1	THE PUBLIC UTILITIES COMMISSION
2	OF THE STATE OF SOUTH DAKOTA
3	
4	IN THE MATTER OF THE APPLICATION EL15-020 BY WIND QUARRY OPERATIONS, LLC,
5	FOR A WIND ENERGY FACILITY PERMIT FOR THE WILLOW CREEK WIND ENERGY
6	FACILITY AND ASSOCIATED FACILITIES
7	=======================================
8	Transcript of Proceedings July 9, 2015
9	
10	BEFORE THE PUBLIC UTILITIES COMMISSION
11	
12	CHRIS NELSON, CHAIRMAN GARY HANSON, COMMISSIONER
13	COMMISSION STAFF
14	John Smith Kristen Edwards
15	Adam de Hueck
16	Greg Rislov Brian Rounds
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24	Reported By Cheri McComsey Wittler, RPR, CRR
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TRANSCRIPT OF PROCEEDINGS, held in the above-entitled matter, at the Newell School Multi-Purpose Room, 501 Dartmouth Avenue, Newell, South Dakota, on the 9th day of July, 2015, commencing at 6:30 p.m.

CHAIRMAN NELSON: Good evening, everyone. I think we're going to get started. I've got some preliminary comments that I need to go through that will kind of set the stage for what we are doing here this evening.

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I see our Senator Betty Olson in the back. Betty, thank you for being with us tonight. Appreciate that.

My name is Chris Nelson. I am Chairman of the South Dakota Public Utilities Commission. With me here this evening is Commissioner Gary Hanson. The third Commissioner, Kristie Fiegen, is dealing with some health issues and so she is not with us tonight but she will be either listening to the recording of this or reading the transcript of everything that happens tonight. So she will be fully up to speed as to what has happened here tonight.

Our purpose this evening is to hold a public hearing in Docket EL15-020 entitled In the Matter of the Application by Wind Quarry Operations, LLC for a Wind Energy Facility Permit for the Willow Creek Wind Energy Facility and Associated Facilities.

On May 27, 2015, Wind Quarry Operations, LLC filed an Application for an energy facility permit for the proposed Wind Creek Wind Power Facility. The

Application is for approval of a permit to construct a 103 megawatt nameplate capacity wind energy facility on approximately 40,000 acres of privately owned land in Butte County, approximately 10 miles northeast of Newell, South Dakota.

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The proposed project would include approximately
45 wind turbines, associated access roads, a new
collector substation, an operations and maintenance
facility, and associated transmission interconnection
facilities.

The project intends to interconnect with the Western Area Power Administration's Maurine to Rapid City 115,000-kilovolt transmission line which extends through the project area.

The project would generate utility scale electric power for residential, commercial, and industrial customers.

A copy of the Application is on file with the County Auditor of Butte County. You can also access the Application and all other nonconfidential documents in the official file on the Commission's website at www.puc.sd.gov, under Commission Actions, Commission Dockets, 2015 Electric Dockets, and then scroll down to this Docket No., which is EL15-020.

You can also access the Application and all

other documents in the official file by calling, writing, or stopping by the Commission office.

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The purpose of this hearing this evening is to provide information to the public about the proposed project and to hear public comments about the project. Interested persons have the right to present their views and comments regarding the Application, and we want to encourage you to do so. But I do want to stress, no decisions are being made tonight or in the immediate future.

The parties to this proceeding at this time are Wind Quarry Operations, LLC and the Commission Staff.

Under South Dakota Law each municipality, county, and governmental agency in the area where the facility is proposed to be constructed or any interested person or organization may gain party status in this proceeding by making written application to the Commission on or before July 27.

We have Application For Party Status forms available here this evening if you would like to apply for party status. The form is also available on the Commission's website for this Docket or by contacting the Commission.

I'd like to emphasize to everybody, however, that you do not need to become a party to the Docket in

order for your voice to be heard by the Commission. And that's the reason we're here this evening, to allow you to have your comments heard on the project.

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We will also be accepting comments in writing from anyone, either by mail, personal delivery, or e-mailing the Commission right up until the time of the decision. So you only need to apply for party status if you want to participate formally in the case by putting on actual testimony or other factual evidence, conducting discovery, cross-examining witnesses, making legal arguments, and to preserve your right to appeal to the courts if you don't believe our decision is legally correct.

I also want all of you to know that each of the Commission and Staff assigned to this Docket thoroughly read all comments submitted by the public as they are filed in the Docket file.

