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STATE OF NEW HAMPSHIRE

SITE EVALUATION COMMITTEE

November 1, 2012 - 9:05 a.m.
Concord, New Hampshire

DAY 4
MORNING SESSION ONLY

In re: **SITE EVALUATION COMMITTEE:**
DOCKET NO. 2012-01: Application
of Antrim Wind, LLC, for a
Certificate of Site and Facility
for a 30 MW Wind Powered Renewable
Energy Facility to be Located in
Antrim, Hillsborough County,
New Hampshire.
(Hearing on the merits)

PRESENT:	SITE EVALUATION COMMITTEE:
Kate Bailey, Engineer <i>(Presiding Officer)</i>	Public Utilities Commission
Amy L. Ignatius, Chrmn.	Public Utilities Commission
Harry T. Stewart, Dir.	DES - Water Division
Johanna Lyons, Designee	Dept. of Resources & Econ. Dev.
Craig Green, Designee	Dept. of Transportation
Brad Simpkins, Dir.	DRED - Div. of Forests & Lands
Ed Robinson, Designee	Fish & Game Department
Richard Boisvert, Designee	Division of Historic Resources
Brook Dupee, Designee	Dept. of Health & Human Services

COUNSEL FOR THE COMMITTEE: Michael J. Iacopino, Esq.

COUNSEL FOR THE PUBLIC: Peter C. L. Roth, Esq.
Senior Asst. Atty. General
N.H. Attorney General's Office

COURT REPORTER: Steven E. Patnaude, LCR No. 52

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APPEARANCES: **Reptg. Antrim Wind, LLC:**
Susan S. Geiger, Esq. (Orr & Reno)
Douglas L. Patch, Esq. (Orr & Reno)
Rachel A. Goldwasser, Esq. (Orr & Reno)

Reptg. Antrim Board of Selectmen:
Galen Stearns, Town Administrator
Michael Genest, Selectman, Town of Antrim

Reptg. the Harris Center for Cons. Edu.:
Stephen Froling, Esq.

Reptg. Antrim Planning Board:
Martha Pinello, Member

Reptg. Audubon Society of New Hampshire:
David M. Howe, Esq.
Amy Manzelli, Esq. (BCM Envir. & Land Law)

Reptg. Industrial Wind Action Group:
Lisa Linowes

Reptg. North Branch Group of Intervenors:
Richard Block
Loranne Carey Block

P R O C E E D I N G

1
2 MS. BAILEY: Good morning. We'll start
3 the fourth day of proceedings on Antrim Wind Energy, LLC's
4 Application for a Certificate of Site and Facility. We
5 will have public comment, an opportunity for public
6 comment this morning. And, then, we will proceed with the
7 continuation of the panel from last night. But, first,
8 I'd like to introduce who's here, and then take
9 appearances.

10 My name is Kate Bailey. And, I am the
11 acting Chairperson today. Chairman Ignatius will be here,
12 and she'll be in and out. Mr. Stewart.

13 DIR. STEWART: Harry Stewart, Water
14 Division Director, Department of Environmental Services.

15 MS. LYONS: Johanna Lyons, Department of
16 Resources & Economic Development.

17 MR. SIMPKINS: Brad Simpkins, Department
18 of Resources & Economic Development.

19 MR. ROBINSON: Ed Robinson, New
20 Hampshire Fish & Game Department.

21 MR. DUPEE: Brook Dupee, here from the
22 Department of Health & Human Services.

23 MR. GREEN: Craig Green, New Hampshire
24 Department of Transportation.

1 MR. BOISVERT: Richard Boisvert, New
2 Hampshire Division of Historical Resources.

3 MS. BAILEY: And, we have Mike Iacopino,
4 assisting as the Counsel for the Committee. Ms. Geiger.

5 MS. GEIGER: Yes. Good morning. On
6 behalf of the Applicant, Susan Geiger, Douglas Patch, and
7 Rachel Goldwasser, from the law firm of Orr & Reno. Good
8 morning.

