



**CAMP**

**Citizens Against the Mesaba Project**

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## **I. CAMP: FORMATION AND MISSION STATEMENT**

**Citizens Against the Mesaba Project (CAMP)** was formed in response to Excelsior Energy's plan to build a 600 MW coal-gasification power plant near Taconite. In June 2005, when the preferred site changed from an abandoned mine site near Hoyt Lakes to a pine forest and wetland greenfield near the Scenic Highway, many local residents started paying closer attention. It was difficult to get good information about the project, especially with respect to why the Scenic site was chosen. After attending public meetings put on by Excelsior, we had even more questions and needed to more fully understand the ramifications of this project. We've read Excelsior's documents and done research, resulting in a more complete picture of the Mesaba Energy Project. What started as a group of individuals working to grasp the full picture, became a committed group organized in opposition to this project.

### **MISSION STATEMENT**

**CAMP is a group of concerned citizens opposing the construction of a coal gasification power plant on the Scenic Highway in Itasca County because:**

- This plant would degrade recreational lake country near the Scenic Highway, exacerbate global warming, and pollute our air and water.
- Huge quantities of diesel fuel will be burned to mine and transport coal, to generate electricity that is not needed and which requires hundreds of miles of new transmission lines to the Twin Cities and beyond.
- A venture with a financial risk too high for the private sector to assume should not receive in excess of \$50 million in public funding and \$800,000,000 in federal loan guarantees.
- There are only 107 permanent jobs planned for this site, many of which require higher education and specialized training. The few jobs available to local residents do not offset the enormous environmental and financial costs.
- Electrical transmission lines, railroads, roads, and pipelines for water and natural gas should not be forced on private property owners through eminent domain granted for the benefit of a private corporation.

## **II. THE MESABA ENERGY PROJECT**

### **Legislative Intent vs. Actuality**

Legislation has given this project extraordinary privileges, such as eminent domain power, public funding, and exemption from regulatory processes. When the Minnesota Legislature conferred these privileges in 2003\*, the project was to be built on an industrial site near Hoyt Lakes, where the local officials wanted it to offset a recent loss of jobs. The Scenic Highway site does not match the original legislation, which stated that the plant would be built “on a site that has . . . adequate infrastructure to support new or expanded development”. Now that the “preferred” site does not have the necessary roads, railroad, and water and gas pipelines, Excelsior is seeking more than \$50 million in funding by the State of Minnesota, Itasca County, Taconite, and Nashwauk to provide infrastructure. \**Minn. Stat.216B.1694*

### **Shrinking and Inconsistent Job Numbers**

The numbers of jobs Excelsior has claimed it would provide have changed dramatically over the past few years. In 2001 The Mesabi Daily News reported that Excelsior planned to be up and running by 2006, creating 1000 permanent jobs when the plant went online. In 2002, Excelsior CEO Tom Micheletti was quoted by the Hibbing Daily Tribune as saying the plant would provide around 600 permanent jobs. Excelsior’s filings with the MPUC in 2006 list 107 permanent jobs in Phase I, and no estimated numbers for Phase II. In the past year, the Grand Rapids Herald Review quoted Micheletti as saying Phase I/II would provide 200 jobs; Mike Wadley (ex-Excelsior VP) said 170 jobs for Phase I/II at a Taconite public meeting; and Micheletti quoted 150 jobs when asked the question at a public meeting in Trout Lake Township. The numbers keep going down, and even the CEO seems not to know how many jobs he may create.

### **Unproven Technology**

One of the primary advantages touted for coal gasification is the capture and sequestration of carbon dioxide, although the feasibility of sequestration is yet to be shown. However, sequestration at this site is not possible and there is no serious plan to capture the CO2.

