

**Commenter 77 – Jean and Herb Halverson**

>>> "Jean Halverson" <[halverjh@mchsi.com](mailto:halverjh@mchsi.com)> 1/9/2008 12:56 PM >>>

This memo is in reference to:

Mesaba Energy Project  
PUC Docket No. E6472/GS-06-668 DOE Draft EIS for the  
Mesaba Energy Project (DOE/EIS-0382D)  
Comments on Draft EIS

We are writing to express our sincere concern regarding the proposed Mesaba Energy project and its impact on the environment.

First, the definition of environment seems to vary, depending on the eyes of the beholder. To those of us who live in the northland, the environment consists of the wooded landscape, the many lakes, the wildlife that inhabit the area....all of the many reasons we all continue to live here. We feel each of these aspects are

**77-01**

endangered by the building of this facility in the midst of this very green and natural area. Not only would it alter the area visibly, but it would challenge the water

quality as it now exists for recreational use and the long term effects on the water table for years to come. It would directly affect the entire area with its

intrusion of power lines, additional trains carrying the coal and the removal of many trees and habitat for the wildlife in the area. Those are the areas that we

look at as citizens and guardians of our environment. These are the most immediate and obvious impacts and are major to all of us.

Secondly, the time frame of the environmental impact is crucial. We are not just discussing today and tomorrow, but we are required to look at the long term

consequences of our actions today and their impact on future generations. With no plan at the present for sequestering carbon dioxide due to high costs and

**77-02**

lack of feasible alternatives, it appears to us to be extremely shortsighted and selfish to consider releasing more of their gases into the environment when the

effects of global warming are being tabulated and documented worldwide. With the recent findings of the Arctic ice shelf diminishing, the drastic changes

occurring throughout the world and the emphasis on doing our part in alleviating the problem, how can we proceed with a project that increases the problem and

**Responses**

**Comment 77-01**

See Sections 3.2 and 4.2 (Volume 1) of the Final EIS, which address aesthetic impacts. Habitat impacts are discussed in Sections 3.8 and 4.8.

**Comment 77-02**

See responses to Comments 1-02, 4-01, 19-03, and 22-01, which address the same concerns.

**Responses**

**Comment 77-03**

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

**Commenter 77 – Jean and Herb Halverson**

**77-02  
(cont'd)**

has no plan to sequester the carbon dioxide! We have an absolute obligation to our children, grandchildren and to society as a whole to do our share in not only preserving what we have been given to use, not abuse, and to leave the world in better shape than it was before us. We feel this should begin right here in our own backyard.

**77-03**

These are just the issues regarding the environmental impact physically. The use of public funding to support this project when there are many, many projects that could be contributing to our environment for today and for our grandchildren tomorrow if they had proper funding seems to be another issue that could be a positive for the area and the environment. Please consider the concerns of those of us who live in the area and bear the brunt of these decisions.

Jean and Herb Halverson  
20665 Mishawaka Shores Circle  
Grand Rapids, MN 55744

**Commenter 77 – Jean and Herb Halverson**

**From:** Jean Halverson [mailto:halverjh@mchsi.com]  
**Sent:** Wednesday, January 09, 2008 12:31 PM  
**To:** Richard.Hargis@NETL.DOE.GOV  
**Cc:** Bill.Storm@state.mn.us  
**Subject:** Mesaba Energy Project

This memo is relative to:

MESABA ENERGY PROJECT  
PUC Docket No. E6472/GS-06-668 DOE Draft EIS for the  
Mesaba Energy Project (DOE/EIS-0382D)  
Comments on Draft EIS

77-04

We are sincerely concerned about the proposed Mesaba Energy project and the preliminary EIS. First of all, environment means many different things to many people and businesses. For those of us who live and enjoy the north woods, it means the varied landscape, the forests, the many lakes and streams and the wildlife enjoying this habitat. It appears to us, this plant poses a serious threat and impact on all of the above. The removal of trees that add beauty, enhance the air quality and are sustainable would be a loss; this is not a "brown area". The water quality would be affected, from the water table to the quality of the existing water for recreational, fishing and other uses. There is a reason that ST. Louis Cty. did not want that impact on the St. Louis River. The visual impact is a concern, to say nothing of the additional power lines, railroad cars filled with coal going across the state. Real estate values, pollution, the Scenic Hwy rerouting, the Mesaba Bike Trail, these are all valid issues and concerns that affect our environment.

77-05

77-06

77-07

Secondly, environmental impact needs to be measured not only in the short term but in the long term. The inability to finance or plan for the sequestering of carbon dioxide is the most serious of concerns. It is unbelievable to us that with the emphasis on

**Responses**

**Comment 77-04**

DOE agrees that loss of vegetation and habitat, landscape alterations, and other land-disturbing activities associated with the project would have adverse environmental impacts. DOE has worked in concert with the project proponent to minimize these impacts to the extent practicable, while ensuring that the project would meet DOE's purpose and need. As described in response to Comment 2-01, the processes imposed by NEPA and the Minnesota Power Plant Siting Act are intended to ensure that potential adverse impacts are weighed in comparison to the beneficial objectives of the project.