9 MS. BAILEY: Good morning.

10 MR. FROLING: Stephen Froling. I'm here
11 on behalf of the Harris Center for Conservation Education.

12 MS. BAILEY: Good morning.

13 MR. STEARNS: Galen Stearns, Town
14 Administrator, Town of Antrim. With me is Mike Genest,
15 Selectman.

16 MS. BAILEY: Good morning.

17 MS. PINELLO: Good morning. Martha
18 Pinello, Antrim Planning Board.

19 MS. BAILEY: Good morning.

20 MS. MANZELLI: Good morning. Amy
21 Manzelli, from BCM Environmental & Land Law, here for New
22 Hampshire Audubon. Also here for New Hampshire Audubon is
23 Attorney David Howe.

24 MS. BAILEY: Good morning.

1 MR. BLOCK: Richard Block, North Branch
2 Intervenors. And, my wife, Lorraine Carey Block, will be
3 along shortly, too.

4 MS. BAILEY: Thank you.

5 MR. ROTH: Peter Roth, from New
6 Hampshire Department of Justice, as Counsel for the
7 Public.

8 MS. BAILEY: Good morning. Do we have
9 any preliminary matters to take up this morning?

10 (No verbal response)

11 MS. BAILEY: Okay. Then, we will start
12 with comment from the public. And, I have one person who
13 has signed the sheet indicating a willingness to speak.
14 Sarah VanderWende. Could you come up please and sit at
15 the table with the microphone. Thank you. And, you need
16 to speak pretty close to the microphone, so the reporter
17 can take down all of your words.

18 MS. VANDERWENDE: I do have a written
19 copy for the reporter.

20 MS. BAILEY: Thank you.

21 MS. VANDERWENDE: And, for me, a
22 microphone is always a good idea. I'm always nervous in
23 public. So, I will only be reading. And, good morning.

24 I'm here today as a private citizen.

1 For personal reasons, I have not fully participated in
2 this proceeding. I have only appeared before you on the
3 matter of subdivision for which the Antrim Planning Board
4 employed legal counsel.

5 During the site visit tour of April
6 30th, I am thankful the Committee was willing to include
7 two of our designated Scenic Roads, which view and follow
8 the base of the Tuttle Hill and Willard Mountain ridge.
9 As was mentioned in the public hearing that evening, there
10 are a significant number of homes all around the ridge,
11 which you would not otherwise have observed, including my
12 own. This development pattern results from the zoning,
13 which has effectively allowed for the harmonious
14 preservation of our lands and our quality of life. The
15 intention of the zoning for this area is clear: It should
16 remain free of industrial and commercial development.

17 On two occasions the voters did not pass
18 ordinances, which could have changed the zoning to allow
19 large wind facilities in the Rural Conservation District.
20 To say the proposed facility is an allowed "public
21 utility" in this district is incorrect. An industrial
22 generating facility servicing 14,000 homes would be no
23 more allowable at this site than water and sewer treatment
24 facilities and propane gas storage of equal capacity.

1 In the same April hearing, AWE professed
2 ignorance of the number of homes surrounding the ridge;
3 this indicates a failure to conduct adequate research.
4 They also confessed that they had failed to monitor the
5 proposed site during winter logging operations where
6 aerial viewing showed significant clearing for the
7 proposed roadway and turbines. It seems like the company
8 maintains a managerial policy to "act now and litigate
9 later", as they have with the met tower, the PILOT, and in
10 applying to the SEC for jurisdiction before developing a
11 clear proposal for a facility. Their unwillingness to
12 safeguard the taxpayers, their failure to come to amicable
13 agreements with the most effected real estate owners, and
14 the attempts to confuse the voters about the proposed
15 zoning ordinances show a lack of good faith in their
16 negotiations. Should they not at least be held
17 responsible for any future tax losses in tax revenue from
18 the homes and the college, if they're abandoned? I ask
19 you to be wary of this repeated disregard for regulations,
20 due diligence, common procedures, and their lack of
21 concern for the Town and the Region.