The DOE characterizes this project as a technology demonstration with a “financial risk . . . too high for the private sector . . . in the absence of strong incentives”. The proposed 606 MW plant is much larger than the 262 MW Wabash River plant in Terre Haute, Indiana, which is the starting point for the design. Nearly “1600 design and operational lessons learned” will necessitate “numerous design improvements”, as yet untested.\* The Wabash River plant has had numerous technical and financial problems, resulting in extended shutdowns. It also violated its permit for process water discharge: “Daily maximum values...were routinely exceeded for selenium and cyanide” and occasionally for arsenic.\*\*

\* *Dept. of Energy Notice of Intent, Federal Register Vol. 70, No 192 10/5/05*

\*\* *Wabash River Coal Gasification Repowering Project Final Technical Report*

### **Eminent Domain Should Not Benefit a Private Corporation**

Although the power of eminent domain is available to utilities, it is not usually given to independent power producers seeking to sell on the wholesale market, as Excelsior is. Eminent domain should not be used to force people to give up land to benefit a for-profit corporation. Although landowners facing a 200 kV or higher line can use “Buy the Farm”\* to force a buyout so they can move, they should not be forced to make this choice. Landowners affected by rail, road, or gas do not even have this option. Taking land is a serious matter and eminent domain should be used only for a public interest that outweighs personal property rights.

\* *Minn. Stat. 116C.63, Subd. 4*

## **No Demonstrated Need for Additional Power**

The legislature exempted Excelsior from a certificate of need for this project; this limits public input and bypasses a usual step to verify that the power is needed. Excelsior is trying to force NSP/Xcel to buy its output for distribution in the Twin Cities and beyond\*, which would require costly new and/or upgraded transmission lines. Without demonstrating need, Excelsior plans to build a total of six 600 MW plants on the Iron Range.

\* *Petition of Excelsior for Approval of PPA 12/23/05*

## **Financing and Infrastructure**

In May 2006 the federal Department of Energy revised the total Project cost of Mesaba I upward to \$2.156 billion.\* The developers have refused to say how much of their own money is being invested. The DOE has also stated that “the financial risk associated with this technology demonstration is, in general, too high for the private sector to assume in the absence of strong incentives”.\*\* The developers have found ways to shift some of this risk to the public.

Public funding for Mesaba so far totals \$55.5 million: \$9.5 million from Iron Range Resources; \$10 million (\$2 million/year for five years) from the state of Minnesota’s Renewable Development Account; and \$36 million from the federal Department of Energy. It also has been promised an \$800,000,000 federal loan guarantee, with the possibility of a loan guarantee up to 80% of the total Project cost.\*

The State of Minnesota is borrowing (general obligation bonds) \$12 million that may be spent by Itasca County for infrastructure for this project and/or the Minnesota Steel project. Best available estimates of some of the public infrastructure costs for Mesaba total \$55,477,725. This includes: \$14,730,500 for roadway; \$21,526,000 for railroad; \$7,480,000 for gas pipeline; \$1,224,000 for potable water; \$3,281,000 for sewer; and an additional 15% for design and construction administration.\*\*\*

Itasca County’s current plan is to spend some of the initial state money (\$4 million) for: predesign, design and bid documents for common (shared by Minnesota Steel and Mesaba) rail infrastructure; and design and bid documents for natural gas pipelines that would serve both projects. Of this \$4 million, \$2.3 million is for shared infrastructure.\*\*\*\* Itasca County is promising the state that it will complete these design activities and pay the related costs, including supplying any funds needed beyond the \$4 million. If bonding is necessary, it plans to issue revenue bonds designed to minimize the risk to property taxpayers. The County has not yet committed to funding the completion of railroad service or the access road for Mesaba and no funding source has been specified.

The Nashwauk Public Utilities Commission is planning to issue revenue bonds in an amount sufficient to complete construction of natural gas pipelines necessary to provide service to Minnesota Steel. It has not yet committed to funding the completion of the pipelines necessary to provide service to Mesaba.

The City of Taconite’s public utility is considering providing regular sewer and water service (\$4,505,000 not including upgrades to wastewater treatment). Taconite may also be considering supplying the process water of about 5,000 GPM that would be piped from abandoned mine pits to the site.