For the permit to be approved, our law says that Wind Quarry must show that the proposed transmission facility will comply with all applicable laws and rules. I should say transmission and generation facility will comply with all applicable laws and rules, that it will not pose a threat of serious injury to the environment or to the social and economic condition of inhabitants or expected inhabitants of the siting area, that it will not

substantially impair the health, safety, or welfare of the inhabitants, and will not duly interfere with the orderly development of the region, with due consideration given to the views of governing bodies of the affected local 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 and conditions or modifications of the construction, operation, or maintenance of the facilities as the Commission finds appropriate.

I'd like to point out to everyone that we have with us our star -- make sure you get that in there -- star court reporter, Cheri Wittler, this evening. So I'd ask you to please use the microphone and introduce yourself and spell your name when you speak so we get it on the record.

We also have three of the Commission Staff here tonight, and if they'd wave, Brian Rounds, Kristen Edwards, and Adam de Hueck. Our sound man tonight, Adam, behind the sound machine.

We want you to feel free to visit with any of them tonight if you have questions or need assistance with anything this evening or as we go through the permitting process.

We're going to begin this evening by having representatives of Wind Quarry make a presentation to explain their proposed project. Following that presentation, we're going to open it up to you. And that's your opportunity to make any comments you'd like to make, ask questions that you'd like to ask, whatever might be on your mind tonight as it relates to this project.

Before we get started, I also want to ask all of you to make sure that you've put your information on the Sign-In Sheets, as we do need to have a record of who attended this evening.

With that, Gary, anything to add? Good to go?

John O'Meara, Wind Quarry's Chief Operating

Officer, will be the introductory spokesman for Wind

Quarry this evening.

John, if you would introduce the folks that you've got with you and take it from there.

MR. JOHN O'MEARA: Thank you very much,

Commissioner. We really appreciate everyone coming out
tonight.

Can you hear me okay?

Okay. Thank you. So I actually would like to introduce my brother who is my partner in our company,

Pat O'Meara. We're going to start our PowerPoint if that

would be okay, and we have introductions of our team in the beginning of the PowerPoint.

So, Pat, if you could, please.

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MR. PAT O'MEARA: Thanks, John. Thanks, everybody, for coming out. Thank you, Chair Nelson, Commissioner Hanson, and all the support Staff that have come out to help this hearing take place.

We have about a 15-minute presentation, which we'll try to get through at a reasonable pace, but I don't want to go so quickly that anything is missed.

Again, my name is Patrick O'Meara, and I'm the CEO of Wind Quarry, LLC.

John O'Meara is the chief operating officer of Wind Quarry, and Jim Tomsic is here as our electrical engineer.

We are doing this project with the best and the brightest that are in the industry, and we have several of those people here tonight with us who will also help answer questions if there are specific questions that is in their area of expertise.

First is Marion Hill, Senior Manager of
Engineering of DNV GL, an engineering firm. She's here
from Quebec, Canada. Jennifer Bell, Senior Environmental
Scientist from Burns and McDonnell. She's here from
Denver. We also have Eric Atkinson, Assistant Professor

of Biology. He's a wildlife biologist that's done the assessments of this site over the last two years very thoroughly and he's been working in the area with us on this project since 2011. He's from Northwest College in Powell, Wyoming.

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And Lance Rom is the President of Quality Services. Quality Services is an archaeological firm out of Rapid City that will be doing the archaeological assessment of the site to look for any significant artifacts.

So our goals are to produce renewable power for consumers, create jobs, both short term and long term, coexist with the traditional agricultural lifestyle.

We'll talk about this a little bit more as the presentation goes on. But we feel that wind power is very, very well associated with rural areas, especially ranching communities.

We also feel that this will enhance the health of citizens both near and far because this is a clean way to generate electricity for consumers. And it should increase the prosperity of the community by bringing jobs in and also the increase in tax revenue in the area.

And we feel that it will also provide a better future for our children and our children's children by providing clean power and moving away from sources of

power that aren't as clean as wind power.

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So, again, tax revenue will be part of the gain for the community. But there are also direct lease payments to landowners. So there will be an injection of money into the community through local landowners then will have a little bit more money to spend.

Again, this will create short and long-term jobs. We expect about 200 short-term jobs and probably five or six long-term jobs for operations and maintenance as well as monitoring the facility for any wildlife take or damage, any kill of birds or bats.

Again, wind power plants don't significantly displace crops or livestock. And this also goes for wildlife, antelope, and deer in the area. They'll move through a wind power development. They'll graze right up to the towers.

Cows seem to like wind power because in the middle of the summer when there's not any shade out there in the grassland they'll actually follow the shadow of the tower during the day, kind of like a timepiece.

And, again, there's a very small footprint.

About a half an acre of land is displaced by each turbine footprint. So that leaves the rest of the area for the classic uses for the ranchland or farmland.

