

**RESPONSES TO COMMENTS ON FINAL ENVIRONMENTAL IMPACT  
STATEMENT**

**Minnesota Steel Industries, LLC**

**Attachment to the Record of Decision on  
Final Environmental Impact Statement Adequacy**

**MINNESOTA DEPARTMENT OF NATURAL RESOURCES  
AUGUST 2007**

## INTRODUCTION

The Department of Natural Resources (DNR), as the Responsible Governmental Unit (RGU) for the Minnesota Steel Project Environmental Impact Statement (EIS) received 16 comment letters during the Final EIS review period.

Minnesota Environmental Quality Board (EQB) Review Program rules (Minnesota Rules, parts 4410.0200 to 4410.6500) specify that comments on the Final EIS shall address the adequacy of the Final EIS, which is measured against the criteria in Minnesota Rules, part 4410.2800, subpart 4.

The Final EIS shall be determined adequate if it:

- A. addresses the potentially significant issues and alternatives raised in scoping so that all significant issues for which information can be reasonably obtained have been analyzed in conformance with part 4410.2300, items G and H;
- B. provides responses to the substantive comments received during the draft EIS review concerning issues raised in the scoping; and
- B. was prepared in compliance with the procedures of the act and parts 4410.0200 to 4410.6500.

Three of the comment letters (#3, #13, and #16) specifically address EIS adequacy as defined by Minnesota Rule. Comment letters #1, #2, #4, #5, #6, #7, #8, #9, #10, #11, #12, #14, and #15 did not specifically address the Final EIS adequacy as defined in Minnesota Rule, but rather expressed support for (comment letters #2, #5, #6, #8, #9, #10, #11, and #12), or opposition to (comment letters #1, #7, #14, and #15), the proposed project. Comment letter #4 did not address Final EIS adequacy nor opposition or support for the proposed project.

Although not required by rule, the DNR has responded to each comment and has included the comment letters and responses as an attachment to the Record of the EIS Adequacy Decision.

## **COMMENT LETTER 1**

Mr. Robert J. Trebesch, St. Michael, Minnesota

**Response to Comment #1a:** Analysis in the Final Environmental Impact Statement (EIS) Sections 4.3.2.5 and 4.8.2 describe a reduction in flow from O'Brien Creek to Swan Lake resulting from the proposed project. The resulting decreases in base and annual average stream flows are not likely to result in changes to water quality or available in-stream habitat.

## **COMMENT LETTER 2**

Mr. James A. Markoe, Jr., White Bear Lake, Minnesota

**Response to Comment #2a:** The Commenter's support for the project is noted.

## **COMMENT LETTER 3**

Mr. Roger H. Kowalsky, Nashwauk, Minnesota

**Response to Comment #3a:** The Final EIS meets the conditions of Minnesota Rule 4410.2800, subpart 4(A), in that the Final EIS has addressed the potentially significant issues and alternatives raised during the scoping period (July 18, 2005 to August 17, 2005) and identified in the October 13, 2005, Scoping Decision Document (SDD), so that all significant issues for which information can be reasonably obtained have been analyzed in conformance with Minnesota Rules 4410.2300, items G and H.

The Final EIS meets the conditions of Minnesota Rule 4410.2800, subpart 4(B), in that the Final EIS provides responses to the substantive comments received during the Draft EIS review period (February 12, 2007 to April 2, 2007) concerning issues raised in the SDD and Draft EIS. Responses to all timely and substantive comments are presented in Appendix M of the Final EIS.

**Response to Comment #3b:** The limited noise assessment performed in conjunction with the EIS for the proposed project indicated that some noise related to the operation of the facility would be experienced by residential receptors, but state noise standards would not be exceeded.

The Minnesota Pollution Control Agency (MPCA) issued air permit for the facility/plant would include a requirement for the facility to conform to state noise regulations. Should the regulatory thresholds be exceeded, mitigation measures would be required to bring the facility into compliance. Noise monitoring is an option that may be considered. Further information on the enforcement of state noise rules is detailed in the MPCA publication, *A Guide to Noise Control in Minnesotan* and is available on the MPCA Website at: <http://www.pca.state.mn.us/programs/pubs/noise.pdf>.

Section 4.10 (Noise) of the Final EIS addresses noise issues associated with blasting and overpressure, provides a summary of the limited noise modeling study for the proposed project, and identifies mitigation measures to reduce potential noise and blasting impacts. A seismic monitoring program was implemented during the Butler Taconite operations and MSI has indicated that they would implement a similar program for this project.

Section 4.10.2.3 (Facility/Plant Noise) of the Final EIS provides the estimated total noise level for the plant facility to be approximately 109 dB assuming all sources are not enclosed ('worst-case scenario'). The noise level for the Little McCarthy Lake receptor, based upon the 109 dB facility/plant level was calculated to be approximately 44 dB (see Table 4.10.7 in the Final EIS).

The level of 44 dB is likely elevated, as a number of the equipment noise sources at the facility would typically be shielded or enclosed, thereby reducing the total noise level at the plant and Little McCarthy Lake.

The estimated level of 44 dB at the McCarthy Lake receptor does comply with the state nighttime noise standards for household units (Noise Area Classification 1) of 50 dB(L<sub>50</sub>) and 55 dB(L<sub>10</sub>) pursuant to Minnesota Rule 7030.0010. Table 4.10.1 (Common Noise Sources) in the Final EIS provides the noise levels of some common noise sources. A bedroom is comparable with a noise level of 40 dB and a library 50 dB.

Section 4.10.3.3 (Facility/Plant Noise) in the Final EIS describes mitigation measures to assist in reducing impacts from facility/plant noise which suggests equipment should be enclosed within the facility structure, or purchased with noise dampers or insulated shrouds, if it cannot be physically enclosed within a structure. Where feasible, noise sources should be kept as close to ground level as possible to effectively use adjacent buildings or topographic features to block noise sources.

Section 4.10.3.1 (Haul Truck Noise) proposes noise mitigation measures to reduce haul truck related noise. For instance, during the initial startup of mine pit related activities a berm could be constructed along the southern perimeter to assist in reducing noise impacts. Initiation of mining from the north would increase the distance away from the nearest receptor which would provide an opportunity to depress potential noise sources by providing mine shielding through creating a topographic release feature. Stockpiles are proposed to be located along the northern property boundary and their location should assist in reducing noise. Some heavy equipment manufacturers provide a noise reduction package for their equipment. These noise reduction packages could be considered when purchasing the haul trucks used by Minnesota Steel.

**Response to Comment #3c:** Due to the similarities of Little McCarthy Lake in size and watershed characteristics to Little Sucker Lake the comparison of the potential for impacts was a practical and reasonable approach. The DNR agrees with the findings as indicated in the Final EIS that the water quality of Little McCarthy Lake is not expected to change.

As stated in Section 4.1.2.9 (Potential Water Quality Impacts Due to Project Wetland and Watershed Impacts) in the Final EIS, “The 15 percent reduction in watershed area for Little McCarthy Lake and the 20 percent reduction for Little Sucker Lake would reduce both the inflow water volume and phosphorus loading to the lakes. Due to the relatively small reduction in watershed area and the fact that phosphorous loading would also be reduced, the water quality is not expected to change perceptibly in either of these lakes.” In addition, Section 4.1.3.2 (Mitigation for Indirect Impacts) of the Final EIS suggests additional wells could be installed to monitor potential indirect impacts to other wetlands in the Little Sucker, Little McCarthy and Swan Lake watersheds.

