Option 1A of the proposed additional rail loop to serve the Mesaba Energy Project will pass within 400 ft of one residence and within 1000 ft. of 3 residences.

What precautions will be in place to reduce train noise and vibration?

What precautions will be taken to protect residents from the effects of escaping coal dust from the coal cars? Will this be monitored? What are the health risks to residents exposed to the escaping coal dust?

**53-10**

The Excelsior Energy study identifies traffic delays of up to nine minutes at rail crossings. This will negatively effect local traffic patterns and cause significant backups along major roads.

A nine minute delay to the response time of emergency equipment and first responders is unacceptable. This delay may result in deaths that could have been otherwise avoided if emergency personnel were not delayed.

The rail plan submitted by Excelsior Energy is unacceptable and should not be approved. A comprehensive study by an independent agency or firm should be conducted to identify the impact of the increased response time of emergency equipment and first responders and the depth of traffic delays caused by the nine minute wait time.

Henshaw Effect

I disagree with the comments in the draft EIS that state since studies of the health risks are inconclusive it is concluded that they are comparable to risks imposed by HVTLs already in use. As noted in my initial comments, those of us raised in the area in the 1950's were exposed to many dangerous chemicals due to the mining industry. When you consider the cumulative effects that result from the incremental impacts of the plant it is reasonable to expect you will consider that not only is our water already impaired from exposure to mercury and other contaminants, but so are we. The diseases attributed to the mining industry continue and Mesothelioma, a lung based disease warrants additional review of any potential for air pollutants of any kind to attach to the charged molecules when inhaled. I request this matter be reviewed in light of the newly released medical information relevant to the local area. I request that the health issues be reviewed.

**53-11**

**Responses**

**Comment 53-12**

See response to Comment 4-04, which addresses the same concern.

**Comment 53-13**

See response to Comment 4-04, which addresses the same concern. The Emergency Response Plan required for the Mesaba Energy Project would identify the requirements for personnel, training, and equipment for first response at the plant. The first responder capabilities at the plant would be maintained through revenues generated by the project. Potential additional requirements for emergency response by local jurisdictions would be identified in the Emergency Response Plan. The costs associated with additional personnel, training, and equipment for local and regional emergency response agencies would be the responsibilities of the respective jurisdictions.

**Commenter 53 – Ron Gustafson and Linda Castagneri**

**53-11  
(cont'd)**

What person or persons by name, title, and experience determined that these risks would not be addressed? What was the specific basis for non review of the health risks? What were the individuals' background and expertise to determine these reviews are not necessary? It is a matter of public record that the Department of Health for the State of Minnesota withheld pertinent information about the impact on the miners and their respiratory health. How do we know that is not occurring here as well?

**Emergency Response**

**53-12**

The City of Taconite is a rural community of 315 residents with limited emergency services. I request an in-depth analysis be included in the scoping process regarding the capability of local community First Responders to properly mitigate any emergencies during the construction, demonstration and operating phases of the proposed plant. I also ask that an in-depth needs assessment be conducted to determine additional equipment needs and assess the level of training needed by First Responders to mitigate emergency situations throughout the phases of construction, demonstration and operation.

The draft EIS does not properly address the issues of Emergency Response. It merely states that the City of Taconite may need to increase the complement level of volunteer firefighters from 12 to approximately 20. It basically states the City of Cohasset never had a problem therefore we should not as well. This is unacceptable. A complete study should be conducted to determine the levels of needed emergency response, equipment and training needed. The men and woman of the local fire departments who risk their lives deserve to receive the proper training and equipment. What person, by title, name and expertise determined that since there hasn't been a problem in the past, there won't be one in the future?

**53-13**

How will additional equipment and staffing be funded?  
Will local taxpayers be required to fund additional equipment and training?

Excelsior Energy successfully lobbied the Minnesota legislature for an exclusive exemption to the energy plant personal property tax. This exemption will shift the costs of additional staffing, equipment and training of First Responders to local communities and ultimately the taxpayers.

Ron Gustafson  
Linda Castagneri  
808 Berry Street Apt 406  
St. Paul MN 55114-1384

**Responses**

**Comment 54-01**

See response to Comment 1-01, which addresses the same concern.

**Commenter 54 – Jim and Tracy Weseloh**

>>> "Jim & Tracy Weseloh" <[westj@mchsi.com](mailto:westj@mchsi.com)> 1/8/2008 9:50 AM >>>

**Mesaba Energy Project, PUC Docket No. E6472/GS-06-668**

**DOE Draft EIS for the Mesaba Energy Project (DOE/EIS-0382D)**

54-01

There's no such thing as "clean" or "efficient" coal! Please add my support to CAMP. Thank you. Trace

**Commenter 55 – Christopher W. Harm**



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEANIC SERVICE  
National Geodetic Survey  
Silver Spring, Maryland 20910-3282

January 4, 2008

Mr. Richard A. Hargis, Jr., Document Manager  
U.S. Department of Energy  
National Energy Technology Laboratory  
P.O. Box 10940  
Pittsburgh, PA 15236-0940

Dear Mr. Hargis,

We have provided comments on the DEIS regarding the Mesaba Energy Project, Proposal to Design, Construct, and Operate a Coal-Based Integrated Gasification Cycle Electric Power Generating Facility, Located in the Taconite Tax Relief Area, Itasca & St Louis Counties, MN (20070471).

The DEIS has been reviewed within the areas of the National Oceanic and Atmospheric Administration, National Geodetic Survey's (NGS) geodetic responsibility, expertise, and in terms of the impact of the proposed actions on NGS activities and projects.

If there are any planned activities which will disturb or destroy geodetic control monuments, NGS requires notification not less than 90 days in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any required relocation(s).

All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the homepage of NGS at the following Internet address: <http://www.ngs.noaa.gov>. After entering this website, please access the topic "Products and Services" then "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the NGS database for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

We hope our comments will assist you. Thank you for giving NGS the opportunity to review your DEIS.

Sincerely,

Christopher W. Harm  
Program Analyst  
NOAA's National Geodetic Survey  
Office of the Director  
1315 East-West Highway  
SSMC3 8729, NOAA, N/NGS  
Silver Spring, Maryland 20910



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**Responses**

**Comment 55-01**

New text was added to Section 4.4.2.1 (Volume 1) stating that DOE would require the project proponent, prior to construction, to review the locations of geodetic markers on the NGS website and notify the NGS 90 days in advance of any markers being disturbed by construction procedures.

55-01

**Commenter 56 – Mike Ives and Peter McDermott**



Itasca Economic Development Corporation  
12 Northwest Third Street  
Grand Rapids, MN 55744

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1.888.890.JOBS  
fax: 218.327.2242  
www.itscadv.org

January 8, 2008

Mr. Richard A. Hargis, Jr.  
National Energy Technology Laboratory  
P.O. Box 10940  
Pittsburgh, PA 15236-0940

Re: U.S. Department of Energy's Draft Environment Impact Statement  
Mesaba Energy Project proposed by Excelsior Energy  
DOE/EIS-0382D

Dear Mr. Hargis

Thank you for this opportunity to comment on the above referenced document. The process to complete an Environment Impact Statement is a huge undertaking and our empathy goes out to you and all those involved.

56-01

Based on a review of the document, the public process, public input, state and federal agency involvement we believe the Draft EIS adequately and completely discloses information about the project's significant impacts and adequately and completely describes mitigation as prescribed in the Environmental Impact Statement Scoping Decision. Without qualifying that statement we do offer the following comments for your consideration in finalizing the EIS.

56-02

Itasca Economic Development Corporation (IEDC) has participated from the beginning of this process since the first public meetings. Please note our organization's legal name has changed from Itasca Development Corporation in 2006 which is referenced on page 3.11-8. IEDC is the economic development organization in the Itasca County area and works with many other organizations to improve quality of life for all residents. IEDC's main emphasis is on the economic well being of area residents. As such our comments are primarily on the Socio-Economic impact of the Mesaba Energy Project.

56-03

Section 3.11.3.2 West Range Site and Corridors – This section should note that Itasca County is a federally designated HUB Zone because of the high unemployment rate and low wages. The Federal Government contracting office gives preferential treatment in awarding contracts to projects located in a HUB Zone which would favor locating the Mesaba Project in Itasca County.

56-04

Section 3.11.4.2 West Range Site and Corridors – This section references key businesses in Itasca County including UPM Blandin Paper Mill in Grand Rapids and Ainsworth Grand Rapids OSB Plant. This section should also note that in early 2003 UPM Blandin permanently shut down two paper machine lines and reduced its workforce from 800 to 500 with 300 jobs eliminated. Further, the Ainsworth Grand Rapids OSB Plant was shut down in September of 2006 with the layoff of 135 employees. This plant remains shut down today.

**Responses**

**Comment 56-01**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Comment 56-02**

The reference to Itasca Development Corporation in the Final EIS has been changed to Itasca Economic Development Corporation.

**Comment 56-03**

Section 3.11.3.2 (Volume 1) of the Final EIS has been revised to indicate that Itasca County is a Federally designated HUB Zone and thereby receives preferential treatment.

**Comment 56-04**

Section 3.11.4.2 (Volume 1) of the Final EIS has been revised to indicate these employment losses in Itasca County since 2000.

**Commenter 56 – Mike Ives and Peter McDermott**

**56-05**

There are a number of potential large capital projects proposed in northern Minnesota that will require power in the future and this local project will add significant base load electricity. The Mesaba Energy Project will produce electricity from state-of-the-art technology on Minnesota's Iron Range. Basic industries requiring significant amounts of electricity have been the foundation of our local economy for a hundred years. In September 2007 Minnesota Steel completed its permitting process and that facility will have a demand for approximately 450 megawatts of electricity. The economic and environmental benefits of locating a long term producer of electricity on Minnesota's Iron Range, where several large capital projects are proposed or under construction, should be highlighted in the EIS.

**56-06**

We at IEDC are advocates for jobs and quality employment opportunities, but not by disregarding other factors of the quality of life. We rely on environmental advocates, the general public and finally governmental bodies to provide the necessary feedback, investigation and permitting to determine whether the Mesaba Energy Project is good for our area.

Thank you for your consideration.

Sincerely,  
  
Mike Ives  
Chairman of the Board

  
Peter McDermott  
President

**Responses**

**Comment 56-05**

The Minnesota Steel Industries project was included in the cumulative impacts analysis for the Mesaba Energy Project. That project is also a factor in Excelsior's preference for the West Range Site.

**Comment 56-06**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Commenter 57 – Michael T. Chezik**

**Responses**



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

**Commenter 57 – Michael T. Chezik**

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.

**Responses**

**Comment 57-01**

See response to Comment 49-01, which addresses the same concerns.

57-01

**Commenter 57 – Michael T. Chezik**

**AIR QUALITY - SPECIFIC COMMENTS**

57-02

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.

57-03

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 days<sup>1</sup> 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)<sup>2</sup> which also predicted significant impacts to visibility at Voyageurs NP.

57-04

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.<sup>3</sup> 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.<sup>4</sup> It is our understanding this is a prerogative reserved to the FLM by the Clean Air Act.

57-05

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 PM<sub>10</sub>, 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/m<sup>3</sup>). A similar analysis for the proposed Mesaba project shows an increase of about 2.1 µg/m<sup>3</sup>. The final EIS should provide an explanation and thorough discussion of the large discrepancy between these two analyses.

57-06

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

<sup>1</sup> Higher impacts result from the eastern location, lower impacts from the western location.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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]”

**Responses**

**Comment 57-02**

See response to Comment 49-10, which addresses the same concern.

**Comment 57-03**

See response to Comment 49-11, which addresses the same concerns.

**Comment 57-04**

DOE understands that the FLMs have rights to determine impacts to Class I Areas. The qualitative description of the impacts as “slight” has been deleted in the Final EIS. Also see responses to Comments 49-01 and 49-11, which address the same concerns.

**Comment 57-05**

The emissions inventory shown in Table 5.2.2-1 (Volume 1) of the Draft EIS contains all source data that the MPCA could provide at the time of Mesaba’s cumulative analysis and represents their judgment at that time of the sources likely to have significant air quality and visibility impacts in Class I areas. The Final EIS has been revised to include updated emissions sources inventory that was used in the revised analyses (included in the revised Appendices B and D1 [Volume 2]). Also see response to Comment 49-13, which addresses the same concern.

**Comment 57-06**

See response to Comment 49-01, which addresses the same concerns.

**Commenter 57 – Michael T. Chezik**

**Responses**

**57-06  
(cont'd)**

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.

**57-07**

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)**

**57-08**

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.

**57-09**

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)**

**57-10**

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.

**Comment 57-07**

See response to Comment 49-01, which addresses the same concerns.

**Comment 57-08**

Comments pertaining to wetlands, including avoidance and minimization of impacts and mitigation of unavoidable impacts, have been addressed in the responses to related comments from USACE (Commenter 116), which is the Federal agency responsible for wetland permitting and a cooperating agency for this EIS. In particular, see responses to Comments 116-22 through 116-24.

DOE has added the definitions for the following terms in the beginning of Section 4.7 of the Final EIS (Volume 1) to eliminate confusion: Permanent Impact, Temporary Impact, Indirect Impact, and Wetland Type Conversion. DOE has updated Tables 4.7-33, 4.7-34 and Appendix F2 to further clarify impacts.

**Comment 57-09**

DOE has expanded the avoidance and minimization analysis and discussions in the Final EIS including new rail and road alternatives developed in order to reduce direct and indirect wetland impacts at the West Range Site and the East Range Site. Additional explanations of the placement of the facility footprint and potential for indirect impacts to wetlands have also been added as appropriate to the Final EIS.

