

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

P U B L I C S C O P I N G M E E T I N G

MESABA ENERGY PROJECT

PUBLIC INFORMATIONAL

and

ENVIRONMENTAL IMPACT STATEMENT SCOPING MEETING

Minnesota Department of Commerce

Hoyt Lakes Arena

Hoyt Lakes, Minnesota

August 23, 2006; 7:00 p.m.

REPORTED BY:
KATE UNDELAND, RPR
P.O. Box 131
Virginia, MN 55792
e-mail: undeland@accessmn.com

1 BILL STORM: Good evening. My name is Bill
2 Storm. I'm with the Department of Commerce, energy
3 facility permitting staff. My assistant, Jeff Haase,
4 who was sharing the desk out there with me, so he's
5 also with the Department of Commerce and energy
6 facility permitting staff. We are here tonight to
7 begin the process, the siting and routing process for
8 the Mesaba Energy project.

9 Before we start, I just want to explain a
10 couple things that were on the desk. One thing, blue
11 cards. At the end of the presentations tonight there
12 will be an opportunity for the public to speak. If
13 you wish to speak, we ask that you pre-register by
14 filling out a blue card and giving it to either me or
15 my assistant, Jeff Haase. There's also a copy of my
16 slides that is available on the table, a fact sheet
17 that sort of gives a brief narrative on the state
18 siting and routing process, and, more importantly, the
19 draft scoping document.

20 One the the reasons we're here tonight is to
21 take some input from the public on what issues are
22 important to you. This draft scoping document
23 outlines the issues that I think are important that
24 should be addressed. So it should serve as a baseline
25 for you.

1 With that, we'll begin. Tonight's agenda.
2 The state siting and routing process, that's what I'll
3 be talking about. The flow chart to my right, that
4 shows the state siting/routing process. It provides
5 milestones. It shows a timetable for it. After my
6 presentation, Jason Lewis from the DOE will speak on
7 the clean coal initiative, and then Bob Evans will
8 speak on the Excelsior Energy/Mesaba presentation.
9 Following that, there will be time for your comments;
10 ergo, the blue cards.

11 Power Plant Siting Act. The Minnesota
12 Pollution Control Agency has the authority to site
13 large electric power generating plants and to site
14 high voltage transmission lines. The Department of
15 Commerce, which I'm staff to, serves an administrative
16 function for the PUC, helping assemble the record, and
17 we also are responsible for the environmental review
18 that occurs under the process.

19 Large electric power generating plants and
20 high voltage transmission lines are defined in statute
21 and rule. Large electric power generating plant is
22 the power plant greater than 50 megawatts. A high
23 voltage transmission line is a transmission line
24 greater than 100 kilovolts. If you're at this
25 threshold, then you fall under the Power Plant Siting

1 Act.

2 There are two processes available for
3 permitting large electric power generating plants and
4 high voltage transmission lines depending on the size
5 and type of the project; the full process, which may
6 take up to a year, and the alternative process, which
7 may take up to six months. Both processes involve
8 public participation and environmental review.

9 The full process. The Mesaba Energy project,
10 given its type and size, must undergo the full review
11 process. So full review process is for larger
12 projects. In this process, the applicant, Excelsior
13 Energy, must identify preferred and alternative sites
14 and preferred and alternative routes for the
15 transmission lines.

16 Under the full process the Department of
17 Commerce prepares an environmental impact statement.
18 A contested case hearing must be held and it's
19 presided over by an ALJ, Administrative Law Judge; and
20 the PUC has one year to decide on the application, to
21 make their final determination, from the time they
22 accept the application.

23 Pipeline. PUC also has jurisdiction over
24 pipelines. PUC route permit is required for pipelines
25 designed to carry natural gas greater than 275 psi.

1 The rules allow something that's called joint
2 processing. An applicant, in this case, Excelsior
3 Energy, may come to the PUC with an application for
4 their site, an application for their high voltage
5 transmission route and an application for their
6 pipeline route, all in one document, in one submittal.

7 This schematic is similar to that schematic
8 over there. They both outline the full process,
9 starting with the submittal of an application, to the
10 final decision from the PUC. What I'll be doing
11 tonight is going through these milestones and
12 explaining a little bit about each one.

13 Before I get there, I do want to state that
14 in addition to our permit, the siting and routing
15 permits, the applicant will have to obtain other
16 permits downstream of our permitting process. These
17 include permits from the DNR for water appropriation,
18 permits from the Pollution Control Agency for water
19 discharge and air discharges. They may involve MN DOT
20 permits for highway access, those sort of things.

21 Agencies that have downstream permitting are
22 by statute and rule required to participate in our
23 process. So we bring them into our process and we
24 seek their comment and their input as we move from the
25 application acceptance through the environmental

1 document, all the way to the final decision.

2 This schematic just shows some of the
3 agencies that are involved and how they interact with
4 the Department of Commerce, and then, of course, the
5 Department of Commerce helps assist the PUC.

6 The process starts when an application is
7 submitted. The rules outline what an applicant needs
8 to contain in their application. I'm not going to go
9 through all the rules. I just want you to be aware
10 that you have a reference here for them. This is the
11 information that the applicant must contain in their
12 application.

13 There's also notification requirements. When
14 the applicant makes a submittal to the PUC, rule
15 requires them to make public notice to let the public
16 know of their intentions.

17 On June 19th, 2006 Excelsior Energy submitted
18 to the PUC a joint permit application. That's a
19 combined permit application for the site, the
20 transmission line and the pipeline.

21 The next step in our flow chart, the next
22 milestone is accepting the application. Once an
23 applicant submits an application to the PUC, the PUC
24 has 10 days to review the application and to determine
25 if it's complete or not. On July 28th, 2006, at a

1 hearing at the PUC, they accepted the joint permit
2 application submitted by Excelsior as complete.

