BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of a Petition by Excelsior Energy, Inc.
for Approval of a Power Purchase Agreement under
Minn. Stat. §216B.1694, and Determination of Least
Cost Technology and Establishment of a Clean Energy
Minimum Under Minn. Stat. §216B.1693.

MPUC Docket: E/6472/M-05-1993
OAH Docket: 12-2500-17260-2

mncoalgasplant.com (MCGP) INITIAL BRIEF

I. INTRODUCTION

Writing this brief has been an exercise in frustration, and if the point of this proceeding is to build the record about the costs of Mesaba, it has been an illustration of the difficulty of this proceeding. What we learned is that this record is full of holes, of numbers that do not add up and others that are missing. This record is insufficient to support any approval of the PPA, and is amply sufficient to demonstrate that the Petitioner has not met its burden of proof and that the Excelsior PPA Petition should be denied.

Excelsior's action to force a Power Purchase Agreement between Xcel and Excelsior is a story of a deal between the parties that was made to assure votes for extended life of Xcel's nuclear plants and increased dry cask storage, and which is typified by a mounting level of misunderstanding and misrepresentations about the nature and costs of Excelsior's Mesaba project. In this proceeding, Mesaba has been presented as having a cost much less than the $2,155,680,783 found in the DOE Notice of Financial Assistance Award – that's $3,593 per kW. The cost estimates, information requests and responses and cost analysis and modeling by Intervenors and the state are based on the incorrect figure. Excelsior's cost estimates made in the Petition, testimony, information responses and analysis or other submissions must be considered in light of its failure to update crucial information, and Excelsior's submissions must, in this light, be given what weight they deserve. This incorrect characterization of the

cost of the project, failure to provide correct information, and the billion dollar difference alone provide sufficient reason to deny Excelsior's petition, but there are many other reasons, well elucidated by Intervenor and the state's testimony and exhibits. We must do the best we can with what we have, make knowledgeable estimates where we can, where there is missing information leave blanks, and determine whether Excelsior has met its burden of proof. MCGP asks the Excelsior Petition be denied because what information that is known shows that the Mesaba Project is not least cost by any measure, and that it be denied because there are too many unanswered questions and Excelsior has not met its burden of proof.

As an intervenor, mncoalgasplant.com (hereinafter "MCGP") has focused on infrastructure and transmission costs, economic development costs versus benefits claimed, and health costs attributable to the project. MCGP has entered evidence in the record that demonstrates that this project does not meet the statutory criteria and that this PPA should not be forced on Xcel. In the process, MCGP also procured cost information that is the most important number in this docket – the thus far undisclosed project cost. This evidence demonstrates that the project and the PPA is far from least cost and instead, at a construction cost of $2,155,680,783, or $3,593/kW, or if measured at a kWh price inclusive of costs, it is exorbitantly expensive. The construction cost and kWh prices are particularly extreme when the costs of ancillary services and transmission are included. The prior costs as estimated by Excelsior are unreasonably low estimates. Xcel has amply demonstrated that the shifting of costs and risks from Excelsior, the party with control over the project, to Xcel, Minnesota Power, state and local governments, and any party but Excelsior, is unprecedented and unjustified. The project fails to deliver the benefits that it relies on as its reason for being – it is not "clean coal. The Mesaba project will not capture or sequester carbon and reasonable capture and sequestration is substantively cost prohibitive; Mesaba does not achieve environmental benefits and instead subjects us to environmental detriments; and Mesaba does nothing whatsoever to contribute to hydrogen as a fuel resource. Excelsior's Petition must be denied.

II. STATUTORY AUTHORITY, LEGISLATIVE HISTORY AND INTERPRETATION

In 2003, Xcel Energy was anxious to secure additional dry cask storage and prepare for relicensing of Prairie Island and Monticello nuclear generating plants. As noted by a witness for

Excelsior, there was a deal, various pieces of which are reflected in the legislation. Rep. Beard, Tr. at /, Public Hearing, December 18, 2006; EE 1137, Rebuttal Testimony of Jim Chen; p. 28-31; Minnesota Session Laws, Ch. 11, H.F. 9, Special Session 2003.[1] The "Package deal" referred to is between those parties, and other parties too, but the state only set up a framework under which IGCC could be deployed in Minnesota – the PUC is not bound by any deal between Excelsior and Xcel – the legislature clarified that role of the PUC through the criteria to be met by Excelsior. Minn. Stat. §§216B.1693; 216B.1694.. The many decision points are specifically set out, expressly different from a typical "least-cost" analysis, and there are additional factors to be considered in the public interest determination.

Dr. Chen covered on his view of the Special Session of 2003 and did not address Mesaba at the legislature in the Regular Sessions of 2003 and 2003. EE 1137, Chen, 28-31. Rep. Beard, a co-author of the bill explained his view of the context:

> Now, it's a political arena. To get that job done there was some other things that had to happen: The renewal development funds, for instance, the mandates to buy wind power. And some other forms of innovative energy which are far more afield than clean coal technology, which has been around for a little more than 100 years, as near as I can tell. Whether we're talking about burning trees or turkey litter, or what have you, these all fell under this idea of innovative power. So we have this concept that somehow, as you read in the statute just a few moments ago, if it's an innovative energy source and it makes sense in the public interest, and we put that in there on purpose so it gets it out of the political arena and puts it with professionals at the Commission here, that was our thinking, we would use that for a backstop and we would go ahead and put that language in the legislation.

Rep. Mike Beard, Tr. at 26-27, Public Hearing, Dec. 18, 2006.

Excelsior's legislative presentations reveal the proposals made, much of which is translated into legislative language exempting the project from Certificate of Need review, granting eminent domain, requiring the project be built on a site with existing infrastructure through Certification by IRR Commissioner, and specific criteria to assure the project lives up to its claims of environmental superiority and cost effectiveness.

MCGP 5045, Mesaba Energy Project Presentation to Senate Energy, Excelsior Energy, January 15, 2002; MCGP 5046, Project Briefing (for House Regulated) Excelsior Energy, Inc, January 2002.

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[1] Available online at http://ros.leg.mn/bin/getpub.php?pubtype=SLAW_CHAP&year=2003&session_number=1&chapter=1

The press reported Excelsior's plans for development in Hoyt Lakes, and the state and IRR willing to invest to make that happen. IRR contributed $1.5 million in December of 2001, based on an estimate of 800-1,000 workers, at a time when Commerce released a report "that the state doesn't need that much electricity" and that "the state much prefers smaller electric generating plants, built closer to where the power is needed." MCGP 5047, Iron Range Board gives subsidy for new power plant, Business Journal, Dec. 12, 2001. Hoyt Lakes was specified as the location, and specified as a brownfield site in legislative presentations and in the articles cited here. MCGP 5034 & 5046; MCGP 5048, Mesaba Energy Project: Powerful Stuff (March 2002); MCGP 5049, Energy park developer pitches Hoyt Lakes power plant, Hibbing Daily Tribune, January 11, 2002; MCGP 5050, Excelsior Energy back to start up Mesaba Energy project, Grand Rapids Herald Review, March 28, 2003.

It is through these lenses that the PUC is to review the record and determine whether Mesaba is "Clean Energy Technology" and an "Innovative Energy Project" and whether it is entitled to a PPA under the terms of the statute. The legislature properly assured the independence of the PUC's determination about Mesaba when it set out express criteria for approval of a Power Purchase Agreement between Excelsior and Xcel.

While regulation falls to the PUC, it is to the utilities to furnish electricity. Utilities, regulated by the state, must "furnish safe, adequate, efficient, and reasonable service..." "Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable." Minn. Stat. 216B.03.

The Commission's responsibilities are specific, but determinations under the Clean Energy Technology and Innovative Energy Project statutes are issues of first impression. The relevant statutory provisions, in pertinent part, are:

> **216B.1693 CLEAN ENERGY TECHNOLOGY.**
> (a) If the commission finds that a clean energy technology is or is likely to be a least-cost resource, including the costs of ancillary services and other generation and transmission upgrades necessary, the utility that owns a nuclear generating facility shall supply at least two percent of the electric energy provided to retail customers from clean energy technology.
> (b) Electric energy required by this section shall be supplied by the innovative energy

project defined in section 216B.1694, subdivision 1, unless the commission finds doing so contrary to the public interest.
(c) For purposes of this section, "clean energy technology" means a 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.

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;
(2) that the project developer or owner certifies is a project capable of offering a long-term supply contract at a hedged, predictable cost; and
(3) that is designated by the commissioner of the Iron Range Resources and Rehabilitation Board as a project that is located in the taconite tax relief area on a site that has substantial real property with adequate infrastructure to support new or expanded development and that has received prior financial and other support from the board.

Subd. 2. **Regulatory incentives.** (a) An innovative energy project:

(4) shall qualify as a "clean energy technology" as defined in section 216B.1693;
(7) shall be entitled to enter into a contract with a public utility that owns a nuclear generation facility in the state to provide 450 megawatts of baseload capacity and energy under a long-term contract, subject to the approval of the terms and conditions of the contract by the commission. The commission may approve, disapprove, amend, or modify the contract in making its public interest determination, taking into consideration the project's economic development benefits to the state; the use of abundant domestic fuel sources; the stability of the price of the output from the project; the project's potential to contribute to a transition to hydrogen as a fuel resource; and the emission reductions achieved compared to other solid fuel baseload technologies;

Minn.. Stat. §216B.1694, Subd. 1, 2(4),(7).

The legislature properly left to the Public Utilities Commission the determination of whether a project is a "clean energy technology" and whether it is an "innovative energy project" entitled to the benefits under the statute.