**Comment 57-10**

Section 3.8 (Volume 1) has been re-written to incorporate the Ecological Classification System (ECS) which identifies, characterizes and maps ecosystems using physical and biological properties. While it is not possible to identify every species occurring within the project areas, this system allows for the characterization of ecosystems (habitat). Understanding the impacts to habitat quantity and quality, Section 4.8 (Volume 1) of the EIS has been revised to evaluate which ecosystems (using the ECS) would experience the greatest impacts and which species habitat would be greatest impacted (see Section 4.8 [Volume 1]).

**Commenter 57 – Michael T. Chezik**

57-11

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.

57-12

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

**Responses****Comment 57-11**

Primary impacts to migratory birds would be caused by the loss of forest habitat during construction of the power plant and utility corridors. See response to Comment 14-02 for impacts to interior ground nesting birds. Overall impacts to migratory bird species could be reduced or avoided through tree clearing activities occurring outside the migratory bird season (after August 1st and before May 1st). Overall impacts to habitat would be reduced through minimizing clearing activities to the greatest extent possible. As abundant habitat to migratory birds exists within the region (see Section 5.2.6 [Volume 1]) and initiatives, such as the North Central Landscape Region: A Report to the Minnesota Forest Resources Council, are being implemented to protect forest resources, overall impacts to migratory bird populations and habitat would be minimal.

DOE has consulted with the FWS regarding migratory bird protection, consistent with the MOU between FWS and DOE and has considered migratory bird protection and conservation in the Final EIS as required by the Migratory Bird Treaty Act and Executive Order 13186.

**Comment 57-12**

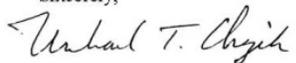
The Biological Assessment was completed and originally submitted by DOE to USFWS in July 2008. DOE made a determination that the proposed action may affect but is unlikely to adversely affect the Canada lynx or critical habitat in a letter to USFWS on August 15, 2008. The Biological Assessment was revised in February 2009 (see Volume 2, Appendix E) to hedge uncertainties regarding the status of the gray wolf under the Endangered Species Act (ESA), the latest action of which occurred on July 1, 2009 when a U.S. District Judge approved an agreement between the USFWS and plaintiffs (in a lawsuit challenging USFWS's 2009 rule removing ESA protections for gray wolves in the Western Great Lakes) in which gray wolves in the Western Great Lakes area will again be protected until the public has been allowed sufficient opportunity to provide comment on the removal of such protections. In a letter sent on May 1, 2009, the USFWS concurred with DOE's conclusion that the proposed action may affect, but is unlikely to adversely affect, Canada lynx, gray wolf or their critical habitat at the West Range Site. Text in Section 4.8 has been revised to discuss the findings of the Biological Assessment.

**Commenter 57 – Michael T. Chezik**

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,



Michael T. Chezik  
Regional Environmental Officer

cc:

D. Shepherd, NPS, Denver, CO  
T. Sullins, FWS, Bloomington, MN  
L. MacLean, Fort Snelling, MN

**Responses**

**Responses**

**Comment 58-01**

See response to Comment 6-01, which discusses the use of an enhanced ZLD system that would eliminate discharges of process water and cooling tower blowdown into any water bodies and negates concerns about potential impacts from effluents. See Sections 4.3 and 4.17 (Volume 1) for discussions on potential impacts from increased CO<sub>2</sub> and mercury emissions, respectively.

**Comment 58-02**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Commenter 58 – Timothy and Patricia Zoerb**

>>> "trtlke" <[trtlke@comcast.net](mailto:trtlke@comcast.net)> 1/8/2008 4:32 PM >>>

**58-01**

Letting Mesaba go ahead will invalidate all environmental legislation passed in this state in the last two years. It runs counter to the spirit if not the letter of these new global warming laws. It will pollute groundwater, poison the surface water of Canisteo Pit, throw massive amounts of CO<sub>2</sub> and enough mercury into the air to affect life in the northland for centuries. It will make hypocrites out of the decisionmakers and let everyone know that government finally, ultimately, can and will be bought for enough money.

On a personal level, it will make me look elsewhere to live and pay taxes. It will make my present property a lot less valuable. It will teach my children to be deeply cynical of all politicians, the political and governmental process, and to think of our country and state as every bit as bad as Hugo Chavez's Venezuela.

**58-02**

There is no justification that can be given to permit this "project" to go ahead. It will be known as the smelly dirty rat of corrupt government and regulatory processes run amok. Just as the robber barons more than a century ago raped the northland for its resources and exploited new immigrants for their labor, the purveyors of this project want to subvert good environmental sense for financial gain. Their gain will be paid for at taxpayer expense and resident's health impacts. Pat Micheletti and Julie Jorgensen have no intention of living near their new plant, but we were planning on living next to Trout Lake.

Sincerely,

Timothy and Patricia Zoerb  
[trtlke@comcast.net](mailto:trtlke@comcast.net)

**Commenter 59 – Harry Hutchins**

DEIS Measba project

Page #  
4 8 2 1

59-01

Changing forestland to grassland will only benefit edge species. We have an abundance of these already. What is declining are forest interior species, species which need larger patches of intact mature forest, and ground nesting birds. These corridors will provide easy hunting well into the fragments of forests Studies show these edge effects go well into the forests – at least 200 meters. Changing forestland to grassland will also be a loss of a Carbon Sequestration sink and loss of biodiversity Righelato and Spracklen, Science 317:902) There should be a GIS study buffering the amount of forest habitat that would be lost from ecologically functioning as a forest. Just the amount of land is one thing, weather the land base functions as a mature forest patch is another – especially with the creation of permanent hard edge.

Last graph

59-02

How are these areas going to be restored? Need to be specific here. Using native genotypes is expensive and the plant material is not readily available. How much native seed will be used? Are they using non-native grasses and hay? Using hay as a ground cover spreads weed seeds. Native grass seeds will have to be maintained with some burning. Is this feasible on these locations?. The weed seeds will spread into the forest as has been documented in rural road construction. Invasive species control than becomes a multimillion dollar control issue and tax burden and forest health issue. As noted in the DEIS, these invasive plants establish easy and are little used by wildlife. A further degradation of our forest environment. So what about the maintenance of this changed ecosystem? This has not been answered adequately – both ecologically and economically.

Fauna  
Graph 2

59-03

What Habitat type is so abundant? It is never stated. “Comparably habitats are abundant” has no business being in an ecological document. I think the wording ABUNDANT needs to be defined. This is arbitrary and for those species which require these NPC, they need to be large, spatial patches, common, and of various age classes across the landscape. Not fragmented small parcels, less abundant and dominate by one or two age classes. What about the organisms which have large spatial area requirements in mature forests? Document goes back and forth from using the wording of habitat type (Kotar) to listing natural plant communities (DNR) for Ecological Classification Systems. The actual NPC is not listed until several pages later. Very confusing and poorly written.

**Responses**

**Comment 59-01**

Section 4.8 (Volume 1) of the EIS addresses loss of ecological function and forest fragmentation, including the creation of increased forest edge and decline of wildlife species. Also, see responses to Comments 14-02 and 14-03, which address the same concerns. The amount of forest land lost to the Mesaba Energy Project will be negligible compared to worldwide forest land serving as carbon stores. Additionally, the amount of carbon released from forest clearing is small compared to the amount of carbon lost each year to forest fires and other natural disturbances (Natural Resources Canada, 2007).

**Comment 59-02**

The following text has been added to Section 4.8.2.1 (Volume 1) concerning invasive plants species: “Invasive species are species that have been introduced, or moved, by human activities to a location where they do not naturally occur and are termed “exotic,” “non-native,” “alien,” and “nonindigenous.” Oftentimes, these species become dominant in disturbed areas and outcompete native species, lower biological diversity, and alter ecosystem function... The potential for invasive species, primarily invasive plant species, would increase within the project area through construction and clearing activities. Natural areas along the power plant as well as utility corridors would be susceptible to invasive species introduction. Both the presence of vehicles and human traffic which can inadvertently carry invasive plant seeds from other locations would be increased. Construction equipment could inadvertently carry invasive plant seeds into the area and continued maintenance (i.e., vegetation clearing) along the utility ROWs would potentially allow for the spread and dominance of these species. Impacts to the overall ecosystems would be reduced as these species would be located within lower quality habitat areas that would experience periodic human disturbance. Invasive species control measures such as spraying and manual removal could be implemented in areas dominated by invasive species to minimize impacts and prevent spreading.”

**Comment 59-03**

Where appropriate, the term “abundant” has been stated with a reference to Section 5.2.6 (Volume 1), which describes proportional habitat impacts in the region.

**Responses**

**Commenter 59 – Harry Hutchins**

59-04	Graph 3, s 1	<p>Good statement about dispersal and migration.</p> <ul style="list-style-type: none"> <li>• These corridors will create barriers to movement</li> <li>• Many of these forest birds are important in maintaining forest health by feeding primarily feeding on butterfly and moth larvae which would strip our trees of their leaves.</li> </ul>
59-05	4 8 3 1 s1	<p><b>We do not have Turkey in Itasca County</b> or at the Eastern location of the plant. Why was this written in? Has there been any local research on these ecosystems?</p>
59-06	4 8 3 2	<p>This statement is incorrect in Northern Minnesota. See research by Natural Resource Research Institute in Duluth and other Lake States wildlife authors. This needs citation. Seeding Transportation lines and utility corridors WILL NOT “BENEFIT” native north central wildlife, as most species in decline in Minnesota are not edge species.</p>
59-07		<p>Cow bird should be one word.</p>
59-08	4 8 3 3	<p>A basic animal ecological principal is that populations cannot pick-up and move to the next woodlot. It may not have the same elements as the destroyed forest patch. There are already individuals that are occupying those niches and know the territory and food sites and territories are established. Even if you could get to a new patch, other individuals of that species are there occupying the site. There is only a decline in numbers of that species in that region of that animal community.</p> <p>This is way to broad a statement as these species vary dramatically in habitats in which they occur for all 60 species of land vertebrates that can be hunted or trapped in Northern Minnesota. Needs much more research here.</p> <p>An impact of <b>habitat loss</b> is pretty darn serious to wildlife. In fact it means the end. Why does this seem to be taken so lightly and buried in the middle for the p-graph?</p> <p><u>Protected species</u></p>
59-09	4 8 4	<p>They Canadian Lynx range is retreating to the north as climate change will decrease lynx numbers, and as forest decreases. Forests are important in CO2 sequestration, so as we decrease forest area with this power plant and associated ROW’s, we will only contribute to the decline of the Lynx habitat, its climate conditions, and the requirements of its chief prey – the snowshoe hare. Another reason to not build this power plant in relation to ETS species.</p>

<b>Comment 59-04</b>	<p>The width of the utility corridors would likely not impede the movement of most wildlife. See responses to Comments 14-02, 57-11, and 59-02 regarding other impacts fragmentation may have on habitat.</p>
<b>Comment 59-05</b>	<p>The reference to turkey in Section 4.8 (Volume 1) has been removed.</p>
<b>Comment 59-06</b>	<p>“Seeding the transmission or utility corridors with an appropriate seed mixture could benefit an assortment of wildlife species that thrive within a forest edge.”</p> <p>This statement does not assert that seeding the transmission and utility corridors will benefit all native north-central wildlife in decline; it states that <i>edge</i> species may benefit. The statement is accurate.</p>
<b>Comment 59-07</b>	<p>The text in Section 4.8.2.1 (Volume 1) has been revised as suggested.</p>
<b>Comment 59-08</b>	<p>See responses to Comments 14-02, 57-10, 57-11, and 59-02, which address the same concerns.</p>
<b>Comment 59-09</b>	<p>It is unlikely that habitat loss and fragmentation resulting from the Mesaba Energy Project would represent a significant obstacle to lynx from a regional perspective. A recent survey found no evidence of lynx residing in or traveling through the West Range Site area. A survey near the East Range Site found evidence of lynx in locations 10 miles and 18 miles away from the site. While lynx may be present in the vicinity of the proposed project sites, habitat quality is marginal and lynx density at the sites is expected to be low. The West Range Site does not lie within or near any designated critical habitat for the Canada lynx. However, the USFWS expanded the critical habitat on February 25, 2009 (<i>74 Federal Register</i> 8616) to areas that immediately surround the East Range site (see map at <a href="http://www.fws.gov/midwest/endangered/mammals/lynx/lynxMNmapCh.html">http://www.fws.gov/midwest/endangered/mammals/lynx/lynxMNmapCh.html</a>). Findings of the Biological Assessment indicate that the Mesaba Energy Project is unlikely to adversely affect Canada lynx or their critical habitat in the region. The Biological Assessment has been included in Appendix E (Volume 2) to the EIS, and conclusions have been incorporated into the main text.</p>

**Commenter 59 – Harry Hutchins**

	<u>Impacts of operation</u>	
59-10	4 8 5	What about noise and human activity in the area -- in relation to wildlife behavior and stress?
59-11		Particulate pollution from the gasification plant will add to leaf deterioration and hasten plant decline, growth, and death.
	4 8 2 2 graph 4	
59-12		What about mercury and heavy metals in fish? "... would not be expected to..." This is vague and needs scientific citation.
	<u>Power plant foot print</u>	
	4 8 3 1 gr 2	Needs to be stated the MHn 35b is at the NW edge of its range in the US. It is important to keep this type because of this climate change. It also has an important oak component for wildlife. Red Oak is also at the edge of its range here in Itasca Co.
59-13		MHn 44 This is one of the most productive NPC's for aspen, white spruce, and balsam fir forest. Forest industry cannot afford to lose this NPC. This P graph is inaccurate and exaggerated.
	<u>Fauna</u>	
59-14		<ul style="list-style-type: none"> <li>• <b>It is important to realize that we made a similar statement about the passenger pigeon.</b> They were very abundant and within 60 years this species was extinct through habitat destruction and market hunting. It can happen again.</li> </ul>
59-15		<ul style="list-style-type: none"> <li>• Non native populations of flora will increase with human disturbance and landscaping of site</li> <li>• The statements 'we can do it cause it is abundant' is a sign of an ignorant ecologist. We can't keep chipping away at ecosystems and think they can keep their integrity.</li> </ul>
59-16		If we remove 1230 acres here, 89 acres there, 42 acres there and finally the ecosystems function falls apart. There are no large patches left of intact MHn 44 or MHn 35 any where
59-17		<ul style="list-style-type: none"> <li>• And what about \$\$\$ from tourism industry: especially biking and birding in the region. These are not considered.</li> </ul>
	<u>Protected species</u>	
59-18	4 8 3 pg 7	See previous comments on Lynx and climate change and forest removal