3 This also starts the regulatory clock, that
4 one year I talked about that the full process has.
5 Once the PUC accepts the application, the clock starts
6 in that one year process. That's why you have the day
7 zero off to the side there, and you can track it as we
8 move through.

9 At the same time that the PUC makes a
10 determination on the completeness of the application,
11 they also must consider whether to assign a citizen
12 advisory task force or not. It's discretionary. In
13 the hearing that I previously mentioned, July 28th
14 hearing, the PUC authorized the DOC, Department of
15 Commerce, to establish a citizen advisory task force.
16 The task force members are listed here for your
17 information.

18 And along with the authorization to assemble
19 a task force, the DOC also has to come up with a
20 charge. That charge is taken pretty much out of
21 statute, and there's a timetable. That timetable is
22 also taken out of statute. The charge for the citizen
23 advisory task force is three-pronged; one, to determine
24 if there was inadequate or missing data, local data,
25 you know, local information missing from the

1 application; two, to identify any local areas of
2 concern, either from the site or the proposed site, or
3 the proposed route; and three, if they can reach a
4 consensus on the preferred or alternative site, they
5 can state that preference.

6 The task force by rule expires when the
7 Commissioner of the Department of Commerce releases the
8 scoping decision. The scoping decision describes what
9 the EIS will study. I'm anticipating that scoping
10 decision will be released in the first week of
11 September.

12 The next milestone on your chart is the
13 public meeting, the scoping meeting, that's where
14 we're at tonight. The major purpose of this meeting
15 is to provide public information about the proposal
16 and to solicit input from the public on what issues of
17 concern does the public have, and to incorporate those
18 issues, if relevant, into the scoping decision.

19 As I said, the scoping decision will dictate
20 what is studied in the EIS. That's why this document
21 that I pointed out on the table -- it's the draft
22 scoping decision -- this lists the areas that I and
23 DOC staff feel are important and should be incorporated
24 in the EIS. It will serve as a baseline for the
25 public to comment, see if I'm missing something that's

1 of special concern to you, or see if there's an item
2 that's of special concern to you that might fall in
3 one of these categories you want to make sure I'm
4 aware of.

5 The scoping decision. The authority for
6 determining the scope of the EIS falls with the
7 Commissioner of the Department of Commerce. The
8 purpose of the scope is, one, to capture those issues
9 that the public feel are important, but it's also an
10 effort to slim down and reduce the bulk of the EIS.

11 During this process, the scoping process --
12 and the scoping process not only consists of this
13 meeting tonight and the meeting we had last night, but
14 there's also a seven-day comment period in which you
15 can submit written comments to me on your concerns.

16 Wrapped in all this, citizens are also by
17 rule allowed to state alternative sites and route. If
18 you have an alternative site or route in mind, the
19 rule states that you should provide that information
20 to the DOC staff, the reasons why and any pertinent
21 information you may have relative to that alternative
22 choice.

23 As I said, the scoping period not only
24 involves tonight and this meeting, but it carries on
25 for a comment period. The comment period for this

1 first meeting will end on August 30th. So you can
2 e-mail me, you can fax me, you can write, snail mail
3 me your comments if you have comments on issues that
4 you think should be included in the EIS, get them to
5 me before close of business on the 30th of this month.

6 There's also a comment sheet on the desk out
7 there, that you can fill out, and it has my e-mail, my
8 fax and my address, so you can mail it to me. There
9 is also a drop box out there if you just want to drop
10 it off.

11 The scoping decision by rule has to cover
12 three minimum issues. One is the scoping decision
13 must address what issues in the EIS will be discussed;
14 noise, aesthetics, air emissions, those types of
15 things. Additionally, it must spell out what
16 alternative sites and routes are going to be
17 considered and going to be studied. And lastly, it
18 has to include the schedule; when will the EIS be
19 completed.

20 Once the Commissioner of the Department of
21 Commerce releases the scoping decision, we then move
22 towards developing the environmental impact statement
23 according to that scope. So the next milestone after
24 the scoping decision will be released will be getting
25 the draft environmental impact study completed. The

1 study needs to be written in plain, understandable
2 language.

3 If you filled out the form on the way in, and
4 you checked the box that you want to be on my mailing
5 list, that mailing list we refer to as the project
6 contact list; once a draft EIS is done and released, I
7 will send you a notice saying it's available. If you
8 want a copy, let me know. And we'll also tell you
9 where the copies are, and they'll be at your local
10 libraries, your government center, that type of thing.

11 Once the draft environmental impact statement
12 is done, we will have another meeting up here, another
13 two meetings just like we did this week, and the
14 purpose of that meeting will be to take comments from
15 the public on the draft environmental impact statement.
16 It's another opportunity for the public to come forward
17 and say, I was at the first meeting, I put my input
18 into the scope, you accepted my input in the scope, you
19 did the draft environmental impact statement, but I'm
20 still unclear about something, or I still have an
21 issue. It's your chance to comment on that draft
22 environmental impact statement.

23 Once we have the public meeting, we will have
24 another public comment period. For this it's 10 days,
25 so 10 days following the meetings you can write your

1 comments to me on the draft environmental impact
2 statement.

3 Once the draft environmental impact statement
4 is out and released and after enough time for the
5 public to review it, the next milestone we hit is the
6 contested case hearing. This is another opportunity
7 for the public to come forward and comment. The
8 contested case hearing is held in front of an ALJ,
9 Administrative Law Judge, and it follows the rules,
10 116C.57. But this is another opportunity for the
11 public to come and voice their comments on the project,
12 enter testimony and evidence into the record.

13 During the contested case hearing the final
14 EIS is usually completed. What the final EIS consists
15 of is your comments and agency comments on the draft
16 EIS and our response, the applicant's responses to
17 that, bound up into one document.