Little McCarthy Lake was sampled and the results were presented in *The Surface Water Quality Monitoring Report* (January 2006) prepared for the project and referenced in Appendix I of the Final EIS. Water samples were collected from Little McCarthy Lake in April 2005 and June 2005. The samples provide baseline water quality data for Little McCarthy Lake where no historical data had previously existed. Although no change to the water quality of Little McCarthy Lake from the proposed project is anticipated, these baseline samples can serve as a reference point in determining if the water quality of Little McCarthy Lake changes over time, if warranted.

#### **COMMENT LETTER 4**

##### Minnesota Department of Transportation

**Response to Comment #4a:** The comment letter does not challenge the adequacy of the Final EIS, but identifies the importance of the proposed project's construction timelines as they relate to road and intersection improvements.

#### **COMMENT LETTER 5**

##### Minnesota Chamber of Commerce

**Response to Comment #5a:** The Commenter's support for the project is noted.

#### **COMMENT LETTER 6**

##### Itasca Economic Development Corporation

**Response to Comment #6a:** The Commenter's support for the project is noted.

#### **COMMENT LETTER 7**

##### Swan Lake Country Club

**Response to Comment #7a:** During the first five years of the project, Minnesota Steel Industries (MSI) will not need to augment Oxhide Creek as the dewatering flows from pits 1, 2, and 5 to Oxhide Creek will average 4,488 gallons/minute (gpm) or 10 cubic feet per second (cfs). Swan Lake Country Club's current water appropriation permit authorizes a maximum pump rate of 540 gpm or 1.2 cfs. Therefore during the first five years of the project there should be an adequate water supply for the Swan Lake Country Club's irrigation requirements.

Upon cessation of pit dewatering, the flow to Oxhide Creek will decrease and will require stream augmentation by (MSI) throughout the life of the mine and through closure up until pit 5 re-fills and resumes overflow discharge to Oxhide Creek. The minimum MSI will be required to augment to Oxhide Creek during mining operations is 1,020 gpm or 2.3 cfs (see Table on page 4-58 of Final EIS). Actual streamflow will likely be higher than this rate since there will normally be some natural runoff, plus MSI is likely to pump at a somewhat higher rate than prescribed since it will be very difficult to engineer a pumping system that delivers exactly the amounts prescribed in the Final EIS. MSI's water appropriation permit will require them to develop a post-mining stream augmentation plan to be approved by the DNR prior to mine closure.

The Swan Lake Country Club was issued their water appropriation permit in 1986, approximately one year after the Butler operation shut down and during extreme low flows in Oxhide Creek (~335 gpm average). Swan Lake Country Club endured these low flow years by constructing a sump or shallow pit next to Oxhide Creek with an open channel to the creek. In essence, the sump allowed Swan Lake Country Club to tap into both surface water from Oxhide Creek and shallow ground water adjacent to the creek. This design met their watering needs for many years and is still used today.

Minnesota Steel will have to conduct environmental monitoring [plant water use, pit pumping rates, Oxhide Lake water level, Oxhide Creek streamflow (periodic flow measurements), etc.] that will be used to periodically re-assess their water use and available water supplies to determine if an outside source of water (most likely Hill Annex Pit) will be needed to supplement augmentation. Section 4.3.3 (Monitoring & Mitigation Opportunities) of the Final EIS describes monitoring and mitigation of Oxhide Creek in greater detail.

Minnesota Steel's water appropriation permit can be amended by the Department of Natural Resources (DNR) at any time it is deemed necessary.

**Response to Comment #7b:** Water allocation priorities are governed by Minnesota Statutes 103G, Waters of the State, specifically Chapter 103G.261 (Water Allocation Priorities). The Swan Lake Country Club Golf Course and the proposed Minnesota Steel mining project both fall into the last or sixth priority (nonessential uses). Therefore, neither entity has precedent over the other. If a conflict occurs, DNR's policy is to try to get the two parties to work out an agreement. If the parties can-not come to an agreement, the DNR will intervene and determine the appropriate allocation of water.

#### **COMMENT LETTER 8**

Mr. Jon Korpi

**Response to Comment #8a:** The Commenter's support for the project is noted.

#### **COMMENT LETTER 9**

Duluth Area Chamber of Commerce

**Response to Comment #9a:** The Commenter's support for the project is noted.

#### **COMMENT LETTER 10**

Bud Stone, Grand Rapids Area Chamber of Commerce

**Response to Comment #10a:** The Commenter's support for the project is noted.

#### **COMMENT LETTER 11**

Minnesota Power

**Response to Comment #11a:** The Commenter's support for the project is noted.

#### **COMMENT LETTER 12**

Mr. Vince Goetsch

**Response to Comment #12a:** The Commenter's support for the project is noted. A determination of EIS adequacy will be issued by the DNR followed by a record of decision by the USACE. MSI will then need to obtain a number of permits as described in Section 2.0 (Government Approvals) of the Final.

#### **COMMENT LETTER 13**

Swan Lake Association

**Response to Comment #13a:** The Commenter does not specifically identify the lack of substantive changes in the Final EIS compared with the Draft EIS and SDD.

**Response to Comment #13b:** The DNR disagrees with the assertion that comments submitted by the Swan Lake Association have been dismissed. The DNR responded to comments submitted by the Swan Lake Association during the scoping process and Draft EIS comment period. The comment letters and agency responses are presented in Appendix C and Appendix M of the Final EIS, respectively.

The DNR as the Responsible Government Unit (RGU) for this EIS is not required under Minnesota Rules 4410 to contact parties interested in the EIS and clarify or discuss information. That being said, the DNR has stated throughout the EIS process in various notices and via the DNR Website (<http://www.dnr.state.mn.us/input/environmentalreview/minnsteel/index.html>) that interested citizens and government entities could contact the DNR to ask questions regarding this EIS.

**Response to Comment #13c:** The Commenter does not specify the incomplete or misleading information provided by MSI.

**Response to Comment #13d:** The Commenter's opinion is noted.

**Response to Comment #13e:** Commenter is referred to the *Swan Lake Nutrient Study*, May 2007. Section 4.5.2.3 (Swan Lake) of the Final EIS further summarizes the main conclusions of the study.

**Response to Comment #13f:** Commenter provides no factual data to support the claim.

**Response to Comment #13g:** The EIS thoroughly evaluated the plants water consumption and on-site available water supply from both surface water and ground water. As noted in the Final EIS Section 4.0 (Affected Environment and Environmental Consequences (Potentially Significant Impacts May Result)) on Swan Lake and Swan River, average outflow from Swan Lake is 62.8 cfs. Minnesota Steel has to augment flow to Oxhide and Snowball Lakes through requirements designated in a water appropriation permit. The augmentation plan calls for varying flows in an attempt to mimic natural variation. During 60% of the years MSI's augmentation would reduce the average outflow by 3.7 cfs or 5.9%; during 20% of the years MSI's augmentation would reduce the average outflow by 4.7 cfs or 7.5%. Worst case conditions would occur when during extreme dry conditions, MSI was augmenting at the lowest rate permissible. This potential situation was addressed in the EIS by modeling the effects on Swan Lake outflow during the drought conditions experienced from July through September, 2006. The analysis shows that under extreme dry conditions outflow from Swan Lake presently approaches zero and could go to zero outflow for brief periods with only 'dry condition' augmentation. In response to this analysis the DNR is requiring Minnesota Steel to continuously monitor both Swan Lake outflow and Swan Lake water levels, and re-evaluate their water balance annually, starting the first year after pit dewatering is completed (pit dewatering will result in increased flows to Swan Lake). If the monitoring data confirms the modeling done for the EIS, the DNR will have the option of requiring increased augmentation under drought conditions, and/or requiring MSI to open the Swan River weir orifice via the water appropriation permit.