**Responses**

<b>Comment 59-10</b>	The following text has been added to Section 4.8.2.1 (Volume 1):  "Noise from construction may disturb animals or displace them to less favorable habitat; however, wildlife responses to noise may be species-specific, and could result in either avoidance or habituation. Avoidance could cause species to under-use high quality habitat near disturbance areas, resulting in decreased fecundity and survival. Noise impacts due to construction would be temporary and localized in nature."
<b>Comment 59-11</b>	The text in Section 4.8.2.2 (Volume 1) has been revised as follows:  "An indirect impact from both the introduction of access roads and railways and increased traffic would include the potential for increased stress to vegetation from particulate matter and dust, which could injure leaves, stems, and roots and increase vulnerability to diseases or insects (Delphi, 2004)."
<b>Comment 59-12</b>	The paragraph in question refers the reader to Sections 4.3 (Air Quality) and 4.17 (Health and Safety) of the EIS, which address the risks of bioaccumulation of mercury in fish (specifically in Sections 4.3.5.8 and 4.17.2.3). See also Section 4.5.2.1 (Volume 1) for information pertaining to mercury levels. As discussed in Section 4.8 (Volume 1), the operation of the proposed Mesaba Generating Station at either location would have minimal impact on aquatic species and their prey caused by the bioaccumulation of heavy metals. As stated in response to Comment 6-01, the use of an enhanced ZLD system at the West Range Site (as well as at the East Range Site), would eliminate discharges of process water and blowdown water to surface waters.
<b>Comment 59-13</b>	Thank you for your comment. It has been noted and will be included in the administrative record for the EIS.
<b>Comment 59-14</b>	Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.
<b>Comment 59-15</b>	See response to Comment 59-02, which addresses the same concern.
<b>Comment 59-16</b>	Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Commenter 59 – Harry Hutchins**  
**Summary**

The Biological component of the DEIS is flawed in many areas. First, it does not coincide with the goals of the Minnesota Forest Resource Council North Central Landscape plan. In fact, this wasn't even mentioned in the DEIS. The 3 main objectives of the plan which was developed by regional citizens and scientist are as follows

**DESIRED FUTURE FOREST CONDITION of North Central Landscape** [www.frc.state.mn.us](http://www.frc.state.mn.us)

**The future forest of the NC landscape will have the following characteristics when Compared to the current forests of the year 2000:**

1. There will be an increased component of red, white and jack pine, cedar, tamarack, spruce and fir.
2. The forest will have a range of species, patch sizes, and age classes that more closely resemble natural patterns and functions within this landscape.
3. The amount of forestland and timberland will not decrease using FIA definitions for timberland and forestland. Large blocks of contiguous forest land that have minimal inclusion of conflicting land uses will be created and/or retained for natural resource and ecological benefits and to minimize

59-19

Obviously, The 1300 acre proposed power plant does not fit the FRC Landscape Plan in many ways by eliminating forest cover, reducing conifer component, reducing the commercial forest area on productive Natural Plant Community Types (NPC), severely fragmenting the forest with the transmission and transportation and plant site foot print, and reducing the integrity and functions of the forest landscape.

Wildlife populations of many species will be negatively effected by fragmentation and the very real threat of introduction of invasive, non-native species.

Soil compaction on the equipment staging sites will render the sites impractical for growing plants again.

Wildlife cannot just '*get up and move*' to the next site. Those niches and territories are already filled. The populations of already stressed populations of Neotropical and ground nesting birds will continue to decline. The fragmentation and introduction of non- native grasslands into a forested ecosystem will only hasten their decline. Research has shown edge specialist predators have increased and have high predation success hunting along these edge corridors and the viability of forest interior species is short-lived. Over time, these fragmented areas are population sinks and they blink-out and vanish. Edge effects are known to effect forest interior species at least 200 meters from the forest edge.

**Responses**

**Comment 59-17**

Recreation and tourism are discussed in Sections 3.13.3 and 4.13 (Volume 1). See also response to Comment 65-01, which addresses the impacts of the Mesaba Energy Project on recreation and tourism.

**Comment 59-18**

See response to Comment 59-09, which addresses the same concern.

**Comment 59-19**

See response to Comment 14-03, which addresses the same concern. The analysis of impacts to biological resources (Section 4.8) has been revised with additional information, particularly with respect to habitat fragmentation.

**Responses**

**Commenter 59 – Harry Hutchins**

The invasive non-native plants issue will almost certainly negatively affect the integrity of the forests along the ROW corridors for transportation and energy transmission lines.

Finally, I find the Biological section of this document (section 4.8) needs a great deal of re-vamping and literature review. New information over the last 15 – 20 years is not included in this document. We are trading the wildlife and forest integrity off for a short term power plant. Forests and wildlife populations are renewable if we maintain the integrity of the forest ecosystem. This power plant will have a negative impact on this ecosystem and much more homework needs to be done by the authors of this study before this process goes on.

Harry E. Hutchins  
Forest Ecologist  
Itasca Community College  
Member of Wildlife habitat Technical Team for Mn Forest Resource Council  
Member of North Central Landscape Team for Mn Forest Resource Council

**59-19  
(cont'd)**

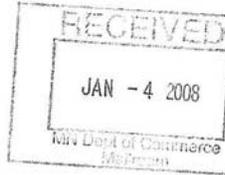
**Commenter 60 –Ryan Neururer**

36608 Deer Lake Way  
Grand Rapids, MN 55744  
(218) 326-3758

December 13, 2007

Bill Storm  
Minnesota Department of Commerce  
85 7th Place East  
Suite 500  
St. Paul, MN 55101

Dear Mr. Storm:



60-01

After reading some of the Environmental Impact Statement I still stand on the opposing side of this project. Although it would be nice to have a few more job openings on the iron range, I feel that the environmental effects are too harsh and outweigh the benefits of building and operation the coal facility of the proposed mesaba project.

60-02

I like to consider myself an avid walleye angler, enjoying many of the areas local waters. With the proposed location of the mesaba project, the facility will be releasing mercury emissions into the air which will end up in the local lakes and rivers. Where I live and fish will be in the red zone on the map of the mercury emissions impact zone, which means that, 800+ fg/m3 of mercury will be emitted from the new plant. Allowed walleye consumption is already low for men and women not planning on getting pregnant, according to the Minnesota Department of Natural Resources, being allowed to eat up to one meal of walleye a week. That number goes down from one meal a week to one meal a month for pregnant women, women who may become pregnant, and children under age fifteen. With more emissions of mercury into the air and water, these numbers of meals could turn for meals per week to meals per month, meals per month to meals per year. I think this project is unsafe for the environment and the local residents, people and animals, and should be reconsidered if it is a right fit for the location.

I thank you for your time in allowing me to write this letter and voice my opinion. I hope you take what I have said into consideration.

Sincerely,

Ryan Neururer

**Responses**

**Comment 60-01**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Comment 60-02**

Sections 4.3.5.8 and 4.17.2.3 (Volume 1) address the impacts of the Mesaba Energy Project's mercury emissions on fishable waters and fish consumption. The results of AERA modeling and analysis in accordance with MPCA requirements indicate that the incremental risk associated with consumption of fish from Big Diamond Lake by adult subsistence fishers would be below the MPCA accepted risk value for the fish ingestion exposure pathway. As explained in the response to Comment 42-01, Big Diamond Lake was chosen as representative of fishable lakes within the release plume of future Mesaba Energy Project emissions.

**Commenter 61 – Christian Charity Warrington**

December 14, 2007

Christian Charity Warrington  
928 N.E. 13<sup>th</sup> Ave. #59  
Grand Rapid, MN 55744

Bill Storm  
Minnesota Department of Commerce  
857<sup>th</sup> Place East  
Suite 500  
St. Paul, MN 55101

Attention: Bill Storm

Dear Mr. Storm,

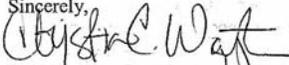
The proposed Mesaba energy Project is an unethical way of creating viable solutions to creating efficient energy. As a global community we need to look at the elimination of dependence on fossil fuels. There are other long term options that may overlooked such as wind or solar energy.

These renewable energy sources will catapult our generations into the future. Fossil fuels are already stressed, and costs of the clean coal-gastrification only puts a band-aid on our degradation of the planets resources. I believe politics have already defiled Mother Nature enough. I am firmly against this project only because I am focusing on our future generations. Is it not enough for these energy monopolies in Minnesota and nationwide to make millions off of consumers, but to exploit an area that is already in financial turmoil or economic despair?

The Minneapolis Excelsior didn't look at the long term picture in the proposal as to the storage, where will it all go? It is unethical and grandiose to minimize the problematic potential of cleaning up another spill or human related error of containment. Something always goes wrong, nothing is ever perfect.

Please make a morally and ethical decision in this project. Isn't it worth your children or grandchildren to say that money didn't ruin their air? Quick Fixes never work and depleting out natural resources is catastrophic. New energy business could come from producing wind and solar power manufactured in the U.S not in Europe.

Sincerely,



Christian Charity Warrington, Itasca Community College and Concerned Air Breather



**Responses**

**Comment 61-01**

The response to Comment 37-01 explains DOE's purpose and need. DOE oversees numerous projects that are investigating and supporting a wide variety of renewable energy generation technologies, such as wind, solar, and hydro power.

61-01

**Commenter 62 – Jennifer Biscardi**

Mrs. Jennifer Biscardi  
103 SW 10<sup>th</sup> Avenue  
Grand Rapids, MN 55744  
218.999.5461  
email: [jbiscardi@hotmail.com](mailto:jbiscardi@hotmail.com)  
December 15, 2007  
RE: DEIS for Taconite Coal Gasification Plant



Bill Storm  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East  
Suite 500  
St. Paul, MN 55101

Dear Mr. Storm,

I am a resident of Itasca county, I am also the mother of five children, a full-time student of Itasca Community College, and am also employed full-time in a local office, and lastly, but not least, I am a wife.

62-01

As a resident, and a tax-payer, I would like to add my opinion to the many thousands of voices in the Northland that are saying no to the coal gasification plant in Taconite. My family does not need the added thermal, air, water, light and visual pollution this proposed project will bring to our environment. We do not need the power in our region, and we don't see any reason to suffer so that people in other areas can use power generated here.

62-02

They tell us that there may be one hundred jobs generated once the plant is up and running, but it will easily cost us a hundred jobs that hinge on tourism. People of the Northland are tired of shouldering the responsibility of power for the Twin Cities and suburbs. Make your own power and learn to conserve like the "out-state" citizens have learned. Walk, shop locally, shut off your lights, take shorter showers, wash clothes in cold water, etc.

62-03

According to the DEIS, after wading through much technical-ese, what the coal plant will give us is added traffic, added lights, added visual obstructions, more trees cut down, more trains, more particulates in the air, etc. All of which adds up to pollution where I'm from. And where I'm from, we're taught that carbon monoxide is poison. The Northland doesn't want to be poisoned for the benefit of others, thank you very much.

Sincerely,  
Jennifer Biscardi  
Michael Biscardi  
Christopher Richardson  
Amanda Richardson  
Kyla Elliott  
Dominic Biscardi  
Michael Biscardi, Jr.  
Rickey Hickey, Jr.

dominic Biscardi

**Responses**

**Comment 62-01**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Comment 62-02**

Section 4.11 of the Final EIS (Volume 1) discusses the potential impacts of the Mesaba Energy Project on the economy and employment. Impacts on recreational resources are described in Section 4.13 (Volume 1). See also the response to Comment 65-01, which addresses the impacts of the Mesaba Energy Project on recreation and tourism.

**Comment 62-03**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

## Commenter 63 – Sarah Copeland

Sarah Copeland  
902 Northwest Third Avenue  
Grand Rapids, Minnesota 55744

December 15, 2007

Mr. Bill Storm  
Minnesota Department of Commerce  
85 Seventh Place East, Suite 500  
St. Paul, MN 55101



Dear Mr. Storm:

- Minnesota is known as an innovative and progressive state.
- Northern Minnesota is known as a beautiful, natural playground.
- The Iron Range is known as a severely depressed community with the state's highest unemployment and poverty rates.

When I first heard about the possibility that substantial numbers of jobs might come to the Taconite community, I was thrilled. This would make a huge impact on the entire Iron Range area. If a business could create 100 middle-class level jobs, the presence of those jobs creates more jobs. Then I found out that the business was coal-based. What are we thinking?

This 'new' coal gasification plant has placed a terrible rift throughout our communities based on only 2 factors: jobs and the environment. You either want jobs, or you want to save the environment. If you are interested in providing jobs for this extremely poverty-stricken and working-poor area, then you probably dump used motor oil in your local lake. If you are concerned about the amount of toxic and hazardous waste that this plant will dump into our air and water supply, then you are obviously a rich, tree-hugging snob who thinks that the environment is more important than human beings. This is an absurd mentality; and yet it is proliferating. (It is even more absurd to hear the grumbling as a massive windmill blade is being trucked through town.)

- Minnesota is known as an innovative and progressive state.