**Comment 77-05**

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 responses to Comments 6-01 and 7-02, which address the same concerns.

**Comment 77-06**

Sections 3.2 and 4.2 (Volume 1) address existing conditions and impacts relating to aesthetics for the Mesaba Energy Project. Also, see Table 5.3-1 for mitigation measures for the Mesaba Energy Project, including mitigation for aesthetic impacts. Potential impacts from project features on real estate values are discussed in Section 4.11. See also response to Comment 80-13, subsequently.

**Responses**

**Comment 77-07**

See responses to Comments 1-02, 4-01, 19-03, and 22-01, which address the same concerns.

**Comment 77-08**

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

**Commenter 77 – Jean and Herb Halverson**

**77-07  
(cont'd)**

greenhouse gases, the global emphasis on curtailing carbon dioxide emissions and the documented changes in our environment, that we would even consider contributing to that problem as this plant would do. It appears that this is a rush to get the funding and approval before it is outlawed. That is not responsible planning and extremely shortsighted, from our point of view.

**77-08**

Please consider again the serious concerns as raised by the many people who live in this area and will be the most directly affected by the impact of your decisions. We take our responsibility very seriously to use, not abuse, this environment which we have been fortunate to live in. We want to leave this state in as good, if not better condition than our grandparents found it. We feel this coal burning plant is a giant step in the wrong direction.

Jean and Herb Halverson  
20665 Mishawaka Shores Circle  
Grand Rapids, MN 55744

**Responses**

**Comment 78-01**

Section 1.2 (Volume 1) of the Final EIS describes the Federal and state contexts for the Mesaba Energy Project and the basis by which the project would be located in the TTRA of northeastern Minnesota rather than in an area closer to coal mines. Section 4.3 (Volume 1) describes the impacts of the project on air quality. Human health risks attributable to the project based on air emission modeling as described in Section 4.17 (Volume 1) would be below EPA and MPCA thresholds. Cumulative impacts are described in Section 5.2.

**Commenter 78 – Mary Erickson**

**From:** Mary Erickson [mailto:vember@uslink.net]  
**Sent:** Wednesday, January 09, 2008 1:19 PM  
**To:** Bill.Storm@state.mn.us  
**Subject:** Mesabi Energy Project Comment

*Mary M. Erickson  
5404 Park Dr.  
Mt. Iron, MN 55768  
January 9, 2008*

*Mr. Bill Storm  
State Planning Director  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place, Suite 500  
St. Paul, MN 55101-2198*

Dear Mr. Storm:

I have lived on the Iron Range most of my life and have experienced the "roller coaster" economy tied to mining. I know the importance of creating jobs in our area and support efforts to do so. However, when it comes to the proposed Mesabi Energy Project, I am not convinced that the benefits created from new jobs will outweigh the possible negative consequences to our environment. I am concerned that decisions made will not only affect those of us that live here today but future generation as well. I have a few comments and questions concerning this project.

78-01

1. We are about to expand mining operations with such projects as Minnesota Steel, Polymet and Franconia Minerals, which will bring new types of mining and additional waste products to our environment. These new mining projects along with the current taconite plants use a natural resource that is here, it comes out of the ground where we

live. However, the Mesabi Energy Project is proposing the hauling of a natural resource, coal, from a different state to where

**Commenter 78 – Mary Erickson**

**Responses**

**78-01  
(cont'd)**

we live. This project could be done where the coal comes out of the ground or anywhere. Has the proposed Mesabi Energy Project been evaluated with all these new mining methods as to a future change in our environment? In particular air quality, will it bring additional mercury, soot and carbon dioxide into the air that we breathe? We currently have Mesothelioma studies taking place so air quality and industry related illnesses are important to us.

**Comment 78-02**

See responses to Comments 4-01, 12-02, 19-03, 41-01, and 75-13, which address the same concerns.

**78-02**

2. Have all the costs for the Mesabi Energy Project been included in the equation? Such as the costs of transporting the coal ( both fuel and carbon dioxide emissions) from train travel. Have the costs involved with carbon sequestration, the costs to bury and maintain the carbon dioxide in the earth been considered? How many years will this carbon dioxide need to be monitored? What about small leaks? Has the possibility of a future carbon dioxide tax been added to the costs?

**Comment 78-03**

Results gained from early research and commercial CCS experiments indicate that CO<sub>2</sub> storage in geologic formations will remain secure for long time periods. The Sleipner project in the North Sea began injection of CO<sub>2</sub> into the Urtisa formation in 1996, and repeated seismic surveys have indicated that the CO<sub>2</sub> remains in the formation. See response to Comment 75-13, which addresses the same concern.

**78-03**

3. I think that there are too many unanswered questions. I feel that these ideas of coal plants with or without carbon sequestration are bad ideas. Those of us living near the plants will be taking the most risk. And I hope that future generations will not be stuck with tons of carbon dioxide waste buried in the ground.