As Dr. Chen noted, there are eight factors to guide interpretation when the words written are insufficient:

1) the occasion and necessity for the law;
2) the circumstances under which it was enacted;
3) the mischief to be remedied;

4) the object to be attained;
5) the former law, if any, including other laws upon the same or similar subjects;
6) the consequences of a particular interpretation;
7) the contemporaneous legislative history; and
8) legislative and administrative interpretations of the statute.

Minn. Stat. §645.16.

Commissioner Nickolai explained the necessity of addressing the direct, indirect costs to Xcel and others, and public interest factors:

> And it seems... that the statutes require us to look at this in kind of three levels. One is that all items which may be claimed to be included or passed through in somehow the PPA...
>
> The second level of this though is that we need to know all of the costs that are – that could be borne by Xcel customers ... and those that are not being flown through the PPA. But, for example, if – under the transmission construction, if Xcel ... or Minnesota Power customers are going to be ... bearing up a very substantial part of the costs of these transmission upgrades, we need to know that. Likewise, if there are impacts on the transmission system because of these upgrades that result in more curtailment payments to wind in western Minnesota being made by Xcel and the Xcel customers, we need to know that
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> And then, finally, we've got this unusual kind of public ... interest requirements ... we're going to have to make findings on economic development benefits. And I assume that means costs as well. We're going to have to look at costs as well as benefits to be able to say yes, that actually is a net benefit... The abundant domestic fuel supply. The stability of the price of the output. We also have to make findings on the project's potential to contribute to a transition to a hydrogen as a fuel resource and ... the emissions reductions achieved compared to other solid fuel baseloads so that if they've ... got the potential to capture carbon, therefore, you've got to give us credit for that, well, then we need information about is it really feasible.
>
> ... Let the parties raise these issues .. their relevance based on those three screens, because that's what we're going to end up having to look at are those three screens when we finally sit down
> with the statute and the record.

Commissioner Nickolai, Tr. p. 54-55, PUC Hearing, July 27, 2006; cited in DOC 3010, Amit Direct Testimony Non-Public, p. 4-5..

As Chair Koppendrayer noted:

> I think that Commissioner Nickolai spelled out quite clearly the interpretation of the statute; and if it isn't satisfied, if we're not satisfied with what you come back with, we're going to start over. And I don't think anybody wants to do that. So the more complete the record is, the better we are.

July 27, 2006, Commission Hearing, Transcript pg. 63, l.11-16.

Excelsior Energy, the Petitioner, has the burden of proof. Minn. R. 1400.7300, Subp. 5.

The record we have in this proceeding is missing a key component, or at least it was until the estimated cost of the project was made part of the record by mncoalgasplant.com. MCGP 5055; DOE Notice of Financial Assistance Award. All the review, calculations, modeling, analysis and testimony by all parties was completed using a cost estimate that is far lower than the cost of the project in MCGP 5055. This information should have been provided by Excelsior, under Administrative Rule and under the Minnesota Rules of Civil Procedure: Minn. R. 1400.6700, Subp. 2; Minn. R. Civ. P. 26.05; 11.02.:

III. THE MESABA PROJECT IS NOT "LEAST COST" UNDER 216B.1693

The Mesaba Project is not a least-cost resource, including the costs of ancillary services and other generation and transmission upgrades necessary, both because the capital cost of Excelsior's Mesaba Project is so far higher than any other comparative generation source, and because no source is "least cost" if the utility does not need the electricity. This $2,155,680,783 plant is not needed, therefore it is not least cost. It's not in the public interest to foist the cost of a forced PPA on ratepayers or to force the taxpayers to pay another dime towards this unneeded project.

A. NO SOURCE IS "LEAST COST" WHEN IT IS NOT NEEDED

Generally, there is no urgent need for electric generation in Minnesota, and specifically, Xcel has no need for the Mesaba Project. There is much talk of an energy crisis, claims that we'll "freeze in the dark in an incubator without a job." This is the environment in which the Mesaba Project was proposed to the legislature:

- 3300-6200MW of additional new baseload capacity need is projected by Xcel Energy, Minnesota municipalities and cooperatives in the 6-15 year planning horizon
- Additional capacity will most likely be required beyond projected baseload needs to replace
    - energy supply shifted out of region to higher rate deregulated regions
    - 90,000MW of aging capacity in the Midwestern region
    - reduced production/eventual closure of Prairie Island Nuclear Plant

MCGP 5046, p.2, Project Briefing (for House Regulated) Excelsior Energy, Inc, January 2002.

- Conservative forecasts indicate a need for 3300-6000MW in Minnesota in the current planning horizon

- Minnesota is at risk of an electric generation shortfall, and the need to act is urgent

MCGP 5045, slides.4, 14 Mesaba Energy Project Presentation to Senate Energy, Excelsior Energy, January 15, 2002.

Likewise, Commerce Commissioner Ed Garvey presents only half the story on our need for electricity and unsupported worry in his testimony:

> I'll list a few specific ones in a moment but the gist of the challenges is that Minnesota and regional electricity systems needs to significantly expand and upgrade its electricity infrastructure to meet the present and future demand and these expansions and upgrades must be made at a time when there will be increased (appropriately so) environmental scrutiny on how they are done.
>
> Like our transmission grid, our baseload generation fleet in Minnesota and in the region is also running at full capacity. The Department agrees with the region's utilities that predict that more baseload will be needed in the next five to fifteen years to keep up with expected demand.
>
> Almost all utilities that file integrated resource plans in the State project continued growth in electricity usage in their service territories in the next fifteen years... Expected growth also is understandable simply because our entire economy and today's lifestyles are very much technology-supported, and becoming more so all of the time, and most of that technology requires reliable electricity.

DOC Ex. 3011, Garvey Direct Testimony, p. 8-9. Similarly, other witnesses question Xcel's long range planning or a claimed reliance on natural gas. EE 1127, Rebuttal Testimony of Cavicchi; EE 1111, Supplemental Testimony of Weissman.

A need determination is not necessary in this proceeding, as the Mesaba Project was exempted from proving need. Minn. Stat. §216B.1694, Subd. 2(1). That's good for Mesaba because there's no need for new power, we're in no danger in the Midwest. Industry sources often say "we need 6,300MW of power," sometimes with that foreshadowing, citing the CapX2020 Report. MCGP 5034, p. 1-2, CapX2020 Technical Update; p. 4 for map of region.. What they don't mention is that at the time of the CapX2020 Report, there was 16,712MW of generation in queue. Id., at 7, Diagram 3 – Potential Generation Areas (map, separated out by states). That means that there is the equivalent of over 25 Mesaba plants waiting in line. They join the queue when the project is serious enough to start the wait for expensive transmission studies necessary for generation interconnection. But the numbers in the MISO queue get better – as of November 10, 2006, the MISO queue shows 91,063.7MW, and in the CapX2020

region, which includes Minnesota, the eastern halves of North and South Dakota, the northern part of Iowa, eastern Wisconsin and some of Illinois and Manitoba, there is over 35,000MW of new generation in queue. MCGP 5033, MISO queue as of November 10, 2006.[2]

Plentiful generation is confirmed by the NERC Long-Term Reliability Assessment, a compilation of utility self-reports of generation and transmission information. It notes that there have been many capacity additions and that "a decrease in new construction is an expected response to the over-supply situation." MCGP 5035, NERC 2005 Long-Term Reliability Assessment, p. 14, 16-17.[3] Minnesota has projected new generator additions of 17%, while Wisconsin, the "market" for excess generation, expects 29% new generation. Reserve margins are sufficient, and even beyond what is necessary, not even taking into account the new generation in queue. Id., p. 21-22. Most importantly, in the regional section, the utility projections of need, used to stimulate new generation development, have demonstrated to be overly generous, and in our region:

- Annual electricity usage for the entire MRO region in 2004 (195,528 GWh) was 0.6% above 2003 consumption (194,286 GWh) and 3.0% below the 2004 forecast (201,605 GWh).

Id., p. 57. This rosy picture of generation need is echoed in the "Midwest at a Glance" report, subheaded "The Optimists are Back in the Market and so is Overbuilding."

> Like many market regions, the Midwest is experiencing historically high levels of generating reserve margins (26 percent) – yet an additional 5,200MW of new supply is currently under construction.

MCGP 5036, p. 1, Midwest at a Glance – Spring 2006, Global Energy.

> Between our Spring 2006 and Fall 2005 reports, Global Energy identified an additional 2,000 MW of coal-fired additions and 1,500 MW of renewables that is likely to come into operation by 2011. Although delayed and canceled plants continue to rise, there remains about 43,000 MW of "planned" capacity additions still in development.

Id., p. 4.

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[2] Up to date MISO queue available on line, and is well worth downloading and converting to Excel spread sheet for sorting: http://www.midwestmarket.org/publish/Document/2a74f7_108e84afbec_-74050a48324a

[3] The library of NERC Long-Term Reliability Assessments: http://www.nerc.com/~filez/rasreports.html

Excelsior's own Petition is more in line with reality, showing the many megawatts of new capacity additions, ranging between 15,000-25,000MW annually. EE 1004, Figure 7, p. 12, Public Interest Determination.

Xcel fits the pattern of need well -- it has no need for the power produced by Excelsior, verified by the Commission's IRP order of July, 2006. The Commission determined that Xcel has no need for additional baseload generation until 2015, and at that time, its need is for only 375 MW. XE 2075, Order Establishing Resource Acquisition Process, MPUC Docket E002/RP-04-1752; XE 2076, Order Approving Resource Plan as Modified, MPUC Docket E002/RP-04-1752; XE 2077, Order After Reconsideration, MPUC Docket E002/RP-04-1752. It is eight years and four Integrated Resource Plans before 2015, and given conservation and efficiency efforts, it's possible, or even likely, that less electricity will be needed at that time.

