

**OVERLAND LAW OFFICE**  
**Carol A. Overland**  
**Attorney at Law**  
**P.O. Box 176**  
**Red Wing, MN 55066**

**(612) 227-8638**

**overland@redwing.net**

**www.legalelectric.org**

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Richard Hargis (Richard.Hargis@NETL.DOE.GOV)  
NEPA Document Manager  
M/S 922-342C  
U.S. DOE – NETL  
P.O. Box 10940  
Pittsburgh, PA 15236-0940

Bill Storm (bill.storm@state.mn.us)  
Energy Siting Permits  
MN Dept. of Commerce  
85 – 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101

RE: Draft Environmental Impact Statement – Comments of mncoalgasplant.com

Dear Mr. Hargis and Mr. Storm:

Enclosed for filing please find the Comments of mncoalgasplant.com regarding the Draft Environmental Impact Statement.

**DEIS IS INCONSISTENT WITH SCOPING DOCUMENT**

The Mesaba Project DEIS is inconsistent with the September 13, 2006 scoping document signed by the Commissioner of Commerce and there is no apparent scoping document by the DOE.

1) The Department of Commerce scoping document and DEIS misstate prohibitions of review. From the scoping document:

*Because the Department has concluded that this facility qualifies as an “innovative energy project” and because Minnesota Statute 216B.1694, subdivision 2, item 1, has exempted such a project from demonstrating need, issues related to the need, size or type of the facility are excluded from consideration in this matter. Thus, such issues are not within the scope of the EIS. The DOC will not, as part of this environmental review, consider whether a different size or different type plant should be built instead. Nor will the DOC consider the no-build option.*

Scoping Document, p. 4. Under Minnesota rules, consideration of size, type and timing is prohibited where a Certificate of Need has issued, and not where a project is exempt:

### **7849.5920 FACTORS EXCLUDED.**

When the Public Utilities Commission has issued a Certificate of Need for a large electric power generating plant or a high voltage transmission line or placed a high voltage transmission line on the certified HVTL list maintained by the commission, questions of need, including size, type, and timing, questions of alternative system configurations, and questions of voltage shall not be factors considered by the commission in deciding whether to issue a permit for a proposed facility.

The Department may claim that there is a statutory prohibition, but the statutory prohibition applies only to the siting/routing permits, and this project has a much broader scope under the PUC. Environmental issues were raised in the PPA proceeding, and are a part of the statutory criteria at issue. See Minn. Stat. §§ 216B.1693; 216B.2694.

### **216B.1694 INNOVATIVE ENERGY PROJECT.**

**Subdivision 1. Definition.** For the purposes of this section, the term "innovative energy project" means a proposed energy-generation facility or group of facilities which may be located on up to three sites:

(1) that makes use of an innovative generation technology utilizing coal as a primary fuel in a highly efficient combined-cycle configuration with significantly reduced sulfur dioxide, nitrogen oxide, particulate, and mercury emissions from those of traditional technologies;

... and ...

#### **Subdivision 2. Regulatory Incentives.**

(8) shall be eligible for a grant from the renewable development account, subject to the approval of the entity administering that account, of \$2,000,000 a year for five years for development and engineering costs, including those costs related to mercury-removal technology; thermal efficiency optimization and emission minimization; environmental impact statement preparation and licensing; development of hydrogen production capabilities; and fuel cell development and utilization.

- 2) The Department of Commerce scoping document also states: "*Nor will the DOC consider the no-build option.*" There is no authority or rationale for the statement. The no-build option must be considered by the PUC.
- 3) The DOE scoping document has not been distributed to stakeholders, parties and interested persons. At the very least, notice and links, if not hard copies, must be provided.

