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3	ORIGINAL
4	PUBLIC INPUT HEARING
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6	SOUTH DAKOTA PUBLIC UTILITIES COMMISSION
7	In the Matter of the Application by Navitas Energy, Incorporated, for an Energy Conversion Facility Permit for
8	the Construction of the White Wind Farm and Associated Collection Substation and Electric Interconnection System
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10	DOCKET EL06-020
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16	Thursday, August 24, 2006 5:35 p.m.
17	White, South Dakota
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1	INDEX OF EXHIBITS
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21	(The following proceedings were taken before
22	Maxine J. Risty, RPR, a Notary Public within and for
23	the State of South Dakota.)
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1	CHAIRMAN JOHNSON: Good evening, everybody. We
2	thank you for being here. We do appreciate it. We're
3.	going to go ahead and begin the hearing, the public
4	input hearing.
5	I've got quite a bit of information to read that
6	will kind of give you an idea of the process we're
7	going through and how we're going to run the meeting
8	tonight. It will take me a minute or two to go through
9	it so my apologies for this.
10	We will now begin the public input hearing for
11	Docket No. EL06-020 entitled: In the Matter of the
12	Application by Navitas Energy, Incorporated, for an
13	Energy Conversion Facility Permit for the Construction
14	of the White Wind Farm and Associated Collection
15	Substation and Electric Interconnection System.
16	The date is August 24, 2006, the time is
17	approximately 5:30 p.m., and the place of this hearing
18	is the McKnight Community Center in White, South
19	Dakota.
20	This hearing concerns an application for an energy
21	conversion facility permit for the construction of the
22	White Wind Farm south and east of White in Brookings
23	County.
24	I would note that Commissioner Gary Hanson and
25	myself, Commissioner Dusty Johnson, are here this

evening. We also have a number of staff members for the Public Utility Commission.

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The purpose of this hearing is to provide information to the public about Navitas' proposed project and to hear public comments regarding the proposed project. Interested persons have the right to present their views and comments regarding the application, and we want to encourage you to do so. A copy of the application is on file with the Brookings County Auditor. The public may also access the application and all other nonconfidential documents in the file on the Commission's web site at www.puc.sd.gov under Commission Actions and then Commission Dockets and then 2006 Electric Dockets and then just scroll down to EL06-020.

16 The parties to this proceeding at this time are Navitas and the Commission. Under South Dakota law, 17 18 each municipality, county and governmental agency in 19 the area where the facility is proposed to be 20 constructed, any nonprofit organization formed in whole 21 or in part to promote conservation or natural beauty, 22 to protect the environment, personal health, or other 23 biological values, to preserve historical sites, to 24 promote consumer interests, to represent commercial and 25 industrial groups, or to promote the orderly

1 development of the area in which the facility is to be 2 constructed, or any interested person may be granted party status in this proceeding. That means that they 3 just may be an official part of the proceeding. 4 And 5 you can do that by making a written application to the 6 Commission on or before September 11, 2006. 7 Now we do have applications here tonight if you'd like to apply for party status. 8 Is there a particular Commission staff member that 9 10 has those? 11 They're back there on the sign-up MS. CREMER: 12 table. They're back there on the 13 CHAIRMAN JOHNSON: 14 table. 15 For its permit to be approved, Navitas must show 16 that the proposed wind farm will comply with all 17 applicable laws and rules, that the wind farm will not pose a threat of serious injury to the environment or 18 to the social and economic condition of inhabitants or 19 20 expected inhabitants in a siting area, that the wind 21 farm will not substantially impair the health, safety 22 or welfare of the inhabitants, and that the wind farm 23 will not unduly interfere with the orderly development of the region with due consideration having been given 24 to the views of governing bodies of affected local 25

units of government.

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Based on these factors, the Commission will decide whether the permit for the project should be granted, denied, or granted upon such terms, conditions, or modifications of the construction, operation, or maintenance of the facilities as the Commission finds appropriate.

Now we're going to begin the proceeding tonight by having Navitas make a presentation to explain its proposed project. Following the presentation, we're going to take comments from any interested persons. We want to strongly encourage members of the public to present your views. I also want to remind everyone in attendance to please sign in on our sign-in sheet at the back of the room so we have a record of who is attending this evening's hearing.

And I'll just note that -- and I'll remind you when we get to the public comment period portion of the program, but we'd like you to -- we do have a handheld mic and I believe --

Bob, if you want to give people -- Bob, give
people a wave.

Again, we'll mention this later, but Bob will have a handheld microphone, so at the end of the presentation, you will have an opportunity to ask

1 questions and, maybe even more importantly, make 2 comments about how you feel about this proposed 3 This will all be entered into the official project. record of this proceeding. And we do appreciate 4 5 everybody coming out here tonight. 6 Paul Eberth will be the spokesman here this 7 evening for Navitas. 8 Paul, would you please introduce the others with 9 you tonight and then you may begin your presentation. 10 And thanks for your patience for all of that. 11 MR. EBERTH: Thank you, Dusty. Yes, my name's 12 Paul Eberth. T'm ---13 CHAIRMAN JOHNSON: Paul, I hate to interrupt, but 14 the most important fact of the evening, the fact that 15 we have coffee in the back. And so if you need to keep 16 well watered. 17 MR. EBERTH: And I'd be happy to pause for a 18 moment if folks want to come up and get it. 19 Why don't we do that real quick CHAIRMAN JOHNSON: 20 because it may be distracting during the presentation. 21 (Discussion off the record.) 22 CHAIRMAN JOHNSON: I will remind you of this again 23 during the public comment time, but we do have a great court reporter here, Maxine, but it makes her job a lot 24 25 easier if we all speak up. And so when you have

questions or comments, if you could hold the microphone 1 2 very close to your mouth, make sure to state your name 3 and town of residence or area of residence and that 4 would be great. 5 And, Paul, we will try this again. Go ahead and 6 take it away. Thanks for your patience. 7 Sure. My name's Paul Eberth. MR. EBERTH: I'm 8 the engineer with Navitas Energy and the one 9 responsible for the development process of the White Wind Farm. 10 11 Christopher Moore is our managing director. We're both out of the Twin Cities area in Minnesota. 12 13 I'm having technical difficulties. One second. 14 I think some of you may have had a chance to 15 examine the site plan on some of the exhibits we've had 16 around the room. And if not, they will be put back 17 up -- at least this one will be put back -- after the 18 presentation, and you guys can have a chance to look at 19 some of the more details. 20 Right now we have a brief presentation, and then 21 when I finish, I'll turn it back over to the commissioners for question and answer. 22 23 The first couple slides are on Navitas and our parent company. Just to describe a little bit more 24 25 about who we are, Navitas Energy is a wind power

1 developer based out of Minneapolis. We focus mainly in 2 the Midwest with projects under development in 3 Illinois, South Dakota, Minnesota, Iowa, Wisconsin, 4 Michigan. We're majority owned by the Gamesa 5 Corporation, which is a corporation based out of Spain. 6 They're a publicly traded company, but they're traded 7 on the Madrid Exchange. And we also own and operate, 8 some of you may notice, the Midwest Center for Wind 9. Energy which is about 10 miles due east. 10 Gamesa is an installer and supplier of products 11 and services in the renewable energy industry. I think 12 the second largest manufacturer of wind turbines in the 13 world. There's about 7,000 employees worldwide, 14 including those here today, Chris and myself. 15 We've recently opened manufacturing in the U.S. 16 In 2005, a blade manufacturing facility in 17 Ebensburg, Pennsylvania opened up. I think we have --18 we staff approximately 300 employees at this facility. 19. And then early in 2006, we opened another facility in 20 Fairless Hills, Pennsylvania. It's on an island in the 21 Delaware River just outside of Philadelphia where 22 blades will be manufactured and the sails will be 23 assembled and steel towers built. 24 Here's just a few pictures of some blades being 25 constructed at the new Fairless Hills facility.