**Response to Comment #13h:** Impacts to air quality were evaluated during the EIS process and are presented in Section 4.7 of the Final EIS. The air quality analyses demonstrated compliance with all Prevention of Significant Deterioration (PSD) increments and ambient air quality standards. The effects of air pollution on acid deposition and regional haze in the Class I National Parks and Wilderness Areas was also evaluated and found to be within acceptable levels. Risks determined in the Human Health Risk Assessment were also within acceptable limits.

**Response to Comment #13i:** While it is acknowledged that there will be an impact to groundwater from the tailings basin all of the data collected to date indicates that the discharge of seepage water from the tailings basin will have minimal or no negative effects on groundwater quality.

To mitigate any potential impacts to groundwater quality the National Pollution Discharge System/Stormwater Discharge System (NPDES/SDS) permit requires Minnesota Steel to install a groundwater monitoring well network in the vicinity of the basin. Furthermore the permit requires Minnesota Steel to collect background groundwater quality data prior to initiating operation of the tailings basin such that a baseline for comparison can be established. If groundwater data collected once the basin is operating shows a deterioration of groundwater quality the NPDES/SDS permit may be modified to require corrective actions.

**Response to Comment #13j:** The DNR does not agree with the assertion the Commenter makes that the project as proposed will, "... needlessly bury up to 18 square miles of land adjacent to Swan Lake with a pile of taconite dust 70 feet thick." The Commenter provides no factual data to support this claim. The area of the proposed tailings basin as detailed in the Final EIS is 1,580 acres or 2.5 square miles.

**Response to Comment #13k:** Recycling water makes sense from both an economic and environmental perspective. The MSI operation would have to use, on the average, 62.8 cfs or more than 28,000 gallons per minute (gpm) in order to dry up the outflow from Swan Lake. Their expected maximum water consumption is less than 6,000 gpm. It is also important to understand that a significant portion of MSI's water demand, perhaps as much as 2,000 gpm, will be offset by increased deep ground water inflow from the Biwabik Iron Formation caused by pit dewatering. Importing water for augmentation from the Hill Annex pit system is expected to be necessary by about year 5 of MSI 's operation. This will help to further minimize impacts on Swan Lake and Swan River.

**Response to Comment #13l:** The air emissions from the HYL reduction process have been included in air emission analyses. The Commenter does not identify what the additional air emission are.

The DNR is unaware of any power plants that are to be built as a requirement or prerequisite of the proposed project. Commenter is also referred to response #16d.

**Response to Comment #13m:** The Commenter does not specify the incomplete information and environmental impacts missing from the Final EIS.

**Response to Comment #13n:** The Swan Lake Association asserts that the Final EIS should be reconsidered based on three topics:

- 1) Inadequate emission disclosures.

The Commenter does not specifically identify what the inadequate emission disclosures are.

- 2) Lack of meaningful review of comments during the EIS process (especially in-pit tailings disposal option).

The Commenter is referred to response #13b. In addition, a letter dated November 14, 2005, was sent by the DNR to Mr. Ronald Rich and the Swan Lake Association identifying the reasons why the Hawkins pit was not suitable for in-pit tailings disposal.

- 3) Exclusion of additional air emissions from the HYL iron reduction process and the requirement for new power plants.

The air emissions from the HYL reduction process have been included in air emission analyses. The Commenter does not identify what the additional air emissions are. The requirement for new power plants due to the proposed project is incorrect. The Commenter is also referred to response #16d.

#### **COMMENT LETTER 14**

Mr. Jim Gustafson, Itasca County Soil and Water Conservation District

**Response to Comment #14a:** The Commenter's opinion is noted.

**Response to Comment #14b:** The USACE would require compensatory wetland mitigation for unavoidable impacts to natural wetlands and artificial wetlands as part of a Clean Water Act Section 404 permit.

**Response to Comment #14c:** Field wetland delineations were conducted for the proposed project and were reviewed by the regulatory agencies (see section 4.1.1.2 of the Final EIS).

**Response to Comment #14d:** Comment noted. The MPCA as the government entity that would issue the NPDES/SDS permit(s) for the proposed project are required to ensure strict adherence to the permit requirements.

**Response to Comment #14e:** The Commenter's opinion is noted.

#### **COMMENT LETTER 15**

Mr. Kenneth Westlake, U.S. Environmental Protection Agency

**Response to Comment #15a:** As recommended by the U.S. Environmental Protection Agencies (EPA) comment letter, the U.S. Army Corps of Engineers (USACE) will address the issues outlined in the EPA comment letter in the federal Record of Decision (ROD). Minnesota Steel has submitted a revised Draft 5-Year Wetland Restoration Plan, Aitkin Wild Rice Farm dated June 2007, to the USACE. The USACE has reviewed the revised Draft 5-Year Wetland Restoration Plan and has sent a letter dated August 2, 2007 to Minnesota Steel providing additional comments/recommendations on the Draft Plan.

#### **COMMENT LETTER 16**

Minnesota Center for Environmental Advocacy

**Response to Comment #16a:** Consistent with Minnesota Rules 4410.2400 and Federal Regulations (40 CFR Part 1500.4), the bulk of the EIS was reduced by providing summaries of detailed analyses in the EIS document. The corresponding detailed technical analyses listed in Appendix I are reasonably available for inspection by interested persons, via submittal of a request to the DNR Project Manager. There are no provisions that require all documents to be posted on the internet. The number of documents and the electronic file size of the documents makes posting all EIS related documents on the DNR Website technically infeasible.

All project documents are and have been available to both governmental units and citizens for public review consistent with the State of Minnesota Data Practices Act (Minnesota Statutes § 13.02 and 13.03). The RGU followed all procedures outlined in *Minnesota Department of Natural Resources Data Practices Manual*, August 1, 2006, when responding to data requests.

In addition, the DNR, MPCA, and MSI made special efforts to provide the Minnesota Center for Environmental Advocacy (MCEA) with information on the project and its impacts through person to person meetings and document submittals/review.

On March 22, 2007, the DNR and MPCA met with Mr. Kevin Reuther (MCEA) to discuss topics associated with the Canada lynx and the proposed project's carbon footprint. As a result of this meeting the *Minnesota Steel, Estimated CO<sub>2</sub> Footprint* report presented in Appendix O of the EIS was added.

The RGU maintains that it has been accommodating and cooperative to all questions and requests raised by both governmental units and citizens, including MCEA.