Excelsior is seeking a Power Purchase Agreement for nearly twice what Xcel needs four years earlier than it is needed. To force a Power Purchase Agreement between Excelsior and Xcel when ratepayers have no need for the electricity and would pay for electricity they don't need or want, is contrary to the terms of the Clean Energy Technology statute because it incurs unnecessary costs and by definition cannot be a "least-cost" option. Minn. Stat. §216B.1693. It is also contrary to the charge of the PUC, against interest of Xcel ratepayers, contrary to the public interest and mandates of the Integrated Resource Plan statute and Preferred Electrical Generation Sources. Minn. Stat. §216B.2422; 216C.051, Subd. 7 (2006).

B. THE CONSTRUCTION AND PPA COST OF THE MESABA PROJECT IS SO HIGH THAT THE EXCELSIOR PETITION MUST BE DENIED.

The Mesaba Project, as of May, 2006, has a capital cost of $2,155,860,783. MCGP Ex. 5055, DOE Notice of Financial Assistance Award, p.1. The cover page states that $2,155,680,783 is the current estimated cost of the Mesaba Energy Project – Unit 1, with a Budget Period breakdown on pages 2 and 3 of the agreement. This $2,155,680,783 cost estimate was known to Excelsior on or before the date it was

signed in May, 2006, three and one-half months before Excelsior's Supplemental Testimony was submitted. Excelsior's Petition and Testimony have not been updated to reflect the cost estimate of Mesaba Energy Project – Unit 1.

The Minnesota Chamber of Commerce, Xcel Industrial Intervenors, Minnesota Utility Investors and Minnesota Power's large industrial customers are all gravely concerned about the impact of the cost of the Mesaba Project on utility rates. See MCC 7000-7008; See also Testimony of Barbara Parnell, Don Barkley, Jim Bryan, Patricia Johnson, Public Hearing, afternoon in St. Paul, December 18, 2006.

$2,155,680,783

The DOE Notice of Financial Assistance Award states a "Total Estimated Cost of Project, Including DOE Funds to FFRDC: $2,155,680,783. MCGP 5055, DOE Notice of Financial Assistance Award. This number is further broken down on pages 2-3 of the DOE document:

TOTAL ESTIMATED PROJECT COST: $2,155,680,783

Budget Period #1

Project Definition and Preliminary Design Phase

DOE Share:	$ 22,245,505	50.0%
Recipient Share:	$ 22,245,505	50.0%
TOTAL:	$ 44,491,010	

Budget Period #2

Final Design and Construction Phase

DOE Share:	$	0.0%
Recipient Share:	$ 2,054,826,915	100.0%
TOTAL:	$ 2,054,826,915	

Budget Period #3

Demonstration/Operation Phase

DOE Share:	$ 13,754,495	24.5%
Recipient Share	$ 42,608,363	75.5%
TOTAL:	$ 56,362,858	

Total Estimated Cost

DOE Share	$ 36,000,000	1.7%
Recipient Share:	$2,119,680,783	98.3%
TOTAL:	$2,155,680,783	

Id. p. 2-3.

In the Terms and Conditions, attached, is a prohibition of use of any of these funds for lobbying, and a Paragraph about applicability of the Freedom of Information Act.:

> 2.19 **Public Access to Information (APR 2000)**
>
> The Freedom of Information Act, as amended, and the DOE implementing regulations (10 CFR 1004) require DOE to release certain documents and records regarding awards to any person who provides a written request. The intended use of the information will not be a criterion for release.

Id., §2.19, p. 8. Excelsior's successful efforts to resist Xcel's Motion to Disclose DOE filings is contrary to the provisions of this award and puts the public interest at a disadvantage. This Petition moved forward with crucial information excluded from the record. See Trade Secret page.

Because the parties have not had timely access to this number, the analysis provided by Xcel and Commerce, the calculations, evaluations, comparisons, assessments and conclusions are way off.

The chart below contains examples of corrections that must be made to various Excelsior submissions to reflect the construction cost of $2,155,680,783 and/or $3,593/kW:

Date	Document	Citation	Amount	Corrected
12/05	Flour Revision 0	p. 7 of 23, §1	[TS]	$3,593/kW
"	"	p. 21 of 23, § 4.4.2	[TS]	$3,593/kW
12/05	Flour Addendum SCPC	p. A7 of A9, est EPC	[TS]	$3,593/kW
09/06	PPA	Schedule 1	[TS]/kW	$3,593/kW
09/06	Section III, Cost, p.1	Figure 1: PVRR & Costs	[TS}	$2,156
"	"	Figure 2: PVSC & Costs	[TS}	$2,156
"	"	Table 1: K Terms	[TS]	$3,593/kW
"	"	Figures 3,4,	[TS]	$?/MWh
"	"	C. Direct Cost Comparison	[TS/kW]	$3,593/kW
"	"	Figure 6, 7, 8, 9	[TS]	$? /kW
	EE 1050, Sass Supp.	All relying on cost info	[TS]	revise
09/06	EE 1051, RJS-2	Table 1: etc.	[TS]	$3,593/kW
	EE 1052, RJS-3	and all others	"	Revise
	EE 1053, RJS-4	"	"	"

	EE 1054, RJS-5	"	"	"
10/06	EE 1091, Cortez Rebut	Testimony, p. 5-8	Conclusions	revise
"	EE 1094; DC-2	Chart needs correction	[TS]	$3,593/kW
"	EE 1095, DC-3	Chart needs correction	[TS]	$3,593/kW
"	EE 1096, DC-4	Chart needs correction	relies on 2,3	revise
"	EE 1100, DC-6	Correct Fluor Report	Conclusions	revise
"	EE 1101, DC-6 Conf.	Correct Fluor Report	Conclusions	revise
"	EE 1102, DC-7	Correct Fluor Report	Conclusions	revise
"	EE 1103, CD-7 Conf.	Correct Fluor Report	Conclusions	revise

All cost estimates, analyses, testimony and conclusions, such as the ones in the table above, are based upon this incorrect information and must be given only what weight they deserve as incorrect representations, and if the information is not corrected, it should also be discounted based on Excelsior's failure to provide accurate and current information about such a material issue.

C. TRANSMISSION COSTS ADD AN ADDITIONAL $500 MILLION TO AN ALREADY COST PROHIBITIVE PROJECT

The transmission situation for the Mesaba Project can best be described as costly, and from an MCGP engineering perspective, perversely hilarious. The best face that can be put on it is that if the problems demonstrated in the transmission studies thus far can be remedied, the costs of transmission infrastructure necessary for this project to deliver electricity to the Xcel service territory is likely one-half billion dollars! But the fixes for the identified problems have yet to be found.

The cost review for the Mesaba project specified that the Commission is to determine whether it "is or is likely to be a least cost resource, including the costs of ancillary services and other generation and transmission upgrades necessary..." Minn. Stat. §216B.1693. Mesaba was sold to the legislature as a project utilizing a brownfield site with infrastructure. MCGP 5045, Mesaba Energy Project Presentation to Senate Energy, Excelsior Energy, January 15, 2002; MCGP 5046, Mesaba Energy Project, Project Briefing (for House Regulated) Excelsior Energy, January 2002. The legislature found that concept reasonable and mandated that the site of the Mesaba project was to be one "with adequate infrastructure to support new or expanded development." Minn. Stat. §216B.1694, Subd. 1(3).

Mesaba has chosen the "West Site" near Taconite as its "preferred" site, which was announced in June, 2005, at the time of the DOE site visit. MCTP 5059, Agenda from June 8-10, 2005 DOE site visit. Excelsior paid the fee and joined the MISO queue, number 38280-01, on October 20, 2004. Excelsior provided updates to the MN-SPG group, the MISO/MAPP group responsible for transmission planning and interconnection studies. On March 30, 3004, a generic introduction of the project was made to the group. MCGP 5041, Excelsior Sherner Presentation to NM-SPG 03-30-04. At that time, the "Key Study Parameters" were delivery of 750MW for Phase I and another 750MW for Phase II, to markets in the Twin Cities, Eastern Wisconsin, NW Ontario and NW Wisconsin, evaluating with and without the Arrowhead project (called "Duluth-Wausau" in presentation). Both 500kV and 345kV lines were considered, from Hoyt Lakes to Forbes and from there either south to the Metro or over Arrowhead to points east. Id., slides 11-14. At that time, "major new transmission development will be necessary to deliver plant output." Id., slide 17.

In the NM-SPG update of October 26, 2004, when Mesaba at Hoyt Lakes joined the MISO queue, the perversely humorous part begins with "Key Study Findings" where:

- The studies showed that development of 345kV lines into and out of Arrowhead Substations causes the 230kV phase shifter installed to control the flows onto the Arrowhead-Weston 34kV line to become ineffective as the phase shifter is effectively by-passed.
- This issue has been brought to the attention of the project developers Minnesota Power and American Transmission Company and is being evaluated.

MCGP 5041, slide 6, Excelsior Sherner Presentation to NM-SPG 10-26-04. It goes on to note:

- Two new 345kV circuits from Forbes to Arrowhead and at least one new 345kV circuit from Arrowhead south to the Twin Cities will be necessary to deliver both units.

Id., slide 9.

The Arrowhead Phase Shifting Transformer (PST) is important because it was used as a limitation in the Arrowhead-Weston transmission project, because the claim for need for the line was "reliability," and to assure that it was not used for bulk power transfer and/or to enable new coal plants to be built and electricity sent over it to Wisconsin, the PCA requested an 800MVA

limitation, which the EQB added as a condition of the permit, but the reasoning was deleted from the Finding and Order Point.. MCGP 5040, MPCA Memorandum to EQB – Limitation of Capacity of Arrowhead Transmission Line. Rendering the Phase Shifting Transformer (PST) ineffective may do the same for the Arrowhead-Weston permit!