\* *Cooperative Agreement: between DOE and Mesaba I*

\*\* *Dept. of Energy’s Notice of Intent, Federal Register Vol 70, No. 192, 10/5/05*

\*\*\* *Infrastructure Cost Estimates by SEH 2/2/06*

\*\*\*\* *Exhibit A, Grant Agreement between Itasca County and Minnesota DEED*

## **Economic Impact**

Excelsior commissioned a study by the University of Minnesota/Duluth\* regarding the economic impact of Mesaba I. The 9/05 report suggested that it would provide large economic benefits to both the Arrowhead region and the state. However, in testimony before the Minnesota Public Utilities Commission, the state Chamber of Commerce has warned that: “the net economic benefits (to the state). . . are likely to be negative”; and “even the positive benefits cited by Excelsior may only be shifting benefits within the state”.\*\*

In April 2006 a second UMD report, which was commissioned by the Itasca Economic Development Corporation, was released. Despite the report’s express acknowledgment of “modeling issues” in studying an area as small as a county, the IEDC has been using this report to argue that enormous economic benefits will result for Itasca County. Reviewing these studies, Prof. Burton Abrams\*\*\* has found that: they use deceptively incorrect numbers; and the County study overstates the benefits by about 25 times, making it worse than worthless. He noted that the studies are incomplete because they disregard the costs, such as illness for people, degradation of lakes, and falling real estate values which will negatively affect the tax base while the project receives tax exemptions. He concludes that Mesaba I’s costs greatly exceed its meager job and income benefits, making it a net loser for the County.

\* *Labovitz School of Business & Economics, Bureau of Business and Economic Research*

\*\* *Testimony of William Blazar, Sr. V.P. of Public Affairs & Business Development 10/10/06*

\*\*\* *Burton A. Abrams, Professor and Acting Chair, Dept. of Economics, Univ. of Delaware*

## **Not a “Done Deal”**

Excelsior has petitioned the MPUC to order NSP (doing business as Xcel Energy) to purchase the output of Mesaba I through a Power Purchase Agreement (PPA).\* This is being contested by multiple parties in a proceeding before an Administrative Law Judge; his recommendation is scheduled for February 2007 and the MPUC’s decision will follow within a couple of months. Without a PPA Excelsior will not be able to attract private financing. Excelsior has said that without a PPA, “not a shovelful of dirt will be turned”.\*\*

The Mesaba Project also needs many permits from various government agencies, some of which depend on the results of environmental studies. The MPUC has until October 2007 to decide whether to grant the requested permits for siting the plant, local transmission lines and the natural gas pipeline. There likely will be other hurdles relating to transmitting power beyond the Blackberry substation to connect with Xcel Energy.

\* *Petition of Excelsior for Approval of PPA 12/23/05*

\*\* *Mike Wadley, Excelsior V.P., Tacontie Community Center, 5/16/06*

## **III.A. CONTAMINATION OF CANISTEO AND AQUIFER**

Excelsior plans to draw process water from four sources and send discharge water to Canisteo Lake, with a minor, restricted flow to Holman Lake. Most of the process water will be evaporated in the cooling process. The water remaining to be discharged would have increased levels of mercury, phosphorus, sulfate and other dissolved solids, resulting in continuously increasing the contamination of Canisteo Lake (documented in Appendix 6 of Excelsior’s Joint Permit Application [JPA]).\*

The south wall of the old Canisteo pit cuts through all geological layers above the iron ore body. The upper layer contains glacial deposits from the last Ice Age. Studies\*\* show a south flow of ground water from Canisteo Lake to Trout Lake; the municipal wells for Bovey and Coleraine draw water from aquifers in this glacial layer. Excelsior’s JPA describes the nearby public water supplies for Bovey and Coleraine as having a possible hydrologic connection

## Canisteo Contamination (continued)

between groundwater captured by wells and local surface waters.\*\*\* The Minnesota Department of Health has found high tritium concentrations in groundwater pumped from these wells, indicating that the water supply is vulnerable to potential contamination. These municipal wells appear to recharge fairly quickly; because the iron ore body at the south end of Canisteo Lake slopes southward toward Bovey/Coleraine, gravitational flow of subsurface water would also be in this direction. Thus it appears that these aquifers are at risk for contamination as Canisteo Lake is polluted.