So why wind energy? We decided to choose wind

power in our choice -- in the type of energy that we wanted to generate in our company because we think that the technology is mature, there's no mercury contamination of lakes and streams that you would get with burning coal, and there's no water consumption.

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You know, this has been a fairly wet spring here in South Dakota. Where I'm from in Colorado we've also had a very wet spring. But that's not a guarantee, and we all know that there are drought years. And as one rancher from Kansas said, wind energy seems to be the most drought resistant crop he's ever grown.

Clean area, again. No carbon dioxide. This is carbon zero. Ethanol takes carbon from the surface. It's burned. It's released to the atmosphere again. Fossil fuels take carbon that's buried, bring it up, burn it, put it into the atmosphere.

With wind power there's no carbon dioxide generation once the plant is up and operational. And with that there's no sulfur emissions and no acidification of streams and lakes that we've seen that are downwind from coal-powered plants.

So why do we need to put in a wind energy facility here in Butte County? Well, the demand for energy continues to increase. This is a slide that shows energy demand. If you can't see this, this is 1995.

Here's the present time. So this is actual -- this is total energy need, all sources of energy, not just electricity. And this is the projected need over time. We have an increasing population -- people seem to like their devices that rely on electricity. We don't see that that demand is going to decrease from that projection.

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So why South Dakota? Why Butte County? This is a wind map that's put out by the National Renewable Energy Lab. They're outside of Denver. And over here is a scale -- and I'm sorry that that may be difficult to read but just realize that these colors up here are high wind and these colors down here are low wind.

And in the center of the country you can see there is very consistent high wind here in the 8- to 9-meter-per-second speed. That's ideal for wind power generation.

Here's the project location in South Dakota.

Now looking closer at a wind map of South Dakota, again, here's the project site. You can see, again, 8, 8 and a half, 9-meter-per-second wind is what NREL felt was here, and that's what our direct wind measurements on site have shown.

So to measure the wind we've put up five 16-meter meteorological towers. They have anemometers at

different levels, different heights that measure wind at different heights and record that for the wind speed and direction continuously. And that data is then stored and managed by DNV GL, Marion Hill's firm. That's one way we measured the wind.

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We also have two SODAR units which use sound waves to measure the wind. Sound waves are thrown up, and the changes in the sound waves returning, called the Doppler effect, that's how these units measure wind. And the good thing about these units is they can measure wind higher than the 60-meter towers.

The towers that we plan to put up that will hold the turbines will be 80-meter towers. So significantly higher. This unit can measure wind up well beyond the 80-meter height even up to the top of the tip of the blades at the top of its sweep.

So I don't know. We tried to photo shop these guys out, but we couldn't do it. This is a picture of the transmission lines that run through the area. This is the Western Area Power Administration's 115-kilovolt line. We applied to put -- inject power onto this line 18 months ago and that Application was accepted and we've continued to work on that process with Western Area Power Administration.

In fact, there was a scoping meeting last night

in this room with Western Area Power Administration as we continue in that process. But they found that there is 103 megawatts of capacity still on this line that's available on this line for this project. And that's how we came up with that number.

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So here's the area. Newell is here. This is Highway 212. This is Old Highway 212. Initially when we came out we looked at putting this project on BLM land. There's 9,400 acres of BLM land that's down here again just east of Newell off Old Highway 212.

And we put up met towers and started measuring wind on that site, did that for a couple of years. The BLM out of Belle Fourche was really fantastic to work with. They helped us every step of the way. But what we learned during that process is that there are a couple of problems with the wind power development down here.

One is that the Belle Fourche River runs right down in that area, and that is an attractant to wildlife. So there were more wildlife issues down on that site.

Also Bear Butte is about here. If you were to draw it in, about 11 miles from the southern tip of this public land here. Bear Butte, as you all know, is a very significant site for many Native American Tribes in the area. And we met with 14 Native American Tribes about

three years ago while we were still looking at putting the project on that public land.

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They didn't voice many concerns, but they did say that they were concerned that there may be a visual impact for their tribal members that go to Bear Butte to do ceremonies and vision quests.

So one thing we learned about South Dakota in this area is that the wind blows here. I don't think we have to tell many people in the room that, but we certainly learned that. The other thing we learned is the people around here are really nice and really easy to work with.

And while we were working on the public land we interfaced with the landowners surrounding that land because we needed access to the public land, and we just wanted to see who was in the area and see if they might have an interest or what their feeling was toward the wind power. We found a great deal of support.

So when we decided we wanted to move the project off the public land and move it further from Bear Butte and further from the Belle Fourche River we talked to some of the surrounding landowners, and they said, yeah, we would like to have you include us in this development.