1 And now on to the White Wind Farm. What we are 2 proposing is a hundred wind turbine installation which З. would result in 200 megawatts. If you look close at 4 the site plan, you may see 105 turbine sites -- you will see 105 turbine sites. We're asking for a permit 5 6 for 105 sites. When it comes time to construct the 7 project, we'll probably eliminate a few of those sites 8 depending on what sites may produce the least amount of 9 electricity or have a high environmental impact. 10 This project is proposed to be constructed now in 11 2008. That might be a surprise to a few of you. 2007 12 was the year that we were planning on building the 13 White Wind Farm, but as of today, that looks like it 14 will be an unfeasible and delayed a year. 15 The turbine we're planning to install is 16 manufactured by Gamesa, our parent company. It's a 17 2-megawatt wind turbine. It's fairly tall. The height 18 of the turbine to the tip of the blade at it's highest 19 point is about 400 feet. I have some more specifics on 20 the screen here. You can see the hub height. That's 21 256 feet. The blade length is about 140 feet. The 22 rotors spin at about 9 to 19 revolutions per minute, 23 which is relatively slow. Probably about half the 24 speed of some of the turbines you see turning over in 25 Minnesota just 15 miles from here.

Take a look inside of the cell of the wind turbine. There is a gearbox located right behind the rotor with a ratio of around 100:1. Behind the gearbox is a generator; in this case, a 2-megawatt generator. We also will house the transformer in the cell of the these wind turbines. Several of the turbines you see operating in Minnesota have a box or a transformer setting on the ground outside the wind turbine. In this case, we will be housing that transformer inside the cell.

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A look at some of the ancillary facilities that go along with the wind farm. There is an access road. This is a picture of an access road to a couple wind turbines at the Mendota Hills Wind Farm, which is a project we constructed a couple years ago in northern Illinois.

17 For the access road, it's typically a 15-foot wide gravel road with around 8 to 12 inches of gravel with 18 the Geotek style fabric underneath the gravel. 19 We use 20 this road for obvious purposes: To access the wind turbine both during construction and during operation 21 and maintenance of the facility. Landowners also get 22 23 to use the road. Oftentimes you'll see trucks parked 24 on the road for loading grain and to assist with 25 farming activities.

1 And in addition to access roads, there is an 2 electrical collection grid. In the case of the White 3 Wind Farm, we plan to install both underground and 4 overhead electrical collection lines. 5 And here again in the Mendota Hills Wind Farm, you 6 can see a trench that was recently dug and the cable 7 laid alongside of one of the access roads. 8 The underground cable will be buried at a depth --9 at a minimum depth of 4 feet. It's possible that we 10 will hit drain tile while running these, and this is a 11 concern oftentimes to the landowner. But we will 12 repair drain tile in the field so that the farmland is 13 still as productive as it was. 14 For crossing roads, we plan to use a technique 15 called directional boring. Open cutting of roads will 16 not take place in the project, eliminating any closures 17 or disruption to public traffic. And then finally the voltage of the electrical 18 19 grid is 34.5 kilovolts. 20 And the overhead line -- there's approximately 21 9 miles of overhead. And because it is a rather large 22 project, some of the wind turbines are a significant 23 distance from the substation, so in order to keep costs 24 low and to minimize electrical losses, we plan to 25 install 9 miles of overhead transmission line or

distribution level voltage line in the project. These lines are also at 34.5 kV so there will be no transformer between the underground and overhead lines. The underground lines will simply come up to the first pole structure, climb the structure, and then turn to overhead.

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The proposed structures for the overhead line will be 40 to 50 feet tall depending on the contour of the land in that area with spacing of approximately 220 feet. And in most cases, the overhead line will be located in public right-of-way as required by the Brookings County ordinance for feeder lines. However, there will be a few situations where we plan to run it on private land, and that is to avoid existing overhead lines and to access the substation location.

16 And then finally there's a substation. This is where we will step the voltage from 34.5 kV to 345 kV. We plan to interconnect at the White substation owned and operated by the Western Area Power Administration. This is the point where the ownership of our project will end and where we would propose to sell the electricity as a merchant facility at this point.

Some of the benefits of the White Wind Farm. 23 In 24 discussions we've had with the county, we asked them to 25 assist us in coming up with an estimated annual

property tax that the White Wind Farm would pay. As of
today, that number looks to be approximately a million
dollars a year with allocation of 16,000 going to
Sherman Township. The project is proposed to be built
entirely in Sherman Township. 232,000 to Brookings
County. And then you can see about 80 percent will go
to the school district. So just over 800,000. And
then around a thousand dollars to East Dakota Water
District.

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Another benefit of the wind farm that we feel is appropriate to mention is that it is renewable generation and it does reduce consumption of fossil fuels. And then finally it's a source of revenue for local businesses and landowners in the area.

And with that, you can see my contact information on the screen. And I'll turn it over to the commissioners to take your questions and comments. And Chris and I will be here to answer whatever questions you have of us. And then I'll also put this board back on the table so people can take a closer look at the site plan. Thank you.

22 CHAIRMAN JOHNSON: Thanks very much, Paul.
23 Appreciate that.

I did mention that we have some staff here. At this point I think it would be appropriate to mention

1 them by name just because they actually do a lot more 2 work on these projects than commissioners often do. So 3 we have Bob Knadle, an analyst, in the back of the 4 room. 5 Bob, give a wave. 6 We have Karen Cremer who's an attorney with our 7 office in the corner there; we have Nathan Solem back here; we have John Smith who serves as the Commission's 8 9 general counsel; and we have Greg Rislov who serves as 10 the Commission advisor. So they know a lot more than 11 So you can ask us questions afterwards, but we do. 12 they're a good resource as well. 13 At this time, I think we will start with 14 commissioner and commissioner advisor questions and 15 then we will open it up to you all. The first question I might have, Paul and Chris, 16 17 is -- and I might have the date wrong -- but I don't 18 think the federal production tax credit is currently in place beyond -- into 2008. So first off, am I right 19 20 about that? And second off, does the presence of 21 the -- or does the lack of a federal production tax 22 credit affect whether or not this project will move 23 forward? And you're correct with the 24 MR. EBERTH: Sure. 25 date. The federal production tax credit of 1.9 cents

1 per kilowatt hour is set to expire at the end of 2007. 2 Just so everybody knows the history of this, this PTC or production tax credit has expired several times 3 in the past and has been renewed. We're optimistic 4 that it will be renewed, but at this point, there is 5 6 some uncertainty as to whether or not it will be 7 available past the end of 2007. Does that affect our capabilities to build this 8 project? It may. It will depend a little bit on the 9 market and what we would be able to sell the power for 10 11 at that time. 12 CHAIRMAN JOHNSON: Okay. Is the totality of the 13 project located within the state of South Dakota? 14 That's right. It's a hundred percent MR. EBERTH: 15 located within Sherman Township here in Brookings 16 County. 17 CHAIRMAN JOHNSON: In your application, you have a paragraph on decommissioning but no details. You do 18 19 note that you'll file a decommissioning plan with Brookings County I believe. But could you give us an 20 21 And for those of you in the audience, I mean idea? 22 decommissioning is what do you do with the wind turbines at the end of their useful life? You know, 23 you want to make sure we don't have a graveyard of wind 24 25 turbines out in somebody's pasture or farmland. So

could you give us an idea? And we're not going to hold you to this, but I want an idea of what does decommissioning normally look like? Will you have a bond to pay for that or does -- what is the standard operating procedure for Navitas with regard to decommissioning?