**Comment 78-04**

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

**78-04**

4. Now is the time to put our money and efforts into cleaner, renewable energy. This is the direction that the people of Minnesota should be going. I think that it holds the key to the creation of jobs and our future well being.

Thank you for reading my comment.

Sincerely,

Mary Erickson

**Responses**

**Comment 79-01**

See responses to Comments 1-01, 1-02, 4-01, and 19-03, which address the same concerns.

**Commenter 79 – Richard Twaddle**

**From:** Twaddle [mailto:shirik@lcp2.net]  
**Sent:** Wednesday, January 09, 2008 4:49 PM  
**To:** Richard.Hargis@NETL.DOE.GOV; Bill.Storm@state.mn.us  
**Subject:** Mesaba Energy Project, PUC Docket No. E6472/GS-06-668

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

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

**Comments on Draft EIS**

With regard to the above item I would like to say:

It appears that this proposed facility would be one of the dirtiest in the State. Sequestering of carbon is not a proven technology and even if it were the carbon would have to be piped hundreds of miles to be sequestered. Mesaba's talk about sequestration of carbon is just that-"talk". I am surprised that the people responsible for the analysis of the proposal even consider it. I hope you will not listen to our uninformed polititions and that you will kill this proposed project.

**Richard Twaddle**  
**26646 Eagle View Drive**  
**Bovey, MN 55709**

79-01

**Commenter 80 – Andrew David**

Mesaba Energy Project

PUC Docket No. E6472/GS-06-668

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

Comments on Draft EIS

**Review Mesaba Energy Project Draft EIS**

**Sections 4.11 (Socioeconomics) and 4.12 (Environmental Justice)**

**Summary Comments**

**80-01**

Section 4.11 analyzes the economic impact of building Phase I and Phase II of the Mesaba Energy Project, particularly the impact that construction and then continued operation would have on employment, income, business, population and housing. The outlook for employment, income and business is predictably positive and virtually unchanged from earlier reports (i.e. UMD/BBER IMPLAN software modeling). The CAMP position paper entitled “Economics of the Mesaba Energy Project” does an excellent job of illustrating the faults and inaccuracies of the BBER report.

This section also investigates the impact on population levels and housing during construction and operation. The EIS finds both the East and West Range sites capable of supporting temporary and permanent increases in population, with little impact to real property. Long-term housing requirements are not viewed as an issue, however the EIS does find that “... depending on the percentage of construction jobs that could be filled by existing residents, the influx of workers from outside the region could create a demand for rental housing and lodging that may exceed available capacity.” (4.11-4).

**80-02**

Section 4.12 investigates the impact the Mesaba Energy Project might have on minority or low-income populations in the following areas: 1) would health effects be significant or above generally accepted norms, 2) is the risk or rate of hazard exposure likely to exceed that of the general, or comparison, population and 3) would health effects occur due to cumulative or multiple adverse exposures from environmental hazards. The EIS finds no issues with these three factors for either low-income, or minority populations (surprise, surprise!) due in no small part to the narrowly defined ‘region of influence’.

**Responses**

**Comment 80-01**

See response to Comment 16-01, which addresses the same concerns.

**Comment 80-02**

See response to Comment 16-02, which addresses the same concerns.

**Commenter 80 – Andrew David**

General Comments Section 4.11 Socioeconomics

80-03

1. The wide range of influence is the 7 county area (Aitkin, Carlton, Cook, Itasca, Koochiching, Lake and St. Louis) the local range of influence is Census Tract 9810 (Iron Range Twp and Taconite) for the West Range Site and Census Tract 140 (Hoyt Lakes) for the East Range Site. The economic analysis is supposedly for the 7 county area the population and housing analysis is done from the Census Tracts.

80-04

2. The BBER, 2006 study does not do a cost/benefit analysis it is strictly a benefit analysis. Even the BBER authors recognize this and caution against using their study as a complete view of the impacts of building Mesaba Phase I and II. Quoting directly from the BBER, 2006 study,

*“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.”*

University of Minnesota Duluth Labovitz School of Business and Economics, Bureau of Business and Economic Research 2006. The Economic Impact of Constructing and Operating An Integrated Gasification Combined Cycle Power Generation Facility on Itasca County. April 2006 For Itasca Development Corporation. Page 13.

80-05

3. The BBER study is misleading in stating the economic value to Itasca County or the seven county wide range of influence. That is because much of the economic value supposedly coming to the area in the form of costs for coal, transportation, profits, interest, etc will actually be accrued where those services are provided or purchased. Most wages will be provided in Itasca County although 20% are estimated to be provided to residents of other counties. Again quoting from the BBER, 2006 study, page 13,

*“As noted in the “Itasca County Study Area” section at the beginning of this report, there are known IMPLAN modeling issues associated with small study areas like county-level impacts, including difficulty in measuring accurately the extent that payments made to imports or value added sectors are shown as re-spent within the study area.”*

80-06

4. The BBER study estimates the number of jobs that would be created in construction and during operation of Phase I and II as well as additional positions created as a result of having additional workers in the area. However, these predictions should be tempered as the job estimates are a combination of full time, part time and temporary positions.