**Response to Comment #16b:** The *Minnesota Steel, Estimated CO<sub>2</sub> Footprint* report and the calculations mentioned in the Commenter's letter were analyzed/compared and verified by Mr. Peter Ciborowski with the MPCA's Air Assessment & Environmental Data Management Section. The comparison spreadsheet was provided to Mr. Kevin Reuther of the MCEA as an attachment in a May 3, 2007 email from the DNR. The Greenhouse Gas Inventory Memorandum (Exhibit E) is presented as an exhibit in the Commenter's letter. The RGU is not sure what other analysis of the MSI study MCEA believes was necessary. Given the facts set out above, there is no question that the data provided by MSI was subject to examination by the RGU.

**Response to Comment #16c:** Please refer to response #16a.

**Response to Comment #16d:** The Commenter asserts that the EIS fails to address potential environmental consequences from Minnesota Steel's power consumption and that electrical generation should be considered a connected action and that it further compounds cumulative impacts.

In general, the DNR does not agree with MCEA's factual assertion that the MSI project will cause new power to be generated, or a new facility to be built such that a "connected action" analysis is required. Instead, the DNR finds that the EIS is accurate in holding that power will come from energy currently generated and available for use, and thus that the impacts will occur whether MSI is constructed or not. The DNR's detailed response to MCEA's factual and legal arguments appears below. The DNR notes that this topic was not included as a scoping issue in the Final Scoping Decision Document for this project. Analysis of impacts and alternatives in the EIS were performed consistent with the Scoping Decision Document (Final EIS, Appendix C). The scoping period for this EIS was held from July 18, 2005 to August 17, 2005 with a public scoping meeting held in the city of Nashwauk, Minnesota on August 10, 2005.

#### Whether the MSI plant requires construction of a new power plant

The Commentor argues that the Final EIS is not accurate in stating that no new power plant will be required to supply energy to MSI, and as evidence cites statements made by MSI representatives to the legislature. The Commenter contends that testimony by MSI representative Jim Girard before the Minnesota Legislature (March 6, 2007) contradicts the conclusion that the MSI project will not require new electricity generating capacity.

The MCEA bases its comment on testimony that was delivered on March 6, 2007. However, MSI has informed the DNR that it did not agree with Mr. Girard's statement, and that it instructed Mr. Girard to discontinue these assertions after they were called to the attention of management by the Commenter's attorney, Mr. Kevin Reuther. On March 9, 2007, John Elmore, MSI's CEO, wrote the following to Mr. Reuther:

"To the extent that anyone may have stated on Minnesota Steel's behalf that new electrical power sources will be necessary for the operation of our proposed project in Nashwauk, Minnesota, that statement was incorrect. As the draft environmental impact statement for the project accurately indicates, the current excess generating capacity of the Mid-Continent Area Power Pool (MAPP) during peak demand is approximately 20 times the amount of power that will be needed by the project. MAPP thus has the current generating capacity to accommodate the project's estimated power demands. The project will not require the construction of any new power production facilities, nor will the construction of such facilities be the result of our project."

". . . I have instructed our representatives at the Legislature to refrain from making any statements that are inconsistent with this fact." (Email from John Elmore to Kevin Reuther, 3/09/07).

Given this clarification, the DNR does not believe that Mr. Girard's testimony is reliable evidence of the fact that MSI projects the need for new energy generation related to the MSI project.

The DNR agrees with the Commentor (as supported by the materials attached to its comment) that it is likely that a new power generation facility will need to be sited in the region some time in the next 10-15 years to meet growing demand, if current trends continue. But as the attached materials themselves suggest, these trends will occur, and sources of new generation will need to be found, regardless of whether the MSI project is built. Further, the DNR finds that there is no good model or method available for calculating the inducement provided by one industrial user on this system with regard to new facility siting and development. For this reason, the case cited by MCEA in support of the proposition that the RGUs must analyze these impacts seems inapplicable. *Cf. Mid States Coalition For Progress v. Surface Transportation Board*, 345 F.3d 520, 549-550 (8th Cir. 2003) (scope called for analysis of air quality impacts associated with the increased availability and utilization of Powder River Basin Coal and model was available). Even if it was possible to predict, based on MSI's demand, that a new generating source would be required, it would not be possible to predict where that source would be located, what kind of fuel it would use, and what kinds of emissions would result. As provided in Minnesota Rules 4410.2500 and Council on Environmental Quality (CEQ) Rule 1502.22, the DNR finds that it is not within the current state of the art to provide the information that MCEA seeks. The analysis of "speculative" and "unforeseeable" effects is not required and is supported by the courts – in fact by the very court that required the indirect effect analysis in the case cited by MCEA. *Mid States Coalition for Progress v. Surface Transportation Board*, 472 F.3d 545, 556 (8th Cir. 2006). The DNR believes that it makes more sense, under these facts and circumstances, to decline the speculative environmental review of impacts of increased generation that might be possible today, in favor of the more focused environmental review that will be required by state law when the new generating facilities are actually proposed and when the type of facility and location will be known. Agencies are not required to consider the possible environmental impacts of less imminent actions, particularly when it appears that the future projects will be subject to environmental review that will reflect the earlier proposed actions and their effects. *Kleppe v. Sierra Club*, 96 S.Ct. 2718, 427 U.S. 390, 410 (1976) .

### Whether the MSI plant will cause new energy to be generated from existing sources

The Commenter asserts that the Final EIS fails to address potential environmental consequences from MSI's power consumption. The MCEA argues that MSI will cause an increase electrical generation of 450 megawatts, and that the environmental impacts from this increase should have been addressed.

The DNR disagrees with the assertion that MSI will cause an increase in electrical generation of 450 megawatts. The following information demonstrates that the electrical generating system in this region is designed to produce a certain capacity (also referred to as resource or supply adequacy) which is sufficient to support another industrial user without causing additional generation resources to be brought on line, either on a daily basis or in the form of a new power generating unit. Further, while new base load or peaking generating units may eventually be needed to address increases in demand system-wide, there is no evidence suggesting that MSI's demand is a "but for" causative factor with regard to the projected need. (see Attachment A, MPCA Office Memorandum, Telephone Conversation regarding the Nashwauk Public Utilities Commission, August 9, 2007).

The electrical power sector in Minnesota consists of an "electrical grid" (grid) that is a network of power plants, high voltage transmission lines, lower voltage distribution lines and substations that interconnect the generating plants and power lines of different voltage.

The grid is ultimately made up of three components: generation, transmission and distribution.

- Generation is the power plants that convert primary energy forms (coal, natural gas, falling water, blowing wind, etc.) to electricity.
- Transmission is the use of high voltage power lines to "transport" electricity from the generating sources to the independent power consumers.
- Distribution is the use of low voltage power lines that carry electric power short distances from high voltage power lines to residential/commercial consumers.

Two important aspects of electric generation are supply/capacity and capability.

Supply refers to the capacity of energy that exists in the form of various types of existing power whether online or offline and the demands they sustain. Generating capacity is divided into three categories: base load, intermediate and peaking.

- Base load power plants are the grid's foundation. They run at or near full capacity everyday of the year. They are predominantly coal fired and nuclear power plants. They produce most of the energy, measured in megawatt hours.
- Peaking power plants are fired up only to meet the highest levels of demand. These power plants are used only a few hours per day or even a few days per year. These plants can be fired up and brought up to full capacity very quickly. These generators are usually spun by gas turbines or diesel engines.