18 As the contested case hearing comes to a
19 close, the ALJ will write a report with their
20 recommendations on granting the permit, on site
21 selection and on any appropriate permit conditions
22 that they think are relevant to the site. This report
23 will come back to the staff of the DOC, and staff will
24 then prepare briefing papers and present the record to
25 the PUC at another hearing, PUC hearing. This hearing

1 will be down in the Cities. It's yet another
2 opportunity for the public to come and voice their
3 opinion.

4 The PUC will consider the entire
5 administrative record; the application, the scoping
6 decision, the environmental document, any public
7 comments that were received, and other evidence that
8 was entered into the record during the contested case
9 hearing.

10 The PUC, when they make their final decision,
11 they'll be basically making three decisions; one, is
12 the EIS adequate and is the record adequate; two, they
13 will select the site between the preferred and
14 alternative site; and three, they will issue a permit
15 for the site and the route, and they may attach
16 conditions to that permit.

17 The rules specify what factors the PUC has to
18 consider in making their final determination. I don't
19 want to go through them all, just show you there's a
20 broad range of factors that the PUC is required to
21 consider in making that final decision.

22 Once the PUC decision is made, there's a
23 period of judicial review, a 30-day period where an
24 grieved party may appeal the PUC decision. That
25 closes the process.

1 What I want to point out now is if you're
2 interested in this project and you want to track
3 documents, relevant documents to the project, you want
4 to see the application, you want to see the scoping
5 decision or just keep track of it, we do maintain a
6 website for the PUC. This is the URL to that website,
7 and this is a flash page from that website. This is
8 probably -- this is months old because it's much
9 bigger now. But each of the items that are listed
10 there in blue are documents, and they'll consist of
11 agency letters, your letters, the application, the
12 environmental report, all the information, and they're
13 linkable. You can click them and view them and read
14 them.

15 I just want to remind you that this docket
16 that we're here tonight is the siting and routing
17 docket for the Mesaba Energy Project. There is a
18 separate docket for the power purchase agreement for
19 the PUC, but that's a separate docket.

20 Another reason for showing you this docket is,
21 in addition to the website that the DOC maintains for
22 the PUC, on the PUC's home page they have a function
23 called edockets where you can see documents also. And
24 if you go to PUC home page and you go to the edockets
25 button, you'll need to punch in "06-668" to get to that

1 section, and that also shows the documents and this
2 record.

3 Bob Evans will be talking about the project,
4 the proposal, so the next three slides I'm just going
5 to skip over; they deal with what the project is.

6 Once Jason gives his presentation, I'll ask
7 Bob to give his presentation. At the end of that,
8 there will be a period of time in which the public can
9 comment and ask questions. I ask that you limit your
10 speaking to five minutes. If at the end we're done
11 and you still want to comment again, we'll give you
12 another turn to talk. I've asked if you know you want
13 to speak now, please pre-register and hand the card to
14 my assistant, Jeff. And if, after you listen to the
15 other presenters, you want to talk, once we're done
16 with the blue cards, we'll open it up to the public.

17 When you're selected to speak, please state
18 your name clearly, spell your last name and say where
19 you're from. I can guarantee I'll be reminding you as
20 we move through that process because some of us forget,
21 me included. We do that because we do have a court
22 reporter, and she needs to keep track of the names.

23 Again, I want to remind you that the close
24 for the public comments on the scope of the
25 environmental impact statement is August 30th, 2006.

1 So get me your comments, e-mail, snail mail, fax, to
2 me by the close of business on this date. And that
3 ends my portion of the talk. I'll turn it over now to
4 Jason Lewis from the Department of Energy, and he'll
5 talk a little bit about the clean coal initiative.
6 Jason.

7 JASON LEWIS: Thank you, Bill. My name is
8 Jason Lewis. I'm representing the United States
9 Department of Energy, the Office of Fossil Energy and
10 the National Energy Technology Laboratory. It's my
11 pleasure to be here tonight to give you some context
12 about the clean coal power initiative and our role in
13 the Mesaba Energy Project.

14 The majority of the Department of Energy's
15 budget, annual budget as authorized and appropriated
16 by Congress, is committed to energy efficiency and
17 renewable energy technologies, with the long-term
18 vision of fundamentally and substantially altering the
19 energy infrastructure of the country. By that I mean,
20 essentially solar and wind and other green
21 technologies.

22 But there's still quite a bit of development
23 still to accomplish to make those technologies as
24 reliable as they need to be, as efficient as they need
25 to be in order to effect that type of change to the

1 infrastructure on a grand scale. It won't happen
2 overnight. It can't happen in a year. It won't
3 happen in 10 years, and it won't be complete in 20.
4 So what do we do in the interim, given a growing
5 population and an ever increasing demand for
6 electricity?

7 We turn our focus to coal, and we develop,
8 demonstrate and commercialize technologies that allow
9 us to use coal more efficiently and more
10 environmentally sound. That, as established by
11 Congress and legislative statute, is the purpose of
12 the clean coal power initiative.

13 The program, as established by statute, is a
14 10-year program with a federal cost share of two
15 billion dollars. It's a government and industry
16 partnership that requires a minimum of 50 percent
17 non-federal cost share on the part of each recipient
18 and their financial partners.

19 There is an emphasis on gasification and
20 integrated gasification combined cycle. The program
21 is not a grant program. It's not an acquisition
22 program to require federal property or federal assets.
23 It's also not a tax credit program. It's not a
24 federal loan guarantee program. With respect to this
25 meeting, it's not a permit program. Those are other

1 essential federal and state processes that are apart
2 from CCPI.