- 4) In many instances, the DEIS has no distinction between DOE and DoC analysis and information. This should be made clear throughout the DEIS.
- 5) Section 1.3.1 claims to address the “Project Proponent Proposed Action” but the narrative is misdirected, and should address Excelsior Energy’s applications to DOE for funding, the “Project Proponent Proposed Action” that is the trigger of the DOE DEIS.
- 6) The DEIS, in Section 1.4, p. 1-6 to 1-9, improperly shifts the purpose of the project, from that of public need, as framed in the DoC scoping document, to one focusing on project proposer need. EIS must address the public need for the project and eliminate discussion of “project proponent need.”
- 7) The DEIS, in section 1.4.1.2, provides a narrative regarding the DOE purpose, and it does not include “demonstrate” in line one where the purpose of the DOE’s action is explained. This is a “demonstration” project, mentioned elsewhere, and that is a material term in the purpose of this project.
- 8) In section 1.4.14 of the DEIS, the State Purpose is addressed. One important omission that must be corrected is the state’s need to provide for public participation opportunities under the Power Plant Siting Act and in the PPA docket.
- 9) Section 1.4.2.1 accepts the project proponents’ claim of a “need within Minnesota for 3,000 to 6,000 MW of base load power generation over the next 15 years.” That is not substantiated, has not been independently verified, and it is not true – this “need” is a repeated exaggeration on the part of Excelsior Energy, and in the words of the PUC chair in November, specifically regarding Excelsior’s Mesaba Project’s projected generation, “No one needs it, no one wants it, and we’re not going to force it on anyone” or words to that effect.. The EIS must include substantiation of this claimed need. CapX 2020 claims a “need” for 4,500-6,000MW in the REGION, the shaded multi-state area below:

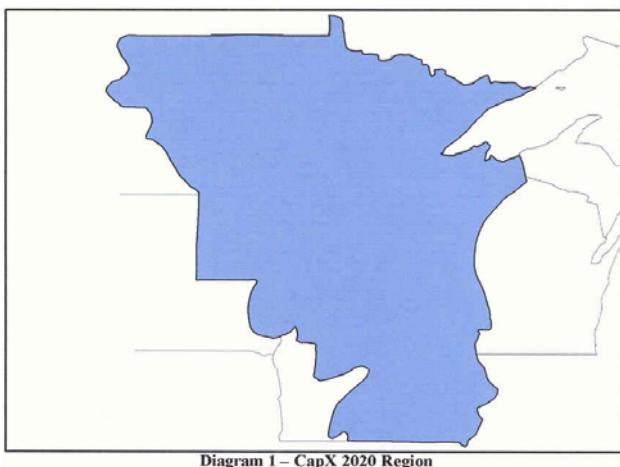


Diagram 1 – CapX 2020 Region

Xcel, the largest utility in this area, was found by PUC to have a “need” for an RFP for only an additional 375 MW by 2015, and has since returned to PUC with “Changed Circumstances” that eliminates the need for an RFP. See Xcel’s Notice of Changed Circumstance:

<http://nocabx2020.info/wp-content/uploads/2007/09/xcel-notice-of-changed-circumstances.pdf>

Where the area's largest utility has no need for additional generation, that raises questions about Excelsior's claimed "need within Minnesota" and that claim should not be accepted without independent verification.

## **DEIS MUST INCORPORATE ENVIRONMENTAL DATA FROM PPA DOCKET**

6) In its characterization of "State Involvement" (§1.4.2.3, p. 1-9), the DEIS limits state involvement to "responsibility for siting power plants... and transmission lines." It refers only to PUC Docket E6472/GS-06-668. **PUC DOCKET E6472/05-1993 HAS BEEN ENTIRELY OMITTED.** The DEIS must incorporate all environmentally focused testimony and documents in the PPA record (05-1993); including, but not limited to:

Direct testimony of Ronald R. Rich:

<http://legalelectric.org/f/2008/01/mcgp-direct-ronrich.pdf>

[The Challenge of Integration](#)

[Climate Vixion Risk Framework](#)

[UMD Itasca County Mesaba Economic Impact Study 2006](#)

Issues raised by Ron Rich that should be included in the EIS include:

- 6a) Cost of Carbon Dioxide Emissions and Sequestration
- 6b) Air Emissions from Proposed Flares – Cost of Control and Mitigation
- 6c) Cost of Plant Safety and Off-site Safety
- 6d) Evaporative Cooling Tower and ZLD Air Emissions – Cost of Control and Mitigation
- 6e) Cooling Water Blowdown ZLD – Cost of Control and Mitigation
- 6f) Cost of Cumulative Impacts in Conjunction with the MSI project
- 6g) Overstated Economic Benefits and Costs not addressed

Rebuttal testimony of Edwin Anderson, M.D., and Ronald R. Rich:

[MCGP Rebuttal Testimony of Edwin Anderson, M.D.](#)

[Exhibit 2](#)

[Exhibit 3](#)

[Exhibit 4](#)

The Rebuttal testimony of Edwin Anderson, M.D., includes the following issues that should be included in the EIS (see DEIS Community Health Issues, 3.17.3, p. 3.17-4):

- 6h) Emissions modeling representing "health benefits" presents false conclusion, and would have detrimental health impact, including increased mortality and morbidity.
- 6i) Comparison of smaller IGCC plant in more remote area with larger SCPC plant in less remote area is misleading – plants of similar characteristics must be compared.

6j) A decrease in stack height and decrease of mercury removal means that health impacts, sickness and death, will increase, particularly among those with asthma, Chronic Obstructive Pulmonary Disease (COPD), chronic bronchitis and heart disease, putting children, the aged, and those with compromised immune systems at higher risk.

Expected morbidity:

<b>Morbidity = Non-Fatal Health Effects:</b>	<b>Cases/yr in Minnesota related to PM 2.5</b>
Acute bronchitis	1.6
Non-fatal MI (heart attack)	1.9
Asthma exacerbation	100
Cough, shortness of breath and/or wheezing	
ER visits for asthma	1.3
Lower respiratory Symptoms	19
Minor restricted activity days	791
Feel sick	
Work loss days	18,313
Clinic/urgent care visits	?

*See ICF Report, p.3-1, List of Health Endpoints, p. 3-4.*

6k) Mortality costs (morbidity costs estimated at 7-8% of mortality costs)

Minnesota = \$8.7 million per year

United States = \$84.9 million per year

6l) Dry deposition of mercury is above the highest level measured at several points very near the site proposed for the Mesaba Project. ICF Report, Exhibit 2-13.

6m) Human health effects from chronic exposure of the developing fetus to mercury are:

- Human nervous system toxicity
- Mental retardation
- Growth deformity
- Seizures/Epilepsy
- Blindness
- Deafness
- Severely delayed development

Human Health Effects of Mercury from chronic exposure as infants or small children:

- Impaired reflexes
- Delayed motor development
- Impaired attention
- Impaired memory
- Impaired language

Human Health Effects from high level mercury exposure in adults:

- poisoning symptoms/very high exposure can cause:
- paresthesias- burning or prickling sensation in skin
- fatigue
- vision and hearing impairments
- ataxia (loss of muscle control)
- abnormal heart rhythms and irregular pulse
- coma

death

The ICF report notes that “Recent research has indicated that low-level chronic exposure to methyl-mercury via fish consumption may be linked with a higher risk of serious cardiovascular impacts in men, including MI, coronary artery disease, and other cardiovascular disease.” Further, “low level mercury exposure may lead to heart attack, stroke, and hardening of the arteries especially in adult males.” ICF Report, p. A-6.

6n) Specifics that should be disclosed:

1. Regarding expected morbidities, provide the range expected for these morbidities in a given year, and adjust for seasonal variation.
2. Give the expected number and range of clinic or urgent care visits, and factor this in to projected costs both to the State, and to local health care facilities and for specific local health insurance plans such as Itasca Medical Care (IM Care).
3. Explain the apparent discrepancy between low numbers of minor respiratory illness, significant number of minor restricted activity days, and the seemingly out of proportion number of work loss days.
4. Describe and quantify the cost of the predicted 18,000 lost work days to the average family affected, as well as the affect on employers needing to cover for sick workers. In simple monetary terms, if \$20 per hour workers lose 18,000 days of work, that is \$2,880,000 cost to the families in lost wages, and another \$2,880,000 to replace those workers for that time at the same wage (without any benefit or sick time adjustment).