Mesaba's next unfortunate transmission encounter came with the first of the MISO transmission studies for Hoyt Lakes, the G477 series, which was released on March 10, 2005, and Excelsior's transmission difficulties began in earnest. The study was not in depth because the request was treated by MISO as "Energy Resource" and the "request has to mitigate only the thermal injection overloads identified in the steady state analysis." MCGP 5037, p. v, Generator G477 Interconnection Feasibility Study, March 10, 2005.[4] The bad news was that out of the generation modeled into the system, "[t]he transfer analysis indicated that, excluding pre-existing constraints, the proposed facility would be limited to less than 90 MW in deliveries to Xcel Energy for the indicated sinks." Id. at vii. Translated to English, it means that only 90 MW of power would get where they wanted it to go – it won't work. Worth noting is that this study was done on a "displace other generation for Xcel Energy" basis, which is NOT the point of the Mesaba Project as envisioned by either Excelsior or Xcel, and to add it on top of generation, without cutting, would make the problem much worse.

Two months later, on May 19, 2005, the "West site" joined the MISO queue as 38491-01. The MISO presentation on May 5, 2005, however, states:

- **Project location is Cliffs-Erie property (old LTV mining site) north of Hoyt Lakes, MN**
- No fatal flaws or insurmountable problems with interconnection to Forbes 230kV bus

[4] MCGP 5037 -- G477 Interconnection Feasibility Study March 10 2005 (p. 9 – Deliverability = 90MW) http://www.midwestmarket.org/publish/Document/469a41_10a26fa6c1e_-72b60a48324a?rev=1

- Some transfer capability exists
  - **Could be as lower as 90MW** (sic)
  - Or over 300MW
- Have some confidence that sufficient facilities will be put in place to minimize the potential for unit output being constrained

MCGP 5043, slide 2, 4, 8, Sherner Excelsior Energy Presentation NM-SPG, May 5, 2005 (**emphasis** added).

Ever persevering, Excelsior proceeded with the G519 study of the West site, where it was determined that, at the very least, the following upgrades must be made:

MISO Estimate - G519 MISO System Impact Study – Phase I only[5]

Boswell-Riverton	Add new 230kV line from Boswell to Riverton – 73 mi (80 mi[6] in G519) bundled 795 600MVA, 115kV to 200MVA	$45.00[7]
Boswell 230kV sub* (+/- 40%)	New 230kV bus position for Boswell-Riverton line at Boswell	$ 1.90
Riverton 230kV sub*	New 230kV bus position for Boswell-Riverton line at Riverton	$ 1.70
Hill City 230kV sub*	New 230kV substation at Hill City	$ 3.50
Nashwauk 115kV sub*	Replace 4 115kV circuit breakers at Nashwauk	$ 0.72
	TOTAL SYSTEM UPGRADES:	**$52.82**

MCGP 5038, G519 System Impact Study 2nd Revision, June 6, 2006; see also MCGP 5039, G519 Initial2post – Branch Violations.

The MISO study noted that the cost estimate was nominally a good faith estimate, but it is far short of even Excelsior's estimate for the West site:

Generator Interconnection:	$ 82,800,000
Network upgrades	$295,000,000
	$380,800,000

EE 1020, Excelsior's PPA Petition, Project Description, Section IV, p. 89-90.

This estimate is based on the most recent G519 report. However, as reported by Sherner at NM-SPG, this list estimate is only the beginning. Sherner's most recent report noted:

- MISO Study Results

[5] Id..
[6] Miles matter at between $1-2 million/mile. Based on the Arrowhead line, costs of $2 million per mile should be expected.
[7] The Arrowhead-Weston line, a lest costly low capacity 345kV line, was just under $2 million/mile, and so it appears this cost is grossly underestimated.

- Project G477 SIS (Forbes POI)
  - Powerflow: No problems identified
  - Short Circuit: Several pre-existing over-dutied breakers but no new ones caused by G477
  - Stability: All simulations are stable and within damping criteria. No transient low voltage violations.
  - Deliverability Analysis: **Failed**
    - Awaiting MISO study proposal to continue NRIS process
    - TSR submitted by Xcel for NITS (local capacity resource)

And update on the G519 study:

- MISO Study Results
  - Project G519 SIS (Blackberry POI)
    - Powerflow: Some issues identified during contingencies. Resolved with the addition of a new Boswell-Riverton 230kV line
    - Short Circuit: Several pre-existing over-dutied breakers [plus four new 115kV breakers at Nashwauk Sub due to G519
    - Stability: All simulations are stable and within damping criteria. No transient low voltage violations.
      - New Boswell-Riverton line was included in these studies
    - Deliverability Analysis: **Failed**
      - Awaiting MISO study proposal to continue NRIS process
      - TSR submitted by Xcel for NITS (local capacity resource)

MCGP 5044, Slides 8-9, Excelsior Sherner Presentation to NM-SPG, 08-16-06.

While the G477 East Range study shows that only 90MW of the Mesaba Project output can be delivered to the Xcel service territory, the West Range study itself addresses it obliquely, in a way that likely only engineers would recognize, Sherner's Power Point showed clearly in bright red letters that delivery had **failed** in both locations. The studies have not progressed to identify the changes necessary to the system to assure full delivery, or even to determine if that is possible, but unquestionably it would require material investment.

In addition to the obvious interconnection and the MISO declared initial upgrades necessary, an unexpected, but significant economic impact was discovered in the MISO studies conducted for interconnection and network system upgrades. In these studies, it was determined that to interconnect the generation at Mesaba, other generation had to be cut across the state: The most far-reaching curtailment

was in southwest Minnesota, where wind generation at 1500MW had to be cut to 825MW, a curtailment of 675MW. Minnesota Power generation in the area of the Mesaba Project had to be cut and the capacity of the Arrowhead transmission line, already limited to 800 by a Phase Shifting Transformer (PST), was cut by 150MW to 650MW. MCGP 5038, G519 System Impact Study 2nd Revision §6.2.1; 6.2.2; June 6 2006 These curtailments are necessary to pass the modeling hurdle and sets the parameters for interconnection. Information Requests were sent to all affected parties, but they had no estimates at the time of the cost of such measures. MCGP 5028, MCGP IR to Big Stone II (in BSII docket); MCGP 5029, MCGP IR to Excelsior; MCGP 5030, MCGP IR to Minnesota Power; MCGP 5031, MCGP IR to Xcel.

There is both a direct economic cost to the curtailments, in that the generators would not be able to market their electricity, and the social cost of cutting 675MW of wind generation for a coal gasification is an unintended and undesirable consequence of Mesaba interconnection, in conflict with the generation preference in Minnesota Law. Minn. Stat. §216B.051 This cost must be considered.

Given this background, and that both sites are failing the deliverability analysis, and because the legislature mandated consideration of the costs, this heightens the need for review. What's not clear is whether it can even be done, whether Excelsior would or could secure delivery to the Xcel territory. See XE 2025, XE 2026; XE 2027, Testimony of Dean Shiro; see also XE 2028; XE 2029, Testimony of Rick Gonzalez.

Shiro puts it well in his summary:

- Mesaba 1 LLC seeks approval of the Mesaba 1 PPA without having a detailed plan for estimated facilities necessary for delivering the output to Xcel Energy as a purchaser;
- The costs and time required to secure the needed transmission service will be significant;
- The Mesaba 1 PPA would require Xcel Energy's customers in Minnesota and adjacent states to pay for the Mesaba Unit 1 capacity even in the event the generating plant does not receive MAPP accreditation; and

- Mesaba 1 LLC fails to account for the cost of ancillary services that will be needed to deliver output to Xcel Energy.

XE 2027, p. 6, Shiro Surrebuttal. However, because the statute specifically requires examination of the costs of ancillary services "including" transmission, we'll have to make do with what information we have in the record.

1. Costs of transmission interconnection and network system upgrades

Excelsior has made its estimate of transmission costs, challenged by Xcel and Minnesota Power, both parties who may have to pay for costs of transmission under the MISO tariff. There is little doubt that a significant transmission expenditure is required, but the cost estimates vary wildly. Before cost apportion can even be considered, beyond the fact that it will somehow be apportioned, the extent of transmission upgrades will have to be determined so that a reasonable cost estimate can be made. At this point, all we know is that there is a floor of necessary upgrades, but we do not know the extent of upgrades required so assure deliverability.

Transmission needs require construction of both the immediate outlet line from the plant to the Blackberry substation and also upgrades necessary because of addition of generation at Mesaba into the system. The numbers reported in the Petition for Power Purchase Agreement (EE 1020, Excelsior PPA Petition, Section IV, p. 89) and MISO study G519 (MCGP 5038, G519 System Impact Study 2nd Revision, June 6, 2006) are not consistent, except in demonstrating the high costs of interconnecting this project. Transmission for this project is characterized as "Generation Outlet" transmission (GO) and Network System Upgrades, which are determined by MISO studies. Generation Outlet must also include substation upgrades, and these costs are low for both line and substation cost.

1. Generation Outlet Transmission

Capital Estimates for Generator Outlet ONLY – E to Forbes, W to Blackberry[8]

	Mesaba I	Upgrade I	Mesaba II	Upgrade II	Total
East Range Site	$99.00	$5.00	$17.00	$10.00	$131.00
West Range Site	$18.40	$5.00	$49.40	$10.00	$82.80

[8] The Joint Application, http://energyfacilities.puc.state.mn.us/Docket.html?Id=16573 has different values and that information has not yet been integrated into these charts.

West – double circuit 230kV for Mesaba One and new 345kV for Mesaba Two
East – two double circuit 345/115kV, in-line 600MVA 345/230kV xfmrs I & sub upgrade for II anticipating system upgrades

2. MISO Capital Estimates for Network System Upgrades

The estimates for necessary transmission system upgrades are based on studies by MISO completed in conjunction with Excelsior's generation interconnection request, but Excelsior's and MISO's estimates are far apart:.

