

ARGONNE NATIONAL LABORATORY (ANL)

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WIND ENERGY DEVELOPMENT  
PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT  
BILLINGS, MONTANA  
PUBLIC SCOPING MEETING

+ + + + +

6:30 p.m.

Thursday,  
October 2, 2008

+ + + + +

Clubroom Meeting Room  
Quality Inn Homestead Park  
2036 Overland Avenue  
Billings, Montana

+ + + + +

JOHN HAYSE, ANL, Facilitator

ALSO PRESENT:

NICK STAS, Western Area Power Administration  
LLOYD JONES, U.S. Fish and Wildlife Service  
KARIN SINCLAIR, National Renewable Energy  
Laboratory

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1                   P R O C E E D I N G S

2                   MR. HAYSE:        Good evening to  
3 everybody. Welcome to the third of our public  
4 scoping meetings for the Upper Great Plains  
5 Region programmatic wind energy environmental  
6 impact statement.

7                   And anyway, I'm very pleased to see  
8 that we have as many people as we have  
9 tonight, considering that we're considering --  
10 that we're competing with the vice  
11 presidential debates and other things. I  
12 don't know if that's pulling away some of our  
13 audience that we hadn't planned on losing.  
14 But anyway, we will conduct our scoping  
15 meeting and collect input from everybody.

16                  My name is John Hayse. I'm an  
17 environmental scientist with Argonne National  
18 Laboratory, which is a Department of Energy  
19 laboratory. And the division that I'm in at  
20 Argonne, one of the primary things that we do  
21 is we prepare documentation for environmental  
22 compliance kind of activities, including

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1 environmental impact statements.

2 And Argonne is the DOE agency that  
3 has been contracted I guess is the best term  
4 to use, to prepare the environmental impact  
5 statement and conduct the analyses for the  
6 environmental impact statement that we're  
7 going to talk about tonight.

8 And we've been contracted to do  
9 that by Western Area Power Administration,  
10 which is, as you'll hear in a few moments, is  
11 a power administration under the Department of  
12 Energy, and also by the U.S. Fish and Wildlife  
13 Service's Division of Refuges.

14 So just a couple of housekeeping  
15 items before we get started. First, we do  
16 have coffee and water over there on the  
17 counter if somebody is interested in partaking  
18 in that. And then the second item is, if  
19 everybody would please check their cell phone  
20 and make sure that it is either on vibrate  
21 mode or turned off as a courtesy to the  
22 speakers and other members of the audience.

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1           Okay. We have several things that  
2 we're going to talk about before we open the  
3 floor for public comments on the environmental  
4 impact statement. We'll give a quick overview  
5 of the NEPA process and what a programmatic  
6 environmental impact statement is. We will  
7 have a short series of presentations from the  
8 two agencies that are preparing the  
9 environmental impact statement, Western Area  
10 Power Administration and the U.S. Fish and  
11 Wildlife Service, and also a short  
12 presentation from the National Renewable  
13 Energy Lab related to wind energy technology  
14 in general.

15           And then after that we will open  
16 the floor up for comments from you, and  
17 collect whatever information you would like to  
18 give us that's relevant to preparation of the  
19 environmental impact statement.

20           So, all right, just an overview of  
21 the NEPA process. Why is this EIS being  
22 prepared? NEPA requires that an EIS be

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1 prepared whenever a federal agency undertakes  
2 an action that has a potential for significant  
3 impacts on the environment.

4 And now Western Area Power  
5 Administration and the Service, the Fish and  
6 Wildlife Service, have determined that a  
7 programmatic environmental impact statement is  
8 appropriate for the actions that they're  
9 considering undertaking. And specifically  
10 that action is to evaluate establishing  
11 specific programs and policies related to wind  
12 energy development within the Upper Great  
13 Plains Region.

14 Now what is a programmatic EIS? A  
15 programmatic EIS is an environmental impact  
16 statement that is intended to evaluate the  
17 impacts associated with the development or  
18 implementation of broad agency actions, such  
19 as the development of programs or national  
20 policies.

21 Now one of the important things  
22 about a programmatic EIS is that it does not

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1 evaluate specific individual projects, under  
2 most situations anyway. Instead it considers  
3 the generic impacts of the actions that are  
4 being proposed, in this case wind energy  
5 development in connection to the energy grid,  
6 and potentially applicable measures for  
7 mitigating environmental impacts from that  
8 action.

9 So one of the first things that we  
10 should be clear about is what is the proposed  
11 action. And we have more information about  
12 this in the notice of intent, and in other  
13 sources of information that I'll provide in a  
14 few moments. But very briefly, the proposed  
15 action is to establish a comprehensive  
16 environmental program for evaluating proposed  
17 wind energy projects that would connect to  
18 Western's energy transmission grid, or that  
19 would be placed on Fish and Wildlife Service  
20 wetland or grassland easements within the  
21 Upper Great Plains Region. So we are talking  
22 about actions that would occur within a

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1 specific portion of the country, not  
2 nationwide in this case.

3 One of the important aspects of the  
4 proposed action is the intent is to identify  
5 mitigation strategies, standard construction  
6 practices, and best management practices that  
7 could be used to reduce potential  
8 environmental impacts associated with those  
9 wind energy development activities.

10 Now one of the things that would be  
11 accomplished during the process of preparing  
12 this programmatic environmental impact  
13 statement is we would -- is that Endangered  
14 Species Act Section 7 consultations would be  
15 conducted with a resulting programmatic  
16 biological opinion. Also programmatic  
17 National Historic Preservation Act  
18 consultation under Section 106 for cultural  
19 resource evaluations, and also government to  
20 government consultations with tribes within  
21 the region.

22 One of the important aspects of

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1 environmental impact statements is that  
2 alternatives to the proposed action need to  
3 also be considered. In this case there will  
4 be at least three alternatives that will be  
5 considered.

6 First, the proposed action itself,  
7 which I described a moment ago; a no action  
8 alternative, which would mean that the  
9 existing situation would continue to occur, it  
10 does not mean that nothing would happen, but  
11 it would mean that the proposed action, or  
12 some other alternative would not be  
13 implemented. So they would continue with the  
14 way things occur now, which is basically to  
15 evaluate wind energy proposals on an ad hoc  
16 basis. So as those proposals come in, each  
17 one is evaluated under the National  
18 Environmental Policy Act individually.

19 An alternative that's also being  
20 considered that may -- that will consist of  
21 Western's aspects of the proposed action, so  
22 connection to the transmission grid for the

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1 power, but would not allow further development  
2 of wind energy projects on Fish and Wildlife  
3 Service easements.

4 Now as part of the scoping process,  
5 of which this meeting is one part, there may  
6 also be a determination that there are other  
7 alternatives, programmatic alternatives, that  
8 should be considered. Okay. And that could  
9 be one or more alternatives in addition to the  
10 ones that I've identified.

11 What is scoping? Scoping is really  
12 an important phase of public involvement in an  
13 environmental impact statement. It's the part  
14 of the process where the agencies that are  
15 proposing to conduct some type of an action  
16 collect input from the public, from other  
17 federal agencies, and from other organizations  
18 about things such as the proposed action,  
19 which alternatives should be considered, as I  
20 mentioned a moment ago, what are the  
21 significant issues that should be analyzed in  
22 the environmental impact statement, what are

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1 possible mitigation measures to reduce  
2 environmental impacts from the actions that  
3 are proposed.

4 Perhaps people or organizations  
5 know about data that are relevant to the  
6 analyses that will be conducted and can  
7 identify what those sources of information are  
8 so that we can consider that when we do our  
9 analyses. And then other specific concerns  
10 may also be considered that -- concerns that  
11 are expressed by interested individuals,  
12 organizations, and so forth.

13 Now this is only one part of the  
14 public involvement opportunities relevant to  
15 this particular programmatic environmental  
16 impact statement. So we have this public  
17 scoping period, which began on September 11,  
18 and will run through November 10 of 2008.

19 After that period, we will use the  
20 information that we collect during scoping and  
21 we will go and prepare the draft environmental  
22 impact statement, which is expected to be

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1 ready probably in the fall or winter of 2009,  
2 and will become available to the public and  
3 other organizations for their review and they  
4 can supply comments on that draft  
5 environmental impact statement.

6 We will then consider those  
7 comments, additional information that may have  
8 come in, and we will prepare a final  
9 environmental impact statement after that.