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MR. EBERTH: Sure. And just to -- the request was made by the PUC to provide more information on decommissioning this morning. We did send an example of a decommissioning plan to the PUC, and they should have some information to help support our response here. But standard procedures -- we've put together decommissioning plans in the past, and some of the research that we've done and that our consultants have done has found that there is a significant salvage value to wind turbines.

Right now there are turbines that were built in the '80s out in California that are being decommissioned and sold to landowners, like those that may be in the room, on an individual basis for production at their home sites. We expect that with these wind turbines, there will also be a salvage value just like there has been in the past.

24 With that said, salvage value, it's difficult to 25 guess what the value might be. In our decommissioning

1 report, it concludes saying that the salvage value of 2 the wind turbine would cover the decommissioning of the 3 wind turbine itself and restoration of the site. 4 However, we do look at a worst case scenario where the 5 decommissioning -- or the salvage value only covers the 6 removal of the turbine components itself, leaving the 7. site, which includes the foundation and the road, to be 8 decommissioned and be paid for. 9 We had civil engineers run those estimates, and it 10 came to about \$39,000 per wind turbine depending a 11 little bit on the foundation type. And it's typical 12 for us to play -- put in place some sort of financial 13 security with the county, at least in other states 14 we've worked, to cover that cost of decommissioning. 15 Dick Edenstrom. MR. EDENSTROM: Paul, are vou saying then that the average life span of these 16 17 turbines has a range of 20 to 25 years? 18 MR. EBERTH: That's what we expect right now. 19 MR. EDENSTROM: Okay. Thanks. 20 MR. MOORE: Chris Moore. I just want to modify 21 that answer a little bit. The design life of the units 22 is 20 to 25 years. The design life of a diesel engine 23 in most machinery is 20 to 25 years. They can last 24 substantially longer than that, but I just want to 25 point out that the design life is 20 to 25 years.

1	COMMISSIONER HANSON: Well, I assume that if
2	they're struck by lightning, that the life is just a
3	little bit shorter. The so thank you.
4	MR. MOORE: Thank you for the visual.
5	COMMISSIONER HANSON: Thank you for pointing that
6	out. Well, it has happened across the border. It
7	definitely won't happen in South Dakota, though. So
8	that's why we've been inviting you to South Dakota all
9	the time.
10	First and foremost, I'd like to congratulate you
11	on the comprehensive application of the South Dakota
12	Public Utilities Commission for a facility permit that
13	you put together. It seems to answer every question
14	that I had.
15	I would like you to touch on just a couple of
16	things that I think that a lot of folks are very
17	interested in. And to an extent, I recognize it's
18	prophesying and perhaps it's stretching the envelope
19	for me to ask this question, but for those folks who
20	and let me stage it a little bit more by saying that I
21	know in some states people are don't want a turbine
22	in their backyard. And certainly in South Dakota,
23	we've heard from a lot of people who have who are
24	very interested in seeing wind turbines in their
25	backyard. And for those folks who may not be on the

map at this juncture, don't have the opportunity to participate in this particular wind farm, do you foresee the opportunity for excess capacity on some of the electrical lines or opportunities for expanding this wind farm?

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MR. EBERTH: I think there's a possibility that we could expand on the wind farm. Whether or not there is excess capability of the transmission lines is uncertain. I know that Xcel Energy does propose to build some lines that would interconnect to the location that we are connecting to. However, there's a queue process for connecting a generator to a transmission line, and that queue is saturated right So it's going to depend somewhat on whether or now. not some of these other projects that are being proposed are built. I also know that there are several land agreements around our project that are held by other developers that may limit our ability to expand on the facility. But right now it's possible those land rights other developers have, you know, have a time frame in which they need to move or execute, and if they were to expire, then it would be possible for us to use their properties.

COMMISSIONER HANSON: Thank you. Could you touch a little bit -- for the folks who may be living fairly 25

1 close to where some of the turbines are going to be 2 constructed, could you touch upon the noise levels for 3 them, what they could anticipate during construction 4 and after they are constructed and functioning? 5 MR. EBERTH: The noise is always a Sure. difficult topic to discuss. It's hard to explain what 6 7 it might sound like. And one of the things we often 8 tell people is to go to a wind farm nearby and shut 9 your car off and take a listen. These wind turbines 10. are going to sound very similar to the other wind turbines that are just across the border. 11 12 Brookings County in their ordinance says that we 13 cannot exceed 50 dBA from a residence. We had HDR, 14 which is a consultant working for us, do some noise 15 studies, and they predicted that in every case and in 16 every turbine site we would be compliant with those 17 levels. 18 There is some more information on noise in the 19 Environmental Impact Statement that discusses I 20 think -- or relates what it might sound like to people, 21 whether it's a running refrigerator or something similar. 22 23 COMMISSIONER HANSON: Thank you. 24 Mr. Chairman, I've got a couple other questions 25 but will let some other folks ask.

MR. HENNEMAN: Leonard Henneman. What's
the decibels right next to one of those towers?
MR. EBERTH: I'm not sure. I apologize. I can
get the information for you and follow up after the
fact if you'd like.

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CHAIRMAN JOHNSON: Paul, at this time maybe you --I mean you did mention 50 dBA, which as Leonard mentioned are decibels. If you could give people an idea of what 50 decibels are. And if memory serves, is that background noise in a neighborhood during the day or something like that or...

MR. EBERTH: Fifty dBA is probably a little quieter than the room right now. Probably substantially quieter. The dBA scale is a logarithmic scale. So 50 to, you know, 51 is not -- you know, it doesn't have a linear relationship to the 52, 53. So 50 may be half the sound of 60. Right now we're probably speaking at a level in the high 50's to 60 decibels or dBA. And the wind turbines would be, you know, relatively quieter. But again, it's very difficult to give an example. I apologize.

22 MR. MOORE: I just have one thing to add to that. 23 At our Mendota Hills facility, I originally gave a 24 presentation to a group of congressional staffers 25 standing at the base of one of our wind turbines. And

it was a group about this same size, made a presentation just like this, didn't use a microphone, normal tone of voice, and everybody could hear me just fine.

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CHAIRMAN JOHNSON: You note that occasionally there could be damage done to drain tiles and that Navitas would be responsible for the repair of those. Could you give us an idea of how often something like that happens? And not just drain tiles, but in general, what kind of complaints does Navitas typically get on a wind farm site from landowners due to damage or interference with farming operations?