**Responses**

**Comment 80-03**

As stated in response to Comment 16-01, the economic and employment benefits predicted by BBER’s study cannot be measured accurately at the level of a local community or neighborhood. However, the adverse effects of plant construction and operations on local communities and residents can be predicted based on their proximities to project features (plant site, rail lines, access roads, and infrastructure). Therefore, efforts were made in the EIS to identify communities that would be affected most adversely by project features, while the beneficial economic impacts of the project were considered more broadly by necessity.

**Comment 80-04**

As stated in response to Comment 16-01, IMPLAN is a widely used input-output impact model for predicting the multiplier effects of increased spending, such as for new projects, on a regional economy. The commenter is correct in stating that it is not a cost-benefit model; rather, it estimates benefits in terms of multiplier effects on the economy and employment. As further explained in response to Comment 41-01, the CEQ NEPA regulations state in 40 CFR 1502.23: “For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations.” This statement highlights the difficulties of reaching a consensus of opinion on values or costs to be assigned to environmental conditions or impacts, many of which represent qualitative considerations with intangible benefits or costs.

**Comment 80-05**

As stated in response to Comment 16-01, although direct employment for construction and operations may involve hiring from outside the region, the indirect and induced employment predicted by IMPLAN reflects jobs specifically created within the 7-county Arrowhead region. Likewise, although some portion of direct project spending would flow outside the region and state, economic benefits predicted by the IMPLAN model, both in terms of value-added benefits from direct spending for wages, rents, interest, and profits for construction and operations, and in terms of total output economic benefits from all direct project expenditures for construction and operations, would occur specifically within the Arrowhead Region.

**Commenter 80 – Andrew David**

**Responses**

- 80-07** | 5. Most of the construction and plant operation positions will be filled by people outside of Itasca County. That number will rise if construction is a union construction job. This has direct negative impacts on housing in the area during the construction period.
- 80-08** | 6. The EIS assumes that there will be an available skilled labor force in the region due to, "... historically persistent higher unemployment rates ..." and a decrease in the manufacturing and iron mining industries. It is not at all certain that jobs in iron mining and/or manufacturing are transferable to construction or operation jobs that Mesaba Phase I and II would provide. Continued investment in iron mining and the specter of Minnesota Steel would suggest that there will be a dramatic shortage of skilled labor for construction positions, requiring that more outside skilled labor be hired and housed in Itasca County.
- 80-09** | 7. The discussion of jobs, wages and employment is occurring in a vacuum. No mention is made of the impact that Minnesota Steel will have on the same population of workers that Mesaba will be trying to hire from. Job competition will be fierce if both are built at the same time. Although this is good news for a few people hired locally with an existing domicile the influx of workers and the shortage of housing will dramatically increase rental and housing costs to the detriment of imported workers through higher rentals, local homeowners through artificially increased property values and taxes and low-income non-skilled individuals and families through increased rental costs and wages that do not keep pace with the increased cost of housing.
- 80-10** | 8. Most if not all of the discussion in this section references dollars or employment that would be gained if Mesaba Phase I and II are built. Therefore the economic benefits are being overestimated given the scope of the proposed building. The permitting process is asking only for Phase I yet the economic analysis is offering figures for Phase I and II combined. We need to see an EIS that accurately compares all costs and benefits just for Phase I.
- 80-11** | 9. The proposed relocation of Itasca County Road 7, the Scenic Highway, is considered to be an act of Itasca County and not the Mesaba Project. Considering the fact that CR7 was recently (within the past 5 years) rerouted and resurfaced from 169 north along its original route at considerable expense it is obvious that an additional rerouting is being done to convenience the Mesaba Project at the expense of Itasca County taxpayers and should be at the very least considered an additional cost of the project.
- 80-12** | 10. The EIS estimates that, "Perhaps a dozen or more of the other residential properties along CR 7 and Diamond Lake Road closest to the plant site or rail alignment may experience reductions in values or at least slower rates of growth in values." (4.11-7)

**Comment 80-06**

Sections 4.11.2.1 and 4.11.2.2 (Volume 1) acknowledge that the BBER study projected jobs as full-time, part-time, and temporary without distinction.

**Comment 80-07**

As stated in response to Comment 16-01, direct jobs both for construction and operations may be filled by individuals from within and without the local communities, the Arrowhead Region, and the state, and that the appropriate distributions could not be accurately predicted, because they would depend upon the availability of individuals with required skills.

Regarding impacts on local housing attributable to an influx of construction workers, Sections 4.11.3.1 and 4.11.4.1 (Volume 1) respectively describe the potential for adverse effects on local housing in the West Range and East Range areas based on limited housing capacity to meet increased demands. Similar concerns were expressed in the Minnesota Steel Industries Final EIS, which concluded that the potential impacts would not be significant, even considering cumulative effects with construction of the Mesaba Energy Project.