10 Now once the comments and the review for the  
11 draft EIS have been collected, there will also  
12 be public hearings similar to this meeting on  
13 the draft environmental impact statement. The  
14 final EIS is expected to be completed probably  
15 during the summer of 2010.

16 An important source of information  
17 relevant to this project, to this programmatic  
18 environmental impact statement, is the project  
19 website. And you can see the URL address for  
20 that website on this slide. It's also  
21 available on the fact sheets that you gathered  
22 as you registered for the meeting.

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1           That site provides information  
2 about the EIS process in general, information  
3 about wind energy and wind energy resources  
4 and technologies. We will post documents that  
5 are relevant to the EIS as they are prepared  
6 or collected, and they will be available for  
7 download from that website. Updates about the  
8 project, information about the project's  
9 schedule will also be available there.

10           Some of the important aspects  
11 relevant to soliciting public comments are  
12 also available on that website, such as an  
13 online comment form. You can sign up for e-  
14 mail notifications so that you know when  
15 important things relevant to this EIS are  
16 going to happen, such as when the draft is  
17 released and that type of thing, when we have  
18 public hearings related to the draft EIS, and  
19 so forth.

20           And then finally you can also find  
21 contact information on that website if you're  
22 interested in contacting either of the

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1 agencies that are preparing the environmental  
2 impact statement about what's going on, or to  
3 express concerns, or provide comments.

4 So with that general background  
5 about the project, I'd like to introduce  
6 tonight's speakers, and we have three  
7 speakers. First, we have Nick Stas with  
8 Western Area Power Administration. He's with  
9 their Upper Great Plains Customer Service  
10 Region; Lloyd Jones with the U.S. Fish and  
11 Wildlife Service's Division of Refuges; and  
12 Karin Sinclair who is with the National  
13 Renewable Energy Laboratory's Wind Technology  
14 Center.

15 And with that I'd like to  
16 introduce -- or call Nick to come up to the  
17 podium and tell you something about Western  
18 Area Power Administration.

19 MR. STAS: Thanks, John.

20 And first of all, I'd like to  
21 recognize an appreciation for having our  
22 colleagues from the U.S. Fish and Wildlife

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1 Service as a joint lead. I think this will  
2 help us move forward and make a better  
3 decision with our program.

4 I would also like to recognize that  
5 Argonne National Lab, our colleagues within  
6 the Department of Energy, has extended  
7 experience in programmatic energy and  
8 specifically they did the programmatic wind  
9 EIS for all the Bureau of Land Management  
10 lands in the west. And so we're really happy  
11 to have those folks onboard. And the National  
12 Renewable Energy Lab, who's a real source of  
13 expertise on wind energy.

14 Before I start, I'd like to  
15 introduce some colleagues that are in the  
16 audience. We have Stan Gliko, who's the  
17 regional maintenance manager here with us.  
18 Stan's right back there. And Ed Weber is the  
19 manager of transmission planning, we have him  
20 here. When you came in you probably saw Dirk  
21 Shulund and Rod O'Sullivan, who's the  
22 environmental staff in the regional office.

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1 We have Mark Wieringa from the corporate  
2 services office, and Randy Wilkerson from our  
3 corporate communications office.

4 For folks that know us a lot, this  
5 is going to be a little bit of a review, but,  
6 again, as John mentioned, we appreciate  
7 everyone coming out. I want to set, first of  
8 all, the big picture on what Western is, what  
9 the Upper Great Plains Region is, and why we  
10 decided to move in this direction.

11 Western is in the Department of  
12 Energy. We wholesale electric power. We have  
13 457 long-term power customers that, when we  
14 started in 1977, we have a lot more than that  
15 now, which I'll get into. We're one of three  
16 power marketing administrations within the  
17 Department of Energy. And there's us,  
18 Bonneville Power and Southwestern Power.  
19 Bonneville Power in the Pacific Northwest,  
20 Southwestern Power out of Tulsa, Oklahoma, and  
21 Southeastern Power is smaller down out of  
22 Georgia.

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1                   These are the service territories.

2           John mentioned the Upper Great Plains  
3 Customer Service Region, is this area right  
4 here. And this area is defined by the  
5 legislation we operate under, it's the Pick-  
6 Sloan legislation. There's also our Rocky  
7 Mountain regional office, our desert southwest  
8 office, the Colorado River storage project  
9 customer service office out of Salt Lake, and  
10 the Sierra Nevada office, their headquarter's  
11 in Folsom.

12                   Okay. We market power from federal  
13 hydropower dams and these are, in our region,  
14 the main stem dams on the Missouri River run  
15 by the Corps of Engineers, as well as Canyon  
16 Ferry on the upper Missouri River, and  
17 Yellowtail Dam on the Big Horn. They're  
18 multi-purpose projects. The Pick-Sloan was  
19 dealing with providing irrigation and flood  
20 control, as well as navigation related to the  
21 Missouri River.

22                   Hydropower, of course, is affected

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1 by water supply. Western as a whole has  
2 17,000 miles of high-voltage transmission,  
3 about 7,000 of that is in the Upper Great  
4 Plains Region.

5 Our customers -- today 671  
6 customers, they're primarily cities and towns,  
7 municipalities, rural electric cooperatives,  
8 public power districts, federal and state  
9 agencies, and more recently we've made  
10 allocations to Native American tribes. These  
11 preference entities were originally defined  
12 under the Reclamation Project Act. Native  
13 Americans were ready to -- added on with an  
14 Energy Policy Act just not too many years ago.

15 How we're different. Well, we're  
16 funded -- we're still -- Congress still  
17 appropriates our funds, but most of the funds  
18 come from the sale of power, and they're cost-  
19 based rates. In other words, we collect only  
20 what it costs to operate the system, as well  
21 as to pay back the loans to the Treasury for  
22 the capital investment in the system. There's

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1 also some missions that are included in that,  
2 such aid to irrigation and a few other things.

3 But primarily our mission in life is try to  
4 keep the rates low as we deliver our power.

5 And this last one's somewhat  
6 important. We comply with the FERC rulings.  
7 The FERC, particularly the open access orders,  
8 FERC 888 and 889, DOE policy tells us that we  
9 comply with this.

10 Our role in providing energy: We  
11 market the hydropower, transmit it to our  
12 customers, control a good part of the energy  
13 grid in the Upper Great Plains. Our dispatch  
14 center is in Watertown, South Dakota. We  
15 manage the interties with the other power  
16 grids, or power systems, and provide open  
17 access to transmission.

18 This open access part, on Western's  
19 website, which I'll give you later, it's just  
20 [www.wapa.gov](http://www.wapa.gov), if you go in the transmission  
21 section, it lays out the procedures for  
22 applying to get on our grid. This includes

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1 wind projects or any other projects, and  
2 included in that is the necessary  
3 environmental review that we have as a federal  
4 agency.

5 And, again, the power grid, power  
6 from our projects at federal hydropower dams,  
7 and renewable energy we have up here -- that's  
8 what this EIS is about -- fossil energy, the  
9 power -- we don't -- we're not building new  
10 power in Western. The load-growth  
11 responsibility in our part of the world falls  
12 largely to our colleagues at Basin Electric or  
13 other groups that generate for our  
14 cooperatives, and the grid is actually  
15 composed of multiple owners.

16 And the wholesale power gets  
17 transmitted through the high-voltage  
18 transmission, down to the distribution  
19 utilities. When I say the distribution  
20 utilities, these are the people you get your  
21 bill from, either your co-op or whoever  
22 provides your service. And then the final

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1 end-users are homes, businesses, commercial.

2 Okay. Western and wind energy:  
3 One of the reasons we're embarking on this,  
4 we've had an increasing number of  
5 interconnection requests for wind energy  
6 projects. Although primarily independent wind  
7 project developers, we're seeing other  
8 involvement by utilities and others. But we  
9 currently address these requests under the  
10 National Environmental Policy Act one at a  
11 time as they are received separately. And  
12 there's separate NEPA analysis conducted for  
13 each interconnection request.

14 Some of the goals of this proposed  
15 wind energy program is to streamline the  
16 processing of the interconnection requests,  
17 and compliment Western's open access  
18 transmission tariff, which has procedures for  
19 adjusting wind energy interconnection  
20 requests, and trying to keep up with the  
21 volume, as well as the number and getting the  
22 benefit of having a program that can cover the

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1 big picture issues, and then analyze the site-  
2 specific issues and tier off the programmatic,  
3 which NEPA allows.