We actually have land under contract that includes a large parcel down here, but we downsized the

project once Western Area Power Administration gave us that 103-megawatt limit. With that downsizing, we wanted to bring that project further north, again further away from the River, further away from Bear Butte. And also there's excellent wind resource in this area that we have learned since that time when we were working on the BLM land.

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This is an aerial view of the site. Here's U.S. 212. Here's Double R Road. This then turns at Twilight Road. Twilight Road then heads down through here. At this point Twilight Road comes off an angle and comes back down to meet up with U.S. Highway 212, just east of Newell.

So I'm sorry this might be a little difficult to see, but the purple is the outline of the leased land and then these cutouts here are land that are not part of the project. Some of that land is public land.

So at this point I'm going to turn the mic. back over to my brother, John, who will give some details of the project.

Thank you very much.

MR. JOHN O'MEARA: Thank you, Patrick.

Again, thank you everyone, to the Commission, Senator Olson for being here tonight. We certainly appreciate your time and your interest here in the

project.

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So Pat just showed you the outline of the project. And this is a different look at it. This is what's called a constraints map.

So what we had our engineering company, DNV GL, do is to produce this constraints map that shows us areas where we cannot put turbines. So you'll see this gray setback area around all the margins of the project area and, of course, by the roads and around land interior to the project that's not under lease.

And then we also have creek beds, wetland areas, et cetera, that we obviously need to avoid when we're placing the turbines and the access roads.

So taking that into consideration, we've come up with the layout, which is posted a couple of places around the room. There's a large copy of it there, a large copy of it over on the wall by the door.

So this shows the 45 turbine layout. These are 2.3 megawatt turbines. Each turbine is denoted by a little turbine type icon. And then the access roads and underground electrical collector system are the blue lines that you see here.

We also have several other components of the plant listed here. We have a proposed operations and maintenance facility up here, which is actually an

existing house that is in a state of disrepair currently, unfortunately.

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We would like to rehabilitate that house and build a maintenance facility there in the existing structure. We also have a laid out area here for materials that come in before they get distributed to the rest of the plant. And also a proposed location here as well for a batch concrete plant to make concrete for the foundations on site once the construction begins.

So we've done a lot of work on the environmental side. There are a couple of endangered species that are certainly of concern here in South Dakota, one of them being whooping cranes.

This map shows the 200-mile-wide whooping crane migration corridor down from Canada to the Gulf of Mexico, and the project here in Butte County is outside of the whooping crane corridor.

Sage-grouse are also a listed species here in South Dakota, although just on the western edge of the state. This is the current range for the sage-grouse. And to answer the unasked question, no, I did not make this map and put that little indentation in there. But that's where our project is located. And Eric has done extensive studies in the field, and we've confirmed that there is no sage-grouse habitat in the area. But if

anyone has anymore questions about that, feel free to ask, and Eric can elaborate.

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So, as I said, we've had Eric out for two years doing wildlife surveys year-round. So with all that data he's done an analysis and created this map that shows the areas of highest probability of impact for wildlife.

So what you see here is the constraints map that we just looked at for road setbacks, et cetera. And then we have this overlay of areas of higher probability of wildlife, particularly Bald and Golden Eagles. So we used that as a guide when we designed the footprint of the project to avoid these areas.

So this area here is down by the Belle Fourche River. As Pat mentioned, there are a number of eagles nesting by the river.

This area up here is lower lying land that has more wetlands, and Eric has observed more eagles traveling through that area.

And then this area here which is south of the highway has some significant prairie dog towns and prairie dogs tend to attract raptors so we're avoiding that area as well.

This is a chart that shows bird fatalities in the United States from a few sources. This is from the American Bird Conservancy. This is in thousands. So

- wind turbines cause about 573,000 bird fatalities a year.
- 2 Cellphone and radio towers, about 6.8 million.
- 3 Automobiles, about 350 million, although the range on
- 4 | that number is quite high. Actually the range on all of
- 5 | these was quite high so I took the lower end of the range
- 6 for each of these. But automobiles, 350 million.
- 7 This here, this data point here, is buildings,
- 8 | which includes skyscrapers but also includes all other
- 9 kinds of buildings cause about 650 million bird
- 10 fatalities a year.
- And the last one on here is domestic cats.
- 12 took the low number on that one, about 1.4 billion,
- 13 | although I did see estimates up to about 3.6 billion.
- So just wanted to show that slide to give you a
- comparison of the impact that wind turbines have versus
- 16 other threats to birds.
- We mentioned a cultural resources inventory.
- 18 | Lance's company, Quality Services, has completed a
- 19 | level 1 records search. So this is a search through all
- 20 of the existing databases for historic places or
- 21 | landmarks, and we have found no registered historic
- 22 places or national historic landmarks within the project
- 23 footprint or one-mile buffer.
- However, we can't stop there. We still have to
- 25 | get out, do a full pedestrian survey where Lance and his

team will go out in the field, walk every square foot of it, and determine if there are any cultural resources out there that were previously unknown and then obviously deal with those as required to either mitigate or eliminate any impacts.