Appendix 6 of Excelsior's JPA shows that over time (approximately 30 years): Canisteo Lake water will have significantly increased levels of mercury, sulfates, and hardness; discharge water will eventually exceed the mercury standard of 6.9 ng/L; and Canisteo water will exceed standards for hardness and total dissolved solids (TDS), necessitating treatment of the power station effluent or reduction in the number of cycles of concentration. Mercury concentrations in Canisteo Lake will rise from 0.9 ng/L to 2.2 ng/L. There is nothing more than a vague plan (Section 5.2.2.1.1) for dealing with this problem.

This same scenario is currently playing out at Minntac where the process water supply has become heavily polluted over the life of the plant. The water now has extremely high levels of sulfates and hardness, causing heavy scaling on equipment and complicating water discharge.

**This could be the most important environmental cause for local concern.** Polluting Canisteo Lake would: put municipal wells at risk for contamination; make power station use of this water inefficient; and eventually make this water difficult if not impossible to discharge. When the water is no longer used by the power plant, it will threaten to overflow and the issue of the pollution will have to be addressed. How will future Canisteo overflow be siphoned if the water violates quality standards, especially if future mercury standards for the Swan and Mississippi Rivers are further restricted?

It would be irresponsible for Excelsior to ignore the future reality of this important issue. If Mesaba is built, Zero Liquid Discharge should be in place from the first day of operation to prevent pollution of this water resource.

\* *MPUC Joint Permit Application Appendix 6, 6/16/06*

\*\* *U.S. Geological Survey Water-Resources Investigations Report 02-4198*

\*\*\* *Section 2.5.2.3.1 JPA Environmental Supplement*

### **III.B. CANISTEO RECREATIONAL USE**

Mesaba I would draw an annual average of about 5,000 GPM of water from the Canisteo mine pit and up to 15,200 GPM in Phase II with both plants online. Canisteo water levels are expected to fluctuate significantly; operations will create additional safety issues for recreational users of the Canisteo. Excelsior proposes to remove the MDNR Buckeye Mine Pit boat launch and close Canisteo Lake to recreational use for "safety, security, and operational reasons". \*

Excelsior's JPA inappropriately minimizes the recreational importance of Canisteo, which is an extraordinarily clear, 5-mile-long oligotrophic lake that experiences more than "occasional"\* recreational use. Although the report describes low amounts of nutrients and biota, this is to be expected in any oligotrophic system. The report incorrectly describes the lake as a "poor fishery"\*: the fish survey appears to have been done prior to the stocking of lake trout; locally this lake is valued as an excellent fishery for lake trout and crappie.

## Canisteo Recreation (continued)

As the increasingly concentrated contaminants are discharged into Canisteo Lake, fatty fish such as lake trout will bioaccumulate increasing levels of mercury, which will adversely affect fish consumption advisories. Lowering water levels, especially over the winter, could expose lake trout eggs on shoals and negatively affect the fishery. In addition, introducing Prairie River water into Canisteo Lake could accelerate eutrophication due to much higher levels of phosphorus in the Prairie River.

The DNR and Western Mesabi Mine Planning Board are already working on stabilizing Canisteo Lake near the 1300 ft-msl elevation by siphoning excess water to Trout Lake, which would improve water quality there. Even if Mesaba is built, Canisteo water levels should be maintained within a range that accommodates recreational use. A stable water level would allow permanent access facilities on the south shore near Coleraine, Bovey and Taconite and increase recreational use. Deep and clear trout waters are rare in northern Minnesota, especially outside the BWCAW. The Canisteo could be developed into a world-class lake trout fishery. A lake of this quality and potential should be valued and treasured, not polluted and discarded.