4 Now one thing I should really  
5 mention about the National Environmental  
6 Policy Act, the primary purpose is for federal  
7 government to make better decisions. And, of  
8 course, the section that requires the  
9 preparation of the impact statement compiles  
10 information for the decision maker. It  
11 includes environmental information,  
12 sociological information related to jobs,  
13 other issues, and it helps the decision maker  
14 make the best possible decision.

15 And also to comply with the policy  
16 directives in the Section 101 of NEPA, which  
17 were goals that were set. The focus has been  
18 on the environmental impact statement because  
19 that's most frequently the thing that get  
20 elevated in courts when someone wants to file  
21 a lawsuit. But the primary purpose is to make  
22 a better decision, to use the information and

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1 make a better decision.

2           And then as we go on to other  
3 objectives, is to identify and address the  
4 generic environmental concerns, and John  
5 talked to that; try to develop some mitigation  
6 measures that would be feasible and reasonable  
7 and have been tested for the efficacy;  
8 implement an adaptative management approach  
9 that requires implementation, monitoring, and  
10 reporting.

11           And that's a term of art that deals  
12 with, we're going to keep learning as we go  
13 along. There's unknowns about some of the  
14 things in wind energy, and we identify them  
15 and get smarter on how to do them better, we  
16 incorporate that back into a feedback loop  
17 and -- as our program keeps going forward.

18           We're going to have programmatic  
19 consultation for threatened and endangered  
20 species and cultural resources, and consult  
21 with the tribes, of course. And provides  
22 easy-to-use guide, or information useable for

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1 those that are going to have interconnection  
2 projects.

3 And the information will include  
4 areas where, if you locate that is likely to  
5 be significant impact, so if it's breeding  
6 grounds for the whooping crane or something,  
7 you know you're going to have a real big --  
8 you're going to have a significant issue right  
9 there that may elevate it and you can't tier  
10 from it. But we hope to have this information  
11 all up front and on the table as much as  
12 practicable.

13 As I mentioned earlier, more  
14 information about Western can be found at  
15 [www.wapa.gov](http://www.wapa.gov), and I wanted to also mention  
16 that there's more information about NEPA on  
17 CEQ's web address, and it's [nepa.gov](http://nepa.gov). It  
18 talks about how citizens can get involved and  
19 provide input to developing the scope of EIS,  
20 which we're doing today, or comment on the  
21 document later on in the process.

22 Any questions on any of the

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1 information that I put forward?

2 (No response.)

3 MR. STAS: If not, I'll introduce  
4 my colleague, Lloyd Jones, from Fish and  
5 Wildlife Service.

6 MR. HAYSE: Let's make a little  
7 adjustment here. Okay.

8 (Pause.)

9 MR. JONES: Thanks, Nick.

10 My name is Lloyd Jones. I'm with  
11 the Division of Refuges in Bismarck, so it's  
12 nice to be in Billings. It'd be nicer to be  
13 outside in Billings, but I guess that's the  
14 challenge we have to face to deal with this.

15 One of the things the Fish and  
16 Wildlife Service feels real fortunate about is  
17 being able to partner with Western to do this  
18 EIS. We're an agency primarily made up of  
19 biologists, so to be able to call on expertise  
20 and experience that Western has it really  
21 feels like a unique opportunity for us. So  
22 we're really glad to have that.

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1           A couple of other refuge division  
2 folks are here with Fish and Wildlife Service.

3           I'd like to introduce Danielle Kepford. She  
4 is with a realty program up in Lewistown. The  
5 person sitting next to her is Shawn Bayless.  
6 Shawn is our Division of Refuges in Bismarck.

7           And so we have a couple of folks here also  
8 that can, if there are any questions, help me  
9 answer them.

10           As Nick did, I can give you a  
11 little background on Western. I'll quickly  
12 try to give you a little bit of background  
13 about the Fish and Wildlife Service and why  
14 we're interested in this programmatic EIS.  
15 The Fish and Wildlife Service does have a  
16 couple of different divisions. As I  
17 mentioned, this is a Division of Refuges  
18 initiative, and I'll hopefully be able to  
19 clarify why that is.

20           I'm always asked to make sure I  
21 point out what the mission of the Fish and  
22 Wildlife Service is. Don't worry about all

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1 those words. Other than that, in terms of the  
2 Fish and Wildlife Service, we manage wildlife  
3 habitats for the continuing benefit of  
4 American people. And I mentioned, this is a  
5 refuge system initiative. We manage those  
6 lands and waters for present and future  
7 generations of Americans.

8 We're always accused of being, All  
9 you guys care about is ducks and that's all  
10 you do is ducks. But we do a lot with ducks,  
11 but we manage ducks for people and the future  
12 generations. So that's the mission of the  
13 Fish and Wildlife Service, so nobody can  
14 report me as to not making sure I exposed you  
15 to that.

16 The Prairie Pothole Region is one  
17 area of the United States that the Fish and  
18 Wildlife Service is very interested in to be  
19 able to fulfill that mission of managing  
20 wildlife, especially migratory birds. It's a  
21 very important area. In fact, it's the most  
22 productive migratory bird breeding habitat in

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1 North America.

2           And it's not just wetlands, it's  
3 also grasslands, and it's the interaction  
4 between the two. Wetlands biologically, well,  
5 I'll say attract a lot of migratory birds, but  
6 a lot of those migratory birds nest in the  
7 upland grassland areas. So it's the  
8 combination of the wetlands and grasslands  
9 that are so important to migratory birds in  
10 North America.

11           The problem, or challenge for the  
12 Fish and Wildlife Service to be successful is  
13 that a lot of grass is being converted to crop  
14 land. Has been for decades, but also  
15 continues very rapidly today to be converted  
16 to crop land, especially in the last couple of  
17 years when crop prices have elevated rapidly.

18           There continues to be a lot of grasslands  
19 converted.

20           In the Prairie Pothole Region about  
21 75 percent of the grasslands that once existed  
22 have been plowed up and put into grass. So

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1 there is some remaining, but not a lot. Same  
2 with wetlands. A lot of wetlands have been  
3 drained over the decades. Again, about 75  
4 percent of the wetlands in the Prairie Pothole  
5 Region have been converted to other crop land  
6 uses.

7 So in order for the Fish and  
8 Wildlife to be successful with out mission as  
9 directed by Congress, we have to recognize  
10 those challenges. And we needed to come up  
11 with a strategy. What are we going to do,  
12 what is it that we want to accomplish in the  
13 Prairie Pothole Region?

14 And we came up with an objective of  
15 trying to sustain 93 percent of the  
16 productivity. Leave it to the government to  
17 come up with 93 and not 90 or not 95, or  
18 whatever. But the reason I'll show you here  
19 in a second, or in a few couple of slides,  
20 but -- and that's just to sustain the current  
21 productivity. That's not to grow it, or let  
22 it slip away. It's to sustain what we have

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1 out there now. We're going to need to protect  
2 about 90 percent of the wetlands and  
3 grasslands that are left.

4 What does that mean when you break  
5 that down to acreages? It's 1.4 million of  
6 additional wetland acres and it's an  
7 additional 10.4 million acres of grasslands.  
8 That's what we will have to protect in order  
9 to be successful in meeting that 93 percent  
10 sustainability of the migratory birds.

11 How do we do that? We basically  
12 have two different programs. The first is a  
13 conservation wetland easement program, and  
14 what that does is it protects wetlands from  
15 being drained, burned, or filled. That's --  
16 it's a very simple easement, it's a very  
17 limited right easement.

18 The land remains in private  
19 ownership. The easement continues if there's  
20 a change in ownership, if the neighbor buys  
21 the land, the easement stays with the land.  
22 It's similar to a lot of other easements on

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1 the landscape in that manner.

2 But all other uses of that  
3 easement, down here we talk about farming,  
4 haying, hunting, all those things are retained  
5 by the land owner. If the wetlands are dry  
6 due to natural causes, the land owner can go  
7 out and plow up those wetlands and farm them.