MR. EBERTH: Sure. The first drain tile -there will be several drain tiles cut. If they are in the field, we'll find them when we trench the cable in. Typically we repair the drain tile as we get to it. We'll have a contractor on site with experience in repairing drain tile.

19'In the Mendota Hills Wind Farm, we attempted to20repair all the drain tile while we were building the21facility. The next year there was some wet spots. We22had to go back. It took a year or two before all the23fields were back to a similar condition as prior to the24construction of the wind farm.

The most common complaint that we get is that an

1 FAA obstruction light is blinking the wrong color. 2 Typically it's white at night. And it is somewhat 3. obtrusive. And when that malfunction takes place, 4 oftentimes the county gets a phone call, you know, from 5 a nearby resident complaining. And at least in the 6 Mendota Hills Wind Farm, the zoning administrator calls 7 me, and then we get on the horn with some of the 8 maintenance folks and get them up there to fix the 9 light. 10 Really, in the last couple years of operation in 11 the Mendota Hills Wind Farm, which is the one that I 12 have the most experience working on, that's been our 13. only complaint. 14 CHAIRMAN JOHNSON: You did note that at this point 15 the project is planned to function as a merchant plant. 16 I'm not asking whether or not you're pursuing a PPA, 17 purchase power agreement, but would that change your time line at all, or would that be likely to change 18 19 your time line if there was a firm purchaser as opposed 20 to this being a merchant facility? 21 MR. EBERTH: No, not at this time. There is a 22 very large demand for wind turbines, and even though we 23 are owned by a turbine manufacturer, if there are 24 others committed to putting the project up in a shorter

time frame, then Gamesa is more than willing to sell

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the turbines to other developers. 1 So with that said, there's a couple of things that 2 3 are running in parallel: One, our ability to get all the permits and everything finalized so that we can 4 construct the wind farm; and second, the time frame for 5 buying wind turbines. And at this point in time, wind 6 7 turbines -- or at least a hundred wind turbines for 2007 is not possible. 8 CHAIRMAN JOHNSON: You did mention in response to 9 10 a good question from Commissioner Hanson, the queue, the transmission queue. I'm certainly not an expert on 11 that, but I don't think projects often move very 12 quickly through there. Do you anticipate any problems 13 with working through the queue that might delay this 14

project?

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MR. EBERTH: Well, working through -- no, we don't expect there to be any delays. We made our request to WAPA or the Western Area Power Administration. I think it was in 2001. We were advised of it in '03. We are now in the process of complying with NEPA, the National Environmental Protection Act.

22 We released a draft Environmental Impact 23 Statement, and there will be a public comment hearing 24 next September on the 14th right here in the evening 25 starting at 5:00. We expect to have a record of

1 decision on the Environmental Impact Statement from 2 Western probably in January of 2007. 3 Following that we've been working in parallel with Western to design the interconnectional facilities. 4 5 They have a design of their substation, the White substation, that includes structures to receive our 6 7 incoming line from our substation. 8 So most of the design work is near complete, and 9 we expect that execution of the interconnection 10 agreement will be a short order after the record of 11 decision on the Environmental Impact Statement. 12 Is this -- in what way would CHAIRMAN JOHNSON: this project be affected by Xcel's proposed 13 14 transmission upgrades into the White substation? 15 MR. EBERTH: This -- Xcel's proposed upgrades will 16 not impact this project. 17 CHAIRMAN JOHNSON: Thanks. 18 COMMISSIONER HANSON: Could you give us an idea of 19 challenges with the turbines from the standpoint of 20 electromagnetic fields in relationship to anything from 21 televisions to radios to cell phones to land-line 22. telephones? 23 Sure. Electromagnetic fields are MR. EBERTH: 24 usually associated with high voltage. Other than the about 500 feet of transmission line that will go from 25

our substation into WAPA's substation, there will be no new high voltage built in the area. So we don't expect there to be any substantial increase to electromagnetic fields from our lines.

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In addition, electromagnetic fields dissipate a lot quicker from underground facilities, and we expect that most of our -- or our design right now has most of our electrical collection facilities to be underground.

In response to the question regarding interference with satellite, GPS, radio, television, we have not experienced in other projects any disruption to GPS signals, satellite signals. There is a possibility -we haven't experienced and I know other wind farms have -- with interference to television and radio. That is possible. Again, we're not experiencing it in one of the facilities that we're operating right now.

If that were the case, we're prepared to mitigate, and that might be installing a higher gain antenna on somebody's house to improve their television reception.

COMMISSIONER HANSON: Thank you. I don't know how you managed that, but every one of the questions I had in order you answered it as you were going through that. I appreciate you answering.

24 Perhaps you can do as well on wildlife mitigation.
25 There have been some questions, of course, pertaining

to bats and birds and challenges of that nature, and we're on a flyway here. Can you give us an idea of what challenges you anticipate and how it compares with other projects you have?

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5 MR. EBERTH: Sure. We have a consultant out of Wyoming right now that is working on -- I think they've 6 7 actually employed some students out of South Dakota 8 State University to do a bird count within the project 9 I am by no means an expert on wildlife so I area. 10 encourage you to read more of the Environmental Impact 11 Statement. But we are doing a preconstruction survey 12 of the aviation population, and we plan to do a 13 two-year postconstruction survey to find out if there's 14 been any displacement and to record any deaths from the 15 wind turbines themselves. We expect there not to be a 16 substantial impact to the avian populations. There 17 have been some studies done on Buffalo Ridge, from the 18 other wind turbine fatalities that are operating. Ι 19 think the results of those studies show that a wind 20 turbine killed close to two birds per year.

Chris, is that right?

22 MR. MOORE: Two birds per turbine per year. 23 MR. EBERTH: Two birds per turbine per year. We 24 expect that the White Wind Farm will have a similar 25 impact, which is, we consider, to be very small. COMMISSIONER HANSON:

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CHAIRMAN JOHNSON: Is it safe to assume that the bird count will include three French hens and two turtle doves or...

Thank you.

**MR. EBERTH:** I have no idea. I apologize. Maybe near Christmas.

CHAIRMAN JOHNSON: That's right. And again, this process really is to determine what is the effect going to be on, you know, this area, the environment, its individuals. And so this question is just a little bit off -- you know, may be off topic, but I think a lot of people here probably have an interest in the progress of your land acquisition and what your leasing strategy and approach to leasing is.

15 Sure. Okay. We have concluded our MR. EBERTH: 16 land acquisition process, and we have sited all our wind turbines. We have been doing several 17 18 environmental studies that involve archaeologists walking out in the fields. I mentioned some of the 19 20 avian surveys going on. We have put in place with 21 those folks that have signed lease options with us, we 22 have put in place an agreement that could last up to 30 23 years. Per the agreement, we agree to decommission the facilities and restore the land to a condition 24 25 reasonably similar than -- you know, to the

surrounding, down to a depth of 4 feet. Now it's 1 2 noteworthy that the foundation would go deeper than 4 3 feet, and the landowners are aware that there is a portion of the foundation that we expect to leave below 4 the soil. 5 CHAIRMAN JOHNSON: Those are all the questions 6 7 that I have at this time. Commissioner Hanson, did you have any others? 8 COMMISSIONER HANSON: No. That's fine. 9. 10 CHAIRMAN JOHNSON: Greg? John? I was just curious on the merchant 11 MR. SMITH: If you could maybe talk a bit about what the 12 selling. 13 general market is you're planning to sell into. And I 14 guess one thing I was curious about more for my own 15 curiosity I think is if you're interconnecting with 16 WAPA -- we heard before where people trying to sell 17 into MISO or receive power from MISO have difficulties with rate pancaking when you're going both through the 18 19 MISO -- or the WAPA system and then interconnecting 20 with the MISO system. 21 MR. EBERTH: That's a great question. I'm going 22 to pass it off to Chris to address that one. 23

MR. MOORE: First regarding merchant selling, we are prepared to install the project based on a merchant -- taking advantage of merchant capabilities.