We are better than this. We are smarter than this. In the world today, with what we know and where our nation wants to be in the future, I find it unbelievable that anyone would consider building a "new" energy plant that uses fossil fuels. Regardless of what companies say they can do or reduce, it is backward thinking to build new with fossil fuels in mind. We need to get off the crack.

We need real, innovative and progressive solutions on the Iron Range. The best use of taxpayer money would be to select businesses that provide solar, wind or other sustainable or renewable energy sources. Northern Minnesota is placing workforce development as a huge priority for our region. We need help investing in people and companies that want to work for the future.

Here's a thought: In the DEIS (Volume 1) dated November 2007, section 1.3.2, under DOE Proposed Action, it states that \$36 million of taxpayer money will be used to co-fund just the design and one-year operational demonstration of the Mesaba Energy project. A portion, over \$22 million has already

## Responses

### Comment 63-01

As stated in response to Comment 12-02, DOE is the Federal agency charged with responsibility to ensure that the U.S. develops sources of energy to maintain economic prosperity and national security. The department oversees numerous programs and projects that are intended to achieve these objectives, including fossil energy, nuclear energy, renewable sources (solar, wind, biomass), and energy conservation. However, Section 1.2.1 (Volume 1) notes that more than 50 percent of the nation's electricity generation is fueled by coal and nearly half of existing plants are more than 30 years old. Replacement of coal-based power generation by other energy sources is a long-term proposition at best.

As stated in response to Comment 37-01, DOE's purpose and need in this EIS are to demonstrate a specific, advanced coal-based technology selected competitively for co-shared funding under the CCPI Program. The Mesaba Energy Project was selected competitively from among 13 applications in response to Round 2 of CCPI Program funding opportunity announcements. Section 2.1.1.2 (Volume 1) of the Final EIS describes the reasonable alternatives considered by DOE. Because the U.S. Congress established the CCPI Program with the specific goal of accelerating commercial deployment of advanced coal-based technologies as explained in Section 1.2.1 (Volume 1), other technologies (such as nuclear, hydro, wind, solar, or conservation) that cannot carry out these goals are not reasonable alternatives in this EIS.

As stated in response to Comment 1-01, "Clean coal technologies" refer to advanced coal utilization technologies that are environmentally cleaner, and in many cases, more efficient and less costly than conventional coal-utilization processes. The IGCC technology is considered a clean coal technology because it would have a substantial overall emissions reduction advantage when compared to existing conventional coal-fired power plants.

63-01

**Commenter 63 – Sarah Copeland**

**Responses**

been made available for cost sharing. That is a substantial amount of money. Look at how much state and federal money has already been spent just attending meetings and developing this DEIS.

There are many areas in these reports that talk about alternative actions. If we decided to only spend \$20,000,000 on an energy project for the Iron range area, what could we accomplish? (A large corporation would require the state to provide more incentive than \$20 million.) However, we could provide a between 1,070 and 2,516 full-sized homes with solar panels that would adequately supply their winter electric needs, and provide excess energy in the summer to sell back to the electric company. On the average, this would mean clean, free energy for approximately 6,038 Iron Range residents. Conservation Technologies, located in Duluth, MN, makes solar panels that could be used, keeping state tax money in our state. Can you imagine what this would mean if the state spent the same amount of money as they are planning for this coal-based project? (Is the coal-based project going to provide free energy? It certainly isn't clean energy.)

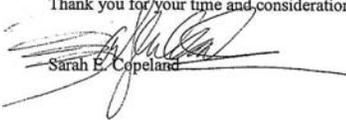
Have one of our state's economists map the equations out using the money multiplier. The impact on this entire region would be phenomenal. As a huge bonus, there is no need for additional environmental impact statements. Only positive results would come from this action. We need to think. Think smart.

This is actually a fantastic opportunity for the entire state of Minnesota. Do we want to continue to be on the forefront of technology and innovation? Whether it is wind farms, or solar panels or ethanol from prairie grasses or other biomass (much more productive than corn) the Iron Range has the potential of being the shining star of our entire nation.

“Wow, look what they did up in Northern Minnesota! They turned a severely depressed Iron Range into a vibrant community. They have low unemployment, an abundance of free and clean energy, and they are working on an unbelievable public transportation system. The air is clean and the skies are blue. I heard you can even drink the water right out of the lakes!”

Is this only some dream? I don't think so. I invite you to come and spend some time up here on the Iron Range. Visit the local diners. Talk to the miners. Take the time to do some cross-country skiing or snowshoeing. Stand out in the middle of a frozen lake at about 9:00 at night. Check out the Northern Lights dancing across the sky. Listen. (I personally prefer doing this in a boat during the summer when the loons are present.) Don't wait very long to make the trip though, – people are waiting in line to dump hazardous waste in our air, lakes and groundwater supply – and the government is paying for them to do it.

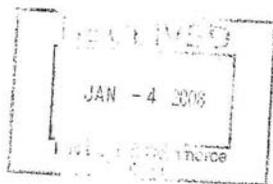
Thank you for your time and consideration in this matter,

  
Sarah E. Copeland

63-01  
(cont'd)

## Commenter 64 – Miranda Hemsworth

Miranda Hemsworth  
6807 West Warren Lane  
Remer, MN 56672  
12/15/07  
Re: The Mesaba Energy Project



Bill Storm  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101

Dear Bill Storm,

I have to admit I'm not too familiar with the Mesaba Energy Project, but then again, not too many are. I was able to read some information regarding the project and discovered that I don't know exactly where I stand. I find that this project has many pros and cons. This "innovative energy project" could have a huge impact on our community. It would create new jobs for the Iron Range, and also produce many opportunities for those thinking of moving to our community.

64-01

This would be the most advanced coal plant in the world. One thing that I questioned was who would be able to work in such a plant? For example, out of the 105 positions in the Wabash Facility in Terre Haute, Indiana, 14% require a minimum of a 4-year college degree. The other 86% of those jobs require specialized training in a specific area, plus extensive previous experience in a power plant, refinery, or similar industrial/military background. These are highly specialized jobs that will pay well, but very few local residents will be qualified for these positions. Would this mean that you would create a training program for our local residents to qualify for these jobs or transfer people in from other areas?

64-02

What will be the environmental impact of the Mesaba Energy Project? Is IGCC technology really a "clean" way of using coal to produce energy? When I first thought about this, I thought that using coal would have a better impact on our atmosphere, but after a little research I found that mercury, carbon dioxide, carbon monoxide, sulfur dioxide, nitrogen oxides, lead, arsenic, volatile organic compounds and particulate matter are all emitted into the atmosphere. I understand that this project would contribute to satisfying the Clear Skies Initiative, which is focused on cutting nitrogen oxide, sulfur dioxide, and mercury emissions by 70% over the next 15 years. I actually think that's great.

## Responses

### Comment 64-01

Section 4.11 of the Final EIS (Volume 1) discusses the potential impacts of the Mesaba Energy Project on the economy and employment. As stated in Section 4.11.2.2, it is expected that permanent labor for plant operations would be drawn from throughout the Arrowhead Region and beyond, because of the specialized skills required for some jobs. Based on the BBER study, plant operation would be expected to induce the creation of additional permanent jobs in the Arrowhead Region.

### Comment 64-02

See response to Comment 1-01, which addresses the same concern. Section 4.3 (Volume 1) describes the impacts of the Mesaba Energy Project on air quality. However, it should be noted that the Clear Skies Initiative was never passed into law.

**Responses**

**Comment 64-03**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Commenter 64 – Miranda Hemsworth**

**64-03**

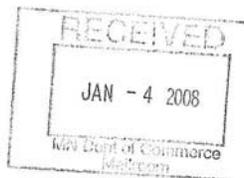
These are just a few things that stuck out to me. There is so much to think about when deciding whether to go ahead or not with a project this big. I'm sure you've heard arguments for and against this project, but please, really think about what's best for our community and environment. We live in an area of beauty and wonder; I would hate to ruin something we all love so much. With that said, I want to thank you for bringing this opportunity to our community.

Sincerely,  
*Miranda Hemsworth*  
Miranda Hemsworth

**Commenter 65 – Dana L. Saville**

December 16, 2007

Bill Storm  
Minnesota Department of Commerce  
85 7th Place East  
Suite 500  
St. Paul, MN 55101



Dear Mr. Strom:

As a Bovey native and student of environmental science, I have serious concerns about the Mesaba Project and its impact on the environment. The EIS does not take into account the value of nature's ecosystems. For example, consider the value of recreation and water regulation and supply provided by Canisteo Mine. On a global scale, the value of recreation to the world is estimated to be worth at least \$3.0 trillion per year and water regulation is worth at least \$2.3 trillion per year. Here in MN, we have diverse ecosystems. How much ecological value does Minnesota provide to the global average and even more specifically, how do the natural resources located in Itasca County contribute to the larger picture? The EIS doesn't take this important measurement into account.

The EIS and supporters of this project view ecological services as free and limitless; expendable if it means more jobs and a boost to the economy. Environmentally literate citizens know this is false. Imagine if Excelsior Energy had to pay the residents of Itasca County for the full value of the recreation, water regulation, and plethora of other ecological services provided to the community by nature. The EIS does not address ecological value in a tangible way and therefore, is not comprehensive.

I am proud to be a Minnesotan and I have lived in places where the water is unsafe to swim in or drink. Minnesota must set an example by clearly defining and assigning a monetary value to the services that nature provides. This is the only way to assess the true cost and impact of a project like this. It's clear to me that the cost is too high and that this project will not provide a healthy and secure life for area residents.

Thank you for your consideration.

Respectfully,

Dana L. Saville  
Bovey Resident

65-01

**Responses**

**Comment 65-01**

The EIS evaluates existing conditions and impacts of the project on natural resources from a biological perspective (e.g., vegetation, wildlife, fisheries, etc.) in Sections 3.8 and 4.8 (Volume 1). Existing conditions and impacts on recreation are described in Sections 3.13 and 4.13 (Volume 1). Tourism is a key sector of Minnesota's economy, and northern Minnesota is the second-most popular destination for travelers (after the Twin Cities). It is difficult to predict the economic impact of the Mesaba Energy Project on tourism revenues, because tourism in the region has coexisted historically with extensive ore mining, timber harvesting, and associated industrial activities. Surface water resources were lost or degraded by these activities in the past, while other valued surface water resources are the direct result of these past activities, as in the case of the flooded Canisteo Mine Pit, Hill Annex Mine Pit, and other flooded mine pits. And, it should be recognized that the CMP could be lost to potential dewatering and mineral extraction in the future. The response to Comment 6-01 explains that the use of enhanced ZLD at the West Range Site, as already proposed for the East Range Site, would eliminate all plant discharges to surface waters, while water levels in the CMP would remain stabilized during withdrawals for Mesaba plant operations. Although Excelsior has proposed the limitation of public access to the CMP as a security measure to protect the plant intake facilities, the company has expressed its willingness to compromise and to comply with MNDNR's decision on the matter (see response to Comment 76-04). The EIS has also evaluated the potential risks of mercury deposition and other hazardous air emissions in Sections 4.3.2.4 and 4.17.2.3 (Volume 1), which have not indicated the potential for risks above levels established by MPCA. Although construction and operation of the plant would eliminate or alter the land cover at the respective permitted site, and wetland mitigation would be required, results of the EIS do not support the expectation of a substantial loss of tourism revenues attributable to the Mesaba Energy Project.

## Commenter 66 – Kari Engen

Kari Engen  
6666 County Rd #126 NE  
Longville, MN 56655-3071

December 16, 2007

Bill Storm  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East  
Suite 500  
St. Paul, MN 55101

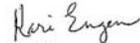
Dear Bill,

My name is Kari Engen and I have lived in Minnesota for 8 years. I am now studying Environment Science and have been asked to read the study about the Mesaba Energy Project that is being proposed. I selected **Chapter four, Environmental Consequences; section 4.7 Wetlands** "*direct loss of wetlands due to the placement of dredge or fill material and secondary impacts relating to the altering or conversion of wetland function due to the removal of vegetation or change in hydrological regime.*" to write to you about.

There are 302 pages in this section and I focused on pages 111-112. After reading this several times, it seems to me that although there will be some negative impact on the wetlands, if a power plant must be built, this is inevitable. My question here would be if another power plant is really needed in Minnesota, wouldn't a nuclear power plant be more environmentally friendly? Perhaps a "wait and see" approach would make more sense. Rather than push ahead with this project, why not wait another five years and then do another study?

These are just some suggestions I wanted to share with you. Thank you for reading this letter.

Sincerely,

  
Kari Engen



## Responses

### Comment 66-01

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS. Chapter 1 (Volume 1) of the Final EIS explains the importance of this project to DOE and the Minnesota Legislature.

66-01

**Commenter 67 – Darryl Sobey**

Bill Storm  
Minnesota Department of Commerce  
85 7th Place East  
Suite 500  
St. Paul, MN 55101

12/16/2007

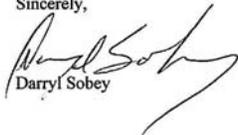
Dear Bill Storm,

My name is Darryl Sobey, and I am writing this letter to express my feelings on the Mesaba Project. I have spent the last five months studying environmental science, and I am one of the top students in my class. I have read the DEIS, and have an educated opinion on this subject. There are a few problems that I see with the Mesaba Project: Excelsior does not have a plausible design for carbon capture, the geology of the proposed area is not composed of the right material to store the CO<sub>2</sub>, and the amount of CO<sub>2</sub> emissions that this site will produce in its life time is in the millions of tons.

I am sure you have read it, but I would like to present to you a few quotes that I have pulled from the DEIS. The first is regarding the storage of the CO<sub>2</sub> emissions. "Excelsior has not established a specific, detailed design for carbon capture, transport or sequestration." The second is regarding the amount of CO<sub>2</sub> that will be emitted without a sequestration method. "Emissions of CO<sub>2</sub> over the 20-year commercial life of the generating station would be approximately 214 million tons without mitigation." The third simply states, "The combined visibility impacts could potentially be significant".