8 Naturally, if it's dry enough to hay, in a  
9 lot of the prairies it turns out to be an  
10 excellent hay source. And that's fine with  
11 the easement. You just can't drain, burn or  
12 fill the wetlands. That's the only thing that  
13 the wetland easement program protects.

14 And similar to the grassland  
15 easement program, it just protects the  
16 grasslands from being converted to other uses.

17 We often refer to our grassland easement  
18 program as, It just keeps it green side up.  
19 It can be grazed at any time, it can be hayed  
20 after July 15, and when I mentioned earlier  
21 about a lot of birds nest in the upland areas,  
22 that's why that haying after July 15 is in

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1 there. We want to protect a lot of the birds  
2 that are nesting in the grassland area.

3 Similar to the wetland easement,  
4 the land remains in private ownership. If it  
5 changes hands, and it continues with the land,  
6 it's a perpetual easement. All of the uses of  
7 the grasslands are allowed, for example,  
8 hunting or other forms of recreation. Again,  
9 a very limited use grassland easement program.

10 This program actually started back  
11 in the 1980s. In fact, there happens to be a  
12 retired Fish and Wildlife Service person here  
13 that lives in Billings that was real  
14 instrumental, Ralph Fries, in actually  
15 starting the grassland easement program, and  
16 he happens to be with us tonight. We're  
17 really -- it's really fortunate to have him  
18 here, because he's the one that was  
19 instrumental in starting that program.

20 If you look at from the air, this  
21 is what a typical wetland/grassland -- this is  
22 a section of land, all that you see that -- is

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1 these round areas are wet, the areas around  
2 the wet are grass. We would work with that  
3 landowner, it's a willing selling thing, he  
4 say, Yeah, I'm interested in selling you both  
5 the wetland and grassland easement. So that's  
6 what it would look like from a bird's eye view  
7 above, and obviously very attractive for  
8 nesting and production purposes.

9 Here's a slide of where we're at  
10 today. We're in Montana, so we're obviously  
11 interested with that. We have about 33,000  
12 acres of wetlands that are protected, and we  
13 have about 150,000 acres of grassland that  
14 have been protected. You can see in North and  
15 South Dakota those figures are much higher,  
16 1.2 million acres combines in North  
17 Dakota/South Dakota. But overall, the program  
18 in that Prairie Pothole Region that I showed  
19 you earlier is about 2.7 million acres of  
20 either wetland or grassland that's been  
21 protected.

22 And remember, we have interest in a

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1 goal to protect a lot more, 1.4 million acres  
2 more of wet and 10.4 more of grass. We've got  
3 a long ways to go, but we've made a lot of  
4 success. The easement program has turned out  
5 to be one of the most successful landscape-  
6 based programs in North America. So it is a  
7 very unique and very special program.

8 When you look at the distribution  
9 of wetlands and the grassland easements,  
10 here's where they are. Most of them, as you  
11 saw, by number are in North Dakota and in  
12 South Dakota. But the Prairie Pothole Region  
13 does extend into Montana all the way out west,  
14 and you can see some of the scattered areas  
15 where the wetland and grassland easement  
16 exists. But there's a lot more wetlands and  
17 grasslands that have been protected in North  
18 and South Dakota.

19 Now, the challenges we face. Wind  
20 development is expanding rapidly. You're  
21 going to hear a little bit more about that  
22 with Karin, who's going to be up next. And

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1 it's difficult because we have such a large  
2 foot print to totally avoid easements. There  
3 is an overlap with wetland and where we want  
4 to protect easements, so we need the ability  
5 to acquire new easements. So that's a  
6 challenge.

7 And then understanding the  
8 interaction of wind and wildlife. We have --  
9 you're going to see in a minute we have worked  
10 with wind companies, and we are allowing wind  
11 development to occur in some situations, but  
12 we need to better understand what that  
13 interaction is. And then the last one, what  
14 is the right mix of wildlife, wind and  
15 easements.

16 Requested uses. People may feel or  
17 think that, well, how come wind is getting so  
18 much attention right now. But the Fish and  
19 Wildlife Service over the years has dealt with  
20 a lot of requested uses. There are rural  
21 water boards that are trying to bury water  
22 lines, there are road company -- or township,

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1 state and federal road projects. And wind  
2 development is just another requested use  
3 that's occurring that may affect easements.

4 So this isn't anything new for the  
5 Fish and Wildlife Service. We've dealt with  
6 these things before. We have a set criteria  
7 we use to analyze those uses, and we have some  
8 internal requirements we have to meet in terms  
9 of NEPA, which we're talking about tonight,  
10 and also Nick mentioned the National Historic  
11 Preservation Act and other Fish and Wildlife  
12 Service policies.

13 Our general guidance on how we deal  
14 with all those requested activities up here  
15 are general guidances, we will reasonably  
16 accommodate those uses. And one of the things  
17 we're trying to look in more detail at is the  
18 issue of wind.

19 Current status, what have done?  
20 John mentioned that in terms of what the  
21 alternatives that will be looked at. We have  
22 authorized three projects on grassland

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1 easements for a total of 25 towers. This is  
2 just some administrative government talk.  
3 We've done two of them with a right-of-way  
4 permit, and one with an exchange with a  
5 reversionary clause.

6 We are working currently -- and  
7 you'll hear a little bit more about that from  
8 Karin in a minute -- but we are working  
9 currently in the refuge system with about 40  
10 projects that may affect wetland or grassland  
11 easements in some form.

12 All right. The future status.  
13 This is the key of tonight. What we hope to  
14 accomplish with the help of the public and  
15 people's input, and expertise and experience.

16 We need to better understand the impacts,  
17 especially this cumulative impact issue here  
18 about all the projects that may occur with  
19 grassland and wetland easements in the future,  
20 rather than doing it on just a project by  
21 project basis.

22 Nick talked about how there are

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1 benefits to looking at it more holistically.  
2 We want to look at it, research and review,  
3 and then also identify possibly research needs  
4 that we need to look at more closely.

5 A lot of interest from the wind  
6 development folks that we streamline the  
7 environmental compliance. It's very  
8 burdensome to try to do NEPA on each of 40  
9 different projects. That would be a major  
10 undertaking for us, as well as them.

11 And then, of course, we hope to be  
12 able to, through this process, provide  
13 guidance, recommendations to wind companies.  
14 Is there some things that we can recommend to  
15 minimize or reduce impacts with wind and  
16 wetland or grassland easements.

17 And I always put a slide in at the  
18 end so I know when to stop talking. But as  
19 Nick did, if anybody has any questions  
20 specific to the Fish and Wildlife Service, or  
21 this particular program, I'd certainly try to  
22 answer them.

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1 (No response.)

2 MR. JONES: I did that good a job.  
3 Karin?

4 MR. GERLACH: I have just one quick  
5 question. Why is --

6 MR. HAYSE: If you'll hold on just  
7 a second, we're going to get a microphone,  
8 because we're trying to capture all your  
9 questions and comments. If you would please  
10 state your name and affiliation, if you have  
11 one then, I'd appreciate it. Thank you.

12 MR. GERLACH: Thank you. Andy  
13 Gerlach -- hi -- Grasslands Renewable Energy.

14 I just -- why such a small  
15 percentage of easements in Montana versus  
16 North and South Dakota?

17 MR. JONES: Partially I think  
18 because the risk was -- partial because the  
19 risk was higher with the loss of wetlands and  
20 grasslands. So the program that -- it  
21 actually started in 1958 with authorization  
22 from Congress. And the thrust to do that was

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1 there such a rapid conversation of wetlands  
2 and grassland that were occurring. So there  
3 was an immediate thrust to try to do that and  
4 address the issue where the largest threat, or  
5 conversion, was occurring.

6 Danielle, do you remember when the  
7 program became active in Montana? I'm not  
8 even sure.

9 MS. KEPFORD: Mostly it was in the  
10 '70s is when most of our --

11 MR. JONES: And the program in  
12 North and South Dakota started in early '60s.

13 And we had -- Congress actually gave us an  
14 accelerated loan to actually ramp up further.

15 And I don't know --

16 Ralph, can you tell me when the  
17 accelerated loan came to the small wetlands  
18 program?

19 MR. FRIES: '62 I suppose initially  
20 in the Dakotas, '62.

21 MR. JONES: And that was like a  
22 \$205 million advance loan. I should -- that's

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1 going to sound a little confusing so I'll back  
2 up and say the funding for the wetland and  
3 grassland easements actually comes from the  
4 sale of the federal duck stamps, which is  
5 required of anybody 16 years or older that  
6 water fowl hunts.