3 The Department has issued two solicitations
4 of what they intend to be for over that 10-year period.
5 In the first round there were eight projects selected
6 in January of 2003. Two have subsequently been
7 withdrawn. The federal cost share was 259 million
8 dollars over those eight projects. And you can see
9 that the industry cost share was 721 million, which was
10 far in excess of the minimum of 50 percent required by
11 statute.

12 The second round was held, and four projects
13 were selected in October of 2004, one of which is the
14 Mesaba Energy Project. One of those four has
15 subsequently been withdrawn. The total federal cost
16 share spread over the four projects was 277 million.
17 The industry cost share you'll see on those four
18 projects was substantially higher than the eight
19 originally selected in Round 1, 2.4 billion dollars.
20 Most of that is encompassed in the industry share of
21 the Mesaba Energy Project.

22 You can see way on the top, the DOE is
23 co-funding a total of 36 million to Mesaba Energy
24 Project. A substantial portion of that is currently
25 being funded solely for the preliminary design and

1 environmental data collection required for the
2 Department to complete its environmental analyses
3 under the National Environmental Policy Act. You may
4 surmise by that that our role in the project is
5 essentially in front end project definition, and you
6 would be correct in that assumption.

7 Fairly brief presentation tonight. In
8 summary, I'd like to leave you with that the CCPI
9 program is legislatively mandated. Its purpose is to
10 expedite and replicate technologies that allow us to
11 use coal more efficiently and cleaner. The Mesaba
12 Energy Project was selected through a rigorous
13 competitive process that resulted in four selections in
14 Round 2.

15 Finally, it's not only the Department of
16 Energy that's excited by Integrated Gasification
17 Combined Cycle, I have a quote here from a recent
18 United States Environmental Protection Agency report
19 in which they state that "IGCC is one of the most
20 promising technologies in reducing the environmental
21 consequences of generating electricity from coal."

22 Finally, let me conclude by echoing Bill's
23 comments and say that the Department of Energy is also
24 very much interested in listening to your comments
25 tonight. Thank you.

1 BILL STORM: Thank you, Jason. Next we have
2 Bob Evans from Excelsior Energy to talk about the
3 Mesaba project.

4 BOB EVANS: Good evening. My name is Bob
5 Evans. I'm vice-president of environmental affairs
6 with Excelsior Energy. I'd like to introduce other
7 people from Excelsior who are in the audience. We
8 have Tom Micheletti in the back, who is co-principal
9 of the firm. We have Pat Micheletti here, he's
10 director of public affairs. Gordon Gray is here, he's
11 a chemical engineer with the firm.

12 We also have other support individuals that
13 are here that we've used in the production of
14 information, and its defense. We have Byron Starns
15 from the offices of Leonard, Street and Deinard.
16 Byron is our outside counsel on two Public Utility
17 Commission dockets that Bill talked about, one of
18 which is this power plant siting process. We have
19 Chuck Michael in the back from Short Elliott
20 Hendrickson. SEH has been with us from almost the
21 inception of the project. We have Gloria Chojnacki
22 here, also with SEH. We have George Johnson from SEH.
23 And we have John Wachler from Barr Engineering here.
24 I think that's most everyone that's here. If you have
25 a question of one of us, don't hesitate to do that.

1 We have four purposes tonight in this
2 presentation, the first of which is to make sure that
3 those of you who haven't heard about this project, do
4 tonight, and the technology that's involved. We will
5 describe it for you if you haven't heard.

6 Second, the last time that we were here was
7 for a DOE scoping process, and at that time Rich
8 Hargis, from the Department Of Energy, entertained a
9 lot of comments that were related to the fact that
10 there wasn't much information available about the
11 project from which people could use to make decisions
12 about it.

13 Since that time we filed probably more than
14 2,000 pages of information that's based on sound
15 scientific inquiry. And we're looking forward to
16 tonight to find out what we didn't do; and if there's
17 some technical inaccuracy that you have found, please
18 let us know. We can assure you that it's inadvertent.
19 But we're very interested in finding out what that is.

20 Thirdly, since we published that information,
21 there's been a lot of review of the environmental
22 impacts therein and the risks that are associated with
23 those impacts. We want to put those risks into some
24 context tonight, and I think that will help people
25 understand that a little bit better and relate it to

1 other things that we might be familiar with.

2 Finally, we have had to announce, because of
3 the power plant siting rules, the site that we
4 designated as our preferred site. We have done that,
5 but we want to reiterate that we think tonight that we
6 owe it to everyone to say that we've got two good
7 sites in this process. If we have to choose -- we
8 made our choice. The West Range site was the site
9 that we thought showed the least cost, which is what
10 we really have to focus on in our other PUC docket.
11 You'll see in the information that's presented that
12 this is a good site.

13 We can't talk about this project without
14 talking about IGCC technology. IGCC is Integrated
15 Gasification Combined Cycle. It simply is above -- it
16 is superior to any other traditional coal-fired
17 technology with respect to environmental performance.

18 It removes air pollutants more effectively.
19 If you looked around the room, you have seen some
20 emission results that show for existing facilities,
21 compared to our project emissions of even a fraction.
22 To new facilities, all we have to do is look in the
23 permit applications that we filed, and we're hands and
24 feet above new facilities as well.

25 There isn't a technology that's better for

1 the removal of mercury. Those of who you are
2 concerned about mercury, our performance is going to
3 be exceptional, and probably nothing that anybody in
4 the state has ever looked at before in terms of
5 coal-fired power plants. We talked about 90 percent.
6 We think we're going to do better than that. The PCA
7 knows that probably we can do better than that, but we
8 will see, to let our test results show exactly what
9 removal we have to meet. But it's going to be better
10 than 90 percent, and it's going to be really good.

11 This technology allows for the capture of
12 carbon, and that's one thing we can do with respect to
13 climate change issues. The other thing is it operates
14 at higher efficiencies. And if you use less fuel, you
15 produce less carbon dioxide. So it does things for
16 carbon dioxide and climate change that no other
17 technology can do as effectively.