*\* MPUC Joint Permit Application, Environmental Supp., page I-344*

## **IV. OTHER ENVIRONMENTAL AND HEALTH CONCERNS**

### **Not Clean Energy**

Coal gasification is being touted as “clean energy”; however, that is not so. Mesaba I and II (a second plant on the same site) would result in over 5,000 tons of pollutants for Itasca County each year. The amounts of pollution listed include:\*

Sulfur dioxide	1,271 tons/yr
Nitrous oxides	2,770 tons/year
Carbon Monoxide	1,909 tons/year
Particulates (soot)	432 tons/year
Volatile organics	176 tons
Mercury	54 lbs/year

*\* “Air quality and Health Benefits Modeling: Relative Benefits Derived from Operation of the MEP-I/II IGCC Power Station”, ICF Consulting for Excelsior Dec. 14, 2005*

### **Air Quality and Health Hazards**

The ICF study cited above characterizes the environmental and public health impacts of the Mesaba Project as “benefits”. It compares the Mesaba Project to a fictional super-critical pulverized coal plant near the Twin Cities. Even this comparison shows only a “somewhat lower and more localized” impact on air quality and mortality (death). It also is misleading because the Mesaba project wouldn’t replace any existing plant; its effects would be cumulative.

This study shows: greater morbidity (illness) for people with emphysema and heart disease; more children with asthma; more heart attacks and strokes; more premature deaths; and more sickness for otherwise healthy people, resulting in more than 18,000 work-loss days per year. Mortality costs alone would be \$8.7 million per year in Minnesota and \$84.9 million nationally; morbidity costs would also be substantial.

**Additional Mercury Would Affect Our Lakes and Health**

There are already fish consumption advisories for essentially every lake tested in Minnesota. Mesaba I would adversely affect 720 lakes over 340 square km. Approximately 487,000 fish are harvested annually in this “mercury impact zone”.\* Mesaba I and II would emit up to 54 lbs of mercury per year.\*\* Ambient air concentrations of mercury would be 2.3 times higher than that of the hypothetical coal plant.\* In addition, the proposed stack height has been lowered for “aesthetic reasons” \*\*\*, causing greater emissions locally. Once mercury is in the environment it never goes away. The recent Mercury Impact Reduction Bill is touted to remove one-third of mercury emissions in the state by 2015. Adding 54 more pounds of mercury to our environment is a giant step in the wrong direction, especially with the potential for 162 pounds of mercury per year if all six plants are constructed across northern Minnesota as Excelsior proposes.

\* *ICF Study; see above*

\*\* *Mesaba Energy Project Environmental Supplement, June 16, 2006*

\*\*\* *Baxter Jones Testimony to the Minnesota PUC, 2006*

**Adverse Impact on Impaired Waters**

The proposed water discharge does not meet the more stringent pollution criteria for the Lake Superior watershed. Nevertheless, it is now being proposed for the Swan River and Mississippi watershed, which are already on Minnesota’s Impaired Waters list. Peak discharge is listed as over 5,000 GPM for Mesaba I and II.\* How will the discharge water be treated so that it will not “routinely violate” its water permits as did the sister plant in Wabash River? Why should this be acceptable for our local waters?

Although Excelsior plans to use a “Zero Liquid Discharge System”, complete zero liquid discharge is planned only for the East Range site where the Great Lakes Initiative requires a much more stringent mercury discharge limit.\*\* If the planned discharge levels are not acceptable for Hoyt Lakes, why should they be accepted in Itasca County?

\* *Mesaba Energy Project Environmental Supplement June 16, 2006*

\*\* *MPUC Joint Permit Application page 200*

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**To receive updates and find out how you can help CAMP, please e-mail us at [camp@northlc.com](mailto:camp@northlc.com).**

**Let us know if you would like to be on our CAMP Action list.**

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**Follow developments at our website: [camp-site.info](http://camp-site.info)**

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**Additional information: [mncoalgasplant.com](http://mncoalgasplant.com)**