7 But because just the sale of stamps  
8 wasn't keeping up with the threat that was  
9 occurring to wetlands and grasslands,  
10 Congress, in '62 then, passed the Accelerated  
11 Wetlands Loan Act and actually provided a \$205  
12 million loan because of that concern of so  
13 many wetlands and grassland being converted.

14 So I think that's probably why it  
15 didn't occur then into the '70s. The  
16 conversion risk wasn't quite as high in  
17 Montana as it was then.

18 MR. GERLACH: That's enough.

19 MR. JONES: That's enough?

20 MR. GERLACH: Thank you.

21 MR. JONES: You bet.

22 MS. SINCLAIR: Okay. So I was

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1 asked to give a presentation on wind  
2 technology. It's a very general presentation  
3 and covers quite a few topics in just a few  
4 minutes.

5 This is a picture of the wind site,  
6 the National Wind Technology Research site,  
7 which is just south of Boulder, Colorado.

8 So I'm going to cover a little bit  
9 about the technology, about the capacity, what  
10 a project configuration might look like,  
11 transmission operational issues, benefits from  
12 wind, and the environmental issues.

13 This is a graphical presentation of  
14 the change in wind turbine technology over  
15 time, since the early years in the '80s. On  
16 the far left is what a state of the art large  
17 wind turbine look like. They're about 100  
18 kilowatts in size. And in 2007 the average  
19 turbine that was installed was 2.2 megawatts,  
20 so 22 times the size.

21 The land-based turbine, the actual  
22 cap on the size of what those turbines will be

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1 is kind of uncertain right now due to  
2 transportation and other issues that are still  
3 being worked out. But the offshore turbines  
4 will probably be considerably larger, just  
5 because it's easier to move those pieces of  
6 equipment around out in the ocean.

7 And overlaid on this graph is a  
8 little bit of a history of some of the  
9 national research meetings that we've held  
10 during this time frame to address avian, and  
11 now bat, related issues. And I'll talk about  
12 those at the end of the presentation.

13 So very simply, how does a wind  
14 turbine work? The wind turns the turbine's  
15 blades, spins a shaft that's connected to the  
16 generator, and that makes electricity. And if  
17 you combine a number of wind turbines  
18 together, we call that a wind plant, or a wind  
19 project, or a wind farm. And that energy is  
20 then fed into the electric transmission  
21 system.

22 So this is turbine, 2.5 -- a

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1 prototype for -- that's being developed for  
2 low wind speed wind regimes; the Upper Great  
3 Plains is a higher wind regime. But if you  
4 look at the map that's on the wall over there,  
5 you'll see a lot of the U.S. doesn't have the  
6 same types of winds that you have up here. So  
7 this is technology that's being developed for  
8 other parts of the country, but it can also be  
9 used here.

10 So where's the capacity installed?

11 Worldwide there's about 90,000 megawatts that  
12 have been installed to date, and the Europeans  
13 represent the majority of that, over 55,000  
14 megawatts. The U.S., as of January '08, we  
15 had about 17,000 megawatts, and just last  
16 month we hit the 20,000 megawatt threshold.  
17 And that represents 1.5 percent of our  
18 electricity needs in the United States.

19 And the rest of world contributes about the  
20 same amount as North America. And you can see  
21 that the European community is going to  
22 continue to contribute significantly to wind

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1 capacity installed.

2 The maps are on the wall over  
3 there, and you see where the wind is. And if  
4 you look at where the capacity installed,  
5 there's a little bit of a disconnect. The  
6 Upper Great Plains has a tremendous  
7 opportunity to contribute to wind, but to  
8 date, this is as of April of this year, very  
9 small capacity has been installed in North  
10 Dakota, South Dakota and Montana.

11 And in the -- in 2005 the state of  
12 the union, the president's state of union  
13 suggested that we could probably contribute 20  
14 percent of our electric -- or meet 20 percent  
15 of our electricity needs by the year 2030 from  
16 wind. And so subsequent to that an analysis  
17 was done, funded by the Department of Energy,  
18 that wanted to explore that.

19 And it turns out that, in fact,  
20 that can be done. There really aren't any  
21 significant technological barriers. There's  
22 some other barriers, like transmission, but

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1 from a technical perspective it can be done.  
2 So the next series of slides that I have will  
3 show you how the various states will need to  
4 contribute to meet that goal of 20 percent by  
5 2030.

6 So this is what the mix of where  
7 wind would be installed in 2012. And the  
8 little box in the middle of each state  
9 represents approximately how much land would  
10 be needed in order to support that capacity.  
11 So here's how it'd look in 2018, 2024, and  
12 finally 2030.

13 And I know I went through that  
14 fast, but basically offshore contributions  
15 really start to ramp up towards the end of  
16 this time series. Right now there's nothing  
17 installed offshore, but the Europeans are  
18 working on that, so we can learn a lot from  
19 them. And there's also the Great Lakes and --  
20 I mean -- yes, and the Gulf.

21 So what does a project look like  
22 today? Typically a turbine is a three-bladed

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1 upwind, and as I said, the average size was  
2 2.2 megawatts. The workhorse has been the 1.5  
3 megawatt-sized turbine, but it's rapidly  
4 moving up in size, and I think 2.5 is going to  
5 be the lead very quickly.

6           These turbines can be installed on  
7 towers of varying sizes ranging from 80 meters  
8 to 150 meters, and that really depends on the  
9 location of the project, the wind regimes, and  
10 other parameters.

11           Generally speaking, what does a  
12 project look like? It varies, depending on a  
13 number of factors, including the wind regime,  
14 the size of the turbine, but generally  
15 speaking you would space the turbines about  
16 two to three rotor diameters apart and then  
17 the rows about 10 rotor diameters apart to  
18 eliminate the turbulence issues that might be  
19 created from the turbines.

20           And power generation is another  
21 question people are frequently interested in.

22           So this is also dependent on a number of

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1 factors, including the size of turbine,  
2 capacity factor, wind regime. But one way to  
3 think about it is, if you assume an average  
4 wind regime, which is a class 3 or 4 today,  
5 and an average household consumption, which is  
6 a little under 900 kilowatt hours a month, a  
7 one megawatt wind turbine would provide the  
8 electricity needs of 225 to 300 households.

9 So what does a developer need to  
10 consider when putting in a wind farm? Well,  
11 first and foremost is going to be the wind  
12 energy. They need to make money, and that's  
13 going to be directly a function of the energy  
14 output of their wind farm, which is related to  
15 the wind speed, and it's wind speed cubed,  
16 that's important.

17 So that's one of the reasons that  
18 the wind turbines are getting much taller, to  
19 capture greater wind. And also why the Upper  
20 Great Plains and other states that have a lot  
21 of wind are really being sought after right  
22 now for projects. Transmission access is

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1 really a constraint right now for meeting that  
2 20 percent by 2030.

3 The other thing that the developer  
4 would need to do is find an outlet for their  
5 power, and that's typically through a power  
6 purchase agreement with the utility. They  
7 also need, of course, to line up their leases  
8 with the land owners so that they can get the  
9 land for the project.

10 And they'll need to get their  
11 permits, which will also include wildlife --  
12 you know, making sure that there's minimal  
13 wildlife impacts, and also dealing with local  
14 community concerns for the project.

15 Then they'll need to find the  
16 turbines at a competitive price. Because of  
17 certain policies protection tax credit, which  
18 provides economic benefit to the project, that  
19 is going to expire at the end of '08, and it  
20 was only for a two-year period. So basically  
21 all the turbines for 2007 to 2008 were bought  
22 up in early '07 and funding wind turbines is a

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1 problem right now for developers. And they  
2 will also need to secure their financing for  
3 the project.

4 In terms of transmission, what we  
5 heard is that WAPA will be following the FERC,  
6 the Federal Energy Regulatory Commission  
7 requirements. And transmission's constrained;  
8 we've talked about that. Intermittency is an  
9 issue that some people talk about. It can be  
10 fairly manageable, depending on the resource  
11 mix of the utility.

12 This example here, Lamar in  
13 Colorado, the utilities excel and because of  
14 the mix, they don't need to have any  
15 additional spinning reserve or back up for  
16 this project. And WAPA still needs to work  
17 out some issues with adding wind to their mix.