18 We minimize production of solid wastes. The
19 solid waste that we produce, in most part, are on this
20 table. One of the things is a glassified slag, it's
21 obsidian like. It's glass like, you can take it out
22 and handle it. It's basically inert. And we produce
23 an elemental sulfur. You can take a look at that as
24 well. Both of these are saleable by-products, and not
25 many technologies can offer that benefit.

1 Finally, we do use less water than other
2 technologies, and that is a benefit as well.

3 I think with respect to what the DOE thinks
4 about gasification -- I don't mean to go over that.
5 Jason did just that. We're proud to have been
6 selected by the DOE, and we think that the State of
7 Minnesota is at the forefront of commercializing this
8 technology. For a state that advertises that 90
9 percent of its pollution comes from outside the state,
10 we believe that this is one of the most important
11 things that the state can do in terms of reducing its
12 own pollution. And this is -- we're quite a ways down
13 the road compared with other states, and we think that
14 that's what Minnesota should be on.

15 Finally, our partners aren't just anybody.
16 The three companies that you see on this list;
17 ConocoPhillips, I think you only have to go about 350
18 yards to find out about ConocoPhillips. I think that's
19 a ConocoPhillips gas station. They're probably the
20 Number 1 refiner in the country, and if not Number 1,
21 they're a close runner-up.

22 Fluor is a world renowned architectural
23 engineering firm that specializes in the design and
24 construction of power plants. They're backing this
25 project. Siemens, I don't expect many people to have

1 heard of Siemens, but they're a world renowned
2 manufacturer of combustion turbines, of which you'll
3 see in a second are included in this technology.

4 Just in terms of describing how this
5 technology works, we grind coal up to a very fine
6 powder, mix it with water, put it in a vessel called a
7 gasifier, along with pure oxygen that is removed from
8 the ambient air in an air separation unit that will be
9 on site at this plant.

10 The temperature is such that it pyrolyzes
11 coal, creates gas, that gas is very hot, goes out the
12 top. It goes through a heat exchanger to produce
13 steam, and that steam goes into a turbine, special
14 steam turbine that's hooked to an electric generator,
15 and the rotation in the system creates electricity.
16 The gas is cooled, and that process is then treated to
17 remove strong acid gases that are in there and other
18 volatile trace metals that are problematic in other
19 technologies.

20 That water is treated in what we call a zero
21 liquid discharge system, which essentially eliminates
22 any water that contacts coal in this process from being
23 discharged to the surface waters. That's important in
24 other facilities, other locations. For this one we're
25 not discharging any water. So we'll get to that.

1 The weak acid gases that remain from the
2 strong acid gases being struck by that water stream,
3 that gas is hydrogen sulfide. That gets sent to a
4 piece of control equipment that turns hydrogen sulfide
5 into elemental sulfur, and the other by-product is
6 water. So that's where the sulfur comes from, it's 99
7 percent plus pure.

8 In between those steps we remove mercury. We
9 have an activated carbon bed that's impregnated with
10 sulfur. It has a very strong affinity for mercury,
11 and the reaction is very fast, and it's almost
12 complete. There's nobody else, no other technology
13 that offers something that good.

14 Again, we're excited about this, and the
15 results that we obtain are going to be very, very
16 impressive to everyone.

17 The gas, after it's cleaned, we call it a
18 syngas. The carbon capture equipment is shown on this
19 schematic. We don't have the equipment designed in,
20 but the room for that equipment is designed in. That
21 space will allow us to capture 30 percent, up to 30
22 percent of the carbon in the coal that comes in.
23 That's pretty striking if you look at that in
24 comparison with any other technology. We're going to
25 be able to be much more competitive in doing that when

1 the time is right for that in terms of the regulatory
2 processes.

3 About the project itself, it's two phases.
4 The site is going to be determined through this
5 process. First phase is 606 megawatts of generating
6 capacity. That's a big pretty big plant. It's going
7 to use a broad range of coals from sub-bituminous to
8 bituminous. It will also be able to burn petroleum
9 coke as a blend of those two coal types.

10 We'll use natural gas as a startup fuel.
11 That reduces startup emissions, and that's a real
12 benefit in terms of the overall annual reduction that
13 we are claiming.

14 Construction on the project is slated to begin
15 the first quarter of 2008. We hope to be in service by
16 the fourth quarter of 2011.

17 Phase II is identical in size to Phase I.
18 Its construction start is later. We anticipate to
19 start in 2010, and in-service date we anticipate to be
20 2013.

21 We have, again, filed documents with the
22 Public Utilities Commission. We have the joint
23 application that Bill talked about. We have the
24 environmental supplement. We have other -- we filed
25 other permit applications for the West Range site, and

1 that includes an air permit application, water
2 appropriation and a wastewater disposal. As far as
3 this site is concerned, the air permit application
4 would be very easy to move into from the document that
5 we prepared. We'll have to look at a water
6 appropriation permit. But as far as this site is
7 concerned, we don't need an NPDES permit application
8 because we aren't going to be discharging any
9 wastewater.

10 We anticipate that should the direction of
11 our preference change, that we're going to be able to
12 quickly move in that direction.

13 One permit that we have to file that hasn't
14 been filed is with the Army Corps of Engineers, and
15 that's for wetland mitigation steps.

16 Bill talked about what was included in the
17 joint application. We think that we've looked at just
18 about everything. And what you see in those four
19 bullets are the range of topics that we discussed.
20 You can feel free to look at this. Again, if there's
21 something in there that we have missed, please let us
22 know.