**Comment 80-08**

Section 4.11.2.1 (Volume 1) of the Final EIS states: "The extent to which temporary and permanent jobs can be filled by local residents would be driven in part by the local labor market characteristics, the availability of unemployed or underemployed skilled construction workers, and prevailing wages." However, based on data from the Department of Employment and Economic Development, the EIS concluded in this section that the size of the workforce in the Arrowhead Region relative to the number of construction jobs expected would not have an overly adverse effect on labor availability.

**Comment 80-09**

See response to Comment 80-07, which addresses the same concerns.

**Comment 80-10**

As stated in response to Comment 16-01, the BBER used IMPLAN in 2005 to estimate the economic multipliers associated with the Mesaba Energy Project Phase I for the Arrowhead Region and the state. Because Excelsior's Joint Permit Application included both Phases I and II of the project, BBER updated the study in 2006 to estimate the effects of both phases. The Final EIS has been updated to include the results of the earlier BBER analysis for Phase I alone.

**Commenter 80 – Andrew David**

**Responses**

- 80-13 11. The EIS states that, "... it is unlikely that residential properties along the proposed new HVTL corridors would experience substantial reduction in property values." Then proceeds to indicate that depending on the route chosen between 4 and 29 residences would be within 500 feet with some as close as 300 feet. I cannot imagine how these residences would not experience a negative impact to their property value. (4.11-7 and 8)
- 80-14 12. The EIS attempts to indicate that housing of temporary construction workers would be easier at the West Range vs. East Range site. This is not necessarily true, especially if Minnesota Steel is being constructed at the same time. (4.11-8)
- 80-15 13. The East Range site impacts fewer homeowners because the East Range site is a true brownfield site with existing infrastructure. This would reduce impacts on housing values due to construction. HVTL corridors would have to be widened and 49 residences are within 500 feet but the EIS states, "... it is unlikely that property values along these corridors would be affected by the additional HVTLs." in part because their values are already being impacted by existing HVTLs.
- 80-16 14. Consider that the economic impact is thought to be a 7 county region, or even throughout Minnesota, but areas that might be adversely affected are considered to be individual blocks within a Census Tract, or just along HVTL corridors and utility ROWs. This is inequitable.
- 80-17 15. Table 4.11.6 Summary of Impacts. This table claims, "Related realignment of CR7 by Itasca County may influence local housing development in vicinity" Here the EIS considers the realignment of CR7 'related' and a benefit yet does not include it as a cost. At the East Range site the lack of construction needed is considered a detriment where it should actually be a benefit.
- 80-18 16. The summary table 4.11.6 is not an accurate summary in that it represents the two sites (West and East Range) as being almost identical with the exception of the relocation of CR7 in the West Range plans and number of residences within rail alignments.
- 80-19 17. The text in section 4.11 points to numerous differences related to impacts to housing values as a result of construction and HVTL corridors, utility ROWs. The text does NOT point out that the East Range site is a brownfield site with existing utility and HVTL infrastructure and therefore more suitable for construction.
- 80-20 18. The socioeconomic analysis is incomplete. The Mesaba Project has to get its product to market and cannot do that without a HVTL that runs from northern Minnesota to the Twin Cities – St. Cloud area where the power is supposedly needed. This analysis does not cover the cost nor the impacts of creating an additional cross-state transmission line.

**Comment 80-11**

The proposed realignment of CR 7 was under consideration by Itasca County when the scope of the EIS was determined. Therefore, as stated in Section 1.6.4 (Volume 1), the impacts of that potential project were addressed in the EIS as a connected action under NEPA. Recently, Itasca County has reconsidered the proposed realignment of CR 7 because of state funding constraints. As stated in Section 2.3.1.2 (Volume 1) of the Draft EIS, if the realignment were not constructed by Itasca County, Access Road 2 would be connected to the existing alignment of CR 7. Excelsior is responsible for constructing the principal access road to serve the Mesaba Energy Project. The alignment of the proposed access road has been modified by Excelsior to avoid and minimize impacts to wetlands based on consultations between DOE and USACE. Section 2.3.1.2 has been updated in the Final EIS to describe the modified alignment, and the impacts of the alignment have been addressed for respective resource subjects in Chapter 4 (Volume 1).

**Comment 80-12**

This statement in the EIS has been correctly quoted in the comment.

**Comment 80-13**

Section 4.11.3.2 (Volume 1) states that 1 residence would be located within 300 feet of Excelsior's preferred alignment for a new HVTL (WRA-1 or WRB-1), and 3 other residences would be located within 500 feet of the alignment. Also, two residences would be located within 300 feet of Excelsior's alternative alignment for a new HVTL (WRA-1A or WRB-1A), and 5 other residences would be located within 500 feet. The section further explains that Excelsior's alternative route for HVTL Plan B (WRB-2A) would be located in an *existing* HVTL right-of-way for which 8 residences are located within 300 feet and another 21 residences are located within 500 feet. Therefore the number of residences affected by proximity to *new* HVTL corridors would be small, and Section 4.11.3.2 points out that Excelsior expects to compensate the property owners for the granting of easements.