18 But it's doable.

19 And operationally, gear box  
20 reliability has been a concern. Turbines are  
21 supposed to last 20-30 years, but gear boxes  
22 have been failing much earlier than expected.

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1       So there's a collaborative right now working  
2       on that issue.       And blade failures were  
3       something that was seen in some of the earlier  
4       projects that really had to do with  
5       manufacturers not doing it quite right. But I  
6       think they've worked through most of those  
7       issues now.

8                       And what are some of the benefits?

9       There was a handout on the table when you  
10      checked in.       Some of the 10 top reasons why  
11      wind -- or benefits of wind, one is that it is  
12      economically competitive.       And it provides a  
13      cash crop for farmers and ranchers, which can  
14      really help them save, you know, save the  
15      farm, so to speak.

16                      It doesn't use water, which is  
17      constraining resource in some parts of the  
18      country.       National security attribute is that  
19      it's indigenous.       You don't have to buy it,  
20      it's here.       And it's inexhaustible, and has no  
21      emissions.       And the fuel is free, so you're --  
22      once you have your wind project and you're not

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1 going to be subjected to the volatility of  
2 fossil fuel prices.

3 And there's a number of  
4 applications that wind can be used, and we're  
5 talking about large commercial wind farms  
6 here, but turbines come in a variety of sizes  
7 and so there's a number of applications that  
8 it can work in.

9 And lastly, from the environmental  
10 issues, the topics that we typically talk  
11 about are acoustics, aesthetics, and wildlife.

12 Acoustics is really a concern in the European  
13 community because the turbines are much closer  
14 to where the people live. So there have been  
15 a number of standards that have been developed  
16 within the environmental -- within the  
17 international community, and the U.S. has  
18 participated in developing those standards.

19 The manufacturers sell their  
20 product worldwide, so the turbines that  
21 they're developing to meet the really stricter  
22 European needs are also sold here. So

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1 acoustically the issues are pretty well  
2 resolved.

3           From an aesthetics perspective,  
4 beauty's in the eye of the beholder. If you  
5 don't like them, you don't like them. But one  
6 of the things that we've heard years ago was  
7 that wind farms or wind turbines would reduce  
8 property values. There have been a number of  
9 studies that have been -- that have showed  
10 that that's actually not the case. And in  
11 some areas, wind farms have actually created a  
12 tourism opportunity. So that's really  
13 something that's just subjective.

14           And then from a wildlife  
15 perspective, what we typically talk about are  
16 birds, bats, and habitats impacts. The bird  
17 issue began with the early development of wind  
18 turbines out in California, in Altamont, and  
19 was really focused on raptors.

20           We've done a lot of work, had a lot  
21 of research done over 10 plus years, and  
22 there's a pretty good understanding of how to

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1 assess a site before construction so that you  
2 can avoid, minimize, or mitigate for any  
3 impacts that might occur. And basically it  
4 comes down to micrositing, where you place the  
5 turbines within the landscape of your proposed  
6 wind farm. And you need to understand the  
7 dynamics and characteristics of your wind  
8 site.

9 For bats, that's a more emerging  
10 issue. In 2003-2004 bat carcasses were found  
11 at a couple of sites in West Virginia and  
12 Pennsylvania, and have subsequently been found  
13 in Canada and Germany. So it's not really a  
14 site specific issue as much as the raptors  
15 were.

16 However, because of the experiences  
17 with trying to assess and deal with the bird  
18 impacts in the early years, we learned a lot  
19 and we very quickly formed a collaborative to  
20 address the bat issue. And there is some very  
21 significant research going on right now  
22 looking at deterrents, trying to understand

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1 why bats are colliding, and trying to  
2 understand what might be attracting bats to  
3 wind sites.

4 And finally, habitat is one of the  
5 things we're doing on a more proactive basis,  
6 looking at greater prairie chickens and lesser  
7 prairie chickens in tall grass prairie lands.

8 And we're looking at greater prairie chickens  
9 in Kansas right now, for example, doing a  
10 demographic study as well as a genetic  
11 dispersal study to figure out whether wind  
12 farms, once they're built, will impact this  
13 particular species.

14 So basically what's happened over  
15 the last 10 or 15 years is that we have moved  
16 in the direction of understanding that working  
17 collaboratively with the various stakeholders  
18 and getting out there as quickly ahead of any  
19 issue, or as soon as an issue comes up, it's  
20 moved us further along faster.

21 And then I just wanted to point out  
22 that there are a number of resources that are

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1 out there, both to help us look at both the  
2 metrics and methods that might be used for  
3 assessing bird -- diurnal bird activities at  
4 potential wind farms, as well as nocturnal  
5 species, including bats and night flying  
6 birds.

7 And then there's also a permitting  
8 document that's been published that helps lay  
9 out some of the issues that one needs to  
10 understand to move forward with the permitting  
11 process of a wind farm.

12 And that's all I have tonight. So  
13 if there are any questions, I'll try to answer  
14 them.

15 MR. MELTON: Yes, I'm Jim Melton.  
16 I'm an environmental consultant out of Helena.

17 I just wanted to ask about the  
18 socioeconomic aspect of environmental issues.

19 I know that the ones you had listed there are  
20 principally natural resource issues, but I  
21 would think that there is a lot of social and  
22 economic benefits to wind energy, possibly

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1 effect on prices of land.

2           You know, I don't know, incentives  
3 for private land owners in terms of -- I don't  
4 know how they -- if companies generally buy  
5 the land that they want to put their wind  
6 turbines on, or if there's opportunity for  
7 land owners to work out a lease deal with  
8 them. Certainly the impacts on water fowl or  
9 hunting as opposed to not having that, and  
10 impacts on just the added energy and cost of  
11 that energy.

12           And those are things that I would  
13 think might be important, the social and  
14 economic aspects of it, and I was just  
15 wondering if you guys have found any real  
16 interesting data in that area.

17           MS. SINCLAIR:           Yes, that's  
18 obviously a really important question for some  
19 of our states that are more depressed where  
20 there is wind. And there's this huge overlay.

21           And we've got a model that we developed over  
22 the last four or five years, it's called, for

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1 lack of a better term, JEDI, and it's jobs and  
2 economic development impact.

3           And it doesn't address all of the  
4 issues that you just talked about, but it will  
5 help you understand the more detailed  
6 information you have on a specific project,  
7 the better the model results will be. But  
8 there's a -- it's all defaulted assumptions,  
9 and then you can go in and change it all and  
10 you will see your direct, indirect, and  
11 induced benefits of a wind farm.

12           Leasing is typically the way that  
13 developers do this, and that allows the  
14 rancher, farmer, whatever, to use the rest of  
15 the land. And approximately 4 percent of the  
16 land is taken out of whatever activity they  
17 were using it for the wind farm, but then the  
18 rest of it is there to do the other activities  
19 that they normally do. I think the EIS is  
20 going to address the other issues, the  
21 cultural issues, et cetera, but maybe --  
22 that's not what we do, so.

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1           MR. STAS: I'd just like to add one  
2 point that there's some -- we know that there  
3 is a company in Grand Forks manufacturing wind  
4 turbine components, so they're seeing an  
5 additional number of jobs in that particular  
6 town manufacturing the wind turbine  
7 components. So that's just one little bit of  
8 information we have.

9           MS. SINCLAIR: Yes, and the JEDI  
10 model will give you an idea of how many jobs  
11 would be created during construction, jobs  
12 will be created for the long-term operations,  
13 and then those that are related directly to  
14 the project, indirectly, and then induced. So  
15 it's the full-breadth. And I've run a number  
16 of analyses using that model and there's no  
17 losers. It doesn't matter what size project  
18 it is, it comes out positive.

19                   Any other questions?

20                   (No response.)

21           MR. HAYSE: Okay. What I'd like to  
22 do now is to move more into the scoping

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1 comments phase of this meeting, now that we've  
2 had some short presentations, to give you a  
3 little more background about what the  
4 programmatic environmental impact statement is  
5 intended to look at, and what the interests of  
6 the two agencies, the Fish and Wildlife  
7 Service and Western Area Power Administration,  
8 are related to wind energy development.