23 This graph is just looking at basically the
24 inputs and the outputs from this project. What we see
25 here, this is for the two phase facility. We're going

1 to be burning at maximum, that's 100 percent capacity
2 factor, and using powder river basin sub-bituminous
3 coal. We'll burn about six million tons of that in a
4 year's time. The products that we're going to produce,
5 the saleable by-products that I pointed out, you can
6 see the slag, the black material, we'll produce about
7 370,000 tons of that a year. Elemental sulfur on
8 powder river basin coal is about 22,000 tons a year.
9 The sulfur will be put into a rail car and transported
10 to the markets that we identify for sale.

11 In terms of other solid wastes that are
12 produced by this plant, I've already talked about one
13 of them, and that's this ZLD salt, and the GI stands
14 for gasification island. That's derived from the
15 water that I talked about that was contacting the coal
16 gas. What happens to that water is it gets
17 concentrated through use of the water in that stream,
18 and when we get that so concentrated that we can't
19 derive any more water from it, we evaporate the
20 remaining water and create a filter cake. That filter
21 cake is composed of salt, because there's chloride in
22 coal, and some of the nastier trace elements that were
23 volatile, lead, arsenic, et cetera.

24 That material will be landfilled in an
25 approved hazardous waste landfill. We have the option

1 of treating that, trying to treat that material and
2 taking the water, discharging it. We don't do that.
3 We think that it's much better to put all of that
4 material in a landfill and use the dewatering process.

5 The second element or the second thing in the
6 orange is labeled with a parenthetical PB, is for the
7 power block. For those of you who have been around to
8 any of Mesaba Nugget or Polymet permitting processes,
9 realize how difficult it is to permit a project in the
10 Lake Superior Basin watershed. We solved this problem
11 by taking our cooling tower blowdown, and that's just
12 what we use to condense the steam in our process so
13 that we don't have to create new and highly purified
14 water, we evaporate all that water. We run that water
15 through a reverse osmosis system, concentrate the
16 material, and then we evaporate whatever is left. And
17 whatever is left is the solids, total dissolved solids
18 that were in the water to begin with. We're not
19 adding anything to that. That amounts to about, we
20 anticipate 24,000 tons a year. That's not a hazardous
21 waste. That's just a filter cake of salt that's
22 composed of what's in the water originally.

23 In the green, I've already talked about the
24 low emissions from this facility. For a 1212 megawatt
25 coal-fired power plant, you're not going to find many

1 emissions that are lower than this, and we think that
2 you're not going to find anything anywhere.

3 You see a very big number for carbon dioxide.
4 Any other facility this size, the same size, that
5 number would be bigger because we're more efficient.

6 HAPs are hazardous air pollutants. If we
7 were a major hazardous air pollutant facility, we
8 would be emitting on the order of hundreds of tons; we
9 would be a major source. This number is exceptionally
10 small.

11 Just in summary, we've got what we think is
12 the best technology around for operating in an
13 environmentally acceptable manner. The DOE is working
14 on zero emission plants, and they're calling them
15 FutureGen, and basing those plants on Integrated
16 Gasification Combined Cycle technology, but they have
17 to have a stepping stone, and this project is one
18 stepping stone.

19 I talked about the two phases -- the two
20 reasons why we're good for carbon dioxide, they're
21 written here, and I think we talked about everything.

22 The last bullet is just, since we clean the
23 combustion gas up in this process before we combust it
24 -- did I say that we clean the combustion -- we clean
25 the syngas before it's combusted, we don't have a lot

1 of the problems that other facilities do, because if
2 we did that, we would have a lot of extra gas to carry
3 around. Because of that, we can minimize the plant
4 footprint. And in terms of its aesthetic size, it's
5 smaller than a similar size traditional coal-fired
6 power plant.

7 I want to talk about ambient air quality and
8 some of the health issues that have been spoken about.
9 We look at two things when we looked at trying to put
10 these risks into context. One of them is the National
11 Ambient Air Quality Standards. Those standards we put
12 up on the slides you'll see that I'm showing, are on
13 some of the boards in the back. Those standards are
14 designed to protect sensitive groups in the population
15 from adverse health effects. And protection is for
16 very sensitive individuals.

17 We also, in looking at putting our risk into
18 context, used methodologies that were provided by the
19 PCA. We worked with the Pollution Control Agency in
20 identifying -- they told us what we should do. We've
21 been working with them in terms of the chemicals that
22 we work with, and they've looked at this. The results
23 that we're going to be showing haven't, with respect
24 to risk, haven't been accepted by the agency, but we
25 don't think there's anything big that's going to be

1 discrepancies that are going to come up, so we feel
2 pretty good in showing them to you.

3 Finally, again, the PCA's modeling approach
4 is designed to protect very sensitive individuals in
5 the population.

6 Basically risk assessment is just identifying
7 what chemicals you're concerned with. You try and
8 model the emission of those facilities and its
9 dispersion from the plant stack to the ground level.
10 You use information that is obtained from scientific
11 studies that talk about a certain dose of a chemical
12 eliciting a certain response. That information is put
13 into a model. What gets cranked out is a level of
14 risk. We're going to talk to you about those, the
15 results of that.

16 This is with respect to the National Ambient
17 Air Quality Standards. This is for sulfur dioxide,
18 SO₂. You can see that the accepted level of
19 protection prescribed by the Environmental Protection
20 Agency and the Clean Area Scientific Advisory Council
21 is very high relative to the dark blue bar that you
22 see for the two phases of this project.

23 We look at 1-hour, 3-hour, 24-hour. There's
24 an annual standard which shows the same result. Fine
25 particulate matter, PM₁₀, this is a 24-hour standard.