- Intermediate or load following, power plants, as the name implies, fall in between base load and peaking plants. They ramp up or ramp down production to follow the daily patterns of demand. These plants may burn coal, fuel oil or natural gas.

It is agreed “the generation of electrical energy is not put on a shelf for later purpose”, rather electricity is generated to meet projected demand. The energy requirements from various users/consumers throughout the United States and Canada are continually being re-directed as demand requires it. In general, power is not generated to address any single industrial user, even a significant one. Rather, power is redistributed to ensure that the demand is met. Some power needs are met by bringing on temporary generating capacity that already exists within the grid (i.e. peaking or intermediate plants). Base load is generated whether it is needed or not - it is wasted if not used. From the information provided to the DNR by power system operators, the demand projected for MSI will not cause the need for system adjustments in the form of increased generation. Available power will be redistributed to meet the new demand (see Attachment B, Public Utilities Commission email from Marya M. White, August, 6. 2007).

Minnesota Steel will likely be connecting to the Mid-Continent Area Power Pool (MAPP). The MAPP is an association of electric utilities and other electric industry participants. Its members are investor-owned utilities, cooperatives, municipals, public power districts, a power marketing agency, power marketers, regulatory agencies, and independent power producers from the following states and provinces: Minnesota, Nebraska, North Dakota, Manitoba, Saskatchewan, and parts of Wisconsin, Montana, Iowa and South Dakota. MAPP also has members in Kansas and Missouri. MAPP serves over 16 million people and covers nearly 1,000,000 square miles.

The MAPP organization has two primary functions: a regional transmission group, responsible for facilitating open access of the transmission system and a generation reserve sharing pool which provides efficient and available generation to meet regional demand. These functions assure efficient and economical power in the upper Midwest for the industry and the public interests.

The total forecasted adjusted net capability of MAPP for August 2007 is 44,982 megawatts with a total firm capacity obligation of 41,275 megawatts resulting in a surplus of 3,711 megawatts. Total forecasted adjusted net capability for December 2008 is 44,650 megawatts with a total firm capacity obligation of 38,157 megawatts resulting in a surplus of 6,493 megawatts (*Mid-Continent Area Power Pool Load and Capability Report*, August 1, 2006). These numbers represent generation from all facilities on the MAPP grid including peaking and intermediate plants.

The Proposed Project’s estimated electrical power demand of 450 megawatts represents approximately 1% of the capability of MAPP and is well within the total firm capacity obligations. This information indicates that MAPP has the capacity to accommodate the estimated future power requirements of the Proposed Project, with appropriate distribution. Therefore, any future power production facilities would not be a direct result of the Proposed Project, but rather the result of long-term trends from both residential and industrial growth.

Capability refers to the ability to transport or deliver energy to various independent utilities or users. This is generally accomplished through a network of transmission lines managed by the Midwest Independent System Operator (MISO). Minnesota Steel has prepared conceptual plans showing possible options for connecting the project to the power grid.

The most current proposal to route electrical power to the MSI facility is shown on Figure 6.13.1 in the Final EIS. The concept plan includes the following improvements:

- Construct 15.2 miles of single 230 kilovolt (kV) line from the Minnesota Steel Plant along the north side of the site and then south along Minnesota Power's existing 115 kV transmission line right-of-way interconnecting to the Blackberry Substation.
- Construct 7.5 miles of double circuit 230 kV lines along new right-of-way going north from the plant tying into an existing 230 kV line that connects up to the Shannon Substation.
- Reroute existing 115 kV line which currently passes through the proposed mine expansion area of the Minnesota Steel site. This line would be rerouted starting from the west side of the facility following existing and proposed road rights-of-way and along the right-of-way for the proposed single 230 kV line connecting up again to the existing 115 kV line east of TH 169 that connects up to the Nashwauk Substation."

The Commenter is referred to Section 6.13.2 (Environmental Consequences) of the Final EIS describing the environmental impacts of the connected actions associated with the proposed MSI project and the construction and routing of new electric transmission lines. The capability or delivery of electricity will require the construction/routing of one or more transmission lines from a major distribution line to supply electrical power to the proposed MSI plant.

Section 7.2 (Connected Actions) of the Final EIS states, "The impacts described in Section 6.13 (Infrastructure) are based on the best information currently available regarding the location and extent of the proposed infrastructure facilities; however, as plans for each infrastructure component are refined, the anticipated impacts may change. If the re-assessment of impacts based on refined infrastructure plans results in increases in the extent of impacts from those documented in this EIS, a supplemental EIS would be prepared, consistent with Minnesota Rules, part 4410.3000."

The DNR disagrees with the assertion the Commenter raises regarding the requirement for the EIS to address the environmental impacts of electricity generated for the proposed Minnesota Steel project because the MSI project will not cause new generation, and because impacts of the current system will exist regardless of whether the project is built. For this reason, the DNR also does not believe that it represents a deficiency in the Final EIS that it did not analyze power generation as an "indirect effect." The DNR notes that the EIS did address the effects of electrical generation as a "cumulative impact" in the following reports:

- Assessment of Potential Visibility Impacts in Class I Areas in Minnesota
- Ecosystem Acidification
- Evaluating Particulate Matter (PM10) Air Concentrations in Federal Class I Areas in Minnesota and Implications for Prevention of Significant Deterioration (PSD) Air Quality Increment
- Mercury Deposition and Bioaccumulation in Fish in Northeast Minnesota

These studies were conservative in that they assumed the existence of some power generation facilities that may not be built, i.e., Excelsior Energy. As the *Border Power Plant Working Group* court notes, an agency must evaluate the reasonably foreseeable significant effects which would be proximately caused by implementation of the proposed action. *Border Plant Working Group v. Department of Energy*, 260 F.Supp.2d 997, 1015 (S.D. Cal. 2003). But there is no obligation to examine effects that are not causally related. *Id.* at 1016 (court does not require analysis of impacts of non-export related generation facilities).

Moreover, at least some of the existing generating facilities that will provide power to the Minnesota Steel project have already undergone environmental review pursuant to Minnesota Rules 4410.4400, Subpart 3 (Electric Generating Facilities), depending on when they were first placed in service. All the generating facilities have been permitted and must comply with air quality regulations. New facilities will be assessed for potential environmental impacts prior to permitting. See *Kleppe v. Sierra Club*, 96 S.Ct. 2718, 427 U.S. 390, 410 (1976) (future environmental review factor properly considered in deciding scope of present review).

### References

Mid-West Area Power Pool Website, 2007.

*Mid-West Area Power Pool Load and Capability Report*, August 1, 2006.

Minnesota Energy Systems, A Primer, University of Minnesota's Regional Sustainable Minnesota Public Utilities Commission.

**Response to Comment #16e:** It is difficult to predict the precise mix of electricity generation that will supply energy to the project. Depending on contractual obligations, transmission congestion, and other variables, the power could be provided from specific existing generation plants, from market purchases, etc. According to MAPP data, approximately 21% of the power is generated from hydroelectric, 8% from nuclear, 47% from coal, 22.5% from gas, and 1.6% from "other." As stated above, (response #16d) there is currently enough existing generation capacity in the regional reserve sharing pool to meet the increased load without requiring construction of a new electric generation plant.