The statement in the Draft EIS that residential properties along proposed new HVTL corridors would not likely experience substantial reductions in property values is supported by a recent study (Pitts and Jackson, 2007). The authors found that prior studies reported an average discount of 1% to 10% in property values when negative impacts of HVTLs are evident. However, although these impacts can extend to a quarter mile when views of lines and towers are completely unobstructed, the impacts were found to diminish with distance and disappeared at a distance of 200 feet if HVTL structures are at least partially screened by trees, landscaping,

**Commenter 80 – Andrew David**

**General Comments Section 4.12 Environmental Justice**

- 80-21 1. The region of influence for the environmental justice analysis is incredibly narrow and does not match the region of influence used for the socioeconomic analysis. Moreover, my guess is that neither would match the size of the region of influence for the true environmental impact of the Mesaba Project Phase I or Phase I and II combined. To wit, “The regions of influence for environmental justice are determined for each resource area by the potential for minority and low-income populations to bear a disproportionate share of high and adverse environmental impacts from activities within the project area.” The EIS then goes on to define the project area as Census Tract 9810 for the West Range and Census Tract 140 for the East Range site. If the economic analysis can be extended to a seven county area why is the environmental justice analysis limited to a single Census Tract for each site?
- 80-22 2. The environmental region of influence or environmental project area of the Mesaba Project is undoubtedly larger than a single Census Tract (here I am calling the environmental region of influence the geographic area that would receive atmospheric deposition). If this is true then the environmental justice analysis, which is charged with assessing the health effects, risk and rate of hazard exposure and potential cumulative adverse exposures, must take a larger geographic area into consideration.
- 80-23 3. Where is the health report that Excelsior Energy commissioned touting the ‘health benefits’ of the Mesaba Project. That information was not referenced in either the socioeconomic or environmental justice sections.
- 80-24 4. Northern Minnesota in general and Itasca County in particular is the center for the environmental region of influence. Residents of Itasca County will bear the burden of any increased health effects, any increased health risks or rates, or be affected by cumulative or multiple adverse exposures from environmental hazards. The electricity generated here, will be sent to the Twin Cities metro area where it is needed. Northern Minnesota does not need this electricity but is being asked – no required – to accept any health burden that its generation would impose. On that basis alone the environmental justice analysis should compare the environmental region of influence, which would include all of Itasca County, with the Twin Cities metro area being the control group. Then the environmental justice analysis can evaluate whether the Proposed Action or alternative would cause disproportionately high and adverse effects on minority or low-income populations in the region of influence.

**Responses**

**Comment 80-13 (cont’d)**  
or topography. Therefore, some of the closest residences may experience adverse effects on property values depending upon the visibility of HVTL structures. Section 4.11.3.2 of the Final EIS has been revised accordingly.

**Comment 80-14**  
As described in Sections 4.11.3.1 and 4.11.4.1 (Volume 1), respectively, the potential increase in demand by construction workers may have adverse impacts on the rental housing market for communities in the immediate vicinities of both sites based on the limited housing stock available for rent. No bias is implied in these discussions, which point out in both cases that construction workers would be required to seek housing in the larger local communities.

**Comment 80-15**  
Thank you for your comment. It has been noted and will be included in the administrative record for this EIS.

**Comment 80-16**  
See response to Comment 80-03, which addresses the same concerns.

**Comment 80-17**  
With respect to the comment about CR 7, see Comment 80-11, which addresses the same concern. Regarding the comment about the East Range Site, DOE could not find specific text where the EIS concluded that the lack of construction needed would be a detriment.

**Comment 80-18**  
The table in Section 4.11.6 (Volume 1) summarizes the impacts relative to the basis for impacts stated in Section 4.11.1.2 (Volume 1). Other comparative impacts for the sites are provided for respective resources in Chapter 4 (Volume 1), such as Aesthetics, Air Quality and Climate, Land Use, Community Services, Utility Systems, Safety and Health, Noise, and others, which have relationships to socioeconomic conditions.

**Comment 80-19**  
Section 2.3 (Volume 1) describes the facilities to be constructed, including HVTLs and other utilities, for the West Range and East Range Sites. Section 4.14 (Volume 1) addresses utility systems, including HVTLs, on the West Range and East Range Sites.

**Comment 80-20**  
The scope of analysis in the EIS for the generator outlet HVTLs associated with the West Range and East Range Sites included

**Comment 80-20 (cont'd)**

transmission requirements to the respective points of interconnection, the Blackberry and Forbes Substations, and the required equipment additions/upgrades to these substations. Section 2.2.2.4 (Volume 1) describes the infrastructure requirements for Phase I and Phase II of the Mesaba Energy Project and explains decisions to be made by the Midwest Independent System Operator (MISO) relating to HVTL requirements. The HVTLs required for the West Range and East Range Sites are described in Section 2.3 (Volume 1).