1 You see that it's very low. There's an annual
2 standard, it's the same, you see the same thing.

3 Nitrogen dioxide is shown on the -- the
4 performance level is shown on the right. That's an
5 annual standard. We see the contribution of Mesaba at
6 ground level to that acceptable level, and it's pretty
7 striking. The same with on the left-hand side, carbon
8 monoxide. People aren't too worried about carbon
9 monoxide. There is a standard, it's an annual
10 standard, and the emissions of Mesaba from its stack
11 as it would be observed at ground level, at the
12 maximum point, would be what was given in blue.

13 Moving to the risks that are overseen by the
14 Pollution Control Agency, what comes out of this model
15 with the inputs that we have put in, which are maximum
16 emissions from this project from two phases, we come
17 out with a lifetime cancer risk of one in a million
18 individuals.

19 For the level prescribed as a level of
20 concern above which PCA would look to reduce that
21 concern is shown in the dark green, right next to the
22 yellow. That's 1 in 100,000. It would be one
23 lifetime individual contracting cancer out of 100,000
24 individuals. The agency considers that level of risk
25 below that to not be of concern, enough concern to

1 them to really try and tweak them any lower.

2 To put this into context, the red bar is the
3 national average risk computed by the EPA for exposure
4 to radon. And the level that we have put in this
5 slide is 1.25 picoCuries per liter. If you look at the
6 website that's provided on this slide, and it's also
7 provided in the back, you will find that you can get a
8 map of Minnesota, and you can look on that map of
9 Minnesota, and what you'll see is in St. Louis County
10 and Itasca County, the emission or the exposure to
11 radon is predicted to range between 2 and 4 picoCuries
12 per liter.

13 So we think we've been very conservative in
14 putting this on this slide, and think that in
15 comparison what this says is that Mesaba would pose a
16 thousand times, at least a thousand times less risk
17 than people's exposure to radon naturally in your home.

18 There's another risk that we felt was
19 reasonable to put on this slide, and that's the gray
20 bar next to the red. That's a risk associated with
21 chlorinated drinking water. So as far as public water
22 systems that are chlorinating water, there's a risk
23 associated with that. And you can check, if you're
24 interested, to look on the website that's provided and
25 check that out.

1 The last three things just are associated
2 with ambient air. And I think it's pretty interesting
3 that the EPA has published these risks based on some
4 information in 1999. They just have published this in
5 2006. And if you look at St. Louis County, the risk
6 for St. Louis County is a little bit over 1 in 100,000.
7 And that is a little bit better than the U.S. ambient
8 risk. When you think about, well, what could cause
9 cause this, I think EPA looks at industries in the
10 area; they look at, I think in this area where there's
11 a lot of forest, wood burning fireplaces. So there's
12 a number of places that you can get a risk from just
13 the ambient air that you're breathing.

14 The risk from Mesaba in a location would be
15 added to any ambient risk. But you'd be adding one in
16 a million to one in a hundred thousand, and that turns
17 out to be not much additional risk. That was for
18 lifetime cancer risk.

19 There's also -- we looked at long-term
20 non-cancer risk, and found that there was a comparable
21 long-term non-cancer risk in the EPA publication that
22 I talked about. The long-term non-cancer risk for
23 Mesaba you can barely see, and basically that's
24 because this system is pretty darn clean.

25 We did some mercury and fish studies for our

1 West Range site. The modeling that we used uses the
2 same meteorology as the West -- for this site is the
3 same meteorology that we used for the East Range site,
4 and so the impacts are very, very similar. What we
5 looked at was a large northern pike in a water body
6 that was close to the site, the West Range site,
7 similar to where Colby Lake would be relative to where
8 the East Range site would be located.

9 You can see in the bottom right-hand column a
10 very low number. This is called a hazard quotient,
11 and PCA says, well, we're really not worried about
12 facilities that have a hazard quotient less than one.
13 So we're substantially less than one. The fish, large
14 fish in a nearby lake to this West Range plant were
15 very high. So while we would be adding something to a
16 level that might be high, it's very negligible.

17 Water quality. And you will have to excuse
18 this, I did change this slide to show what was going
19 to be discharged from the East Range site. What
20 you'll see is that we take in water, we're not
21 discharging anything, and that's from this zero liquid
22 discharge. I thought I changed the West Range there
23 to East; I apologize.

24 Talking about trade-offs just in terms of why
25 we selected the West Range site, we looked at a wide

1 variety of criteria. One of the things that we looked
2 at is large blocks of available land that are owned by
3 a single owner. We looked at trying to locate on
4 existing facilities where we might have some synergies.
5 We couldn't find any. We moved to the two sites that
6 we selected, the West Range and the East Range site. I
7 think everybody knows where we are expecting to place
8 this. It's on a board in the back. It is on or near
9 the Cliffs-Erie property, and it's a very good, very
10 good site.

11 The advantages basically as far as the East
12 Range site goes, we have shorter distances for
13 infrastructure, and that's important. We don't have
14 to construct as much rail. We don't have to construct
15 as long of roads. We have water sources that are
16 relatively close by. And so those are all very
17 positive things.

18 There are fewer residents close by the plant
19 at this location. And there are fewer residents with
20 respect to the roadways and rail relative to the
21 western site. People are far enough away from the
22 site, so noise isn't that big an issue. We monitored
23 background noise at several facilities, the closest
24 facilities to the plant site here, and found that
25 there weren't any violations of nighttime ambient

1 noise standards, nor daytime standards. We were close
2 on nighttime here, but the West Range site has some
3 problems. People living close by because of roads are
4 experiencing noises above the standards.

5 We believe that this site also has fewer
6 grade crossings for rail, and the speeds at which they
7 will go over, of which the trains would go across
8 those grade crossings, are higher than Grand Rapids,
9 where there are at least nine crossings in town that
10 would have to be reckoned with. For example, in Grand
11 Rapids, traveling at 25 miles an hour, those crossings
12 would take between three to four minutes for our unit
13 coal train.