**Response to Comment #16f:** An estimate of the amount of electricity that MSI will use is provided in Appendix O of the EIS (see Table 1). The estimate of kWh/year that will be used by the facility was based on power usage estimates obtained from process equipment vendors. Appendix O, Table 1 provides for an estimate of 1.845 million megawatt hours per year (MMWh/year). Details of electric usage of each major process unit are also provided in Appendix O.

**Response to Comment #16g:** Commenter is specifically referred to response #16d and #16j.

**Response to Comment #16h:** Commenter is referred to response #16d.

**Response to Comment #16i:** An evaluation of the impacts of emissions from mobile sources is included in the analysis of impacts to air quality in the EIS as follows:

Contribution of nitrogen oxide (NO<sub>x</sub>) and other air pollutant emissions from mobile sources were included in the modeling analysis of visibility impacts in federal Class I areas. Particulate matter (PM) emissions from trucks were included in the analysis of PSD increment consumption in federal Class I areas.

The human health risk assessment also included hazardous air pollutant emissions from truck traffic at Minnesota Steel. The results of the analyses are presented in the Final EIS.

- Fugitive dust and exhaust emissions from mobile sources are included in the assessment of impacts on air quality. Fugitive dust emissions were modeled in the Air Permit Application and included in the assessment of impacts in Section 4.7.2.2.1 (Class II Area Impacts Analysis) of the Final EIS. The impacts of exhaust emissions on local air quality are assessed in Section 6.9 (Vehicle-Related Air Emissions) of the Final EIS.
- Hazardous Air Pollutant (HAP) emissions resulting from fugitive dust and exhaust emissions from mobile sources are included in the Human Health Risk Assessment and Ecological Risk Assessments which are discussed in Section 4.7.2.4 and 4.7.2.5, respectively, of the EIS.
- Exhaust emissions from mobile sources are included in the modeling of visibility impacts and PM<sub>10</sub> increment for the Class I areas in the Air Permit Application and the results of this analysis are summarized in Section 4.7.2.2.2 (Class I Area Impacts Analysis) of the Final EIS.
- Emissions of mercury from diesel fuel used in haul trucks and shovels are included in the mercury mass balance summarized in Section 4.7.2.3 (Mercury Emissions) of the Final EIS.
- Emissions of CO<sub>2</sub> from diesel fuel used in haul trucks and shovels are included Appendix O of the Final EIS.

The fugitive dust control plan is identified as a mitigation measure for reducing dust emissions resulting from haul trucks and is discussed in Section 4.7.3 (Mitigation Opportunities for Air Emissions) of the Final EIS. As discussed in Section 6.9.3 (Mitigation Opportunities) of the Final EIS, MSI has proposed to install particulate controls and to use low sulfur diesel in all major pieces of mining equipment, including shovels and haul trucks, to mitigate impacts to air quality from these sources.

#### **Response to Comment #16j:**

In response to MCEA's initial comment on the Draft EIS regarding greenhouse gas emissions, the DNR and USACE, with assistance from the MPCA, requested that MSI perform a carbon footprint analysis. This analysis was reviewed by the MPCA. The *Minnesota Steel, Estimate CO<sub>2</sub> Footprint* for the facility was provided in Appendix O of the Final EIS. This document stated that the annual emissions of CO<sub>2</sub> from the facility would be 3.75 million tons per year. The analysis includes estimation of CO<sub>2</sub> emissions from diesel fuel combustion in haul trucks and shovels, natural gas combustion, and carbon-containing additives used in the various processes. MCEA questions the validity of this analysis based on the carbon analysis conducted by consultant Rick Heede which projects that 4.9 million tons per year CO<sub>2</sub> would be generated by the Project.

The MPCA, as requested by the DNR, has reviewed both studies and finds that both studies are valid within reason with regard to providing information on the projected carbon emissions from the Proposed Project. Regardless of the difference between the estimated CO<sub>2</sub> emissions, it is clear that the MSI facility will add greenhouse gas emissions to the environment.

The DNR does not dispute that the addition of any CO<sub>2</sub> to the environment has an environmental effect. However, as provided in Minnesota Rule 4410.2500 and CEQ Rule 1502.22, the DNR finds that it is not within the current state of the art to provide the information that MCEA seeks in its letter, which is analysis of the impacts of the MSI-related CO<sub>2</sub> emissions (however calculated) on the environment. As cited in the MCEA comment letter, general information is available that attempts to project climate change effects. However, to determine the specific effect that the MSI project will have on climate change, there needs to be a reliable model that can be used in a fair and consistent manner to evaluate the potential effects. According to the MPCA, there currently are not reliable analytical and modeling tools to evaluate the incremental impact of discrete emissions, such as those from the MSI project, on global and regional climate or on any cascading incremental impacts to natural ecosystems and human economic systems in Minnesota. As stated in the previous response to the Draft EIS, the MPCA believes that the effects of climate change on the environment must be addressed holistically and not just by one individual facility. Given the uncertainty in directly connecting the emissions from an individual facility to the environmental consequences of climate change, it would not be possible to properly and fairly evaluate these potential incremental consequences in the EIS.

As MCEA is aware, the Minnesota Climate Change Advisory Group is charged with recommending policy options to aggressively reduce greenhouse gas emissions in Minnesota during the coming years. The proposed emissions from the MSI project would be considered in this evaluation. Minnesota Steel would also be subject to any new rules or regulations that evolve over time regarding greenhouse gas emissions.

Minnesota Steel has incorporated many measures into its project design to mitigate CO<sub>2</sub> emissions. Integration of mining, processing and steel making facilities will reduce energy use and shipping and associated greenhouse gas emissions. Minnesota Steel's use of natural gas rather than coal will further reduce emissions of CO<sub>2</sub>.

The Commenter is also referred to response #16d.

**Response to Comment #16k:** Commenter is referred to response #16b and 16j.

**Response to Comment #16l:** As stated in response #16j, the MPCA does not believe that a reliable analytical technique or model exists to accurately determine the effects of the MSI project on climate change. Likewise, there is not a reliable method to accurately project the effects of climate change on the overall modeled environmental impacts for the project, given the wide range of possible climate responses. As provided in Minnesota Rule 4410.2500 and CEQ Rule 1502.22, the DNR finds that it is not within the current state of the art to provide the information that MCEA seeks in its letter.

Given the wide variety of factors that must be taken into account, it is difficult to predict how climate change will ultimately affect Minnesota in general. It is partially due to this uncertainty that reliable predictions of future conditions can-not be applied in the models used in predicting impacts of the MSI project. The following information was obtained from the U.S. EPA's Global Warming Web site (<http://www.epa.gov/climatechange/index.html>) and illustrates the range of some of the potential impacts:

## Forests

Trees and forests are adapted to specific climate conditions, and as climate warms, forests will change. These changes could include changes in species, geographic extent, and health and productivity.

If conditions also become drier, the current range and density of forests could be reduced and replaced by grasslands and pasture. Even a warmer and wetter climate would lead to changes - trees that are better adapted to warmer conditions, such as oaks and southern pines, would prevail. Under these conditions, forests could become more dense.

These changes could occur during the lifetimes of today's children, particularly if they are accelerated by other stresses such as fire, pests, and diseases. Some of these stresses would themselves be worsened by a warmer and drier climate.

With changes in climate, the extent of forested areas in Minnesota could change little or decline by as much as 50-70%. The uncertainties depend on many factors, including whether soil becomes drier and, if so, by how much. Hotter, drier weather could increase the frequency and intensity of wildfires.