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And we'll get Lance out there in the field here in the next couple of weeks and have that done by the end of August.

So another concern with wind power plants is visibility. So we've done some studies on the visibility of the project. So this is a much farther zoomed out picture of the area.

So this is Belle Fourche over here. This is the town of Newell where we're sitting here. This is the project area and the turbine layout. And then we have Bear Butte that Pat mentioned earlier is here.

So we've done what are called photomontages where we took pictures from Newell, we took pictures from the top of Bear Butte. DNV, the engineering company, did a photomontage to overlay the turbines on these pictures so you can see what it looks like.

So just to get you oriented here, this is the original photo. This is what's called a wire frame diagram showing where the turbines are. So you take this wire frame diagram, overlay it on the photo, and then you

get the resulting photo up here, which is the visual simulation.

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So this photo was taken here in Newell looking up to the northeast towards the project site, and depending on where you're sitting, you can maybe just seat tips of some of the turbine blades peeking over the horizon here.

But what I want to do if you'll give me a minute here is I'd like to pull up the actual file and show it to you so I can zoom in a little bit, and you can see where the turbines actually are.

So if I zoom into this to about 200 percent, which would be like looking through a pair of binoculars, then you can see -- I don't know if you folks can see back there. You can see that the wind turbines are just peeking up over the horizon here.

I'll zoom in a little bit more, like if you had a spotting scope, I guess. And you can see that the wind turbines really are there in the picture, but they're actually barely visible from town.

So this picture we took from Highway 212 just outside of town next to the DOT yard. So it's just on the east of town.

Okay. So then we have the same simulation from Bear Butte. So, again, this is the original picture that

Pat and I took about a month ago, beautiful, sunny, clear day from the top of Bear Butte. Here's the layer frame of where the turbines are. So you overlay that on the photo, and the turbines are actually right in this area here.

What you see over here is Highway 79 coming up here to Newell. So Newell is right here, and then Highway 212 goes out this way. So the turbines are actually located in this area here.

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And, again, let me zoom into this so you can see a little better where the turbines actually are. And you can see at 200 percent, which again would be probably like a pair of binoculars, you can see the individual wind turbines here.

I'll zoom in a little bit more, and, again, you can see the turbines really are in the photo but are barely visible from the top of Bear Butte.

So that's what we have as far as an introduction tonight. Again, I'd like to thank everybody. Our contact information is here. We also have business cards. If anyone would like to talk to us afterwards, we'll be happy to give you a card.

And I'll turn it back over to Commissioner Nelson.

CHAIRMAN NELSON: Thank you. Appreciate that.

I see our Representative Marty has joined us tonight. Thank you for being here tonight.

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This is your turn. At this point we've got
Brian with the roving microphone, and so this is your
turn to ask your questions, give your comments, make this
night usable for you all and help us understand what
you're thinking.

Again, remind you to give us your name and spell your name for the court reporter before you speak. And, with that, who's first?

Wow, this could be a shorter night than I expected, but somebody out there's got a question or a comment.

MR. BOYLAN: Robert Boylan, B-O-Y-L-A-N.

How far in the near future will there be room on the lines to expand for more wind turbines, or will it ever happen?

MR. TOMSIC: Jim Tomsic here. The transmission line, the existing line that goes through the project sites today, we are going to use up all available transmission extra capacity.

If and when there's another line built, I don't have any idea. We have been talking with Western Area Power for quite a while about upgrades or adding new transmission stuff, but at the moment it's not in the

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foreseeable future.
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              So right now the 103 megawatts that our project
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    will put on this transmission line will use up all
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     available capacity. There will not be anymore room after
     that.
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              Does that answer your question?
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              MR. BOYLAN: Yeah.
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              CHAIRMAN NELSON: Okay. That was a good start.
              Here we go.
              MR. KEOLKER: Mike Keolker, K-E-O-L-K-E-R.
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              You indicated approximately how many people to
    build the facility? Was that 200?
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              MR. PAT O'MEARA:
                                Yes.
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              MR. KEOLKER: And maintenance crew of six that
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    would remain after the project is completed?
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              MR. PAT O'MEARA: Yes. That's correct.
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              MR. KEOLKER: When do you anticipate starting
    this?
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              MR. PAT O'MEARA: We are currently in the
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    process of obtaining permitting at all levels, federal,
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     state, and local permits. We're well along in that
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    process.
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              The biggest hurdle is the environmental impact
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    statement. Western Area Power Administration is the lead
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     federal agency for that statement. We are, again, well
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along the way of gathering all the information to complete that statement. We expect that to be done by October.