9 So as far as how to provide scoping  
10 comments, I want to be clear that there are a  
11 number of different ways. The three primary  
12 ways of providing those comments would be to  
13 make an oral comment at this particular  
14 meeting. You can also comment via the project  
15 website, and I've given the address here for  
16 that website, and there's an online comment  
17 form that can be used to supply comments  
18 directly related to scoping for this  
19 programmatic environmental impact statement.  
20 And finally, you can also supply comments via  
21 normal mail.

22 And as you registered, there was a

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1 comment form that was supplied to you I  
2 believe, and if you were to look at that form,  
3 you would see there's a place that you can  
4 write in comments, and if you fold it, you can  
5 add a stamp and it's already got an address  
6 and everything on the other side of it, but  
7 you can mail that directly in.

8 But we'll also accept written  
9 comments in other formats if you'd like to  
10 send that to us, including sources of  
11 information and that type of thing, you know,  
12 perhaps telling us where there were certain  
13 types of data that may be valuable to us for  
14 conducting analyses and so forth.

15 An important point to keep in mind  
16 though is that we are interested in getting  
17 busy with analysis and appropriation of the  
18 document itself, and as a consequence, the  
19 scoping comments will be accepted through  
20 November 10 of 2008.

21 After that point, basically we will  
22 look at all the comments that we've received,

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1 we'll make a decision about what are the types  
2 of analyses that we're going to do for the  
3 environmental impact statement, what are the  
4 alternatives that we're going to analyze, and  
5 so forth, and we'll go ahead and start with  
6 the preparation of the document at that point.

7 But the scoping comments are very  
8 important, a very, very important part of the  
9 planning process as the agencies move forward  
10 with the preparation of the document, and  
11 understanding better what type of programs  
12 they would develop relative to wind energy.

13 So the focus of this meeting  
14 tonight really was to provide oral comments,  
15 and as people registered there was an  
16 opportunity to go ahead and note whether you  
17 were interested in providing an oral comment  
18 or not.

19 Did we have some people that signed  
20 up, Kirk?

21 Okay. So what we will do then is  
22 the speakers that signed up and said that they

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1 would like to provide an oral comment will be  
2 called up in the order that they signed up in,  
3 and after we have received comments from those  
4 people, we'll open the floor to anybody else  
5 that would like to provide a comment. So  
6 whether you checked yes or no in the box  
7 doesn't really matter in terms of providing a  
8 comment. All it did was help us kind of  
9 organize how we would receive those comments.

10 Some important points about making  
11 an oral comment, if you would, please, we've  
12 got a microphone stationed here in the center  
13 of the floor, so if you would work your way to  
14 that microphone when you're called on to  
15 provide your comment, I'd appreciate it.

16 State your name and affiliation.  
17 Keep your comments as brief as you can to  
18 allow time for other speakers, although we  
19 don't have such a huge crowd that we can't  
20 accommodate everybody tonight, I'm sure.

21 And limit your comments, if you  
22 can, to the scope of the programmatic EIS, as

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1 I've tried to explain it, or as you understand  
2 it. And if you have written remarks that you  
3 would like to provide to us, please supply  
4 those to me up here at the podium, or to one  
5 of the other members of the EIS staff that  
6 have the badges on tonight, and we will  
7 collect all of those and those will be entered  
8 into the public comment record.

9 Another important point is that the  
10 comments are going to be recorded, and  
11 transcripts of the comments that we've  
12 collected will be prepared. Now this is the  
13 third of the public scoping meetings that  
14 we've held, and so all of the transcripts from  
15 those public meetings will eventually get  
16 posted on the project website so that other  
17 members of the public can see what type of  
18 comments we've received relative to the  
19 programmatic EIS.

20 So with that, I'll open the  
21 floor -- we've got some names here -- okay,  
22 there's only -- several. The first person

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1 that signed up to provide comments was Jim  
2 Raznoff? Okay.

3 MR. RAZNOFF: I really don't have  
4 any comments.

5 MR. HAYSE: Okay. That's fine. So  
6 you've decided that you don't need to provide  
7 a comment at this time.

8 And then the second person that  
9 signed up was Trent VanderBoom?

10 MR. VANDERBOOM: I guess mine's  
11 more of a question than it is --

12 MR. HAYSE: Could you come to the  
13 microphone though? It's fine if it's a  
14 question. You know, a question that we can  
15 answer tonight we will, if we can't answer it,  
16 we'll think about it and use it in our scoping  
17 process anyway.

18 MR. VANDERBOOM: Okay. My name is  
19 Trent VanderBoom. I'm with Clear Wind, a wind  
20 energy developer out of Minneapolis,  
21 Minnesota. And I guess this question's for  
22 Lloyd, and I guess what's -- it's got a couple

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1 of parts to it, but what's faulty with the  
2 current standards? I realize that there's  
3 more wind towers going up, turbines, projects.

4 Are there -- what's the number of strikes in  
5 wetlands versus non-wetlands.

6 And also, is this environmental  
7 impact statement, is this the same as what  
8 would be on the BLM lands? Is this what  
9 you're trying for? And is there a threshold  
10 for smaller projects, because it would be an  
11 expensive proposition for the smaller  
12 projects.

13 MR. JONES: Well, let me try, but  
14 if you need more clarification, let's go for  
15 that as well. But the -- I'll maybe go  
16 backwards. The effort that the Service is  
17 doing with this EIS is simply looking at how,  
18 if we accommodate wind, how do we accommodate  
19 wind on easement lands. We don't have a set  
20 policy that we're going to allow, like two  
21 towers or four towers or six towers. We work  
22 with the wind companies, try to minimize

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1 impacts.

2 In terms of wetland versus  
3 grasslands, or wetland easement, which just  
4 protects the wetland from being drained,  
5 burned, or filled, usually, to this point, and  
6 we've worked with a lot of companies, is not a  
7 conflict, because the towers and the access  
8 roads and such are put in away from the  
9 wetlands, generally on crop land or whatever,  
10 so there is no concern that we have with our  
11 easement in terms of the impact of those  
12 towers. We have no jurisdiction on the upland  
13 areas, it's just where the wetlands are. So  
14 we don't see a conflict there.

15 In terms of the grasslands where  
16 the grasslands is disturbed by the pad of the  
17 tower or by the road itself, as I said, we try  
18 to work with the companies and try to minimize  
19 that to the extent possible. And then once  
20 we're at that stage, as I mentioned, with the  
21 three projects we've authorized, we go ahead  
22 and give the company the authorization to go

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1 ahead and build that project on that grassland  
2 easement.

3 In terms of your question about  
4 bird strikes, it does not appear, it isn't  
5 evident that there is much research in the  
6 Upper Great Plains about the interaction of  
7 birds and towers themselves in terms of  
8 strikes. It's an extremely small percentage  
9 of what are human induced strikes in terms of  
10 what birds are striking, you know, windows in  
11 people's houses, or being, you know, eaten by  
12 house cats, and all the other things that  
13 occur out there.

14 The incidents of what strikes have  
15 been documented with wind towers is very, very  
16 small. In fact, I just looked at a paper the  
17 other day, in 2007 it was estimated to be  
18 three one thousandths of 1 percent of the  
19 birds that are actually lost to human induced  
20 mortality are actually caused by wind towers.

21 Three one thousandths of 1 percent.

22 So at this point in time we don't

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1 see any evidence in the upper Midwest that, in  
2 relation to our easement, that is of concern  
3 in terms of bird strikes with the towers.

4 Now a bigger concern is what might  
5 occur in terms of transmission line facilities  
6 that are built to transport the energy from  
7 the towers. There is more evidence of  
8 conflict with birds and bird strikes,  
9 especially for birds like the whooping crane,  
10 where, you know, they're more susceptible to  
11 that kind of mortality.

12 But in terms of other birds, we  
13 have three refuges -- the Division of Refuges,  
14 again, has three research projects that we've  
15 either funded or are involved in, in North  
16 Dakota right now where we're looking at, is  
17 there an avoidance issue with birds.

18 For example, do they -- are they  
19 bothered by the wind tower and so then are  
20 they leaving the easement area, or something  
21 like that. And all three projects are  
22 somewhat preliminary, but the data that we've

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1 looked at, we're not seeing hardly any, if  
2 any, avoidance reaction from the birds. So  
3 we're not seeing the direct mortality. At  
4 this point we're not seeing an avoidance  
5 impact either.