Mixed forests better adapted to warmer conditions could replace the unique boreal forests in the northern part of the state and in the Boundary Waters Canoe Area. The mixed aspen, birch, beech, maple, and pine forests in the northern and eastern areas of the state would shrink in range and be replaced by a combination of grasslands and hardwood forests consisting of oak, elm, and ash.

Grasslands and savanna eventually could replace much of the forests and woodlands in the state. These changes would significantly affect the character of Minnesota forests and the activities that depend on them.

## Water Resources

Water resources are affected by changes in precipitation as well as by temperature, humidity, wind, and sunshine. Changes in streamflow tend to magnify changes in precipitation.

Because evaporation is likely to increase with warmer climate, it could result in lower river flow and lower lake levels, particularly in the summer. In addition, more intense precipitation could increase flooding. If streamflow and lake levels drop, ground water - the primary source of drinking water in Minnesota could also be reduced.

If climate warms, the ice cover on Minnesota's lakes and streams would not last as long as it does today. Streamflows could peak sooner in the spring because of earlier snowmelt and ice breakup. Reduced summer flows could decrease water quality. Lake surface temperatures would be warmer in the summer, although the temperature changes generally would be less than the increase in air temperature. As a result, lake evaporation would increase considerably, perhaps by as much as 20% for a 4°F warmer climate.

Shorter ice-cover seasons and increased lake evaporation could have major effects on Lake Superior. Fresh water flowing into Lake Superior could decrease with global warming, potentially reducing lake levels and degrading water quality.

Flood damage may be reduced with lower lake levels, but shorelines could be more susceptible to erosion damage from wind and rain. Reduced fresh water in the Great Lakes could negatively affect shipping to and from Duluth, for example, primarily because of lower water levels in the shipping channels connecting the lower Great Lakes. However, this could be offset by a longer ice-free season.

### Precipitation

Precipitation is projected to increase by around 15% in winter, summer, and fall, with little change projected for spring.

The number of heavy rainfalls in summer most likely would increase. The frequency of extremely hot days in summer is expected to increase along with the general warming trend. It is not clear how severe storms would change.

The task of determining how best to develop state, national, and international greenhouse gas emission limits, including how best to address new emission sources, is outside the scope of this EIS.

“The RGU’s evaluation of such impacts from the project and its alternatives are based upon theoretical approaches and research methods generally accepted in the scientific community.” (Minnesota Rules 4410.2500, Item D).

The Commenter is also referred to response #16d.

**Response to Comment #16m:** MCEA comments that “presumably, the entire project area is the ‘ore body leased by MSI,’”. Figure 6-B in MSI’s Permit to Mine application, which is referenced in the EIS, shows that the ore body does not lie under the proposed plant site.

The DNR disagrees with the Commenter’s assertions that the analysis of modified design or layout alternatives are inadequate. Decreasing the project footprint is addressed by the early project alternatives evaluation process described in Appendix G (4.2 Plant) of the Final EIS and consideration of sub-alternatives are described in Section 3.3 of the EIS. The technical memo, *Processing Plant Alternatives Development*, September 2006, produced by Wenck Associates, Inc. and identified in Appendix I also aids in the analysis of plant alternatives development and evaluation.

Appendix G lists the following reasons that the former Butler Taconite plant site, suggested by the MCEA as an alternative site for evaluation, would be unsuitable, including: 1) the former site is not adequate in size for the much larger equipment needs of the new processing facilities; 2) Midland Research, an independent firm, is located on a portion of the site; 3) blasting would be restricted near the former plant site where ore reserves exist; 4) old building and machinery foundations exist below grade, and this reinforced concrete would have to be removed by hammering and blasting before new foundations could be placed, which would be a slow, expensive, and unpredictable process; 5) considerable visual impacts would occur along Highway 169, and 6) bedrock is located approximately 150 feet below the surface, so that solid footings would be expensive to construct. Appendix G also lists the reasons that the proposed plant site is the only practicable and feasible location that meets the goals and objectives of the MSI project and minimizes environmental impacts, including: 1) the plant site contains more than 300 acres of contiguous land located on a hill which will minimize costs for pumping tailings;

2) the site is not situated over any resource which may become ore in the future; 3) the site provides optimal access to the ore reserves; 4) the site will have minimal visual impact on Highway 169 and the town of Pengilly; 5) the site has shallow bedrock required for sensitive machinery footings; 6) there is adequate potential for access by road and rail, and 7) wetland impacts will be minimal.

The Commenter is referred to Section 4.1.2.8 (Indirect Impacts) and Figure 4.1.9 (Indirect Wetland Hydrologic Impacts Assessment) and Table 4.1.11 (Impacts to Subwatershed and Wetland Areas from the Proposed Project) in the Final EIS. The DNR disagrees with the Commenter's assertions that the analysis of potential indirect wetland impacts are inadequate.

**Response to Comment #16n:** In response to this comment, the DNR reasserts the response provided during the Draft EIS (IG-07.27, Appendix M of the Final EIS) that the analysis of cumulative wetland impacts in the EIS was performed consistent with the SDD and is adequate. The public was given the legally required time to comment on the scoping document and no comments were received objecting to the rationale of the Upper Swan River watershed.

The cumulative impacts analysis for wetlands was conducted within the Upper Swan River watershed, which covers approximately 110 square miles. This study area was chosen because wetlands play a key role in watershed processes and the Upper Swan River is the watershed in which most of the project site lies. Therefore, the study area is relevant geographically and ecologically due to the functional role wetlands play in watershed processes. The 110 square mile study area extends well beyond the 7.4 square mile project area.

**Response to Comment #16o:** Although there is general agreement in the scientific community that global climate change is occurring, there is not a consensus on what the specific results of climate change would be on the local climate in the vicinity of the project area. Since the future climate cannot be predicted, the EIS studies, including the cumulative wetland impacts analysis, did not attempt to speculate what the long-term impacts of global climate change would be in the study area. Rather, the analyses focused on valid historical data and reasonably foreseeable events, such as reasonably foreseeable future projects.

**Response to Comment #16p:** The Commenter asserts that formal consultation with the U.S. Fish and Wildlife Service (USFWS) is required. The DNR/USACE disagree with this statement - There is no requirement that formal consultation must occur. As stated in Section 6.4 (Threatened and Endangered Species – Animals) of the Final EIS, the USFWS and USACE are currently conducting informal consultation to determine whether a formal consultation under section 7 of the Endangered Species Act will be required for the Canada lynx or bald eagle. If a formal consultation is required, the USACE (as the federal requesting agency) will prepare and submit a letter to the USFWS requesting initiation of a formal consultation. The USFWS determination under section 7 will be completed before the USACE approves a Record of Decision for the MSI project.

Additionally, Section 8.1.1 (U.S. Fish and Wildlife Service) describes the Section 7 consultation that is currently underway and will be completed prior to the USACE completing a Record of Decision for the proposed project. Any mitigation measures or conditions required by the USFWS as a result of Section 7 consultation would be included by the USACE as a special permit condition if a Section 404 permit is issued.

**Response to Comment #16q:** In the winter of 2007, a comprehensive survey of the MSI project and surrounding area was conducted to determine if Canada lynx are present in the area.