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At that point we will or will not have a Power Purchase Agreement signed or at least in the works with someone who will buy the power. It's one thing to generate the power, but then you have to find someone who is going to take the power off of the system and pay for it.

We are now going to start -- we've actually been in the process of looking for off-take, some entity that will buy the power. Now that we are far enough along in the process and we know about how much it will cost to produce the power at the site, meaning what we can sell the power for, now we're going to work in earnest to sign that Power Purchase Agreement.

Once the Power Purchase Agreement is signed and all the permitting is done, and we hope to have that all completed by the end of the year, then we could break ground at any time. So construction could be, again, as early as next year.

MR. KEOLKER: Oh. Where are you planning on housing 200 people?

MR. PAT O'MEARA: That's a very good question.

I'm sure that there are plenty of extra bedrooms in the

area where people would be happy to have a renter for a
while and make some extra money. I think the Newell
hotel would probably get a shot in the arm.

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- And these crews certainly can travel as well from Spearfish or Sturgis or some of the surrounding areas and find housing there.
- 7 MR. KEOLKER: Are these imported crews, or are 8 they mostly local?
- 9 MR. PAT O'MEARA: Let me have Marion Hill of DNV GL answer that.
- MS. HILL: It could be a combination of
 different expertise that's required for construction of
 the wind farm. There's electrical works and civil works
 that's done. There's permitting, environmental
 surveillance.
 - So it will depend on the construction company that's selected that's chosen where their crews are coming from, but they do try to have local people as much as possible.
 - MR. KEOLKER: How long do you anticipate the project to take once you break ground?
 - MR. PAT O'MEARA: It should take less than a year. Probably somewhere in the neighborhood of nine months to construct the project.
- 25 MR. KEOLKER: 45 towers in nine months?

MR. PAT O'MEARA: Yeah. It's a pretty fascinating process, and we actually have a loop of how these are done. But it's basically done in a progression of where one crew starts the excavation of the foundation, the next crew comes in, drills the pilings down into the lower bedrock, if available, to anchor it.

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Then the crews come in to weld the rebar. Once that's done, the concrete folks come in. And, again, it's a team. Each step of this is a team. And once the excavators finish at one turbine location, the next day they start on the next location, and it's kind of a progression of each stage and each crew is, again, progressing through the site building each turbine.

MR. KEOLKER: What do you anticipate the economic impact for this area?

MR. PAT O'MEARA: You know, we don't have specific numbers at this point because we don't have a Power Purchase Agreement signed. Certainly there will be tax revenue. Certainly, you know, we have lease agreements with landowners. They will get a certain percentage of the money that's generated by a turbine or turbines on their property.

MR. KEOLKER: I give up.

MR. PAT O'MEARA: Thank you. Not thank you for giving up, but thank you for the questions,

MS. CERULLO: Hi. My name is Gayle Cerullo, C-E-R-U-L-L-O.

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My question is going back to the birds. You know, cats don't kill our huge migratory birds so that was kind of a funny that you held until the end.

And most of these birds fly through like the cranes in a 10-day to two-week period of time that I've noticed twice a year. And they do fly through. I know your map showed that they missed the area, but I see thousands of them just outside of Newell here going north. So I think they may be flying a bit closer than what that map happened to show, just by my uneducated, you know, visual perception.

So during that 10-day to two-week period of time would the output be diminished at all to help, you know, protect those birds?

I know from driving around, they don't all run at the same time. But there's just a real concern about the birds. You know, they are -- they're a concern.

MR. PAT O'MEARA: Thank you for that question.

I'd like to split this into two parts. One is which birds those might have been. And we have our wildlife biologist here. He's done observations throughout the year for two years, and I think he probably knows what species that is.

And the other is that so far Western Area Power Administration, the environmental folks with -- they call themselves Western, they don't feel that there is much of a risk to whooping cranes. But let me have Eric Atkinson, our wildlife biologist, give you more information on birds in the area and potential impacts to the bigger birds, as you say, that the domestic cats would not take.

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 $$\operatorname{MR}.$$ ATKINSON: Again, my name is Eric Atkinson, and thanks for your question.

I too have seen the cranes and agree that their migration is really pulsed because of those huge flocks, 3, 500 of them on up. And those are Sandhill Cranes, same genus as whooping cranes.