The IPCC concluded that climate change is directly linked to the amount of CO<sub>2</sub> in the atmosphere. They used data collected from over a thousand scientists from all over the world. The Mesaba Project doesn't yet have any means of CO<sub>2</sub> storage, and therefore will be emitting massive amounts of CO<sub>2</sub>. This in turn will be speeding the trend of global climate change. In conclusion, I could not live with myself knowing that I did not try to do my part in stopping climate change. I hope you feel the same way.

Sincerely,

  
Darryl Sobey



**Responses**

**Comment 67-01**

See responses to Comments 1-02, 4-01, 4-03, 26-01, 49-01, and 53-04, which address the same concerns. The Final EIS (Volume 1) addresses greenhouse gases specifically in Sections 2.2.1.3 (under subsection *Potential Carbon Capture Retrofit*), 2.2.3.1 (under subsection *Emissions of Greenhouse Gases*), and 5.2.8 (under subsection *Greenhouse Gases and Climate Change*). As stated in the EIS, the Mesaba Generating Station Phases I and II without CCS would emit approximately 9.4 to 10.6 million tons per year of CO<sub>2</sub>.

67-01

Commenter 68 – Diana L. Storrs

Diana L. Storrs  
P. O. Box 552  
Grand Rapids, MN 55744-0552



December 16, 2007

Bill Storm  
Minnesota Department of Commerce  
85 7th Place East, Suite 500  
St. Paul, MN 55101

Dear Mr. Storm,

I am a student at Itasca Community College in Grand Rapids, Minnesota, currently finishing a semester of study that includes a course in Environmental Science. The text for this course is *Principles of Environmental Science*, Cunningham, William P. and Mary Ann Cunningham. The chapter under discussion is entitled, "Environmental Policy and Sustainability", subtitled, "You must be the change you wish to see in the world." --Mahatma Gandhi.

In conjunction with our studies, we were encouraged to read the Draft Environmental Impact Statement, Mesaba Energy Project. As I am sure you are aware, this is a challenge to read in its entirety. I therefore selected **Appendix F1, Documentation for USACE, "Overall Project Purposes From a Public Interest Perspective", Item d. Develop solid fuel baseload technologies with significantly reduced emissions of particulate matter, mercury, SO2 and NOx"**, upon which to focus my comments. It has become common knowledge that mercury is a neurotoxin that can cause harm in people and wildlife, sulfur dioxide is a corrosive gas that in part is a component of acid rain and nitrogen oxides produce smog. It is also fairly well known that coal burning electrical power plants emit these and other particulate matter and an "Integrated Gasification Combined Cycle" power plant is still a coal burning plant. West Range site or East Range site and LEDPA notwithstanding, it is my opinion that all needs as outlined, would be far better served now and in the future by a nuclear power plant.

Section h which reads, "**Support the development of energy systems which enhance national security**", is a noble and lofty goal and one with which I heartily concur. Stamp the words "national security" on nearly any program and I will support it first and ask questions second. So while I support a project that will bring jobs and electrical power to Minnesota, I am now asking the questions, is it not better to avoid adding any more emissions to our air in the first place, rather than trying to minimize them? Is this not a case of none is better than some?

I appreciate your time in reading this letter, Mr. Storm.

Thank you,  
*Diana Storrs*  
Diana Storrs

Responses

Comment 68-01

See response to Comment 37-01, which addresses similar concerns.

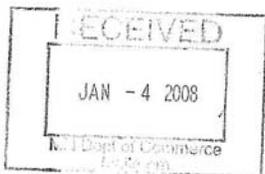
68-01

**Commenter 69 – Meagan Wichterman**

December 19, 2007

Re: Coal Gasification Plant

Mr. Bill Storm  
Minnesota Department of Commerce  
85 7th Place East, Suite 500  
St. Paul, MN 55101



Dear Mr. Storm:

I am writing this letter to you to inform you about my concerns regarding a coal gasification plant that is being proposed for construction in Itasca County, Minnesota, and the Departmental Environmental Impact Statement (DEIS) that was written about this project. This letter also serves as an educational project assigned to me through an Environmental Science class that I am taking at Itasca Community College.

First of all, I found it difficult to read and comprehend the DEIS as it contains very technical and regulatory terminology that is confusing. In Chapter 4 of this DEIS, you stated that mercury levels in the lakes would stay below the total allowable limits. However, you did not mention the current status of mercury levels in lakes that are located near the plant's proposed construction site, nor did you give a projection of the potential increase in mercury levels that will be emitted once the plant becomes operational.

Mercury contamination is accumulated and stored in the muscle tissue of fish and wildlife that are exposed to it either through direct consumption or that which is absorbed through the skin. This poses a significant health risks to pregnant women, small children, elderly populations, people with immune deficiency disorders, and indigenous populations who consume large quantities on these dietary staples.

With 1,000's of lakes under mercury advisories and warnings, Minnesota's economy is also at risk due to a decline in tourism—one of the state's primary industries. In addition to being a prime vacation destination, Minnesota (especially the northern quadrant) attracts hunters and fish enthusiasts across the United States. Resort owners in Minnesota have already been negatively impact by the growing number of fish advisories, and some have had to close their businesses since many of their out-of-state customers have chose to go elsewhere.

The DEIS did not include any information about the possible long-term environmental affects of storing waste by-products that will be generated from this plant. Even with state-of-the-art leachate collection equipment and liners, I believe that Minnesota's harsh winters pose a risk for breakage and leakage to underground storage containers, thereby degrading soil and groundwater supplies.

Lastly, in constructing the plant and its pipelines, home owners are being displaced in what amounts to property "takings" by the company proposing this plant. While this project is seductive to economically-challenged communities that are looking for employment opportunities; I believe the environmental impacts and human health risks far outweigh the handful of jobs this plant promises to supply.

Sincerely,

Meagan Wichterman  
45038 County Road 172  
Deer River, MN 56636  
(218) 246-2126

**Responses**

**Comment 69-01**

See response to Comment 59-12, which addresses the same concern.

**Comment 69-02**

Refer to Section 4.16.2.2 (Volume 1), which discusses proposed management for hazardous and non-hazardous waste and pollution prevention of such material. The Mesaba Generating Station would be required to adhere to regulations under the Resource Conservation and Recovery Act (RCRA) for the handling, storage, and disposal of generated hazardous waste (described in Section 4.16.2.1). Guidelines for the installation of underground storage tanks typically state that such structures must be protected from freezing by installing below the frost level. Thus, underground tanks would adhere to design requirements that minimize the potential for leakage and include monitoring systems to detect accidental releases (Minnesota Rules, Chapters 7045 and 7150).

**Comment 69-03**

As stated in Sections 4.11.3 and 4.11.4 (Volume 1), respectively, the Mesaba Energy Project would not require the destruction of housing or the displacement of population at either the West Range or East Range Site. The magnitude of human health risks attributable to the project based on air emission modeling as described in Section 4.17 of the Final EIS (Volume 1) would be below EPA and MPCA thresholds.

69-01

69-02

69-03

**Commenter 70 – Bridgitte Ross**

Dear Bill Storm,

After reviewing the EIS report, I found there to be several areas of concern. One of the main concerns many residences have is in the area of CO2 sequestration. The fact there is no procedure of how this will be done is only almost as scary as the fact that such equipment may not even be put in at all. Besides this, the amount of deforestation, pollution, and destruction that will take place if this project goes through is appalling. Not only will acres and acres of forest land and natural wildlife be destroyed in the process, but the EIS fails to even address this as a major issue. Besides just the damage done on the immediate construction site, the need for new gas lines and other utilities will create much more damage than suggested. This project is clearly being proposed for the wrong are. Northern Minnesota is in no power shortage, Mesaba does not even have a buyer for its energy yet, and the negative environmental impacts to our local residence and environment far outweigh the benefits.

Sincerely,

Bridgitte Ross

*Bridgitte Ross*



**Responses**

**Comment 70-01**

See responses to Comments 4-01 and 4-02, which address concerns about carbon capture and sequestration. Sections 4.8 and 5.2.6 of the Final EIS (Volume 1), respectively, address project impacts and cumulative impacts on forest lands and wildlife habitat.

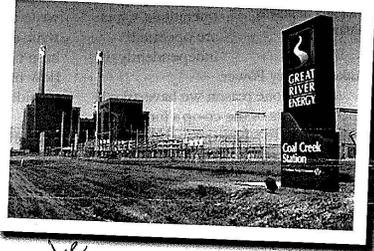
70-01

Commenter 71 – Betty Dodson

Responses

Public Comment Sheet  
From Lake Country Power Newsletter  
December 2007  
RECEIVED  
JAN -7 2008  
MINNESOTA DEPARTMENT OF COMMERCE  
ST. PAUL, MINN.

# Power factor: a closer look at energy costs



Great River Energy is dedicated to providing reliable, competitively priced energy to its 28 member cooperatives, including Lake Country Power. With that dedication comes the need for necessary investments to improve operations, reliability and increase efficiency. Investing in the future today will ensure adequate power supply for years to come.

As a result, Great River Energy anticipates passing on an average rate increase of 8.5 percent to its member co-op systems in 2008. *(Editor's Note: GRE's rate increase to Lake Country Power will actually be closer to 11 percent based on seasonal demand and time of use. It's expected this will account for an additional \$3 million impact to Lake Country Power's 2008 budget.)* There are three primary reasons for the increase in Great River Energy's wholesale rate.

1) Regular system maintenance, such as outages for routine plant maintenance, helps ensure the system's reliability. However, when a generation facility is offline for maintenance, Great River Energy must purchase higher priced replacement power from the open market, which is costly. In 2008, Great River Energy will experience an extended outage for approximately 70 days at its primary generation facility in North Dakota.

*Note*  
2) Increasing costs to mine coal will also affect Great River Energy's finances in 2008. The coal that is being mined for Great River Energy's North Dakota operations is getting farther away from the plant and deeper in the ground, so the cost of mining that coal is rising. About 25 percent of the overall wholesale power cost increase is related to mining coal next year. The mining industry is also experiencing increases in the cost of the equipment used to mine the coal.

3) In 2008, Great River Energy will realize a full cost of ownership for Cambridge Station, a new natural gas peaking plant near Cambridge, Minn. As transmission and generation projects are completed, the impact of rising interest payments is also reflected in the member rate.

*This came from our power company!  
Our home was built in 1993 (2 bedroom) and our electric bill is over \$100<sup>00</sup> per month.  
Our property taxes cost over \$100<sup>00</sup> per month!  
On our fixed income we will not be able to afford anymore taxes for all that Mesaba Excelsior Project will entail  
Betty Dodson*

### Comment 71-01

The PUC has responsibility to approve a power purchase agreement for the Mesaba Energy Project after determining that it would be in the best interests of the utility companies and rate payers.

71-01

Commenter 72 – Alvin Donnell



Public Comment Sheet  
Mesaba Energy Project  
PUC Docket No. E6472/GS-06-668

Name: Alvin Donnell Representing: Iron Range Council  
of Native Americans  
Email: \_\_\_\_\_  
Address: P.O. Box 373 Tel: 218 327-2092  
Bovey, Mn, 55709

Comments:

I am an enrolled member of the White Earth Reservation but have lived near the Iron Range most of my life. There have been many changes in the area throughout my 50 years. I was too young to notice the permanent scars in our landscape made by the iron mines. As my life has changed with the birth of our children and most recently my first grandchild I feel that I must accept the great responsibility of stewardship over our Mother Earth to insure a healthy environment for these and future generations.

I was proud to attend the Nov. 27<sup>th</sup> meeting in Taconite with so many educated and well informed neighbors. Many of these requested more clarification or revisiting the EIS. According to the facts & figures presented at this meeting I would request that we stop wasting our time and money funding the

Please submit comments to meeting moderator or send to:

William Cole Storm  
Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101-2198.  
Tel: 651-296-9535.



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Responses

Comment 72-01

See response to Comment 63-01, which addresses the same concerns.

72-01

Commenter 72 – Alvin Donnell

Responses

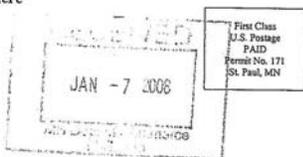
72-01  
(cont'd)

Comments Continued:

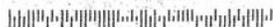
*projects executive's salaries and continue to investigate  
more earth friendly sources of energy (wind & solar)  
We cannot continue to sacrifice our grandchildren  
to provide a more comfortable way of living for  
ourselves or the future generation will suffer or  
maybe not even be able to exist.*

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William Cole Storm  
Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101-2198.



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Responses

Comment 73-01

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

Commenter 73 – Dorothy Stish



Public Comment Sheet  
Mesaba Energy Project  
PUC Docket No. E6472/GS-06-668

Name: Dorothy Stish

Representing:

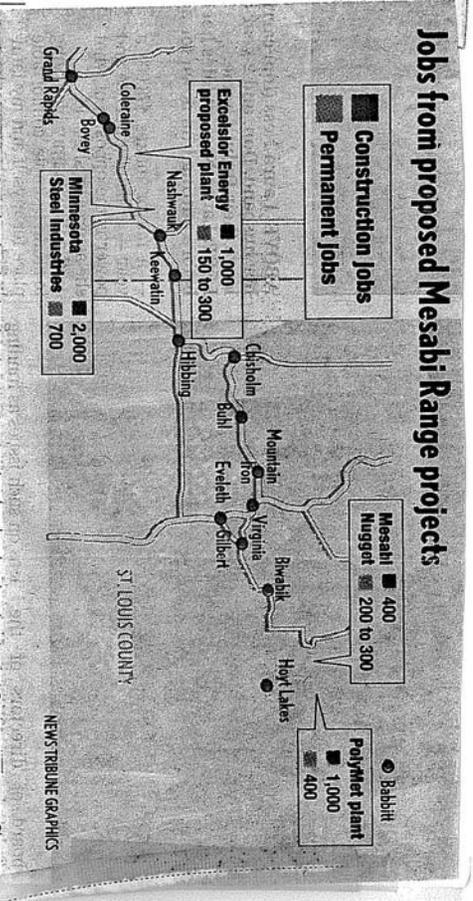
Address: 16177 Westwood  
Nashwanak, MN 55762



Some people call this of us  
"born in the Range" Many of us  
at the death of the Range  
to the people and the  
in on men + women  
God help you if you  
allow this to happen

Please submit comments to meeting moderator  
William Cole Storm  
Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101-2198.  
Tel: 651-296-9535.