Excelsior Estimate - Cost of Network System Upgrades for East & West Range, Mesaba I & II[9]

	Mesaba I		Mesaba II		Total
East Range Site	$255.00		$53.00		$308.00
West Range Site	$75.00		$220.00		**$295.00**

(note E is high up front costs, W costs are delayed)

MISO Estimate - G519 MISO System Impact Study – Phase I only[10]

Boswell-Riverton	Add new 230kV line from Boswell to Riverton – 73 mi (80 mi[11] in G519) bundled 795 600MVA, 115kV to 200MVA	$45.00[12]
Boswell 230kV sub* (+/- 40%)	New 230kV bus position for Boswell-Riverton line at Boswell	$ 1.90
Riverton 230kV sub*	New 230kV bus position for Boswell-Riverton line at Riverton	$ 1.70
Hill City 230kV sub*	New 230kV substation at Hill City	$ 3.50
Nashwauk 115kV sub*	Replace 4 115kV circuit breakers at Nashwauk	$ 0.72

TOTAL SYSTEM UPGRADES: $52.82

The cost estimates provided by MISO and Excelsior and Sherner and Shiro and Gonzalez are quite different. A look at the costs estimates of a similarly situated line would be a good guide as to expected costs. It's hard to tell what's included in the Mesaba Project estimate because it's just blank pages. EE 1197, OSBL Excelsior Supplement Chart. In the non-public version there's just the category "Transmission" that's public and then just one number and no subcategories.

The Arrowhead-Weston transmission line, designed for a similar geographic and geological setting, would be a reasonable guide. It used mostly existing right of way, had significant forest and

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[10] Id..
[11] Miles matter at between $1-2 million/mile. Based on the Arrowhead line, costs of $2 million per mile should be expected.
[12] The Arrowhead-Weston line, a lest costly low capacity 345kV line, was just under $2 million/mile, and so it appears this cost is grossly underestimated.

wetlands and granite that increased the cost. That 220 mile line, excluding substations, was estimated at $314,441,178, or $1,429,278 per mile, and given the estimate date of July, 2003, rounded to $1.5 million per mile. MCGP 5062, p. ES-3, R.W. Beck Final Report, Independent Cost Review of the Arrowhead-Weston Project, #RPA-PSD-160, July 2003. The R.W. Beck report provides a detailed report listing estimates for everything from Structures, to Wire to Wetlands Accessibility Adder, to Contractor Field Offices, in sufficient detail to know what is included, and it is all public information.

The other cost estimate in the Arrowhead-Weston transmission line was by Black & Veatch, dated May, 2003. That estimate all inclusive, was $420,307,482, including $56,804,501 for substations. MCGP 5061, Table 3.0-3, p. 15, American Transmission Company, Minnesota Power and Wisconsin Public Service Corp. Arrowhead to Weston 345kV Transmission Line; Cost Estimate Audit Report, Revision I, May 23, 2003. That's $1,652,296 per mile excluding substations.

> The current transmission line cost estimate of $281,500,682 for a length of 220 miles, results in average cost per mile of $1,279,519. This average is for a combination of both single and double circuit construction. Approximately 54 percent of the line is single circuit construction and 46 per cent is double circuit construction. Assuming that double circuit construction costs about 70 percent more than single circuit, on a per mile basis; this single circuit construction costs approximately $970,000 per mile and double circuit construction costs approximately $1,650,000 per mile.

Id. at §6, p. 25.

The cost analysis of this case has a broader reach than a typical transmission "least cost" analysis, and Excelsior has not met its burden of proof. That level information necessary has not been provided here, only the most basic of information that is impossible to evaluate, and the record is grossly incomplete, leaving too many questions and an insufficient basis on which to grant the Petition.

IV. THE MESABA PROJECT IS NOT IN THE PUBLIC INTEREST AND IS NOT ENTITLED TO A PPA WITH XCEL

This proceeding, as above, entails a broader review than the typical "least-cost" analysis. The statute specifies that:

> The commission may approve, disapprove, amend, or modify the contract in making its public interest determination, taking into consideration the project's economic development benefits to the state; the use of abundant domestic fuel sources; the stability

> of the price of the output from the project; the project's potential to contribute to a transition to hydrogen as a fuel resource; and the emission reductions achieved compared to other solid fuel baseload technologies…

Minn. Stat. §216B.1694, Subd. 7 (2006). One Commissioner explained the public interest review:

> And then, finally, we've got this unusual kind of public … interest requirements … we're going to have to make findings on economic development benefits. And I assume that means costs as well. We're going to have to look at costs as well as benefits to be able to say yes, that actually is a net benefit… The abundant domestic fuel supply. The stability of the price of the output. We also have to make findings on the project's potential to contribute to a transition to a hydrogen as a fuel resource and … the emissions reductions achieved compared to other solid fuel baseloads so that if they've … got the potential to capture carbon, therefore, you've got to give us credit for that, well, then we need information about is it really feasible.

Commissioner Nickolai, Tr. p. 54-55, PUC Hearing, July 27, 2006; cited in DOC 3010, Amit Direct Testimony Non-Public, p. 4-5..

Excelsior fails to meet its burden of proof on several factors.

A. THE MESABA PROJECT WILL NOT CAPTURE AND SEQUESTER CO2

Carbon capture and sequestration was a primary driver of the Mesaba Project, used in the sales pitch, but carbon capture and sequestration is not the plan. .The specter of CO2 regulation looms in the legislative language, but there's no requirement to capture and sequester, only to study:

> (6) shall make a good faith effort to secure funding from the United States Department of Energy and the United States Department of Agriculture to conduct a demonstration project at the facility for either geologic or terrestrial carbon sequestration projects to achieve reductions in facility emissions or carbon dioxide;

Minn. Stat. §216B.1694, Subd. 2(6).

The presentations of Tom Micheletti to the Senate and House show that from its inception, the potential for carbon capture and sequestration was a selling point – it was raised, but often vaguely or without specifics:.

- Greenhouse Gas CO2 emissions are reduced up to 34% depending on thermal efficiency of comparable plant.

MCGP 5046, p. 7, Mesaba Energy Project, Project Briefing (for House Regulated), Excelsior Energy, Inc., January, 2002..

- The Mesaba Energy Project reduces Minnesotans' exposure to… Price increases due to changes in environmental laws.

- New Air Regulation Very Likely: Carbon 2008 going forward (ICF 9)

- New Environmental Regulations are Very Likely by 2010, CO2 Mild Control with Trading, 75% ICF Assessed Probability (ICF 10)

- IGCC is Very Clean Among Coal Plants, CO2 tons/kWh
  Existing Coal Plants 2.1-2.2
  New Coal Plants 2.1-2.2
  IGCC 1.3-1.8, fn.1 "assumes technology improves"

MCGP 5047, p. 8 & ICF Slide 9, Mesaba Energy Project, Project Briefing (for Senate Energy), Excelsior Energy, Inc., January, 2002..

However, the discussion left no impression whatsoever on a co-author of the bill:

> A few moments ago you heard the word carbon sequestration mentioned. Now, I might not have been paying attention at that moment, but back in 2003 when this bill was drafted and being worked through the process at the legislature, the term carbon sequestration never came up. It was not part of this legislator's agenda, I can assure you that.
>
> Carbon sequestration seems to be, in my opinion, an aberration -- strike that from the record. It's been an issue that's been raised in the last 12 to 18 months, particularly as some sort of a club to run against this project. Carbon sequestration was not a consideration when this bill was passed. It was not part of my presentation in the House and I don't recall it ever being discussed.

Rep. Mike Beard, Tr. p. 29, Evening Public Hearing, St. Paul, December 18, 2006.

Excelsior has no intent to capture and sequester carbon dioxide. It's not in the application, it's not in the cost, it's not in the terms of the DOE demonstration project. Even Harvard Report authors admit that the demonstration phase is not the place for CO2 capture and sequestration, the point of this project is to get IGCC off the ground:

> [E]xperts agree that extensive research and large-scale demonstration projects are needed on sequestration before a commercial IGCC or other coal power plant would be in a position to sequester its CO2. Sequestration is not specifically addressed in this paper because it is viewed by the authors as beyond the scope of commercialization of a small initial fleet of IGCC plants, which is the objective of the 3Party Covenant proposal.

EE 1028.5, p.6, Harvard Report. The Booz Allen Report also regards capture and sequestration as off in the future, not yet realized – their estimates of "sequestration costs include compression and piping only up to the plant gate." EE 1027.6, p. 12, Booz Allen Hamilton Report on Coal-Based Integrated Coal Gasification Combined Cycle: Market Penetration Recommendations and Strategies, September 2004.

The authors note that carbon capture and sequestration to the "fence line" is the state of practice at this time and when faced with implementation of capture and sequestration or trading credits, "[i]n all cases, the model chose allowances as the more economic outcome. Id. at 12. The loss of efficiency and increase in capital cost have proven CO2 capture and sequestration beyond any economic justification at this time and in the foreseeable future, even in a highly regulated market. See e.g., EE 1019, Fluor Report Addendum; MCGP 5052, Feasibility Study for an Integrated Gasification Combined Cycle facility at a Texas Site, Electric Power Research Institute (2006); MCGP 5013, The Economics of CO2 Storage, Heddle, Herzog & Klett (August 2003). MCGP 5012, Environmental Footprints and Costs of coal-Based Integrated Gasification Combined Cycle and Pulverized Coal Technologies, EPA (July 2006); MCGP 5014, Carbon Dioxide Capture and Geologic Storage, Global Energy Technology Strategy Program (April 2006); MCGP 5010 – *Climate VISION Risk Framework for Advanced Clean Coal Plants Risks & Challenges*, Berg, DOW Policy Office, Presentation to Roundtable on Deploying Advanced Clean Coal Plants, July 29, 2004; MCGP 5009, The Challenges of Integration, Geosits and Schmoe, Bechtel Corporation, Proceedings of GT2007, ASME Turbo Expo 2005.