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That would not be our preference. If we get a power purchase agreement, we will obviously take one. But right now the people that we're talking to are aware of the situation of that project and they'd be willing to invest in taking merchant.

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Regarding the WAPA transmission issues, I think 6 what you need to -- for this part, what you need to 7 consider is that when we started on this project back 8 in 2001 we had forecasted the issues regarding 9 transmission in this particular state were going to be 10 11 huge as they turned out to be. And the only place where we could put a transmission interconnect that had 12 any potential for being acted on in the near term was 13 into the WAPA line. That's how we ended up there. 14 15 It's not our preferred place to be, but it's where we 16 landed.

MR. SMITH: Just one other question related to the system. Are these turbines equipped with internal power factor balancing systems like I know some of the new GE turbines are?

21 MR. EBERTH: Yes, they are. We do use a variable 22 speed technology, and GE does have a patent on that. 23 And a couple years ago, there was a patent settlement 24 to allow Gamesa to also use that technology.

MR. SMITH: Thank you. That's all the questions I

have.

2	CHAIRMAN JOHNSON: Mr. Rislov, anything?
3	MR. RISLOV: I was very curious about the
4	marketing, but I think my question's been answered.
5	Really, they truly are a merchant plant. We don't know
6	if that power's going to be consumed in South Dakota,
7	Illinois, Wisconsin, Minnesota, North Dakota or
8.	wherever on the eastern interconnection at this point.
9	MR. EBERTH: And just to provide everybody with a
10	little bit of comfort going merchant, we do operate
11	merchant facilities. One that I mentioned earlier,
12	Mendota Hills is a merchant facility. And we are
13	starting construction here on another merchant facility
14	in Texas.
15	MR. SMITH: I do have one follow-up question maybe
16	on that is on the power purchase agreement notion. I
17	mean are you in any way thinking about maybe coming to
18 <sub>.</sub>	this Commission with a QF type proceeding if necessary
19	to get to that point?
20	MR. MOORE: It hadn't crossed my mind until right
21	now.
22	CHAIRMAN JOHNSON: If there are no further
23	questions from the table up here, at this point, we
24	would open it up to either public questions or public
25	comments.

Two reminders again. First off before you speak, we would ask that you get recognition so that Mr. Knadle in the back there could get you a microphone. Speak very close to the microphone so that Maxine and Mr. Eberth and everybody up here can hear you well. We would also ask that you begin with your name and then your area of residence. And we will take either questions or comments or certainly both are in order as well.

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So who wants the first bite of the apple? MR. BERNDT: My name's Bob Berndt, and I was wondering: How long does it take to construct a hundred wind towers under normal conditions?

MR. EBERTH: Right now on our construction schedule we expect to be able to complete the project in one typical construction season. So starting probably around May 1st and concluding in December.

MR. TROOIEN: Tim Trooien from White. Three questions here if you could answer them. If they're too in-depth, we can talk afterwards.

No. 1, you mentioned the possibility of a lightning strike. Does that render the tower useless for the rest of its life, or will it be repaired? Is the landowner going to be, you know, stuck with a tower that's unoperational, or is there a guarantee that that

will be repaired?

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MR. EBERTH: Just so you know, the landowners will receive a fixed payment that's not attached to production. So if a turbine becomes inoperable, they'll still receive a payment. We'll repair it, you bet. We'll be out there repairing it as soon as possible.

The blades are equipped with a lightning protection system. There's a cable that runs down the blades, a copper cable, that would hopefully receive that jolt and take it in ground. But there is a possibility of damage to the turbine from lightning, and we'd be out there repairing it as soon as we could.

MR. TROOIEN: Okay. Second question. You had -on your original screen, you had \$800,000 allocated to schools as part of the economic impact. You might not be able to answer this but maybe somebody else can. How much of this would go to the local school versus schools across the state?

20 MR. EBERTH: Well, there's two school districts, 21 and they would go to -- that \$800,000 would go entirely 22 to those two school districts. And it depends on how 23 many turbines are in which district. At least that's 24 the way I understand it. And if that's wrong, maybe 25 somebody in the audience here can correct me.

CHAIRMAN JOHNSON: Tim, you're really going to have to not quote me on this, but I believe because of the state's school funding formula, I don't think that there would be any financial impact to the school districts in this area. And it would just offset fewer state dollars. I mean it's going to help schools, but it's going to help all school districts across the state a few bucks at a time.

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MR. TROOIEN: Okay. That's what I was asking. I mean does it all go to our local schools here, or does it get spread out across the whole state?

CHAIRMAN JOHNSON: My guess and -- you know, Gary served in the legislature so he might have a better idea. In fact, I'll just quit talking and hand it over to him.

COMMISSIONER HANSON: Dusty's accurate. As I understand it, because of the formula, it supplants moneys that you receive. It ends up going to everyone, benefiting the entire state's educational system.

20 MR. TROOIEN: Okay. Thanks. Final question. You 21 had talked briefly about the 1.9 cent federal subsidy 22 that was set to expire and may or may not come into 23 play here. And maybe this has no impact on what the 24 property owners of each tower get paid, but as far as 25 the sales of electricity, is this at the -- supposedly

there's a Minnesota rate where they pay back generators of electricity more to the higher end of the scale where in South Dakota they kind of get in the bottom end.

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Let's say your electric bill you pay 8 to 10 cents for the first stuff you use, and by the time you get to the bottom, you're down to 2 or 3 cents. And I've been told that in South Dakota if somebody is to generate electricity -- and maybe this applies to you, maybe it doesn't -- that they're only required by South Dakota law to pay back the lowest rate where in Minnesota it's more up in that 7 to 10 cent range. And that's why up until now we've seen so many more wind farms in Minnesota than South Dakota because of the utility differential.

Would anybody be able to comment on that and explain how that would affect the land -- the property owners who are getting paid for the towers?

MR. EBERTH: Perhaps could the Commission describe a little bit what a qualified facility is and the payment structure?

CHAIRMAN JOHNSON: And I suspect Paul would be happy to take 10 cents per kilowatt hour in Minnesota. But yeah, no, I do understand your question, and we'll let Greg Rislov take the first crack at it, and

Gary and I and John can clean up the pieces.

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MR. RISLOV: Hopefully I've understood correctly what you were saying. The difference in rates really -- the difference in purchase power cost is not bounded by state lines. In other words, both states allow recovery of cost of purchased electricity and their generating cost. So very honestly for Xcel customers in Sioux Falls, they're paying the blended rates that appear on the bills of the Minnesota customers.

Now with that said, purchase power cost and the cost of generating are just part of your rate; about one-third of your rate. Two-thirds of your rate relate to fixed costs, administrative costs, costs imposed by the state. So if the rates are higher in Minnesota, it's because they're flowing through more nonpurchase power costs than South Dakota is. Very honestly, our purchase power costs and Minnesota's are roughly identical.