14 Complicating that site is that there's
15 another -- Minnesota Steel project that is quite large
16 and would use the same roads that we would use, and it
17 would employ a lot of people. And that would
18 complicate traffic there. On this site there's not
19 much other traffic than people that are either going
20 to work or -- well, people that are going to work or
21 constructing the plant. For those people we don't
22 figure that traffic is going to be that big a deal.
23 It's a little bit bigger deal if you're traveling and
24 caught in that traffic, in which case you would be on
25 the western side.

1 In its defense, and I think we've got to say
2 strong defense, the West Range site is off the Lake
3 Superior Basin watershed. The zero liquid discharge
4 system that I talked about for this site is expensive.
5 It uses a lot of additional electric power. If that
6 electric power doesn't get generated, it doesn't get
7 sent to our customer. That's a problem when we're
8 trying to defend the cost of a facility.

9 As well the length of transmission lines that
10 we would use, we have significant less transmission
11 lines required for the West Range site, 60 miles worth,
12 to be exact. That's added expense. And the line
13 losses that occur over that length of line also reduce
14 further the generation that we can -- the electricity
15 that we can send out.

16 It has fewer individuals close to the gas
17 pipeline and to the transmission line, and that's --
18 we've got a lot further to go at this site, and as a
19 result, we come closer to a lot of other people.

20 It may not seem like a big deal, but we have
21 to cross less protected waterways on the West Range
22 site. One of the big issues that occur at this site is
23 that we can only serve this site by one rail carrier,
24 and it is further from the western coal fields. So
25 that fuel is more expensive, and we're more or less

1 going to be bandied about by the fuel supplier and held
2 hostage in any negotiation with them.

3 The West Range site doesn't have that. We can
4 serve the plant by two rail carriers, and that's a
5 distinct advantage.

6 On that site the sources that we would use for
7 water are now flooding and threaten nearby communities.
8 This plant needs water, uses water, and basically would
9 prevent that from happening. We would like to be part
10 of the solution to something rather than just a
11 problem. All of the things that I've talked about,
12 some of the big ones, reduce our operating costs.

13 Just a couple of other observations. We don't
14 think you're going to find anything better than IGCC as
15 far as environmental performance. Our impacts are low,
16 and the PCA indicates that it's below their threshold
17 of concern.

18 Here we say that we're only permitting
19 non-contact cooling water is being discharged -- on
20 this slide we're saying. At this facility on the East
21 Range site we're not discharging anything. So for
22 people that are concerned about what we would be
23 discharging to surface water, it's very difficult to
24 discharge anything to surface water here. We've
25 provided a system that doesn't.

1 Transmission lines. We'll have longer
2 transmission lines. They'll be higher than the
3 existing lines, so you'll be able to see them further.
4 With that said, we meet all of the guidelines and
5 rules as far as electromagnetic fields are concerned.
6 We're going to have to mitigate any wetlands that we
7 take, and the Corps of Engineers will make sure of
8 that.

9 We want to leave you with the understanding
10 that this project is going to meet or exceed all of
11 the applicable rules and regulations. We look forward,
12 at least as a benefit of some of these meetings, to
13 hearing from you. If you looked at the gas pipeline
14 map or a transmission line map or where we're going to
15 put roads or anything else, if that's impacting you,
16 we want to know about it, because we don't intend to
17 put a transmission line across somebody's front porch.
18 We want to work with you. We just want to make sure
19 we know who it is so that we can sit down and say, all
20 right, what are your concerns, how can we avoid them.

21 With that, that concludes my remarks. Thank
22 you very much.

23 BILL STORM: Thank you, Bob.

24 Okay. I would like to open it up for public
25 comment. Again, I want to remind you, try to keep

1 your comments brief and on point. Your comments
2 should involve what issues of local concern you have
3 and what would you like to see incorporated into the
4 EIS scoping document.

5 If you have questions, you can state your
6 question. I will not try to respond to your question,
7 but we will keep it on the record, and we will try to
8 get an answer out on our website to those questions.
9 If you have a specific question about something that
10 might be in the application, like what exact alignment
11 are you looking at or where is that high voltage
12 transmission line going, I think the best way to
13 handle that is after we're done, meet with Bob
14 informally, and he can go through the application with
15 you as we mill around and look at the various photos.

16 With that, I only have one blue card. I
17 thought there were three of them on the desk, but two
18 of them seem to have disappeared. So we'll do the
19 blue cards first. Gene Paulson.

20 GENE PAULSON: Gene Paulson from Aurora,
21 representing Mesabi East schools. Through the
22 environmental impact here sometimes we get stuck on
23 environment and we forget about some of the other
24 parts of the environment, and that's our communities.
25 I just want to get it in the record that these

1 communities here have stepped up and we're now in the
2 process of an 18.8 million dollar school facility
3 project, and we've also registered an additional 25
4 students. So I want that in the record, that these
5 communities are moving forward, and we'd like to see
6 Excelsior Energy be part of that.

7 BILL STORM: Thank you, Gene. Since that's
8 the only blew card I have, I will open it up to members
9 of the audience. If you want to raise your hand, I'll
10 have Jeff come over. When Jeff gets to you, state your
11 name, where you're from, spell your last name. Anybody
12 want to speak? (No response). Quite a different crowd
13 than last night. Okay.

14 With that then, I appreciate everybody coming
15 out. It's important that the public participate.
16 Remember if you have comments that you would like me to
17 address in the environmental impact statement, you have
18 until August 30th at the close of business day to get
19 your comments to me. Once again, thank you.

20 (Hearing concluded at 8:30 p.m.)

21
22
23
24
25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

REPORTER'S CERTIFICATE

I, Kathleen M. Undeland, do hereby certify
that the foregoing pages of typewritten matter to be a
true and correct transcript of my stenotype notes taken
on the date indicated.