Subsequent upgrades to the regional transmission system to accommodate the injection of power from Phase I and Phase II into the Blackberry and Forbes Substations would be subject to MISO decisions, the results of which will be dependent upon other project developments and would likely require separate environmental review by MDOC and approval by the Minnesota PUC. However, MISO recently completed sensitivity studies based on load from Minnesota Steel and the CapX 2020 transmission project between Boswell and Bemidji substations which conclude that no upgrades to the regional transmission system are required in order to interconnect Phase I to the electric grid.

**Comment 80-21**

As stated in response to Comment 16-02, environmental justice impacts occur when a minority or low-income population would bear disproportionate adverse impacts from a proposed action. Therefore, regions of influence for the Mesaba Energy Project were selected in closest proximity to the project features (plant site, rail lines, access roads, and infrastructure) most likely to affect residents adversely. The demographic compositions of these regions of influence were compared to those of the larger populations (local townships and cities, respective counties, and the state) to determine whether minority or low-income populations might be affected disproportionately by the proposed action.

**Commenter 80 – Andrew David**

**Responses**

**Comment 80-22**

As stated in response to Comment 16-02, Section 4.17 (Volume 1) describes the risks to local populations from emission depositions. The heading for Section 4.17.2.3 (Human Health Risks) was inadvertently lost in printed copies of the Draft EIS. From the perspective of environmental justice, Section 4.12.4 (Volume 1) specifically addresses the health risks to American Indian tribes in northern Minnesota, because they may consume higher amounts of locally caught fish than the general population. Diamond Lake was considered representative of the nearest fishable bodies of water to the West Range Site receiving emissions from the plant. Also, cumulative impacts on air quality, deposition, and air inhalation health risks are described in Sections 5.2.2 and 5.2.3 (Volume 1) of the Final EIS.

**Comment 80-23**

The report identified in this comment (titled “Air Quality and Health Benefits Modeling: Relative Benefits Derived from Operation of the MEP-I/II IGCC Power Station”) was filed in Minnesota PUC Docket Number E6472/M-05-1993 for the power purchase agreement, which is separate from the docket for Excelsior’s Joint Permit Application. As noted in response to Comment 20-02, MDOC has stated that the power purchase agreement is not a subject of this EIS. The report compared the health effects of emissions from an IGCC power plant in the Iron Range to those of a comparably sized supercritical pulverized coal-fired power plant in central Minnesota and concluded that the IGCC plant would cause fewer adverse health effects than the pulverized coal-fired plant to generate the same baseload of electricity. It was not cited in the EIS, because MPCA requires applicants to address health risks using the agency’s AERA protocol, which is contained in Appendix C (Volume 2) and summarized in Section 4.17.2.3 (Volume 1). Section 4.17 (Volume 1) was referenced in Section 4.12.4, Health Risk-related Environmental Justice Impacts. See also response to Comment 80-22.

**Comment 80-24**

As stated in response to Comment 16-02, the demographic compositions of the regions of influence for environmental justice (census units in closest proximity to the respective plant sites) were compared to those of the larger populations (local townships and cities, respective counties, and the state) to determine whether minority or low-income populations might be affected disproportionately by the proposed action. These demographic compositions are compared in Sections 3.12.2 and 3.12.3 (Volume 1). They indicate that the distributions of minority populations in the West Range and East Range census units closest to proposed project features are substantially lower than in the respective larger

**Commenter 80 – Andrew David**

**Responses**

80-25

1. The environmental justice analysis outside of construction sites, HVTL corridors and utility ROWs presented in this EIS is inadequate. The EIS looked at "... the potential for adverse health risks in a wider radius from respective project sites and corridors based on impact analyzed in Section 4.17, Safety and Health, and the assess the potential that an adverse health rise would affect a minority population, low-income population , or American Indian tribe at a higher rate than the general population." The term 'wider radius' was never defined and the only reference made was to effect that additional mercury deposition would have on subsistence fishing on Diamond Lake. There was no effort made to include any other health risks such as particulate matter, VOCs, NOx, SOx or other heavy metal contamination from airborne deposition, nor consider their impact either individually or as cumulative or multiple adverse exposures as required in the Method of Analysis.

80-26

2. Somewhere I heard a woman testify that the West Range site is within view of a proposed American Indian retirement home. If this can be substantiated, even if it has not been built but exists only as purchased property with a plan, it may trigger the low-income, minority or American Indian tribe provisions of the analysis.

80-27

3. On page 4.12-3 the EIS states that, "Mercury emission in Minnesota declined significantly (about 68 percent) from 1990 to 2000, and there is evidence that concentrations of mercury in Minnesota's fish have declined by about 10 percent, which is considered an encouraging response (MPCA, 2005)." Given this statement why would we want to go backwards towards higher levels of mercury emission? Especially since it appears that even significant declines in emissions have only relatively modest declines in the amount that is actually concentrated in fish. Clearly there is a long lag time between a decrease in mercury emissions and a decrease in mercury concentration in fish. This is consistent with the idea that mercury is a bioaccumulator that is not readily removed from the environment.