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73-01

**Commenter 74 – Nancy LaPlaca**

>>> "Nancy LaPlaca" <[nancylaplaca@yahoo.com](mailto:nancylaplaca@yahoo.com)> 1/9/2008 11:35 AM >>>  
 Mr. Hargis and Mr. Storm:

Following are comments on the proposed Mesaba 600 MW IGCC plant proposed for Taconite MN.

**74-01**

About a dozen IGCC plants have been cancelled or put on hold during the 4 months. See the attached 3-page article about 9 IGCC plants that have been cancelled or put on hold (Emerging Energy Research, Oct. 5, 2007, "TECO, Nuon Underscore IGCC's Woes.") Since the report was issued, 2 more IGCC's have been cancelled: Colorado and Orlando. I worked long and hard to successfully stop the Colorado IGCC, but it was cancelled bc it is simply NOT economic; and although CO2 can be "captured", the entire process, from capture to compression to transportation to re-pressurization to storage -- is enormously expensive and risky. Why go there, when it's cheaper to go with wind and solar? The Orlando plant is notable because it received \$235 million in federal funds, which it must now return.

It's such a shame that our country is run by short-sighted, self-interested people who only know dollars -- and show very little respect for human life.

Facts: coal-fired power produces 40% of all CO2, 33% of all mercury and 66% of acid rain. In some states, EVERY body of water is contaminated with mercury. One in ten (some studies say one in six) women of child-bearing age in the U.S. have so much mercury in their bodies that she is at risk for having a child with serious neurological disorders.

**74-02**

Acid rain is a problem that is only getting bigger.

According to Peabody, coal use soared 30% in the past 5 years (2001-2006), and will increase dramatically over the next couple of decades.

Coal mining wastes are the largest waste stream in the U.S., and coal combustion wastes are second. U.S. coal peaked a few years ago in terms of BTU (heat value) per pound -- meaning that we need to burn more coal for the same amount of heat/electricity.

2/3 of a coal plant's energy is lost as waste heat.

**Responses**

**Comment 74-01**

DOE oversees numerous programs and projects that are investigating and supporting a wide variety of energy technologies. While a combination of technologies, including wind, solar, nuclear, and hydro power, will be important for the nation's future energy generation, coal is expected to remain one of the nation's lowest-cost sources of baseload (continuous) electric power for the foreseeable future because domestic supplies of coal are abundant. A goal of the CCPI is to develop technologies that reduce air emissions and other pollutants from coal-based power plants and to promote acceptance of viable technologies by demonstrating them at commercial scale. IGCC plants offer significant reductions in criteria pollutants and the ability to capture carbon emissions more efficiently than at pulverized coal-fired plants. While IGCC technology is not yet economically competitive with conventional coal-fired power plants that have higher emissions of criteria pollutants, DOE expects that more operating experience will help to advance the technology and reduce costs to improve the commercial viability of IGCC plants.

**Comment 74-02**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Responses**

**Comment 74-03**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Commenter 74 – Nancy LaPlaca**

**74-03**

**Renewable energy is cost-competitive.** Xcel Energy's recently submitted Colorado Resource Plan estimated these capital costs: wind-\$1645/kW (with Production Tax Credit); wind-\$2,000/kW (no PTC); concentrating solar with 6 hrs thermal storage-\$2572; IGCC with 50% capture-\$3912/kW; pulverized coal, dry cooled with 50% capture-\$3688/kW. Energy efficiency is 1-3 cents/kWh!  
[http://www.xcelenergy.com/XLWEB/CDA/0,3080,1-1-1\\_41994\\_45385-42116-2\\_68\\_135-0,00.html](http://www.xcelenergy.com/XLWEB/CDA/0,3080,1-1-1_41994_45385-42116-2_68_135-0,00.html) -(go to Vol. 1, p.1-55).

Thank you.

Nancy LaPlaca  
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303-588-3937

*Mahatma Ghandi wrote about seven sins: wealth without work, pleasure without conscience, knowledge without character, commerce without morality, science without humanity, worship without sacrifice, and politics without principle. [www.energyjustice.net/coal/igcc](http://www.energyjustice.net/coal/igcc)*

## Commenter 75 – Amanda Nesheim

January 9, 2008

PUC Docket E6472/GS-06-668  
DOE Draft EIS for the Mesaba Energy Project (DOE/EIS-0382D)  
Comments on Draft EIS

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Dear Sirs:

Below are nine comments that were combined in one document for your convenience. The comments are separated by lines.

75-01

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In section 1.2 CCPI of the draft Environmental Impact Statement (EIS) one of the bulleted items to qualify for the Clean Coal Power Initiative (CCPI) is the Global Climate Change Initiative to cut greenhouse gas intensity 18 percent by the year 2012.

With the Department of Energy (DOE) readily acknowledging global warming issues and also acknowledging in Appendix A2 of the EIS that Carbon Capture and Sequestration (CCS) is not feasible for the Mesaba Energy Project (MEP), how can the MEP qualify as part of the CCPI program? And therefore how can the DOE justify providing \$36 million in support of the program?

In the same section the DOE mentions aging power generating facilities that will have to be replaced. Yet nowhere in the EIS does it state what facilities will be shut down to validate the construction of the MEP. What power generating facilities will be shut down as suggested in section 1.2 of the EIS?

75-02

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I wish to draw attention to the criteria specified in "Minnesota Rule (MR) 7849.5220 Subpart 1. H. a cost analysis of the costs of constructing and operating the facility that are dependent on design and site; Subpart 2. K. cost analysis of each route, including the costs of constructing, operating, and maintaining the high voltage transmission line that are dependent on design and route; Subpart 3. B. a description of the effects of construction and operation of the facility on human settlement, including, but not limited to, public health and safety, displacement, noise, aesthetics, socioeconomic impacts, cultural values, recreation, and public services; and Subpart 3. C. a description

## Responses

### Comment 75-01

See responses to Comments 4-01 and 4-02, which address concerns about carbon capture and sequestration. See responses to Comments 9-02 and 22-01, which explain DOE and PUC authority to shut down power plants.

### Comment 75-02

The requirements referenced in the comment apply to the Joint Permit Application and not the EIS. See response to Comment 16-01 regarding the BBER study using the IMPLAN model and response to Comment 41-01 regarding the use of cost-benefit analysis in NEPA documents. As stated in Section 1.3.1 (Volume 1) and the cooperative agreement, the estimated total cost for Phase I of the Mesaba Energy Project would be \$2.16 billion, of which DOE would provide \$36 million in co-funding through the cooperative agreement with Excelsior as part of the proposed action to demonstrate commercial-readiness of the ConocoPhillips E-Gas™ IGCC technology. Pursuant to the Energy Policy Act of 2005, DOE may also provide a loan guarantee for a portion of the private sector financing of the project. Excelsior has received other public funding and support for the Mesaba Energy Project; however, private financing would be required for the balance of project costs yet to be determined. The successful acquisition of private financing for the project by Excelsior will be dependent upon DOE's Record of Decision for the EIS, PUC's decision to issue a Joint Permit based on the EIS and the settlement of a power purchase agreement, USACE's issuance of a CWA Section 404 permit for the filling of wetlands, and the issuance of other permits by agencies consistent with Federal and state laws and regulations as outlined in Chapter 6 (Volume 1). The impacts of the Mesaba Energy Project on public health and safety, displacement, noise, aesthetics, socioeconomics, cultural resources, recreation, public services, and land uses are described throughout the resource subjects in Chapter 4 (Volume 1) of the Final EIS.

## Commenter 75 – Amanda Nesheim

## Responses

of the effects of the facility on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining."

Each one of the above mentioned rulings pertain to a "cost analysis" being completed to satisfy requirements of an EIS. There has been no such study performed to date.

The University of Minnesota – Duluth, Labovitz School of Business and Economics (LSBE), Bureau of Business and Economic Research, completed an "economic benefit" study. The research report is titled *"The Economic Impact of Construction and Operating An Integrated Gasification Combined Cycle Power-Generation Facility on Itasca County"* and was developed for the Itasca Development Corporation. This is the study that is readily accepted as a complete cost review for the EIS.

In the very first paragraph of the Executive Summary it states; *"Mesaba One will be a privately funded power-generation facility..."* To date no private investors have been found and several million dollars of public money has been used to develop the Mesaba Energy Project (MEP). Excelsior Energy's MEP has been selected to apply for federal loan guarantees up to \$800 million, again "public dollars" not private investment. In addition Excelsior Energy has been granted tax-free incentives.

It is noted in the second paragraph Executive Summary *"For this county-level model, Excelsior was not able to quantify what will actually be exclusively spent in Itasca County."*

The very next paragraph acknowledges several inadequacies of the study; *"IMPLAN modeling issues associated with small study areas like county-level impacts, as noted in the IMPLAN User's Guide, 2 include the following: A small area will have a high level of leakage. Leakages are any payments made to imports or value added sectors, which do not in turn re-spend the dollars within the region. Also important to consider: A study area that is actually part of a larger functional economic region will likely miss important backward linkages. For example, linkages with the labor force may be missing. Workers who live and spend outside the study area may actually hold local jobs."*

The very last paragraph on page 13 states; *"Readers are also encouraged to remember the BBER was asked to supply an economic impact analysis only. Any subsequent policy recommendations should be based on the "big picture" of total impact. A cost-benefit analysis would be needed to assess the environmental, social, and governmental impacts."*

Despite the cautions cited, many governmental agencies were misled by the study with information that was supplied by Excelsior Energy, including the Minnesota Department of Commerce (MDOC) and the Department of Energy (DOE) when drafting the EIS.

MR 7849.5220 clearly states in several subparts that a "cost analysis" is required in determining outcomes for the EIS. It is also clear that the MDOC and DOE have not adequately addressed the issues pertaining to MR 7849.5220 above-mentioned subparts because no cost benefit analysis has been conducted.

It is not unreasonable to request that a cost analysis be required for the MEP to be included in the EIS. The public, both in verbal and written comments brought up the issue of conducting a cost analysis study in the EIS scoping process. It is clear that those comments were ignored, but it is also clear that a cost analysis must be conducted according to MR 7849.5220.

75-02  
(cont'd)

## Commenter 75 – Amanda Nesheim

- 75-03 With respect to Minnesota Rule 7849.5220 Subpart 3. E. *"a description of the effects of the facility on the natural environment, including effects on air and water quality resources and flora and fauna."*
- It is clear throughout the EIS most of the disseminating information that was considered came from Excelsior Energy's Joint Permit Application and other agencies' information such as the Minnesota Pollution Control Agency were ignored. The MPCA, Army Corps of Engineers and highly educated citizens submitted comments and suggestions that were not considered or included in this study. The Department of Energy and Minnesota Department of Commerce have a public duty to examine and consider all comments and suggestions put forward to come to unbiased conclusions in the EIS.
- 
- 75-04 The Canisteo Mine Pit (CMP) is considered a national recreational attraction that includes, but is not limited to, a major trout fishery. Nowhere in the EIS is it discussed how closing the CMP to recreational use, (Excelsior Energy's intentions\*), will affect the tourism revenues brought into the area.
- Nowhere does the EIS bring up the inherent danger of ground water contamination by the planned concentrated water discharges of the Mesaba Energy Project (MEP)\*\*. Yet Minnesota Rule 7849.5220 Subpart 3. F. *"a description of the effects of the facility on rare and unique natural resources."* is part of the EIS process and is ignored.
- These two very important considerations need to be re-examined to determine the true effects of the MEP on not just the CMP, but the entire surrounding communities.
- \*Excelsior Energy's Joint Permit Application; Supplement Part 1, page I-344.
- \*\*Wellhead Protection Plan, Part I; Wellhead Protection Area Delineation, Drinking Water Supply Management Area Delineation, Well and Aquifer Vulnerability Assessment For The City of Bovey, February 8, 2007; James F. Walsh, Minnesota Department of Health
- and
- Wellhead Protection Plan, Part I; Wellhead Protection Area Delineation, Drinking Water Supply Management Area Delineation, Well and Aquifer Vulnerability Assessment For The City of Coleraine, February 12, 2007; James F. Walsh, Minnesota Department of Health
- 
- 75-05 Both the Department of Energy (DOE) and MN Department of Commerce (MDOC) have remarked in the draft EIS that Certificate of Need (CON) comments were not included because of the legislation passed (Minn. Stat. § 216B.1694) exempting the Mesaba Energy Project (MEP) from the CON. Yet Excelsior Energy is allowed to exert its claim for the need of 3000 to 6000 Mw of base-load power by 2015.
- Why the double standard? I put forward the argument that since the MEP has been exempted from the CON that the issue needs to be fully addressed according to Minnesota Ruling (MR) 7849.5300 Subpart 5. It states; ***"Matters excluded. When the Public Utilities Commission has issued a Certificate of Need for a large electric power generating plant or high voltage transmission line or placed a high voltage transmission line on the certified HVTL list maintained by the commission, the environmental impact statement shall not address questions of need, including size, type, and timing; questions of alternative system configurations; or questions of voltage."***

## Responses

### Comment 75-03

Although the Mesaba Energy Project EIS relied substantially on data provided by Excelsior and its consultants consistent with DOE and MDOC policies for EIS preparation, the information was independently confirmed with primary sources as available. As stated in response to Comment 7-01, all comments received during the Federal and state scoping periods were given thorough consideration by DOE and MDOC in establishing the scope of issues to be addressed in the EIS. All comments received on the Draft EIS are included in this volume with associated responses. Refer to comments from respective agencies relating to specific data presented in the EIS, including: Minnesota Historical Society (Commenter 48); USDA Forest Service (Commenter 49); NOAA (Commenter 55); U.S. Department of the Interior (Commenter 57); MNDNR (Commenter 76); MDH (Commenter 84); MPCA (Commenter 105); EPA Region V (Commenter 111); and USACE (Commenter 116). These comments provide a fair measure of the EIS's sufficiency in relying upon data consistent with, available from, and agreeable to, the respective agencies.