6 So I don't know how well I did.  
7 You had several parts to your question. Did  
8 that get to some of it?

9 MR. VANDERBOOM: I think so. You  
10 know, typically with the BLM, you know, it  
11 could be several hundred thousand dollars for  
12 an EIS study, and is there a threshold that  
13 you're -- I mean it doesn't -- like you said,  
14 it doesn't matter if it's one or two or -- it  
15 won't be two, but it'd be --

16 MR. JONES: Yes.

17 MR. VANDERBOOM: -- you know, five  
18 or ten.

19 MR. JONES: And really, you know,  
20 with the exception of Argonne being the  
21 contractor that worked on the BLM wind study,  
22 there is --

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1                   And, Nick, help me here.

2                   -- there is no really relationship  
3 between that EIS process and this one.

4                   MR. STAS: Actually, we're going to  
5 try to use information gathered for that  
6 study, as well as new studies that Lloyd  
7 talked about, and -- so that we can do the  
8 good job of developing the wind, and where we  
9 interconnect, as well as protecting the  
10 wildlife resources.

11                   And the goal is to try to reduce  
12 the costs, you know, through the programmatic  
13 effort in tiering with site-specific issues,  
14 and have enough information where that could  
15 go forward with the least amount of impact to  
16 the wildlife, or perhaps some mitigation that  
17 would be useful to allow that to happen.

18                   As I said earlier in my  
19 presentation, we've been doing some one by one  
20 environmental NEPA reviews, and there's some  
21 studies linked to those projects, and as this  
22 information's gained, it'll be included just

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1 like the BLM studies will be looked at as  
2 well. And, again, that's why I want -- am  
3 pleased to have Argonne with us. They've  
4 accumulated a lot of that information for that  
5 study.

6 Yes, Ed.

7 MR. WEBER: And if I might add too,  
8 that not every wind project does require an  
9 EIS. This process is not going to force wind  
10 projects into the EIS process necessarily, but  
11 what it does is it draws a box around your  
12 project, and if the impacts of your project  
13 fit in the box, that work's already been done.

14 And you just have to look at the site-  
15 specific stuff that may very well only require  
16 an EA.

17 Is that correct?

18 MR. STAS: Right. Actually, that's  
19 the goal.

20 MR. WEBER: That's the goal. Make  
21 it easy on them. We're not trying to make  
22 everybody do an EIS --

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1 MR. STAS: Right.

2 MR. WEBER: -- that's for sure.

3 MR. VANDERBOOM: Thank you.

4 MR. HAYSE: So I've taken comments  
5 from the two people that signed up ahead of  
6 time. Is there anyone else that would like to  
7 provide a comment?

8 Yes, sir?

9 MR. MELTON: Yes, this is Jim  
10 Melton again. I was just wondering about the  
11 case for the need -- we talked about the  
12 purpose of the EIS and the need. I missed the  
13 numbers of EAs or EISs that they're currently  
14 having to do related to wind power. I'm  
15 trying to get an idea about the number of  
16 projects, and if they, you know, vary by  
17 state, one more than another.

18 MR. STAS: We've had a handful of  
19 projects where we've completed the NEPA  
20 process. However, there are a number of  
21 proposed projects in the queue, and I talked  
22 earlier about the system studies processed to

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1 gain access to Western's transmission grid.  
2 That queue has a fairly significant number,  
3 and we've had a lot of preliminary discussions  
4 on proposals coming in. As far as completed  
5 NEPA documents, we've got one EIS and four EAs  
6 that have been completed.

7 MR. HAYSE: Lloyd, did you want to  
8 address that relative to your easements?

9 MR. JONES: In terms of the  
10 easement program for the Fish and Wildlife  
11 Service, we've done an EIS and an EA, and two  
12 EAs I guess. But as I mentioned earlier, we  
13 have about 40 projects on the table right now  
14 that companies have come to us and expressed  
15 some interest to look at development on  
16 easements.

17 In terms of where is that  
18 happening, primarily in North Dakota and South  
19 Dakota combined. That's where practically all  
20 those 40 are. But -- and as Nick pointed out,  
21 you know, looking to the issue -- like Karin  
22 said, about, you know, 20 percent by 2030,

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1 we're trying to be a little bit more proactive  
2 and get this NEPA issue addressed so we're not  
3 slowing down the system, or the process, when  
4 a wind company comes to us we don't have to  
5 say, Well, time out, it's going to take us two  
6 years to do an EIS process. That's what this  
7 will be in.

8 So we're not going to stop. I mean  
9 the 40 that we have right now, we're not  
10 telling them, Come back and see us in two  
11 years. We're saying we'll continue to work  
12 with you, we have a process in place, but  
13 hopefully as time goes on, we'll be able to  
14 facilitate that tremendously, you know, with  
15 this effort, with this programmatic EIS.

16 MR. STAS: I hope that answered  
17 your question, Jim.

18 MR. MELTON: Yes. Thank you.

19 MR. HAYSE: Anyone else? Yes?

20 MS. WESTERMAN: Hi, I'm Haven  
21 Westerman with Tetra Tech here in Billings.

22 And I was wondering -- Lloyd, this

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1 is probably for you -- are you bringing in the  
2 Army Corps with regard to impacts to wetlands  
3 at all in this EIS process?

4 MR. JONES: No.

5 MS. WESTERMAN: Oh.

6 (General laughter.)

7 MR. JONES: And the reason is  
8 because, as I mentioned, our wetland easements  
9 are very specific, you know, to the wetlands  
10 themselves. That's the only spot that we have  
11 any jurisdiction. And the wind companies --  
12 and we've probably worked on 15 different  
13 projects with wind companies, they avoid the  
14 wetlands, they stay away from the wetlands.

15 If there were going to be a  
16 situation where a wetland that is a navigable  
17 body of water and it would require a 404  
18 permit, it would be the company's  
19 responsibility to do that. But we wouldn't  
20 allow the filling of -- we would not allow,  
21 under our easement provisions, the filling of  
22 that wetland anyway, so.

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1                   But to this point, they've stayed  
2 away, they put the wetlands -- or, I'm sorry,  
3 the towers up on top, or away from the  
4 wetlands. We've been real happy with the wind  
5 companies. As you saw from that one slide, in  
6 some areas there's a huge density of wetlands  
7 a lot of times, and if they by chance would  
8 locate a tower like in between two wetlands,  
9 you know, we've had real good luck asking them  
10 to move those towers because we expect there's  
11 a pretty good flight line of birds between  
12 those wetlands. And they've been real good,  
13 they say, Not a problem, we'll move it off in  
14 between.

15                   But in terms of impacts to the  
16 wetlands themselves, no, and no in regards to  
17 404.

18                   MS. WESTERMAN:       And does that  
19 include -- I'm assuming that includes  
20 infrastructure as well.

21                   MR. JONES:    Uh-huh.   Yes.

22                   MS. WESTERMAN:       Okay.       So you

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1 use --

2 MR. JONES: The substations, the  
3 lines they've got to bury, or use to bring the  
4 tower, or I'm sorry, bring the power to the  
5 substations --

6 MS. WESTERMAN: Right.

7 MR. JONES: -- we've also had  
8 excellent luck with the companies, asking them  
9 to bury distribution lines to avoid any  
10 conflicts or concerns. You know, we've had  
11 some project where they've proposed to span  
12 wetlands with power lines or whatever to move  
13 the power, and we've asked them to go around  
14 the wetlands, we've asked them to bury the  
15 lines, and the companies have been real  
16 receptive to make those types of changes. So  
17 we're not seeing much conflict between the  
18 wind projects and the wetlands themselves.

19 MR. HAYSE: Anyone else have a  
20 comment related to the EIS?

21 (No response.)

22 MR. HAYSE: Okay. Okay. Well,

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1 with that I will call this meeting to an end.

2 And we thank you all for your comments. On  
3 behalf of Western and the Fish and Wildlife  
4 Service, please rest assured your comments are  
5 very important to us.

6 And remember that whether or not  
7 you made an oral comment at the meeting  
8 tonight, you're free to also send us comments  
9 via mail or via the website and we will  
10 consider those comments. And keep in mind,  
11 again, that the comment period closes on  
12 November 10.

13 So thank you, and have a safe trip  
14 home.

15 (Whereupon, at 8:00 p.m., the  
16 meeting was concluded.)

17

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