22 Like other towns in the Monadnock
23 Region, Antrim has attracted a number of musicians,
24 artists, authors, educators and other professionals who

1 depend on our natural surroundings to conduct valuable
2 work at home while commuting to other obligations. This
3 is a way of life long recognized as integral to the
4 character of the Town and the State. Even Mr. Emerson
5 wrote of our self-reliance with admiration.

6 Disturbances such as turbine sounds,
7 changing light patterns, and wind turbulence, as well as
8 the permanent damage caused by their construction and
9 removal would seriously affect our families. We respect
10 and steward these lands and our wildlife, sharing our
11 reverence by educating our children and visitors in these
12 places.

13 In addition to his real job, my husband
14 Paul has authored two popular guides to fishing in New
15 Hampshire. He is a licensed fishing guide and is active
16 in the New Hampshire Guides Association. We both
17 volunteer for the federal "Let's Go Fishing" Program.
18 Paul also designs and produces fishing lures, and is the
19 webmaster for several small companies and organizations.
20 We hoped all this would provide some income when he
21 retired. I have been downsized, but most recently
22 supported the continuing education -- accreditation for a
23 local university, and was responsible for the recruitment
24 of over 4.3 million of annual student tuition. We are

1 typical of the people who have chosen to live in this part
2 of town; these activities are all dependent on the
3 location where we built our home.

4 Three days after your site visit, I sat
5 beside the marsh that you saw by the junction of scenic
6 Old Pound Road and Craig Road. I had just learned that my
7 husband has incurable cancer. We do not know if there
8 will be a time for retirement at all. With the current
9 economy and questionable PILOT agreement looming, I do not
10 know if I will afford to call Antrim my home when he is
11 gone. I gazed on Tuttle Hill that afternoon, thinking of
12 Judge Tuttle, a 16-year State Representative and Senator,
13 and his wife Betsey, who buried her first five children on
14 Meetinghouse Hill; I thought of James Tuttle, who
15 sponsored the Town Library; and of my old "Grandma Tuttle"
16 and the curled brown photo of her cradling my sister in
17 her ancient arms.

18 From my seat, I also saw Willard
19 Mountain, standing as a monument to all the family has
20 given to the establishment of this country and, through
21 Colonel Josiah, the opening of this very place for
22 permanent settlement; also, I thought of the long labor of
23 Frances in promoting women's rights so at least we, too,
24 could vote and serve. I recalled the age-darkened family

1 portrait hanging in the dining room above my "Gramps",
2 where he sat daily writing for the Boston Globe unless his
3 end. All of these were faithful people who endured great
4 struggles. Their service should be honored and their
5 legacy treasured. But, in public meetings, the same
6 speakers who broadly proclaimed windmills will save the
7 world would later ask me outside "Where is Tuttle Mountain
8 anyway?"

9 I walk to this place daily and I pray I
10 might have the strength of those who came before me. I am
11 comforted by the whisper of the wind in the pines and by
12 the sight of the wild creatures there, proving that life
13 goes ever on. If we are really trying to save the world,
14 should we not protect these beautiful places gifted to us
15 for safekeeping? My own future is not in human hands, but
16 the future of Antrim is now in yours. I am sure you will
17 decide what seems proper, but please don't let Zarathustra
18 be right, if the legacies dedicated there are destroyed, I
19 will no longer lift up my eyes to these hills for my
20 strength. Thank you.

21 MS. BAILEY: Thank you.

22 MS. GEIGER: Madam Chairperson, I just
23 want to thank Ms. VanderWende for her comments. But I
24 would like to note for the record that she is a member of

1 the Antrim Planning Board. And, I understand that she
2 appeared here as a private citizen, but the Antrim
3 Planning Board is a party to these proceedings. I just
4 wanted to note that for the record.

5 MS. BAILEY: So noted. Thank you. Are
6 there any other members of the public who wish to speak
7 today?

8 (No verbal response)

9 MS. BAILEY: Okay. I don't think there
10 are. So, we will proceed with Mr. Roth's
11 cross-examination -- oh, excuse me.