### Comment 75-04

MNDNR would have jurisdiction over the decision to close the CMP for recreational use based on the need for security of the Mesaba intake structure. Based on demands for recreation on the CMP, MNDNR may minimize the area to be closed. See further discussion in response to Comment 76-04. Regarding potential groundwater impacts, see response to Comment 7-02.

### Comment 75-05

The Mesaba Energy Project is exempt from requirements for a Certificate of Need as stated in Section 1.2.2 (Volume 1) of the Final EIS. The reference to baseload power generation needs within Minnesota was included in Chapter 1 of the Draft EIS under a section pertaining to the "Project Proponent Need" for the project. The anticipated needs for additional baseload power in Minnesota relating to plans filed in PUC dockets were outlined in Appendix F1 (Volume 2) prepared by Excelsior at the request of USACE, which is a cooperating agency for this EIS (see response to Comment 116-33). The reference to projected baseload power generation needs has been deleted from Chapter 1 (Volume 1) of the Final EIS. As stated in Section 1.4.1, DOE's need for the project "...is to accelerate the commercialization of clean coal technologies that achieve greater efficiencies, environmental performance, and cost-competitiveness."

**Commenter 75 – Amanda Nesheim**

**Responses**

**75-05  
(cont'd)**

Therefore, since the MPUC has **not issued** a CON, it can be argued according to MR 7849.5300 Subpart 5, that Excelsior Energy should be required to proceed with the CON regulatory process.

**75-06**

In the case of Minnesota Rule 7849.5300 Subpart 6. *“Draft EIS. The draft environmental impact statement must be written in plain and objective language...”*

It can be argued that the EIS was not written in plain and objective language. How can the general public decipher the ambiguous and voluminous technical data with no back-up information to which to compare or judge?

**75-07**

The MDOC has the legal right to request a Certificate of Need under Minnesota Rule 7849.7080:

7849.7080 APPLICANT ASSISTANCE. “The commissioner of the Department of Commerce may request the applicant for a certificate of need or for certification of a HVTL to assist in the preparation of an environmental report. Upon request, the applicant shall provide in a timely manner any unprivileged data or information to which it has reasonable access and which will aid in the expeditious completion of the environmental report.”

In the interest of the providing a complete report for the Mesaba Energy Project’s EIS, the MDOC should request a certificate of need.

**75-08**

It is stated in the EIS in the Summary Section, *DOE Purpose and Need*; *“IGCC technology meets the goals of the CCPI by utilizing an estimated 240-year domestic supply of reliable, low-cost coal in an environmentally acceptable manner.”*

Throughout the EIS the cost of coal is referred to as “low-cost”, “clean”, “affordable”, “reliable”.

The terms used to describe coal in the EIS are inaccurate. The following are just a few examples pertaining to costs of the MEP that are not in the EIS. The costs of health related costs are not included in the total cost per MW and could be attained by conducting a cost analysis study, which is required by Minnesota Rule 7849.5220. The costs of Carbon Capture and Sequestration (CCS) are not included in the total cost output. This is acknowledged in the EIS Appendix A2. The costs of transmission upgrades by other utilities are not included in the total cost. It has been demonstrated in the MPUC rulings that the cost of energy output by the Mesaba Energy Project (MEP) is not “low-cost”, therefore cannot be deemed “affordable”. Since the MEP is a demonstration project it can hardly be defined as “reliable”.

The DOE also comments on supposed 240-year supply of coal. Not all coal is attainable, and to continue to comment on a long-term coal supply is misleading and inaccurate.

I wish to draw your attention to a study performed by the German research organization Energy Watch Group”. Another study completed by the University of Stanford comes to the same conclusions. The results of these studies show that with the attainable coal reserves peaking in 2025, the cost of coal will increase dramatically as coal reserves

**Comment 75-06**

See response to Comment 24-01, which addresses the same concern.

**Comment 75-07**

MDOC has determined that the Mesaba Energy Project is exempt from the requirements for a Certificate of Need and the agency cannot request one.

**Comment 75-08**

In its capacity as the Federal agency responsible for the nation’s energy resources, DOE estimated the number of years of available coal reserves in the U.S. As stated in Section 1.2.1 (Volume 1): “Coal accounts for over 94 percent of the proven fossil energy reserves in the U.S. and supplies over 50 percent of the electricity...” According to reports by the Energy Information Administration, the cost of coal per million Btu has consistently been lower than for oil or natural gas since 1979. Potential health risks from the Mesaba Energy Project are described in Section 4.17 (Volume 1). As explained in response to Comment 41-01, potential costs associated with qualitative considerations have not been estimated in this EIS because of the difficulty of reaching consensus on their valuation. See response to Comment 53-04 regarding the costs of potential CCS.

**Commenter 75 – Amanda Nesheim**

**Responses**

**75-08  
(cont'd)**

become harder and harder to attain making the terms “low-cost”, “affordable”, “cheap”, “clean” and other labels that favor the coal industry inaccurate and outright false.

In Appendix A2 the DOE readily admits that the proposed project’s Carbon Capture and Sequestration (CCS) plan is not economically feasible. The DOE states expectations of Integrated Gasification Combined Cycle (IGCC) plants to offer 90% carbon capture with 99% permanent sequestration at less than 10% increase in cost. The cost of electricity from the proposed MEP is currently evaluated at 10–30% higher without CCS. With CCS not only does the cost per kW increase dramatically, the efficiency of the plant is reduced by up to 30%. The DOE’s cost increase expectation of less than 10% with CCS is inaccurate.

The real cost of the MEP needs to be re-examined with the above-mentioned issues.

\* The full report of Energy Watch Group can be found at:  
<http://www.energywatchgroup.org/files/Coalreport.pdf>

**75-09**

I respectfully suggest that the Department of Energy’s (DOE) involvement in the EIS is biased and therefore the EIS cannot be relied upon to be forthcoming or accurate.

The DOE has openly and publicly supported the Mesaba Energy Project (MEP) on several occasions through different media sources. In the draft EIS the DOE openly promotes its favorable position on the MEP. It is stated in the draft EIS in the Summary Section, DOE Purpose and Need: “*DOE’s purpose in considering the Proposed Action (to provide cost-shared funding) is to meet the goal of the CCPI Program (NETL, 2006b) by demonstrating the commercial readiness of the Conoco-Phillips E-Gas™ gasification technology in a fully integrated and quintessential IGCC utility-scale application. The principal need addressed by DOE’s Proposed Action is to accelerate the commercialization of clean coal technologies that achieve greater efficiencies, environmental performance, and cost-competitiveness.*”

It has also supported the project with \$36 million of public money as stated in Section 2.1.1.1 of the draft EIS. The DOE also remarks that it may continue to support the project through a federal loan guarantee program, in which the MEP has qualified for the first two rounds in the application process.

In the interest of moral responsibility to the citizens of this community and beyond, this EIS should be disregarded in its entirety and a new one established without the biased influence of the DOE.

Respectfully submitted,  
Amanda Nesheim

**Comment 75-09**

Chapter 1 (Volume 1) of the Final EIS explains DOE’s purpose and need and the agency’s responsibilities under NEPA.

## Commenter 75 – Amanda Nesheim

January 9, 2008

PUC Docket E6472/GS-06-668  
DOE Draft EIS for the Mesaba Energy Project (DOE/EIS-0382D)  
Comments on Draft EIS

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Dear Sirs:

### The Mesaba Energy Project

The draft EIS is incomplete in that it does not address the entire scope of the MEP. The intent of the entire MEP is to build a total of six IGCC plants on up to three locations.

Of particular concern as described in the initial legislation Minn. Stat. § 216B.1694, Subd. 2 Regulatory Incentives (a), (2) "once permitted and constructed, is eligible to increase the capacity of the associated transmission **facilities without additional state review.**" It is unclear in the legislation if this pertains to HVTL and/or generating facilities and could be argued either way.

Because of the lack of clarification, (...on **up to** three sites), the intent to build six facilities, and the ambiguous legislation above mentioned, the EIS should include environmental, health and socio-economic impacts of all six proposed IGCC facilities.

## Responses

### Comment 75-10

The scope of the EIS addresses the Mesaba Energy Project Phases I and II at either the West Range or the East Range Site, including associated transmission lines and other infrastructure. If permitted, both phases would be eligible for construction and operation on the site authorized by MDOC, including HVTLs and pipeline corridors approved by MDOC. The EIS would not be applicable to other sites for potential future innovative energy projects, which would require separate permit applications. Also, MDOC has indicated that future upgrades to transmission facilities beyond the HVTL corridors described in Section 2.3 (Volume 1) would be subject to environmental review.

75-10

**Commenter 75 – Amanda Nesheim**

**Responses**

75-11

Innovative Energy Project

In Appendix A2 the summary conclusion states; “Carbon capture and sequestration is not considered feasible for the Mesaba Energy Project at this time.” “Without an order from the PUC that incorporates the costs associated with CCS within the power purchase agreement, the Mesaba Energy Project would not be economically viable.”

Since it has been determined that CCS is not a viable option for the MEP it cannot be considered an Innovative Energy Project nor can it qualify for the Clean Coal Power Initiative (CCPI).

75-12

5.1.2 Impacts of Commercial Operation

“The demonstration of the Mesaba Energy Project for the CCPI Program would be considered successful if the results indicate that the continued operation of the gasifier would fully meet the fuel needs of the combined-cycle unit and would be economically and environmentally feasible (i.e., the project would achieve commercially competitive performance in terms of availability, thermal efficiency, emissions, and cost of electricity). However, if the fuel needs of the combined-cycle unit would need to be met or supplemented by using natural gas for continued commercial operation, then the demonstration of synthesis gas (syngas) production by coal gasification would be considered unsuccessful.”

In reference to the paragraph above, the MPUC has found the MEP would not be the least cost resource even without factoring in transportation of CO2 and CCS. Therefore, the project cannot be considered as economically successful.

Excelsior Energy has no definitive plans for CCS, which is commented on in Appendix A2. The DOE readily acknowledges that CCS is not environmentally or economically feasible. Therefore, this project cannot be considered environmentally successful.

**Comment 75-11**

The responses to Comments 1-02, 4-01, and 37-01 explain that the implementation of CCS is not a requirement for the Mesaba Energy Project to be considered “innovative technology” or to be eligible for the CCPI Program. MDOC and PUC have determined that the Mesaba Energy Project meets the requirements of the “innovative energy project” statute (Minnesota Statutes 216B.1694). DOE has determined that the project is qualified under the CCPI Program. These determinations are explained in Section 1.2 (Volume 1) of the Final EIS.

**Comment 75-12**

DOE’s purpose and need, as stated in Section 1.4.1 (Volume 1) are to demonstrate the commercial-readiness of a specific gasification technology in a utility-scale IGCC application. DOE will determine at the conclusion of the 1-year demonstration period whether the project has successfully met the demonstration objectives for the advancement of a gasification technology for the CCPI Program. As stated in response to Comment 4-01, the implementation of CCS is not a requirement for the successful demonstration of the Mesaba Energy Project under the CCPI Program; however, Excelsior submitted a plan for CCS that could be implemented based on regulations or incentives enacted during the commercial life of the plant. The PUC has not approved any power purchase agreement or agreements affecting the specific final revenues and costs for the project, which will determine its economic feasibility. See also response to Comment 53-01, which addresses a similar concern.

**Commenter 75 – Amanda Nesheim**

**Responses**

**75-12  
 (cont'd)**

The administrative law judges determined that this project would not significantly reduce emission as compared to Super Critical Pulverized Coal (SCPC) plants. Therefore, this project cannot be considered environmentally successful nor an innovative energy project.

Since the MEP cannot be found to be environmentally successful, it cannot qualify as a clean energy technology under the Clean Coal Power Initiative (CCPI).

In order for the MEP to be environmentally successful, CCS should be required at time of start up. All potential impacts should be studied, quantified and included in the EIS.

**75-13**

CCS and EOR

On page 5.1-8 of the draft EIS, it is mentioned that "standard industry practices result in permanent underground storage of 33 percent of CO2 injected, employing advanced technologies could result in Enhanced Oil Recovery (EOR) with 60 percent of the CO2 stored." This would amount to only 1,049,400 million tons (33%) of the 3,180,000 million tons of CO2 proposed to be captured from Phases I/II of the MEP. That's **less than 1%** of the total 10,600,000 million tons emitted annually. And would be 1.8% or 1,908,000 million tons per year sequestered with the advanced technology of 60%.

How is this cost effective or beneficial to the environment when the vast majority of the CO2 emitted is not sequestered?

The other factor not clearly identified in EOR/CCS is that the estimated 8.7 million barrels of oil recovered annually would be responsible for (conservatively) CO2 emissions of 4,350,000 million tons, (approximately 1000 lbs of CO2 per 42 gallon barrel). This clearly indicated that CCS is not the answer to reducing global warming CO2. Any economic benefits would solely go to the oil industry.