**Comment 80-24 (cont'd)**

census areas, counties, and the state. They also indicate that the distributions of low-income populations in the West Range and East Range census units closest to proposed project features are comparable to, or lower than, those in the larger local census tracts, the Arrowhead Region, and the United States as a whole. It is true that the Arrowhead Region generally has a higher distribution of low-income population than the state as a whole. However, in adopting the "innovative energy project" legislation that provided incentives for an undertaking like the Mesaba Energy Project (see Section 1.2 in Volume 1), the Minnesota Legislature specifically targeted the TTRA in part because of the economic challenges experienced there.

**Comment 80-25**

See response to Comment 80-22, which addresses the same concerns.

**Comment 80-26**

A Native American Tribal retirement complex is believed to be planned on property along the west shores of Twin Lakes, off Cherokee Road, south of US 169, about 3 miles southeast of the West Range IGCC Power Station footprint. The preferred HVTL route for the West Range Site would pass about 2/3 mile to the west of the property boundary of the planned complex. Potential effects on this proposed facility have been included in the Environmental Justice impacts in the Final EIS. Based on the exposure risks determined by the AERA analysis in Section 4.17.2.3, the retirement home would be situated farther away from the Mesaba facility than the adult and child residents with highest risk of exposure to hazardous emissions, which are located 1.2 miles away. The AERA analysis determined that the highest risk exposure scenario for these adult and child residents would be below the risk thresholds established by EPA for both cancer risk and non-cancer morbidity hazard. Therefore, it is concluded that the exposure risk to residents of the planned retirement home would also be below the EPA risk thresholds.

**Comment 80-27**

Thank you for your comment. It has been noted and will be included in the administrative record for this EIS. See response to Comment 1-01.

**Commenter 81 – Jim and Steph Shields**

**From:** James Shields [mailto:jx1@hotmail.com]  
**Sent:** Wednesday, January 09, 2008 8:13 PM  
**To:** Bill.Storm@state.mn.us  
**Subject:** PUC Docket No. E6472/GS-06-668 DOE Draft EIS for the Mesaba Energy Project (DOE/EIS-0382D)

January 9, 2007

Mesaba Energy Project, PUC Docket No. E6472/GS-06-668  
DOE Draft EIS for the Mesaba Energy Project (DOE/EIS-0382D)

- 81-01 Carbon capture and sequestration is the main potential advantage of IGCC technology. The draft EIS states that CCS is not feasible or economically viable for the proposed Mesaba Energy Project. I would hope that the DOE would have the sense to build a demonstration IGCC plant closer to the coal, closer to where the power is needed, and especially closer to where sequestration is possible. If there is not a better place to build a DOE demonstration IGCC plant than the proposed Mesaba Energy site, then IGCC has no future and is not worth risking taxpayer money.
- 81-02 The Draft EIS does not reflect the importance of the Canisteo Mine Pit as one of the best trout fisheries in Minnesota.
- 81-03 Why does the Draft EIS use an air emission impact area of only 3 km? The impact area will be much larger and will also overlap with the emissions of MSI. In the final EIS, please include emissions from MSI and expand the impact area to include an area of at least thirty miles.
- 81-04 The Draft EIS states there is a need for the power from the Mesaba Energy Project. The Army Corp of Engineers says that is not true. Please include information indicating where the power is needed in the final EIS.

Thank you.

Jim and Steph Shields  
Pengilly, MN

**Responses**

**Comment 81-01**

The potential for capturing CO<sub>2</sub> more efficiently is only one advantage of IGCC over other coal-fueled power plants. As stated in response to Comment 1-01, IGCC offers substantially lower emissions of pollutants than conventional coal-fueled power plants, which is why the technology was selected by DOE for co-funding under the CCPI Program. As stated in response to Comment 8-01, Section 1.2 (Volume 1) describes the Federal and state contexts for the Mesaba Energy Project and the basis by which the project would be located in the TTRA of northeastern Minnesota rather than in an area closer to coal mines or geologic formations conducive to sequestration of CO<sub>2</sub>. See also response to Comment 4-01, which explains that CCS was not included in the Mesaba Energy Project as originally selected for the CCPI Program.

**Comment 81-02**

See responses to Comments 7-02 and 76-07, which address the same concerns.

**Comment 81-03**

The 3-kilometer radius was used for the cumulative health risk analysis for air emissions. It was conducted according to MPCA guidance, which specifies a 3-kilometer radius for facilities with stack heights below 100 meters. MSI's emissions were, in fact, included in the analysis in Appendix D2 of the Draft EIS. See responses to Comments 105-08 through 105-26, which addresses the revised AERA analysis. Results of the revised risk analysis are presented in Section 4.17 (Volume 1) and Appendix C (Volume 2) of the EIS.

**Comment 81-04**

See response to Comment 75-05, which addresses the same concern.