Sometimes a whooper will stray and be on migration with a group of Sandhill Cranes. We haven't noted endangered whooping cranes at all in the area. And the last known whooping crane in this neck of the woods was in October of 1972. Not to say that there aren't ever any whooping cranes in the area, but those are the data that we have.

And I too would be concerned about the Sandhills. When I've been on site I've seen them flying generally high except for one flock I could see flying more slowly.

But I think in consultation with the U.S. Fish & Wildlife Service those are issues that we will bring forward into the data management plan for the conservation plan for both birds and bats. When we do see issues perhaps that we can modify, the power output might be the most pragmatic thing to do.

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Other birds. When I initiated surveys actually back in 2011 I was mostly concerned about Golden Eagles and Bald Eagles at the time. There was a lot of concern about eagles being hit by wind turbines.

So a lot of modeling has been done to try to estimate risk of fatality based upon not only the numbers of eagles that you see but how high are they flying and how many minutes per hour of the day do they fly.

And when I took out mostly the two years of point count data, meaning that you would go to a certain location, and the first year we did it for 20 minutes and then we decided to test it and go up to 60 minute point counts and observe every single raptor bird of prey that we would see.

When we took those data and modeled it over a 30-year period I feel pretty confident to where we could potentially have 0.67 eagles killed by the turbine array in 30 years. Highest comes out to shy of three and lowest to almost negligible, 0.02. So there's a

1 potential, but I was pleased that it was considerably 2 lower than what I had envisioned. 3 MR. KEOLKER: I got another one. Are any of the 4 maps that you have displayed here available on your 5 website? And if they are not, can they be made 6 available? 7 I mean, it's a PowerPoint. You've got them all 8 saved on file someplace; right? MR. PAT O'MEARA: They're not on our website. 10 We haven't really put much information at all -- I don't 11 think we have any information on the actual project 12 that's on our website. We could certainly make these 13 available. 14 CHAIRMAN NELSON: Let me just jump in here. 15 Their entire Application is on our website, including a 16 number of maps. 17 MR. KEOLKER: All of the maps that they showed 18 here? 19 CHAIRMAN NELSON: I don't know that we've got 20 all of these. But maps such as -- here's just an example 21 that shows locations. 22 MR. KEOLKER: Okay. Thank you. 23 MR. PAT O'MEARA: One thing I would add to that is that the turbine locations that are on these maps 24

around the room and that we put up here are still

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1 preliminary.

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MR. KEOLKER: Yeah. I wasn't worried about the turbine location, more about the actual layout and where the roads are and that kind of thing. Just curious.

MR. PAT O'MEARA: We feel that this layout that we presented tonight is close to what will be final.

But, again, we don't have all of the information from all the wildlife issues.

We actually toured the site this morning with Natalie Gates of the U.S. Fish & Wildlife Service, and Trenton -- sorry. I'm blanking on Trenton's last name -- from South Dakota Game, Fish & Parks. Sorry. I'm not sure about Trenton's last name.

But we did tour the site this morning with them so they could see what's there, and they had some suggestions on some changes that we might need to make to the design to help decrease any disruption of the site for migration of species or animals through the site.

CHAIRMAN NELSON: Others?

MR. SJODIN: My name is Ron Sjodin, S-J-O-D-I-N. My wife is Vivian. We're part of the Newell community here. We have three businesses.

And I really want to compliment your briefing. It's an outstanding briefing. It's been well thought out. Your team is wonderful.

But I'm speaking to the economic development of Newell, the surrounding area. It's a wonderful project for that, so I'm speaking in favor of it. And it sounds like you've got so many of these problems worked out, and there might be a few come along the line here.

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We need an extension of our economic development in Newell. I think it will stretch out to the surrounding towns around here to include Belle Fourche, maybe Sturgis. And that power helping residential is developing. The power is helping commercial and industrial. We need industry in South Dakota. So for the western South Dakota to develop in such a way, I can't speak highly enough of it.

And my wife and I talked about it coming to this briefing, and we've kind of endorsed it. We both feel about the same way. So thanks again. We've enjoyed the briefing.

Sorry we missed last night's presentation, but we didn't know about it.

So enough said. Continue on. In my estimation you've done a wonderful job. Thank you.

MR. PAT O'MEARA: Thank you very much. You're very generous.