The Mesaba Project does not provide the CO2 emissions for which it was promoted. Instead, approval of this PPA would be a $2,155,680,783 irretrievable commitment to continued CO2 emissions at the rate of over 5.3 million tons annually – knowing what we know about CO2 emissions and global warming, we cannot responsibly approve a CO2 generator of this magnitude.

B. THE MESABA PROJECT DOES NOT HAVE A NET ECONOMIC DEVELOPMENT BENEFIT AND INSTEAD IS A COSTLY DETRIMENT

The Mesaba project has many touted "benefits" but it also has many economic development costs, literally millions of dollars of costs, and the costs far outweigh ANY claimed benefits. There have been many federal, state and local grants, loans and benefits provided TO Excelsior, including a $10 million grant from the Renewable Development Fund mandated by the legislature; $9.5 million ($500,000 + $1,000,000 + $8,000,000), deemed a **loan at 20% interest**, from the IRR; a DOE grant of $36 million a $21 million grant from DOE for carbon capture and sequestration; an unspecified share of $4 million in

infrastructure bonding in the 2006 session; a personal property tax exemption in 2002, amended in 2006; DOE §48A IGCC tax credits; DOE federally guaranteed loans. Thus far, this project has taken much from ratepayers, taxpayers and society – the cost is high. The costs outweigh the benefits.

1. Mesaba Project deviates from Harvard Report's path to success

The Mesaba Project's deviance from the Harvard Report's blueprint for deployment of IGCC lessens the odds that it can succeed. The Harvard Report, relied on and introduced into the record by Excelsior, is *Deploying IGCC in This Decade With 3Party Covenant Financing, Volume 1* (hereinafter "The Harvard Report.")[13] EE 1028.5. Because IGCC is not economically viable, not ready for commercialization, and is too risky for private investment, the Harvard Report sets out a detailed scheme and schematic to provide state and federal benefits and incentives to subsidize IGCC sufficiently to induce deployment and position IGCC for commercial success. There are many necessary legislative changes, and most of those have been accomplished, so that the Mesaba Project is well positioned federally and in the state. However, the Harvard Report's specific blueprint sets out several project scenarios that offer the best chance of success, and the best likelihood of being a least-cost option, but the Mesaba Project does not utilize any of these scenarios – the project proponents have chosen a more costly and riskier path – and therefore, its chances of success, based on the Harvard and industry playbook, are not likely.

The Harvard Report is based on the premise that IGCC needs to be heavily subsidized if it is to succeed. "IGCC is not perceived in the US to have sufficient operating experience to be ready for use in commercial applications."[14] This is confirmed in the Excelsior Mesaba DOE Notice of Intent, which states that Mesaba is a "demonstration plant" and that "[t]he financial risk associated with technology demonstration is, in general, too high for the private sector to assume in the absence of strong incentives," hence the DOE federal loan guarantees. Public Hearing Ex. ___, DOE Notice of Intent, p. 1; p. 2. The

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[13] *Deploying IGCC in This Decade With 3Party Covenant Financing, Volume 1*, Rosenberg, Alpern & Walker (2004).

[14] Id., Harvard Report, citing *IGCC Risk Framework Study*, Berg & Patterson, DOE Policy Office, Presentation to Gasification Technology Council, May 20, 2004.

Harvard Report assumes that the cost is "about 20% higher and commercial reliability has not yet been established." Harvard Report, p. 2. That's not even a close estimate -- the DOE Notice of Financial Assistance Agreement reflects a cost of $2,155,860,783,[15] or $3,593.[16]

When looking for IGCC deployment options with highest chance of commercial success, the Harvard Report raises three scenarios, those converting natural gas and utilizing distressed natural gas assets,[17] converting existing coal plants to IGCC, and in cogeneration uses such as chemical production. Mesaba is a greenfield project, not a coal or gas conversion, not utilizing distressed gas assets, nor is it cogeneration project – Mesaba is not a likely prospect for success.

2. "Health" benefits are claimed, but impacts are detrimental and costly

Mesaba claims that the project provides health benefits but this is a misnomer.

> [Mesaba] presents this project as a "health benefit," specifically that the Mesaba Project provides health benefits to the people of Minnesota. This is a false premise and conclusion – this plant as proposed would not provide health benefits to the people of Minnesota or the country at large, and instead will have a detrimental health impact, one which can be predicted in terms of increased mortality and morbidity. People will be harmed by the Mesaba Project, and they will require health care, and the costs of the health impacts are predictable as well.
>
> The company should describe the specific increase in health risk for people in nearby communities as well as individuals with co-morbidities and the elderly. In addition, the company should address health impacts/risk for Native American elders with regard to the senior housing facility and interpretative center planned just off Hwy 169 near the Scenic Highway.

MCGP 5001, Anderson Rebuttal, p. 1-2. The project instead is a detriment:

> We must be clear; there are no health benefits associated with Excelsior's Mesaba Project.. The primary, and a fundamental flaw, in the ICF report is that it compares Mesaba I/II to a conventional SCPC plant located in central Minnesota. Jones, p. 4. In essence, this report compares Mesaba's smaller 531 MW (per their application) "less dirty" coal plant in a sparsely populated lake region to a larger 600 MW dirtier coal plant near a more densely populated area so the baseline negative health impacts of this plant look better in comparison However, when considered independently, the emissions and the health impacts are stark.
>
> The Excelsior Application expects the following emissions:

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[15] MCGP Ex. 5055, DOE Notice of Financial Assistance Award p. 1 (cover sheet).
[16] Id., p. 4. One factor of the Harvard analysis that has changed materially since its publication is the price of coal – the report assumes stability (p. 4), giving it a significant edge over natural gas, but the last months of 2005 saw a tripling of the price of coal, and though it has decreased some, the price has not returned to past rates. Price stability of coal can no longer be assumed.
[17] Id., p. 5, 7.

Annual Emissions: Phase I and II

POLLUTANT	TONS PER YEAR
NOx	2,772
SO2	1,332
PM10	440
VOC	152

Excelsior also expects to emit 54 lbs of Mercury per year, based on the cited 17.92 pounds annually for Phase I only. Section IV 2-8, assume double Phase II.; increased to 54 in the JPA. Id., 2-3. Adding to emissions is not a benefit, it is additional pollution, with additional harm. Our waters are impaired already and additional mercury will make an unacceptable situation worse. MCGP 5006 – MPCA Impaired Waters List (Map)(2006).

The cost of harmful emissions must be considered in this proceeding. Just as there is a commodities market where the pollutants are monetized, the harmful effects of pollution also have an economic impact that can be measured. MCGP 5003, The Price of Pollution. These costs are very real and will be suffered primarily in the area closest to the plant. MCGP 5004, *Economic Costs of Diseases and Disabilities Attributable to Environmental Contaminants*, Davies & Hauge, Collaborative on Health and Environment – Washington Research and Information Working Group (July, 2005); MCGP 5005, *Environmental Pollutants and Disease in American Children: Estimates of Morbidity, Mortality, and Costs for Lead Poisoning, Asthma, Cancer and Developmental Disabilities*, Environmental Health Perspectives 110(7); 721-728 (2002)

The pollution is not only in air emissions, but in water as well. The Mesaba Project is modeled after the Wabash River plant, but that plant was routinely in violation of its water permit, and was contaminating the water with arsenic, selenium and cyanide. MCGP 5051, p.64, Wabash River Coal Gasification Repowering Project – Final Technical Report. The MPCA has listed many concerns about pollution from this plant, and most focus on water. MCGP 5053, MPCA Comment Letter on Joint Application, July 31, 2006, Mesaba Siting Docket; MCGP 5054, MPCA Comment Letter, May 4, 2006, Mesaba Siting Docket.

The costs of the pollution of Mesaba must be considered. There will be direct impacts to humans and animals in the vicinity, as well as impact to the environment.

3. The public is unreasonably bearing the cost of project infrastructure

Although this project is claimed to provide economic benefit to the area, state and local governments are paying to locate the Mesaba Project at its preferred site. The ultimate cost is more than the benefit.

Excelsior presented the Mesaba Project as one that would be built on a brownfield site, specifically the abandoned LTV mine site, and would utilize pre-existing infrastructure.

- Sited on former LTV mining site near Hoyt Lakes (slide 3)
- Project site is an existing industrial site (slide 7)
- Site infrastructure (slide 9)
- Site advantages (slide 10)
    - Existing rail and port access
    - Empty unit trains and ore boats
    - Private water resources
    - Isolated existing industrial site
    - Strong public support
- IRRRB has authorized preliminary funding and is providing an option on the site (slide 13)

MCGP 5045, Mesaba Energy Project Presentation to Senate Energy, Excelsior Energy, January 15, 2002.

- Use of Brownfield Site and Existing Infrastructure and Transportation Corridors: The Mesaba Energy Project has committed to use a brownfield site on an existing industrial site on the Iron Range if possible, reducing the environmental impact of the project and providing the opportunity to bring net environmental benefits to the site. Siting transmission on an existing transportation path minimizes cost and environmental impacts and expedites the construction timeline.

MCGP 5046, p.1(brownfield site); p. 10 Project Briefing (for House Regulated) Excelsior Energy, Inc, January 2002.