6o) The DEIS should address air quality modeling and adverse health consequences, both local and regional, with regard to secondary particulates, and provide similar analysis of secondary particulate matter health impacts for the general population, individuals with co-morbidities, and the elderly.

6p) The DEIS should estimate the increase in risk for developing childhood asthma and associated costs; estimate risk and associated costs attributable to ozone exposure for people with co-morbidities, including children, individuals with lung disease, and the elderly; including average risk as well as increased risk on hot, sunny days; and estimate the health risk for healthy individuals and children exercising outdoors on hot sunny days and all associated costs.

[MCGP Rebuttal Testimony of Ronald R. Rich](#)

[Exhibit 5](#)

[Exhibit 6](#)

[Exhibit 7](#)

[Exhibit 8](#)

6q) The EIS must consider the internalized and externalized costs of accomplishing Carbon capture and sequestration and the internalized and externalized costs if this is not accomplished.

Dept. of Commerce:

Rebuttal Testimony of Eilon Amit:

<http://legalelectric.org/f/2006/10/05-1993-pub-rebuttal.pdf>

6r) Cost comparison update, p. 1-7.

6s) Sequestration of Carbon Dioxide, p. 20-23.

## **AIR**

7) The EIS must incorporate all of the MPCA filings regarding air emissions in the PPA docket:

8) The EIS must include, at minimum, truck and train traffic in emissions calculations. The EIS should also address increased train traffic necessary to support Phases I and II of the Mesaba Project. See MPCA Final Emissions Analysis:

[http://legalelectric.org/f/2007/03/ago\\_docs- 1712467-v1-excelsior\\_energy\\_mPCA\\_comments\\_in\\_pdf.PDF](http://legalelectric.org/f/2007/03/ago_docs- 1712467-v1-excelsior_energy_mPCA_comments_in_pdf.PDF)

9) The DEIS states that particulate emissions were “conservatively” assumed to be PM10 (DEIS p. . This is not reasonable, nor is it conservative, as gasification reduces the size of particulate matter, making it even more dangerous. An assumption of PM2.5 would be reasonable and conservative. The PM10 assumption must be corrected to more closely match reality of MEP’s emissions.

10) The Clean Air Act requires regulation of PM2.5, a criteria air pollutant. This must be addressed in the DEIS, for example, in Table 4.3-1, et seq.

11) Because the total of Annual tons per year of HAP Emissions, at 24, is so close to the 25 ton per year threshold, the Compound numbers should be itemized as to source to document that each source is indeed included.

12) Truck and train traffic attributable to MEP operations must also be included in emissions calculations. The MPCA frequently adds this calculation (see Midtown Eco-Energy Air Permit), but this calculation should include MEP operational traffic from its source to the MEP to deliver and then the return trip, not just on-site traffic.

13) The MPCA is soliciting comments for revisions of allocations under the Clean Air Interstate Rule and Excelsior is participating in discussions and making Comments. The EIS must address impact of proposed changes on the impact of the Mesaba Project. See Excelsior CAIR Comments:

<http://www.pca.state.mn.us/publications/cair-excelsiorenergy.pdf>

<http://www.pca.state.mn.us/air/excelsior-energy-comments-cair.pdf>

14) The MPCA is having discussions of altering Haze requirements in a Regional Haze Concept Plan, and Excelsior is participating in discussions and submitting Comments. The EIS must address impact of these changes. See Excelsior Haze Comments:

<http://www.pca.state.mn.us/publications/haze-excelsiorcomments.pdf>

## **WATER**

15) Wabash River is the immediate predecessor of the Mesaba Project, and had many, many technical problems, including water contamination. These problems should be anticipated and plans must incorporate “lessons learned,” and there must be preparation for immediate remediation. The EIS must address

16) The Wabash River plant was in “routine violation” of its water permit, emitting arsenic, cyanide and selenium into the water. ZLD as a preventative measure and mitigation must be addressed for the West site, not just the East site, and REQUIRED!