In this survey, lynx abundance, movement, and habitat use in the vicinity of the project site were studied. The study area extended out approximately six miles from the project site. No lynx tracks or scat were observed in the study area. Only habitat marginally suitable for lynx was identified within the study area. The assessment report concluded that the project would not adversely affect Canada lynx populations or their critical habitat. In addition, the report concluded that though lynx could travel through the area, it is reasonably foreseeable that mining activities could impact their movements. Therefore, conservation measures, including reclamation of the mine project site, were proposed. The *2007 Canada lynx Assessment Final Report* is presented in Appendix D of the Final EIS.

On November 9, 2006 the USFWS designated 317 square miles in Voyageurs National Park as critical habitat for the Canada lynx. No other areas in Minnesota were designated as critical habitat. Voyageurs National Park is 75 miles (120 kilometers) away from the proposed project.

The *Recovery Outline, Contiguous United States Distinct Population Segment of the Canada Lynx* (USFWS, Region 6) referenced and attached to the Commenter's letter was not included as a reference in the Final EIS. However, the letter and the 'Recovery Outline' attachment have been included in the comment letter section of these responses to comments. In addition, several other relevant documents were used and are listed in Section 3.1 of the 2007 Lynx Assessment Report (Final EIS, Appendix D).

Minnesota Steel hired recognized experts to conduct the Canada lynx survey that supports the conclusions of the EIS. Those experts worked in close coordination with USFWS biologists to develop an acceptable scope of work for the survey. The survey report's conclusions were based upon field observations and the report recommended conservation measures.

Section 6.4 of the Final EIS provides a summary of existing credible scientific evidence that is relevant to evaluating the potential significant environmental impacts and updated information on the status of the winter 2006-2007 lynx tracking study including the USACE/USFWS consultation process.

"The RGU's evaluation of such impacts from the project and its alternatives are based upon theoretical approaches and research methods generally accepted in the scientific community." (Minnesota Rules 4410.2500, Item D).

# **ATTACHMENT A**

# Office Memorandum

DATE : August 9, 2007

TO : Minnesota Steel Air Quality Permit File  
FROM : Jess Richards  
Manager  
Metallic Mining Sector  
Industrial Division

PHONE : 6-7757

SUBJECT : Telephone Conversation regarding the Nashwauk Public Utilities Commission

On August 9, 2007, at 8:50 am I received a call from Clarence Kadrmas of Short Elliot Hendrickson (SEH). Mr. Kadrmas stated that he was calling on behalf of the Nashwauk Public Utilities Commission (NPUC) to discuss claims that the NPUC was planning to install power generation capacity to accommodate the proposed Minnesota Steel project. Mr. Kadrmas stated that the NPUC had no plans to install any power generation capacity. He stated that the City of Nashwauk may have power needs in the future that are unrelated to the MSI project, but that the NPUC did not intend propose any power generation, but rather obtain future power from other outside sources as needed.

I asked Mr. Kadrmas if he is speaking for the NPUC. He said yes. I asked Mr. Kadrmas how long he has been the consultant for the NPUC. He stated 2 years. I asked Mr. Kadrmas if the sizing of the proposed natural gas line was in anyway envisioned to accommodate future power generation capacity for MSI. He said no. I asked if the NPUC had any plans to construct any type of power generating facility or peaking plant to feed the proposed MSI facility. He said no.

## **ATTACHMENT B**

**From:** "Marya White" <Marya.White@state.mn.us>  
**To:** "Steve Hirsch" <Steve.Hirsch@dnr.state.mn.us>, <Marya.White@state.mn.us>  
**CC:** "Scott Ek" <Scott.Ek@dnr.state.mn.us>, "Edward Garvey" <Edward.Garvey@st...>  
**Date:** 8/6/2007 1:20 PM  
**Subject:** RE: PUC Letter

Hi Steve, Please find my answers immediately after each of your questions below. If you need anything further on this, just let me know.

Thanks. --Marya

Marya M. White  
Manager, Energy Planning and Advocacy and  
Energy Facilities Permitting  
Minnesota Department of Commerce  
Energy and Telecommunications Division  
651-297-1773  
651-297-7891 (fax)

-----Original Message-----

From: Steve Hirsch [mailto:Steve.Hirsch@dnr.state.mn.us]  
Sent: Monday, August 06, 2007 11:08 AM  
To: Marya.White@state.mn.us  
Cc: Scott Ek  
Subject: Fwd: PUC Letter

Hi Marya:

Thanks for agreeing to provide a written response to the questions below. Please let me know if you need additional information or clarification.

Steve Hirsch  
(651) 259-5106  
Minnesota Department of Natural Resources  
500 Lafayette Road  
St. Paul, MN 55125-4025

>>> Scott Ek 8/6/2007 9:25 AM >>>  
Steve,

Jill Schlick explained that a letter would be good if the PUC is willing to write one, as the record cannot be appended if it goes to court. However, if they do not want to write a letter there is not much we can do and she explained that the DNR's response to electrical generation is very good right now.

Marya White (PUC) 651/297-1773

Following are the questions to pose to Marya White (PUC) when requesting a letter:

Is there currently adequate power on the grid to supply MSI 450 megawatts?

(A) This is a general question that has many varied and complex answers, depending on the information sought by the question. As such, I will presume here that because you are seeking this information for an environmental permit, you are asking this question in order to ascertain if serving a 450MW load at the approximate location of Nashwauk MN starting in the Fall of 2008 at the earliest (per my information) would require the construction of further power plants--correct? If so, then available information shows that sufficient (present and proposed) baseload generation should be available to serve a new 450MW load at that approximate location and time, barring any other (presently-unknown) large load additions in that area or limitations on transmission availability.

Another way to look at this would be to look for any certificates of need (filed in this office) or site permit applications (also filed into this office) for such a baseload facility. There haven't been any such filings. However, if a baseload plant was required on a timeframe matching Minnesota Steel's, then the applications would have had to be filed already in order to receive the certificate of need and site permit, yours and other agencies' permits, MISO interconnection/operation permission, etc. all in time to serve that 450MW load.

Will the addition of MSI coming "on-line" require the construction of any type new power plant?

(A) Please see my response to the first question.

Will the addition of MSI coming "on-line" induce increased use of peaking plants

(A) No. This load addition should not, itself, prompt the need for any new peaking facilities. The reason for this is because the load profile (which is non-fluctuating power use all of the time--24/7/365) for this load would be served by baseload resources rather than peaking resources. Peaking resources are required to serve residential and other commercial loads which tend to require the largest amount of power for air conditioning during high temperature/humidity peak times.  
?

What is the available baseload?

(A) This is another general question with many various answers. Here is just one example: Normally, MISO monitors and operates the grid in five-second periods. Available baseload on the grid changes from five-second interval to five-second interval based upon what is being purchased/dispatched and what is available to be purchased/dispatched during that particular five-second interval.

Since I don't know what specific information you seek by this question, I don't know if I can provide an answer that isn't already found above. Scott told me that MISO provided him a number. Since I don't know specifically what question Scott posed to MISO, I can't tell you if I concur with that number but I don't contest any number that MISO gives you as they have the best handle on grid operations.

If you can provide me with more specifics, I could "take another crack" at answering this for you, ok? Just let me know. --Marya

Regards,  
Scott