Articles written at the time confirm the intent of use of a brownfield site, most often citing the LTV site as the site for this project. MCGP 5047, Iron Range Board gives subsidy for new power plant, Business Journal, Dec. 12, 2001; MCGP 5048, Mesaba Energy Project: Powerful Stuff (March 2002); MCGP 5049, Energy park developer pitches Hoyt Lakes power plant, Hibbing Daily Tribune, January 11,

2002; MCGP 5050, Excelsior Energy back to start up Mesaba Energy project, Grand Rapids Herald Review, March 28, 2003.

The legislation specifically states this intent of use of a site with infrastructure:

> 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:
> (3) that is designated by the commissioner of the iron range resources and rehabilitation board as a project that is located in the taconite tax relief area on a site that has substantial real property with adequate infrastructure to support new or expanded development and that has received prior financial and other support from the board.

Minn. Stat. §216B.1694, Subd. 1(3).

Excelsior's "preferred" site near Taconite is anything but an abandoned brownfield mining site with infrastructure. The DOE site tour in June, 2005, revealed these conditions:

6/8/2005
Mesaba Trip 07.jpg

6/8/2005
Mesaba Trip 08.jpg

MCGP Ex. 5059, Agenda from June 8-10 2005 Site Visit. A picture is worth a thousand words – these clearly display that there is no infrastructure on site whatsoever. While IRR staff attended part of this Site Visit, the IRR Commissioner did not. Id, Attendee List. However, the IRR Designated the site as required by the statute, as being a "a site that has substantial real property with adequate infrastructure to support new or expanded development.' EE 1034, Written Innovative Energy Project Designation from the Commissioner of Iron Range Resources, Nov. 7, 2005.

The project can not proceed without infrastructure, so to compensate for this lack of infrastructure, and to avoid paying for construction of necessary infrastructure, Excelsior has and/or is working to shift the responsibility for and costs of infrastructure to entities other than Excelsior. Some of

Excelsior's plans for shifting these economic development costs are identified in an SEH document entitled "Public Infrastructure Improvements: Public Infrastructure Improvements to Support the Proposed Minnesota Steel Industries Taconite Mine, Pellet Plant and Steel Mill project and Excelsior Energy/Mesaba Energy Project" which gives rough cost estimates for each of these categories utilized to seek bonding on behalf of Itasca County in the 2006 session:

Category	Excelsior Energy (exclusive part)	Excelsior Energy (1/2 shared)	Excelsior Energy (total if shared)	Excelsior Energy (if separate)
Roadway	$ 9,999,825	$ 3,448,185	$12,448,070	$16,940,075
Railroad	$16,187,400	$ 4,256,665	$20,444,065	$24,754,900
Gas Pipeline	$ 805,000	$ 5,780,333	$ 6,585,333	$ 8,602,000
Water	$ 1,407,600	-----	$ 1,407,600	$ 1,407,600
Sewer	$ 3,773,150	-----	$ 3,773,150	$ 3,773,150
Summary	**$32,172,975**	**$13,570,978**	**$45,743,953**	**$55,477,725**

MCGP 5058, SEH Public Infrastructure for Mesaba & MSI (Jan. 2006).

While Excelsior is quick to claim that the county was planning on realignment of Scenic Hwy. 7, the SHE map entitled "Itasca County Public Infrastructure: Mesaba Energy Project"' lists this road in the legend as "EE Proposed Roads." Other notations in the legend are "EE Proposed Plant Layout, EE Proposed Rail Alt. 1-A, EE Proposed Gas Alignment, EE Proposed Sewer and Water.

These are only the identified estimates of costs, but there are other infrastructure costs that remain unaddressed. The MPCA, in its Comments in the Siting Docket, raised air quality issues and several wastewater issues that entail large costs. MCGP 5053, MPCA Comment Letter on Joint Application, July 31, 2006; MCGP 5054, MPCA Comment Letter, May 4, 2006, Mesaba Siting Docket. Cost issues raised:

- Mercury modeling and emissions issues
- Need for dredging disposal permit
- Pipeline testing permit – NPDES/SDS
- Discharges into Swan River downstream of Swan Lake
- Concentrations of contaminates in Cooling Tower Blowdown and Discharge
- Water Intakes and Pumping Systems
- Compliance testing where outfalls are submerged
- **Adequacy of Taconite-Bovey-Coleraine Waste Water Treatment Plant – system already over what it can handle "The additional flow and subsequent solids load at the CBT WWTP underscores the need to invest in upgrades to the existing solids treatment infrastructure." P. 5.**
- Surface water quality standards
- Impaired Waters – turbidity issues and permits.

See MCGP 5054, MPCA Comment Letter, May 4, 2006, Mesaba Siting Docket.

Wastewater Generation and Discharge Outfalls
Water Quality – appropriate mercury standard
Impaired Waters – no discharge since Maple Lake/Annandale decision – no NPDES permit
Thermal Discharges under Clean Water Act

See MCGP 5053, MPCA Comment Letter on Joint Application, July 31, 2006.

These comments focus on water issues, including process, waste and discharge issues, and the costs instituting the MPCA recommendations for prevention and remediation are part of this project and have not yet been calculated or considered. These costs must be considered in the economic cost/benefit analysis, and added to the estimated $55 million of infrastructure costs taken on by others than Excelsior (excluding transmission).

4. The Mesaba Project provides no economic net gain

Although the project has been touted as one with vast economic benefits, instead the project is a drain on an already economically stressed region and to the state. As Commissioner Nicolai noted, the impacts of rate increases to Xcel, Minnesota Power and other utility customers must be considered. The testimony of Robert S. Lee, representing large mining and lumber/paper employers in the area that are Minnesota Power industrial customers, explains the impact of the Mesaba Project on these large ratepayers:

> MR. LEE: Thank you, Judge Mihalchick. I should state at the outset that, although I represent one of the parties to this case, I'm here today not speaking for them, but rather for a group of my other clients, comprised of Hibbing Taconite Company, a joint venture of Hibbing, Minnesota; United Taconite, LLC of Eveleth, Minnesota; Minorca Mine of Mittal Steel USA of Virginia, Minnesota; the Minntac Mine and Keewatin Taconite, both operated by US Steel Corporation, located in Mountain Iron and Keewatin, Minnesota respectfully; UPM Canadian Blandin Paper Company of Grand Rapids, Minnesota; the Cloquet mill of Sappi Fine Paper of North America of Cloquet, Minnesota; the Stora Enso paper mill in Duluth, Minnesota; Boise Paper of International Falls, Minnesota; and Enbridge Limited Partnership of Houston, Texas. All of these companies for whom I'm speaking today are customers of Minnesota Power and all of them are members of Minnesota Power's large, so-called large power class, which is made up of customers with a demand of 10 megawatts or larger. Collectively, these customers purchase approximately two-thirds of all of the energy produced and delivered by Minnesota Power, approximately two-thirds of all the energy consumed in northern Minnesota.
>
> The reason we are making a statement today in the public hearings is that we want the Judge and the Commission to understand that we're concerned, very concerned about one aspect of the public interest determination in this case that we feel has not

received sufficient attention. And that is the spillover effect on other northern Minnesota industries of the Mesaba proposal. One of the five factors to be considered, as the Judge pointed out at the beginning of the hearing today, is the project's economic development benefits to the state of Minnesota. We can't address the positive aspects of business development, we leave that to the parties, and I'm sure there's ample evidence in the record. But we are concerned about certain negative impacts on the economic development of northern Minnesota that are inherent in the proposal that Excelsior is proposing. I believe that the facts as they appear in the record of this case indicate that there are approximately $250 million worth of transmission-related investments that will need to be made in order to connect the Mesaba Project to the grid and to Xcel who would be the recipient of the power. And that $250 million essentially entails the construction of a 345 kilovolt transmission line between the site and the Xcel system.

Our understanding is that the construction of such a transmission line will trigger applicability of the baseline – baseline reliability project components of the MISO open access transmission and energy market tariff, and that the result of that will be that approximately -- well, I think exactly 20 percent of the project costs will then be allocated system-wide on a load ratio share basis, and that 80 percent will be allocated sub-regionally to all transmission customers in the pricing zones that are affected by the project.

Well, that's a complicated statement, but what I believe that it means is that Minnesota Power, and therefore Minnesota Power's customers, will end up getting allocated at least $77 million of the $250 million. And I believe there's testimony in the record in the evidentiary portion of this case that will show that that's true. Obviously the exact amount will be determined by what the project actually costs and by the application of that tariff. I'm not trying to provide any specific information that isn't already in the record on that point. Unfortunately, the PUC does not have jurisdiction to contest that allegation. That's a FERC tariff, and under the supremacy clause and the various legal doctrines that have grown up around the enforceability of FERC tariffs, the Commission has absolutely no jurisdiction to dispute the applicability of that tariff. And it's not in the purview of either the applicant, Excelsior Energy, or of Xcel, to propose the applicability, that is, my understanding, to be done by MISO, the Midwest Independent System Operator. So if what we fear is correct, that we are going to see $77 million of the $250 million

allocated to Minnesota Power's customers, we are going to see a very significant increase in electric costs for every customer buying power from Minnesota Power, even though those customers obtain none of the power generated by the Mesaba Project, and even though the customers do not benefit in any way, shape, or form from the construction of the 345 kV line.

As I stated at the outset, my clients are particularly concerned about that because they pay two-thirds of whatever goes into the MP cost structure in the form of transmission-related investments. So if we assume that $77 million is 1 added to Minnesota Power's rate base, and we assume that Minnesota Power is entitled to earn their current authorized rate of return on such an investment, both of which assumptions I think are reasonably fair, and we assume that the transmission goes in with a 30-year expected life, which is the norm for such investments, it means that Minnesota Power's ratepayers will experience a $10.3 million per year rate increase, at a minimum. Of that, my clients will

experience a $6.7 million increase in rates, regardless of the fact that they derive no benefit or value from the Mesaba project. That's a very serious and significant increase in rates for industrial customers in northern Minnesota and will have a deleterious effect on economic development in northern Minnesota.