**Comment 75-13**

See responses to Comments 19-03 and 53-05, which address the same concerns. DOE's Carbon Sequestration Program also performs research, development, and demonstration of technologies and procedures for monitoring, mitigation, and verification to determine the success of sequestration and detect gas migration and leakage from a formation.

**Commenter 75 – Amanda Nesheim**

**Responses**

**75-13  
(cont'd)**

Referring to mitigation measures of CO2 contamination mentioned on page 5.1-9 it is not clearly outlined how CO2 contamination can be prevented, located within the injection site or stopped.

How can the exact location of a CO2 leak be identified and what can be done to stop the contamination. These questions must fully be answered before any more sequestration takes place to protect valuable water resources.

**75-14**

5.2 Potential Cumulative Impacts

The data, particularly for the West Range site, should be re-evaluated in its entirety since the final EIS has been released for Minnesota Steel Industries (MSI). There are gross errors in the information provided for the MSI project and this EIS. To fully address potential cumulative impacts all information submitted for the MSI EIS should be included in the MEP EIS.

**75-15**

5.2.3 Air Inhalation Health Risk

Air emissions data and permits have been issued for MSI. Air emission for the power generation planned through the Nashwauk Public Utilities for MSI was not submitted and should be included in the overall impact. The air emissions for MEP EIS should be re-evaluated to be all inclusive. Mesothelioma and other mining related cancers from airborne sources need to be addressed as cumulative.

**75-16**

5.2.3.2 West Range Site

It is stated that a sub-chronic hazard index was not calculated for the MSI facility in the MSI Human Health Screening-Level Risk Assessment; therefore a cumulative sub-chronic hazard index could not be evaluated.

It is unacceptable for MSI to not disclose its sub-chronic hazard information. As a result the cumulative non-carcinogenic and carcinogenic results data are inaccurate and incomplete.

**Comment 75-14**

The Cumulative Impacts discussion (Section 5.2 [Volume 1]) has been updated to reflect the latest information available about MSI, and also reviewed to verify the accuracy of data, correct discrepancies, and incorporate any more recently available data as appropriate.

**Comment 75-15**

Sections 4.17 and 5.2 (Volume 1) of the Final EIS present the results of an updated cumulative health impacts analysis that includes sources with available data.

**Comment 75-16**

See response to Comment 75-15, which addresses the same concerns.

**Commenter 75 – Amanda Nesheim**

**Responses**

**75-16  
(cont'd)**

The sub-chronic hazard information from MSI needs to be included particularly since Mesothelioma and asbestos like cancers are now being documented across the Iron Range including the West Range.

**75-17**

5.2 Data Refinements (pg 5.2-13)

The air emissions from any new source of power generation (i.e. Nashwauk PUC) for MSI was not included in this EIS. All emissions for MSI need to be re-evaluated because of this omission.

**75-18**

5.2.4.1 West Range – Water Resources

Mercury deposition is of great concern to the MN Dept. of Health, so much so that legislation has been passed to reduce mercury emissions. It is not conducive to state guidelines to be adding mercury to the environment from the many proposed industrial scale projects slated for this region. It is a known fact that minute amounts of mercury are damaging to developing fetuses and young children. And have cumulative health affects on the general population as a whole.

It is noted in Appendix D1 Tables 1 and 2 have mercury emission omissions from several sources. How can the cumulative mercury output be accurately analyzed if there are significant amounts of data missing?

With tighter restrictions on mercury emissions all sources should be included in this EIS.

5.2.4.1 Water Quality – West Range (pg 5.2-15)

It is false to say that the MEP wouldn't add any mercury to water discharges. Air emissions also have an affect on water quality. The JPA mentions Phases I & II of the MEP as emitting 54 lbs of mercury annually, with highest concentrations closest to the location of the proposed plants, (see Mercury Emissions Impact Zone below).

**Comment 75-17**

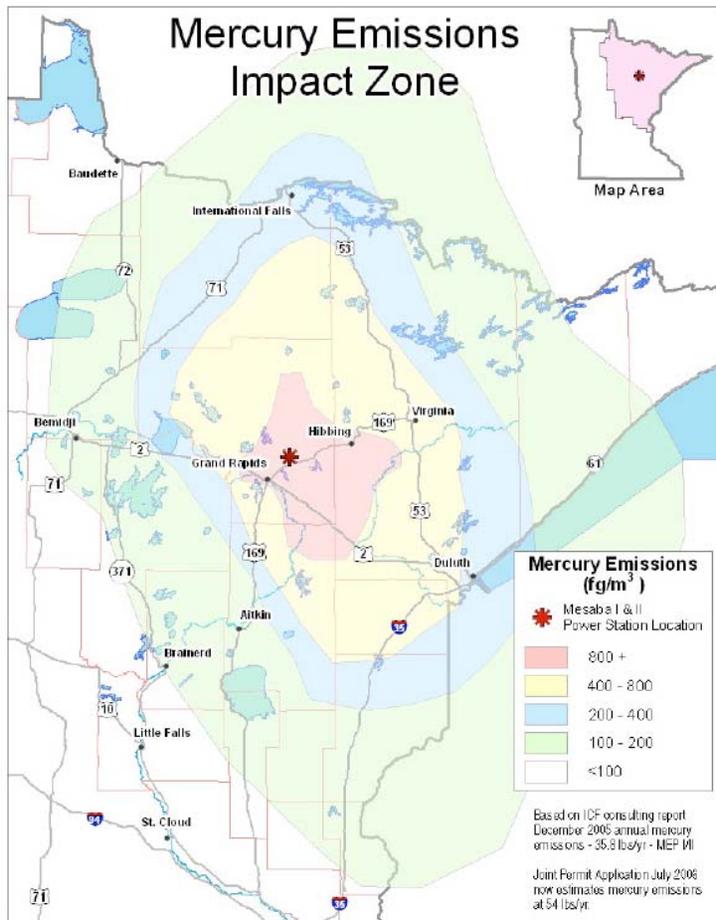
See response to Comment 75-14. The Nashwauk Public Utilities Commission has not applied for any facility that would produce air emissions.

**Comment 75-18**

See response to Comment 6-01 regarding the use of an enhanced ZLD system and the elimination of discharges of process water and cooling tower blowdown at the West Range Site.

See responses to Comments 38-01 and 42-01 regarding potential health risks from mercury emissions. Note that the Final EIS has been revised to insert a missing sub-section heading (in printed Draft EIS copies) "4.17.2.3 Human Health Risks" for text that addresses human health risks associated with air pollutants.

75-18  
(cont'd)



These emissions will greatly impact all of our water resources with those nearest becoming contaminated faster and more concentrated than they are currently. The 720 lakes identified in the Mercury Deposit Zone all need to be

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(cont'd)**

tested for current levels of mercury to determine if they would be at risk to additional levels of mercury deposition. This should include MSI emissions from the operational plant and whatever power source is agree upon and built by Nashwauk PUC.

**75-19**

5.2.6 Wildlife Habitat

The information in this section is grossly inaccurate. It does not contain the total amount of habitat lost due to the MSI project.

In table 5.2.6-2 it states a total of 307 acres lost due to MSI. The data given in the final EIS for MSI indicated a total of 4,719 acres affected. (See Minnesota Steel Project Final EIS pg 6-10.)

This section needs to be corrected to reflect accurate information to determine habitat loss.

**75-20**

5.3.2 Additional Mitigation Options

5.3.2.1 Cooling Water Discharge Options at West Range Site

Zero Liquid Discharge (ZLD) should be implemented from the start of operations at the proposed West Range site. As water resources become acutely more important to our community and society it should be a requirement for the proposed MEP to utilize ZLD. It is unacceptable to not impose ZLD on the proposed MEP no matter where its proposed location.

**75-21**

5.3.2.2 Mitigation Options for Visibility Impacts to Class 1 Areas – Enhancement of Existing Design Basis.

The 1<sup>st</sup> paragraph mentions MEP's current design status. It also states; "Excelsior could be required to enhance its current design basis to produce further SO2 and NOX emission reductions to reduce modeled visibility impacts." Since it is in the public interest to reduce emissions as much as possible, the MEP should be required to enhance its current design basis to further reduce

**Comment 75-19**

Tables 5.2.6-2 and 5.2.6-5 have been revised to provide more accurate estimations of the MSI Project's impacts to vegetation. DOE utilized the anticipated footprint of the MSI Plant for analysis to maintain consistency with analyses performed for other reasonably foreseeable future actions. It is important to note that State of Minnesota rules require the reclamation of mined lands following mining activities; therefore, permanent impacts to vegetation from the MSI Project are not currently well-defined.

**Comment 75-20**

The Final EIS has been updated to reflect the project proponent's announced decision (to be included in a revised permit application to MPCA) to utilize an enhanced ZLD system at the West Range Site, comparable to the system proposed for the East Range Site, which would eliminate discharges of process water and cooling tower blowdown into any water bodies. Also see response to Comment 6-01, which addresses the same concern.

**Comment 75-21**

See response to Comment 49-01, which addresses the same concerns.

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**75-21  
(cont'd)**

SO2 and NOx emissions.

5.5 Relationship Between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity.

It is stated that the MEP would be demonstrating innovative coal power technologies that can provide the US with clean, reliable, and affordable energy.

The MEP is not innovative. The technology was introduced during WWII when Germany needed fuel. It is neither clean nor affordable. Coal is not clean. The proposed MEP would still emit over 10 million tons of CO2 annually and would add SO2, NOx, PM10, PM2.5, Hg and VOCs that do not currently exist. The administrative law judges have determined that IGCC does not significantly reduce the above mentioned emissions over a SCPC system. The MN PUC has determined that the electricity produced would be far too expensive and is not the least cost resource and as a result is not in the public interest. It should be noted that the MN PUC findings on cost do not include the necessary transmission upgrades, CCS or transport of CO2 and its related costs.

**75-22**

This sections states; "The Proposed Action would also support the objectives of the Mesaba Energy Project proponent to provide a source of electric power for the State of Minnesota and the national electric grid, as well as provide economic revitalization for the Taconite Tax Relief Area and Arrowhead Region of Minnesota." There are six bullet points that outline potential long-term benefits to the region:

- The generation of 1,212 MWe to help alleviate the need within Minnesota for 3,000 to 6,000 MWe of new baseload power generation over the next 15 years (Section 1.4.1.1).

The above bullet point mentions that Minnesota will have a need of 3,000 to 6,000 MWe of new baseload power in the next 15 years, this is what Excelsior

**Comment 75-22**

DOE is the Federal agency responsible for oversight and decisions relating to energy technologies in the U.S.; PUC is the state agency responsible for oversight and decisions relating to energy technologies in Minnesota. DOE selected the Mesaba Energy Project under the CCPI Program, because it would demonstrate an IGCC technology that DOE considers to be an advancement over conventional coal-fueled power plants (see response to Comment 1-01). MDOC and PUC have determined that the Mesaba Energy Project meets the requirements of the "innovative energy project" statute (Minnesota Statutes 216B.1694) as outlined in Section 1.2.2 (Volume 1). See also response to Comment 75-05 regarding estimated generation needs.

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(cont'd)**

Energy claims. Any reference to electrical need by the public was omitted in this EIS because of the legislation that was passed exempting the MEP from the Certificate of Need. Since the public was forbidden to comment on the need for electricity then Excelsior Energy should not be able to promote their claim of electrical need. Excelsior Energy has not had to prove the need for electricity so any mention of needed baseload power should be stricken from the EIS.

**75-23**

The next six bullet points refer to economic benefits to the region. Excelsior Energy submitted an economic benefit analysis that was conducted by UMD's Labovitz School of Business and Economics, Bureau of Business and Economic Research. The information supplied for the study came from Excelsior Energy. A true economic picture should be obtained by conducting a Cost Benefit Analysis study. This has been requested, but has not been conducted. The results of a Cost Benefit Analysis should be included in this EIS. If a Cost Benefit Analysis is not to be performed then the economic benefit study submitted by Excelsior Energy should not be referred to and any cost relationship data should be omitted.

**75-24**

The sixth bullet pertains to the Canisteo Mine Pit water level stabilization. The water levels could easily be stabilized by siphoning water to Trout Lake. This scenario has been studied and is ready to be implemented upon securing funds. The estimated cost of this siphoning project was approximately \$3 - 4 million, considerably less than the estimated \$2.2 billion (and rising) for the MEP.

**75-25**

It is not right to overlook the impacts of the Long-Term Productivity on environmental and human health, the costs of which are significant, and should be included in this summarization.

Respectfully submitted,  
Amanda Nesheim

**Comment 75-23**

See response to Comment 16-01 regarding the use of IMPLAN modeling in the BBER study and response to Comment 41-01 regarding the use of cost-benefit analysis.

**Comment 75-24**

The Mesaba Energy Project has not been proposed specifically as an alternative for CMP water level stabilization. The Final EIS has been revised to acknowledge the proposed MNDNR project intended to address this issue.

**Comment 75-25**

As stated in response to Comment 41-01, the CEQ NEPA regulations recognize the difficulties in reaching consensus among differing opinions of experts and the public about the weighing of merits and drawbacks in terms of costs associated with a project. Therefore, to the extent practicable, the impacts on environmental and human health conditions have been presented in Chapters 4 and 5 (Volume 1) based on quantifiable changes and differences, the use of models and analyses required or recommended by respective regulatory agencies having jurisdiction over resources, and the comparison of results to thresholds as established by respective regulatory agencies where appropriate. The magnitude of human health risks attributable to the project based on air emission modeling as described in Section 4.17 of the Final EIS (Volume 1) would be below EPA and MPCA thresholds.