17) The DEIS must address each water issue raised in the Wabash River technical report.

18) The MPCA is anticipating and preparing for a Water Quality Trading Scheme, and Excelsior Energy has been participating in discussions. The EIS must address the environmental impact of a Water Quality Trading Scheme. See MPCA Water Quality Trading Meeting Participant List: <http://www.pca.state.mn.us/water/wqtrading/meeting-participants.pdf>

19) Stormwater Management is also being addressed by the MPCA, with Excelsior participating. The EIS must address the impact of proposed changes if instituted by Mesaba Project. See MPCA notes: <http://www.pca.state.mn.us/water/stormwater/swpfocusgroup-notes101107.pdf>

## **WETLANDS**

20) The Mesaba Project footprint and project area is located in wetlands. EIS must address wetland mitigation and availability of wetlands for compensation of wetland loss: <http://www.duluthsuperior.com/mld/duluthsuperior/news/12999133.htm>

*CRISIS OF CREDITS But a major problem could lie ahead for other developers. A scarcity of available wetlands for developers to compensate for wetland loss could become a large issue for several planned projects in Northeastern Minnesota. Economic development projects such as PolyMet Mining Co.'s proposed base and precious metals mine, Excelsior Energy's coal-gasification plant and Mesabi Nugget will probably require wetland replacement. With the exception of about 10 to 20 acres near Duluth, there's no certified wetlands credits available in Northeastern Minnesota, said Malterer. "It's a crisis," he said. "Where will the credits come from?" Tim Peterson, a U.S. Army Corps of Engineers project manager in Two Harbors, said Northeastern Minnesota needs more wetlands for mitigation. "Up in this area, there isn't too much for banks at the moment," said Peterson. "Compensatory mitigation for these projects hasn't been figured out yet -- they're discussing different options." Replacing wetlands with the same type of wetland and in the same watershed is preferred, he said. However, replacing wetlands with a different type of wetland can also be considered before looking to a bank for replacement, Peterson said.*

## **ACCESS ROADS**

21) The DEIS, addressing access roads, only discusses “an extension” of CR 7. However, realignment of CR 7 (Scenic Highway 7) is occurring specifically for the Mesaba Project, and the impact of this realignment must be addressed in the EIS. See MCGP Ex. 5058, SEH Presentation on allocation of project infrastructure.

## **HIGH VOLTAGE TRANSMISSION**

22) The EIS must address the impacts of not just the interconnection transmission, but the system transmission that must be added to deliver Mesaba Project electricity to the metro area. Excelsior has proposed 345kV transmission lines, which under Minnesota law are assumed to

have an environmental impact. These lines are part of the project and the impact must be evaluated. The need for this transmission has been documented repeatedly over the years by Excelsior lobbyists and electrical engineers. See MCGP 5041, Scherner presentation to MAPP 3/30/04; MCGP 5042, Scherner presentation to MAPP 10/26/04; MCGP 5043, Scherner presentation to MAPP 5/5/05; MCGP 5044, Scherner presentation to MAPP 8/16/06, MCGP 5045 Excelsior Presentation to MN Senate 2002; MCGP 5046, Excelsior Presentation to MN House 2002.

Thank you for the opportunity to Comment on the Mesaba Project DEIS. If you have any questions, or require anything further, please let me know.

Very truly yours,

A handwritten signature in black ink that reads "Carol A. Overland". The signature is fluid and cursive, with "Carol" on top and "A. Overland" stacked below it.

Carol A. Overland  
Attorney at Law

Enclosures

cc: Excelsior Energy Mesaba Project Service List (via email)