As you may know, we're already faced with some massive increases in electric costs that are associated with environmental retrofitting of the Taconite Harbor power plant, the Laskin power plant, and the Boswell 3 power plant which is currently under consideration by the Commission. Laskin and Taconite Harbor are already approved by the Commission. In addition to those increases, we're going to be experiencing and have been experiencing over the last few years very significant increases in electric rates as a result of fuel increases. Now, you might ask, well, why is that so important, and the reason, to this group of companies? The reason is that northern Minnesota's two dominant industries, paper making and taconite, are unusually dependent on energy, electrical energy, to make their products. And energy forms an extremely high proportion of the total cost of production at both kinds of plants. It varies from plant to plant with a wide variety of factors, but we're talking about a proportion of total costs that ranges in the 20 to 25 percent range. So an 25 increase in power costs from any source, Mesaba 1 included, is a serious problem in terms of expansion of these facilities and, indeed, on their continuing economic viability.

And we would respectfully ask that the Commission consider that fact, consider that spillover effect, when it makes its analysis with respect to the net economic development effects that Mesaba will have on the state of Minnesota.

Robert S. Lee, p. 65-71, Public Hearing, St. Paul, afternoon of December 18, 2006.

The testimony of Bill Blazar, Minnesota Chamber of Commerce, makes a similar point:

I believe there are some economic benefits to the state, but out concern is that the net economic benefits of the current proposal as we understand it are likely negative. Particularly, the negative economic impacts of increased costs to businesses and the increased cost of electricity for the individuals in Xcel's service territory have not been addressed or factored in by Excelsior

Good construction jobs will terminate upon construction, and then there are a relatively modest number of jobs for ongoing operations of the facility. The long term, permanent effect on tax base may be limited. Much of the revenue generated by ratepayers for this project will be for fuel, which will be sent outside of Minnesota, and the positive addition to local tax base may be offset by the increase costs of electricity in regions outside of the location of the IGCC facility. The increased costs of electricity could result in lower income tax by businesses and less disposable income for individuals, which could in turn reduce spending and sales tax collections.

MCC 7000, Blazar Rebuttal Testimony, p. 3-4.

Excelsior introduced its Labovitz report as evidence of the economic benefits to the "Iron Range" of the Mesaba Project. EE 1009. It is a cookie cutter report, nearly identical to one "commissioned" by

the Itasca Economic Development Corporation and entered by MCGP's Ron Rich. MCGP 5011, The Economic Impact of Construction and Operating an Integrated Gasification Combined-Cycle Power-Generation Facility on Itasca County, Labovitz School, University of Minnesota-Duluth (2006). A comparison of these reports demonstrates their credibility.

In the Public Hearing in Taconite, the CAMP Economic Report was entered into the record. That report is a review and critique of the Labovitz "study" and points out its shortcomings:

> Burton Abrams, Ph.D., Professor and Acting Chair of the Department of Economics, University of Delaware, estimates the economic impact to be $15-25 million before factoring in the costs of lost tourism, decreased real estate values, public health expenses and environmental impacts.
>
> The key question is how much of the value-added spending represents a net increase in income for Itasca County residents. The study asserts that "operating expenses" will "generate economic activity across the county", but this doesn't equal net economic gain for the county. The study gives only the totals for the gross categories of value-added and operating expenses, making it impossible to determine the particulars. The report acknowledges that the IMPLAN modeling used in this study is not suitable to a geographic area as small as a county as there is likely to be significant "leakage", meaning that much of the money expended for Mesaba's operations will not recirculate in the county. It is likely that many of the construction workers and some of the permanent employees will not have a primary residence in Itasca County and that the bulk of their wages will be spent elsewhere. Excelsior acknowledged this by stating: ". . . about 80 percent of labor used by Tenaska Inc. to build a gas-fired plant in Southwest Minnesota came from Colorado, Wyoming, Texas and Mississippi" (Joint Permit Application Environmental Supplement 3.14.4-5).

CAMP Economic Report, p. 2., Public Hearing at Taconite December 20, 2006. This report addresses specific economic issues sidestepped or misrepresented in Labovitz:

> **Coal:** About $30/ton for western coal delivered x 2 million tons = $60 million. Less than 2% of this would stay in NE Minnesota: the cost of coal goes out of state; transportation costs go out of county; fuel costs for delivery go out of state; and most wage earners are outside of Minnesota.
> *$1 million stays in NE Minnesota; $59 million leaves the area.*
> **Natural Gas**: $6 per MMBTU average and will increase over time. Amount used depends on how long the plant stays in start-up mode before introducing coal. Natural gas will be used when either gasifier is shut down.
> *$100,000 to $500,000 per startup and $1 million to $4 million backup stays in the area; $1.9 million to $9.5 million per startup and $19 million to $76 million backup leaves the area.*
>
> **Operating Expenses:** Wages (amount unknown), generously assuming $100,000 per year average with benefits, vacation, health care, overtime for 100 people = $10,000,000. It is likely that 80% will stay in the area, but 20% is likely to leave the area as the plant will hire people who will commute on weekends and send money home.
> *$8 million stays in the area; $2 million leaves the area.*

Maintenance: $25 million per year for parts, supplies, and contractors. More than 80% will go out of state: most of the specialized contractors are from out of state; very few specialized parts are made in Minnesota. A few local contractors may be used for general repair work. Motels and restaurants will see some of these dollars when specialized contractors are on site.
$5 million stays in the area; $20 million leaves the area.

Debt Service: Interest on debt is projected at $70 million to $100 million dollars per year. None of this stays in the area.

Profit: If the Mesaba Project is profitable, profits will go to investors.

Real Estate Tax: Will provide some revenue for local government but Excelsior got the legislature to exempt the Mesaba Project from personal property tax, which would likely produce at least four times as much as the real estate tax. Excelsior is obligated to negotiate a "host fee agreement" with the county, Taconite, and Greenway School district in lieu of the personal property tax. The amount of the host fee is unknown but would likely be significantly less than the personal property tax.

* By Ross Hammond, P.E., Energy Consultant & former Manager of Xcel's Riverside Plant. Public Hearing Exhibit _____, CAMP Economic Report, p. 2-3.

Thus far the economic gain has been on the part of Excelsior, gain received from public coffers, ranging from the federal government to the state to county and city governments, from the taxpayers. MCGP received the box of IRR disbursement requests with attached "documentation" that showed where the public IRR funds were spent. A spreadsheet of these expenditures was entered by Ron Gustafson at the St. Paul Public Hearing, where he reviewed some of them:

MCGP 5023 - Excelsior Response to Xcel Information Request No. 142 w/selected documents from big box, including but not limited to IRR Convertible Debenture Agreement; see also Public Hearing Exhibit _____, Ron Gustafson, Spread sheet of MCGP 5023 IRR Disbursement Records (Xcel IR 142), afternoon hearing, December 18, 2006.

C. THE PRICE OUTPUT OF MESABA IS INHERENTLY UNSTABLE

At the outset, Excelsior claimed both "Low Cost" and "Hedge of Fuel Cost" in its presentations to the Legislature:

- Low Cost… With the scale economies associated with the Mesaba Energy Project, ratepayers will benefit from lower fuel costs and equipment costs. Funding from U.S. DOE for a portion of the project costs will further reduce the cost of output from the Mesaba IGCC plant.
- Hedge of Fuel Cost: Coal can be purchased under long-term, fixed-price contracts, which will provide a hedge of fuel costs that is unavailable from gas suppliers.

MCGP 5046, Mesaba Energy Project Presentation to House Regulated, Excelsior Energy, January 2002

However, Excelsior is not operating as it presented, and it is not possible to have low cost fuel with out a contract, it is not possible to hedge fuel cost without a contract – Excelsior's own statements show the necessity of a "long-term, fixed-price contract. Its not possible without a coal contract. The experts of Xcel and Minnesota Power have addressed these issues completely.

The Excelsior Petition should be denied because the price output is inherently unstable.

D. THE MESABA PROJECT DOES NOT CONTRIBUTE TO A TRANSITION TO HYDROGEN

The Mesaba project will not do anything whatsoever to contribute to a transition to hydrogen – Excelsior scores a zero on this factor.

V. EXCELSIOR'S PETITION MUST BE DENIED

Excelsior's Petition to force a Power Purchase Agreement must be denied because Excelsior is not an Innovative Energy Project as defined by statute. The Designation by the Commissioner was false – Excelsior's preferred site has no infrastructure. It is not probable that the Mesaba Project would be a least cost resource considering costs of ancillary services and transmission upgrades, as it is already far more costly than comparable baseload generation.

Excelsior's Petition to force a Power Purchase Agreement must be denied because it is not in the public interest. The project is an economic detriment to the state and the local area, the price is instable due to lack of fuel contracts, it has zero potential to contribute to a hydrogen economy and the emissions profile is not significantly different from other baseload coal plants.

Excelsior's Petition to force a Power Purchase Agreement must be denied.

January 5, 2007

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Crossed-off = email

Carol A. Overland, after being duly sworn on oath, states and deposes that she has served the above parties by mail or be email as noted, with mncoalgasplant.com's Motion to Compel and for Sanctions by mailing copies to the parties at the addresses above in envelopes with proper postage at the Red Wing Post Office.

Signed and sworn to before me this
5th day of January, 2007.

Shelly Ranae Bucholz
Notary Public

SHELLY RANAE BUCHOLZ
NOTARY PUBLIC-MINNESOTA
My Commission Expires Jan. 31, 2009

Carol A. Overland

Carol A. Overland, Atty. for mncoalgasplant.com