And you were talking about a decline block rate. That really doesn't have anything to do with it either. They may have some different rate designs that may spread the cost across to consumers a bit differently, but still in aggregate, their purchase power cost will be the same as ours. CHAIRMAN JOHNSON: And as far as -- I think one portion of your question, Tim, was a payment to landowners. And I'll turn it over to Paul if I'm wrong, but I believe that the landowner payments would not be affected by whatever purchase power agreement that Navitas is able to secure, purchase power agreement.

MR. EBERTH: That's correct.

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**CHAIRMAN JOHNSON:** Did we get all the pieces of your --

COMMISSIONER HANSON: One other -- there's one other piece and that was: Is this why we have seen so much more construction of wind energy into Minnesota than into South Dakota? The reason that there has been so much more wind energy development is that although the state of Minnesota does not necessarily have a renewable portfolio standard for the -- for Xcel for instance, they do have a system that works out that way.

When Xcel was -- it's going to require a little bit of a foundation here. But because the Department of Energy did not complete the repository for spent nuclear fuels at Yucca Mountain, Xcel Energy has to store its spent nuclear fuels from its three nuclear plants in Minnesota on-site -- on-site means Monticello and their other plants in Minnesota -- in large casts. In order to do that, the state of Minnesota said if you are going to do that -- originally they said they'd have to pay \$500,000 per cast per year. It has worked out now where Xcel Energy has to pay \$16 million per year into their energy fund.

In addition, they had to build out a certain amount of renewable -- renewable -- I won't say fuels but renewable --

## MR. RISLOV: Generators.

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COMMISSIONER HANSON: Electric generation systems, and they have to do that in Minnesota. So that is why it's taken place in Minnesota and that's why it's come right up to the border of South Dakota.

Now as they've gone through that process and we've watched it, we've recognized that we have great wind power development areas in South Dakota. And eventually it has to cross our border, and that's what's taking place at this time.

The transmission, as the developers have explained today, has been our biggest challenge. Again, even with the Big Stone plant, transmission is the big problem because just as the interstate highway system has to cross another state, we can't build an interstate system up to their border and say, here it

1 is. Now you guys build your interstate system. It's 2 the same way with transmission line. We can only build 3 a transmission line to a load somewhere. If the other 4 state -- in this case, Minnesota -- will allow us to 5 build that transmission line across their state to the 6 person -- the entities rather that are building the --7 that are building the load, the user of the 8 electricity. So that's our big challenge right now is 9 transmission. 10 CHAIRMAN JOHNSON: Did we get all the portions of 11 your questions answered, sir? 12 MR. TROOIEN: Yes. There's one little thing that 13 I'm curious about, and this dates back to, oh, a few 14 years ago when I inquired about putting a wind 15 generator on my own farm and I wanted sell to Sioux 16 Valley Electric. And that's where they had the 17 variable rates. Now apparently that doesn't apply 18 here. And if so, maybe -- if it does or doesn't, if 19 you could explain why or why the, you know, producers 20 wanting to generate their own electricity are playing under a different set of rules than those in Minnesota 21 22 when it's going to the same company. 23 There would be a different set CHAIRMAN JOHNSON: 24 of rules. My understanding for a large project like

this, many states do have legislation that mandates

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that the small generators, that that output has to be purchased at a particular price. That legislation doesn't exist in South Dakota, although there is some federal legislation that says that if you're a qualifying facility, the incumbent utility provider does have to purchase that power.

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In this instance -- and this is probably better for Navitas to answer -- but they're not -- at this point, they have not indicated an interest in being a qualified facility. They're going to find either a willing buyer and sell it on an agreed-to price. They're not going to force somebody to purchase it. So they're going to open into a market, something like MISO where the price will be set by the market, and they will sell a good. At that point, it becomes a commodity, and it's sold for a price not set by any government but rather set by the free market system.

And so I don't think the kind of regulation you're talking about is going to be in play here. And as far as the landowner perspective, regardless of what price they get for the energy, it wouldn't affect the check that Navitas would be cutting to you.

And how much of that did I get wrong, Mr. Eberth? MR. EBERTH: No, I think you're right on. In fact, one of the big challenges that was alluded to

earlier is getting this power to a market. And we're
interconnecting with WAPA, the Western Area Power
Administration, and they alluded to rate pancaking.
Well, we very well may want to get this electricity
over to MISO, which is the Midwest Independent System
Operator, which Xcel Energy is a member of, but we
would incur a fee in order to get that power there from
WAPA.

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MR. RISLOV: If I may, the standing between one windmill setting by itself and a large production facility is entirely different under federal law. Once you install generation over a hundred kW -- in this case, it's a 200-megawatt potential -- they're really in a position of negotiating contracts, perhaps bilateral contracts, or entering a market where they're really dumping a large chunk of power.

When we talk about a single windmill, now we're talking about an arrangement where administrative costs can eat up any value of that windmill really quickly for both the producer and the utility.

21 So what happens there are utilities have 22 established tariffs perhaps and they would be paying 23 that producer the marginal cost of energy. When I say 24 the marginal cost, the utility's marginal cost of 25 energy. Now some states have tariffs in effect --

they're called net metering tariffs -- that pay above the cost for that energy or what that utility is paying for energy. And what you're really looking at from these small producers is 15 kW, 20 kW perhaps. You do have tariffs to try to keep administrative costs down.

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But I think it's important to separate one facility from a very large development like this. They have to hire attorneys, they have to have rate experts, they have to have engineers -- all those types of people -- to go and negotiate contracts. For the small producers, most states keep rates in effect where they can go right to the utility.

Now you're in a unique situation as well because you're dealing with a cooperative, and cooperatives are operating under a different set of rules as well compared to the investor-owned utilities. It gets a little complicated, but I think, bottom line, you're really in a different ballpark when you have one small facility versus a very large producer.

MR. TROOIEN: Okay. Thank you very much.

21 MR. IVERSON: David Iverson. A comment 22 regarding a follow-up to a couple of Tim's questions. 23 I have visited personally with someone who built a wind 24 tower in Minnesota. It was a private. And he said 25 that they do get guaranteed; because in Minnesota law, the power company has to buy at a higher rate, much higher than what we could get if I personally built one in South Dakota. So that somewhat agrees with Tim and agrees with your comments as well. And I agree with Mr. Rislov about additional costs

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on a private line to administer it. And that's why our local cooperatives cannot afford to buy it because they can buy it much cheaper through WAPA.

9 Also a follow-up statement regarding the school 10 I'm on the local school board, and yes, you tax issue. 11 are exactly right on the \$800,000. It looks like it 12. goes directly to the school by your slide that was up 13 there. No, it goes to the state fund. And our school 14 funding is based on enrollment only; however many 15 students we have in our school district, we get a 16 portion of that regardless of how much income is 17 generated locally. It goes into the state pot, and we 18 get our share back based on enrollment. There would be 19 a small increase to the local district on the capital 20 outlay part of the funding aspect because in the whole 21 district there would be more total valuation of 22 properties and that would increase. And as a local 23 school, we can tax on that portion of it, which can 24 only be used for capital expenditures, buildings, basic 25 capital items and that type of thing, but not

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education. Thank you.