CHAIRMAN NELSON: Others. I'm Joel Hovland, H-O-V-L-A-N-D, and I'm the superintendent of the schools

here. 2 And when I look at this project going in I -- I see all the opportunities for furthering our kids' 3 4 education, exposure to things that they will never get if they stick around here. 6 This could help kids stay here afterwards. 7 There's going to be jobs coming up. So I'm all for this 8 project. I think it's a neat thing. There will be kids coming into town with the workers, and hopefully they'll 10 like it and stay. 11 We have 330 kids at this school, and I'd like to 12 keep that number there or higher. 13 So thank you very much. 14 MR. PAT O'MEARA: Thank you. 15 CHAIRMAN NELSON: Thank you. 16 Other comments or questions? 17 You all must feel very, very well Wow. 18 educated. And it was a good presentation. 19 appreciate that. 20 I'm just going to throw in a couple of comments 21 just to give you all a minute or two to think if you've 22 got anything else. 2.3 The question dealing with the cranes, I'm very,

very familiar as a landowner with a large wind farm in

eastern South Dakota, and it's in the whooping crane fly

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way.

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And I can tell you the minute they see a whooping crane those turbines stop, and they do not start until the whooping cranes leave. I mean, it's just -- that's the way they manage those things. It's an absolute because they don't want to take any risk there.

As to your question as to how quickly they can build these things, that's a 108-turbine field that I'm familiar with. They built that thing in five months in the middle of winter. I was absolutely amazed as how quickly that thing can come together.

So, with that rambling, other questions, comments?

Commissioner Hanson, anything to add?

COMMISSIONER HANSON: I was fearful that my brother was going to show up. He ranches close to Orman Dam, and I thought he'd have some impertinent questions for me. But I see his good friend Marty is here so I'm looking forward to questions from you.

But I'd just like to say I did very much appreciate the presentation, and we'll be available afterwards.

And you're probably going to speak to that, the fact that everything that is filed or transpires with this Docket is going to be on the PUC website. You'll be

able to access that. Every piece of paper. If you folks send a letter to one of us, we will respond to it through the PUC. That will be part of the Docket as well. So we're very, very transparent in the PUC.

Thank you, Mr. Chairman.

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CHAIRMAN NELSON: Any other questions or comments?

I'm not going to drag this out. It's going to be like an auction. We're going to go pretty fast.

Okay. I guess the closing comment I would make just to kind of let you know where this goes from here, by law we have six months to make our decision after the Application was filed. So this is going to move along pretty rapidly.

The Commission Staff that you see here that are a party to this Docket, they're the folks that are looking out for the public interest, and they will be ultimately making a recommendation to the Commission on whether, again, we should grant the permit, deny the permit, or grant it and add some specific conditions to it, assuming the project is built.

And so they will make that recommendation to us, and then at some point we will have a public meeting in the State Capitol where the three Commissioners will ultimately take a public vote on whether or not to grant

the permit or not and what conditions might be added.

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So that's kind of how this thing is going to play out. And I'd stress if you've got questions or concerns, talk to our Commission Staff because they're the ones that can dig deeper into that before this is finalized.

Commissioner Hanson points out a very good point. By state law we as Commissioners can't have one-on-one conversations with you about this Docket. The only conversations that we can have with you are in a public meeting, public setting like this where it's been transcribed. And so that's why we say if you've got some questions or comments that need to come to us, they need to go through our staff.

COMMISSIONER HANSON: Neither can we have discussions with the Applicant outside of an open meeting law. Chris and I cannot even speak to each other about this unless we're in an open meeting.

So just to give you an idea of what the ex parte law is like in South Dakota for us. So you need to have that conversation, like Commissioner Nelson says, with our staff.

Thank you.

CHAIRMAN NELSON: With that, I would like to thank each one of you for taking a little bit of time out

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tonight to learn a little bit more about what may be
 1
     happening in your community, asking your questions, and I
 2
     appreciate your involvement.
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              I appreciate you all with your presentation.
                                                               I
 5
     appreciate you folks coming to be backup tonight.
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              And with that, we will consider this adjourned.
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     Thank you.
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               (The hearing is adjourned at 7:27 p.m.)
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1	STATE OF SOUTH DAKOTA)
2	:SS CERTIFICATE
3	COUNTY OF SULLY)
4	
5	I, CHERI MCCOMSEY WITTLER, a Registered
6	Professional Reporter, Certified Realtime Reporter and
7	Notary Public in and for the State of South Dakota:
8	DO HEREBY CERTIFY that as the duly-appointed
9	shorthand reporter, I took in shorthand the proceedings
10	had in the above-entitled matter on the 9th day of July,
11	2015, and that the attached is a true and correct
12	transcription of the proceedings so taken.
13	Dated at Onida, South Dakota this 21st day of
14	July, 2015.
15	
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18	Cheri McComsey Wittler,
19	Notary Public and Registered Professional Reporter
20	Certified Realtime Reporter
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