CHAIRMAN JOHNSON: Just think of how much we're all learning. It's not just about wind power. It's about school funding and about Minnesota regulatory policy and all kinds of good stuff.

I would just note, as mentioned by Mr. Rislov, two very different set of laws govern on a small wind turbine meant to provide one or maybe two homes with electricity and this project, which could provide 50 or 60,000 American homes with power, which is a rough ballpark I use in my mind. And so this is a lot of power, this is a great deal of power and has a different regulatory scheme.

Other questions or comments?

15 MR. HILL: My name's Bob Hill. I'm the Brookings 16 County zoning director. And I just wanted to say that 17 when the construction starts, if it's approved by the 18 PUC and the Brookings County Zoning Commission, there 19 are safeguards in our zoning ordinance to protect the 20 township roads and different structures within 21 townships, and that the zoning board is all behind 22 this. And that the Navitas Company has been working 23 with the zoning board to ensure that everything's done 24 right in the permitting process at the local level, but 25 it still hinges on the state level. Thank you.

COMMISSIONER HANSON: Thank you very much for your comment. And Brookings County is mentioned a number of times, as I'm sure you're fully aware, in their application process, and it appears that they have been working with you folks regularly along the process. Thank you for your comments.

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CHAIRMAN JOHNSON: Mr. Smith, our general counsel, also noted that again from the land payer perspective, there is going to be very, very little difference in the way the landowners are compensated in South Dakota versus Minnesota. In all of the wind farms that I'm aware of -- they're not community based wind in Minnesota -- the landowners receive a lease payment that is in the ballpark to what I understand lease payments would be for this project.

> Other questions or comments? Go ahead, David.

18 MR. IVERSON: David Iverson. Xcel Energy, you 19 mentioned that their line -- their requirement to have 20 10 percent in renewable energy and it had to be 21. originated in South Dakota. I've heard discussion 22 recently that that has been expanded outside of 23 Minnesota. That the source does not have to be just to 24 Minnesota. A comment regarding that? Has there been 25 any discussion on that or is that public information or

1 is it just coffee shop talk? 2 COMMISSIONER HANSON: David, you're correct that there has been discussion of that. And frankly, I 3 have -- it's probably in one of the two dozen e-mails 4 5 that I have from Xcel pertaining to the topic that I 6 haven't been able to read recently. But yes, they have 7 been working on that process. I understand that there 8 has been some headway gained in that area and they are 9 able to do some work in South Dakota now or in Iowa. 10 I'm not certain if that's accurate. 11 I assume if that is accurate, that MR. IVERSON: could affect other wind tower development, whereas this 12 13 is not hinged upon that aspect because it's not an Xcel 14 project. But if Xcel can generate power outside of 15 Minnesota, those towers, like they end on the Minnesota 16 border now, that could extend beyond there. Would that 17 be correct?

CHAIRMAN JOHNSON: You know, I'm not an employee 19 of Xcel, and I don't -- and I'm also not a Minnesota legislator. So take this not as an expert but just as a guy just like you that kind of knows what I've read in the newspapers or what I've heard from people. It's 23 my understanding that at this point Xcel is in compliance with all of its legislative mandates from the state of Minnesota; that it's met the renewable

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1 portfolio objective. There is some anticipation that 2 this coming legislative session, some additional 3 mandates and purchase requirements might be put on 4 But at this time, they're in compliance. Xcel. 5 Now they do continue to make plans for purchasing 6 additional wind projects. They're saying that it's not 7 because they're being forced to but because they're 8 interested in investing in additional wind generation. 9 If anybody has evidence to the contrary, I'd love 10 to hear it. 11 MR. SMITH: Just in observation on that, too. 12 Except for a couple of very small developments, all of 13 Xcel's wind energy that it uses to fulfill its 14 Minnesota legal obligations, they don't own it. They 15 purchase it from facilities just like this. They're 16 all done under purchase power agreements with other 17 So the fact that these guys aren't Xcel I entities. 18 don't think -- if an additional mandate were put on 19 Xcel and they were allowed to develop outside of 20 Minnesota or if they needed to meet the other thing, 21 the -- what's it called? The renewable -- okay. The 22 renewable energy objective in Minnesota, which is a 23 goal, not a legal obligation unlike their nuclear 24 obligations, there's absolutely no reason why this 25 particular project or the PPM proposed project or any

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1	of those couldn't be used to fulfill that.
2	CHAIRMAN JOHNSON: I would like to call on Paul
3	and Chris to see if they have a different understanding
4.	of what we've laid out.
5	MR. EBERTH: I'll add to it a little bit, but no,
6	I think you guys are right on. And you're right on
7	also with the Xcel line coming into the White
8	substation; that will act as a catalyst for new wind
9	generation in South Dakota. And the reason is:
10	Because it provides outlet capabilities.
11	And the load isn't here for these projects. It's
12	in Minneapolis; it's in Des Moines; it's in Chicago.
13	So with this new transmission line coming in, it
14.	creates a lot more capacity on those lines with the
15	power out.
16	Our request was made again, I mentioned the
17	interconnection queue back in 2001 when Western or
18	WAPA did a study. They looked at the available
19	capacity on the lines without the Xcel line coming in
20	to the White substation. And at that time, there was
21	capacity on the lines. And that's what's allowing us
22	to interconnect with very little upgrades being
23	required.
24	Now the queue became saturated. Lots of
25	developers made requests; in particular, the White

1 substation. Well, at that point in time, the upgrades 2 for them to move their power out of the area were too much in order to build a facility. 3 4 One of the things that Xcel is doing is bringing 5 the line out here in order to help them reach that 6 objective and that mandate for storing the spent 7 nuclear fuel. 8 So you're right on with the lines from Xcel coming 9 into South Dakota causing some more wind turbines to 10 come over here. CHAIRMAN JOHNSON: Other comments or questions? 11 12 And perhaps we'll request some. You know, nobody here 13 has spoken as to whether or not you have any concerns 14 about whether or not this would be good for the region. 15 Does anybody have any views as to whether or not 16 you'd like to see the Commission approve this project? 17 MS. HENNEMAN: I'm Norita Henneman. I for one I 18 guess I think it would be good for this area. My only 19 comment is I wish the money that's being made here as 20 far as for the school system would stay with these 21 school systems. Small school systems are struggling, 22 and we all know that. And I don't know if that's a 23 fix, but I think it would be a help. But I would say I 24 think it's a good idea. I think the more we can depend 25 less on foreign countries for anything we need, the

better off we are.

CHAIRMAN JOHNSON:

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Other comments or questions? If we end early, Commissioner Hanson has promised to sing Danke Shoen, which means I think people should ask a few more questions.

Thank you very much.

MR. RISLOV: It may be helpful. You've used the word "queue" many times tonight. And we know what you mean, but perhaps you'd want to explain to everyone what you mean by getting in the queue.

MR. EBERTH: Sure. The Federal Energy Regulatory Commission requires by law that anybody can interconnect to a transmission facility. The kicker however is that there needs to be capabilities there to move that power. So if we want to interconnect into a line that is already full of electricity, then the company that owns that line says, sure, you can interconnect to this location, but you need to build a whole new line in order to move the power out.

20 Well, most transmission lines have some excess 21 capacity in the lines; some ability to carry more 22 power. So what happens is in that process of mandating 23 that anybody can interconnect, there's a queue or a 24 line that you need to get into.

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So for the White substation, for example, at some

point in time, there were no requests to interconnect generation there. It was just operating as a switching station to be able to move power in different directions or to change the voltage of the electricity going into that area.

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Well, there was a point in 2001 we made a request to Western, the owner of that facility, to interject 200 megawatts. We were then put in a line of others that want to interconnect power to that location. Let's say, for example, we're the first. Now there were others before us. Whether they were built or not is a different story.

So we made a request. They did a study and said, yes, there's sufficient capacity on these transmission lines to move 200 megawatts out of the area.

16 Now subsequent to our request, other developers 17 started making requests. Well, when Western did the 18 study on their facilities to see if they could move 19 their power out, they also needed to consider those 20 that were in front of them in the line or the queue; 21 for example, Navitas and the 200 megawatts. The 22 situation was that they could not move the power out of 23 the area without significant upgrades because there was 24 the existing capacity in the lines and projects in 25 front of them in the line or in the queue that were

1 requesting to move power out of the area. So that's 2. kind of the queue process of how it's set up. 3 CHAIRMAN JOHNSON: Thank you very much. 4 Are there any other comments or questions? 5 Ms. Cremer, Mr. Knadle, Mr. Solem, anybody, is there a 6 public comment period that ends or is this evening the 7 last opportunity for people to make comment if they're 8 not interested parties, if they don't have party 9 status? 10 MS. CREMER: This is Karen Cremer from staff, and 11 we will always take public comment. Most people 12 contact us either by e-mail or write a letter, and we 13 place that in the file. So you're not precluded. 14 Other than to get party status, the deadline is --15 CHAIRMAN JOHNSON: September 11. 16 MS. CREMER: -- September 11th if you want to be a 17 party, but you can comment without being a party. 18 CHAIRMAN JOHNSON: Thank you very much. 19 MR. EBERTH: I think there's another question up 20 here. 21 MR. BERNDT: This is Bob Berndt again. I just 22 want to comment. I think this is good for the 23 community and the state, and it's just a good thing all 24 around. So that's just my own opinion. 25 COMMISSIONER HANSON: Thank you.

1 CHAIRMAN JOHNSON: And thank you for bringing your 2 little one so I'm not the youngest looking person here. 3 That was actually Gary Hanson's joke, not mine. I just stole it. 4 5 Other comments or questions? 6 Yes, back there. 7 MR. ODA: Bob Oda, rural Brookings. What kind of 8 downtime is there on your generator systems for maintenance or anything? 9 10 MR. EBERTH: Sure. The manufacturer -- in this 11 case, Gamesa -- guarantees an availability of about 12 97 percent, which means that the turbine is available 13 to generate electricity and to be not down for 14 maintenance or repairs 97 percent of the time. 15 CHAIRMAN JOHNSON: Good questions. Follow-up? 16 MR. ODA: Yes. It is down for scheduled  $17^{'}$ maintenance periodically? 18 MR. EBERTH: That's right. There is approximately 19 a six-month maintenance schedule that involves changing 20 oil, lubing components, checking the torque on the 21 These are modular in design so there are bolts. 22 several components to the tower itself and then the 23 cell. And the tightness or the torque on those bolts 24 need to be checked during that maintenance schedule. 25 CHAIRMAN JOHNSON: Other questions or comments?

If there are no further questions or comments, I 1 would -- and if you have one, feel free to pop up while 3 we're wrapping up here. But I do want to thank again the staff of the Public Utilities Commission, I want to 5 thank Mr. Moore and Mr. Eberth for their presentation. 6 I certainly believe they'd be willing to give you their 7 contact information if you have other information you'd like to get from them as follow-up. I'd like thank you 9 our wonderful court reporter, Maxine, this evening. 10 And most importantly I'd like to thank all of you for 11 attending this evening. This is why we have these 12 meetings: To get an idea of what you think about a 13 project. We certainly wouldn't want to act without 14 knowing what you all think is in the public interest. 15

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Before we close the hearing, any other questions or comments?

MR. SMITH: I have one last. Could I ask a question? Follow-up on the maintenance thing. With the maintenance, with those kind of maintenance requirements, are those -- do those present opportunities for entrepreneurly oriented local folks, or is that something you're going to hire a big guy out of Minneapolis to do?

24 MR. EBERTH: Well, actually the big guy that is operating -- or maintaining and operating the wind farm 25

that was alluded to earlier in Illinois is located here in Gary, South Dakota. It's EMS, Energy Maintenance Systems. So I think a good question. But yeah, there is opportunity here in South Dakota to operate and maintain these wind farms.

6 COMMISSIONER HANSON: That was a good question. 7 It caused me to think of -- just a little bit further. 8 Are there other construction opportunities for local 9 firms? We saw the trenching that's being done, the 10 roads being built, and all of those sorts of things. 11 Are you going to be going out and bidding, or do you 12 have a large -- a mammoth construction firm that moves 13 into the area?

14 MR. EBERTH: I'm going to add to the operation and 15 maintenance just a little bit, though. EMS, Energy 16 Maintenance Systems, out of Gary, South Dakota, they 17 have a contract to maintain the Mendota Hills Wind 18 They sent some folks down from South Dakota. Farm. 19 However, not everybody that works for EMS here out of 20 Gary, South Dakota wanted to move to northern Illinois. 21 So they did hire local folks, trained them to operate 22 and maintain our facility. I think there's only one 23 transplant, South Dakota transplant, in northern 24 Illinois right now at that location.

As far as local contractors, we do plan to hire a

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1 general contractor. And it will be up to them to 2 choose a subcontractor such as those that supply the 3 aggregate and the concrete, which are probably two 4 material items that would most likely be sourced 5 Those suppliers could be from a different locally. 6 area. However, in our experience, it costs a lot to 7 move aggregate from Minneapolis to Illinois. So 8 aggregate suppliers were chosen locally for those other 9 projects. And we expect that the general contractor 10 will be sourcing some of the materials locally. And 11 that the tile contractor that goes around repairing 12 tiles will not be living in a hotel and be moved in 13 from out of state. He'll most likely be local. 14 Someone that knows the land and that can operate at the 15 least cost and is familiar with how things work here. 16 COMMISSIONER HANSON: Thank you. 17 CHAIRMAN JOHNSON: Thanks very much, Mr. Eberth. 18 Thank you everyone once again for coming this 19 evening. We'll wait around a little bit yet this 20 evening if you have other questions, but at this point, the hearing is finished for the evening. 21 Thank you. 22 (Proceedings adjourned at 6:52 p.m.) 23 24 25

1 CERTIFICATE 2 STATE OF SOUTH DAKOTA : SS 3 COUNTY OF MINNEHAHA ) 4 5 I, MAXINE J. RISTY, Court Reporter and Notary 6 Public, do hereby certify the foregoing pages 1-57, 7 inclusive, are a true and correct transcript of my stenotype 8 notes. In testimony whereof, I have hereto set my hand 9 and official seal this 5th day of September 10 11 2006. 12 13 14 MAYME 12 15 16 MAXINE J. RISTY, RPR Court Reporter and Notary Public My Commission Expires: October 14, 2011 17 18 19 MAXINE J. RISTY NOTARY PUBLIC 20 SOUTH DAKOTA 21 22 23 24 25