12 CHAIRMAN IGNATIUS: Before we begin with
13 that, I just wanted to make one brief comment. As you
14 know, I've been coming and going, and mostly going in the
15 last couple of days, because of the work done on the
16 Hurricane Sandy. I'm back, I think, although I'm going to
17 have to step out for some conference calls and if things
18 -- anything should change, I would have to be back over at
19 the Storm Center. So, I would think it best for Kate
20 Bailey to continue to Chair the hearings. She's doing a
21 fabulous job, and she knows better all the mechanics of it
22 at this point, and I may have to be out some.

23 So, for the sake of continuity, that
24 would be my preference, if that's acceptable to the

1 Committee members?

2 MR. DUPEE: Uh-huh.

3 CHAIRMAN IGNATIUS: All right. Thank
4 you.

5 MS. BAILEY: Okay. Mr. Roth, are you
6 ready?

7 MR. ROTH: I guess so.

8 MS. BAILEY: All right. You may
9 proceed.

10 MR. ROTH: I'm expecting a delivery of a
11 document. The person bringing it left my office five or
12 ten minutes ago, so she should be here any moment. But
13 I'll put that piece towards the end.

14 MS. BAILEY: Okay.

15 MR. ROTH: But I may have to take a tiny
16 break to get the document and distribute it at that point.

17 MS. BAILEY: Okay.

18 (Whereupon **Dana Valteau** and
19 **Adam J. Gravel** were recalled to the
20 stand, having been previously sworn.)

21 MR. ROTH: Good morning, gentlemen. We
22 meet again.

23 WITNESS GRAVEL: Good morning.

24 WITNESS VALLEAU: Good morning.

[WITNESS PANEL: Valleau|Gravel]

1 **DANA VALLEAU, Previously sworn.**

2 **ADAM J. GRAVEL, Previously sworn.**

3 **CROSS-EXAMINATION (Resumed)**

4 BY MR. ROTH:

5 Q. You recall yesterday there was some discussion about
6 what the most dangerous weather conditions are for
7 hawks and their inter-reaction -- interrelation with
8 wind farms. Do you remember that discussion?

9 A. (Valleau) Yes.

10 A. (Gravel) Yes.

11 Q. And, Mr. Lloyd-Evans whispered in my ear during that,
12 and he said, and I'll ask you whether you agree with
13 this, isn't it true that the most dangerous weather
14 condition for hawks and wind farms is on windy days?

15 A. (Valleau) That's probably true.

16 Q. Thank you. Now, there was also yesterday some
17 discussion about "eagle take permits"?

18 A. (Valleau) Yes.

19 Q. And, can one of you tell the Committee what the
20 consequences of an -- to the Project for killing an
21 eagle, what the consequences could be under federal
22 law?

23 A. (Valleau) If there's a take permit, there would be no
24 prosecution. But, in negotiating for a take permit,

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1 there may be a number of conditions that are attached
2 to it, additional study, things like that. It's more
3 or less an agreement for cooperation with U.S. Fish &
4 Wildlife Service and Department of Interior.

5 Q. Okay. But, if you don't have a take permit, what are
6 the consequences for killing an eagle?

7 A. (Valleau) You may be subject to prosecution under the
8 Bald and Golden Eagle Protection Act, which could mean
9 fines and other sanctions. However, I think, in the
10 history of prosecution under the Bald and Golden Eagle
11 Act, it's usually been under either purposeful take of
12 eagles, in other words, shooting, and killing in some
13 other way, eagles or some sort of negligence that, for
14 example, taking some advisement from Fish & Wildlife
15 Service and ignoring that advisement and having an
16 eagle killed. So, prosecution has been more or less
17 discretionary, depending on the circumstances.

18 Q. So, that's a criminal prosecution?

19 A. (Valleau) Yes, I believe so.

20 Q. Okay. And, do you know what the magnitude of the fines
21 might be?

22 A. (Gravel) I think it's up to 100,000.

23 Q. Per eagle?

24 A. (Gravel) Per eagle, yes.

1 Q. Okay. All right. And, then, there was a lot of
2 discussion about the "Avian and Bat Protection Plans".
3 And, I believe, Mr. Gravel, you testified that the one
4 proposed by the Applicant is something new. But isn't
5 it true that Iberdrola has an ABPP as well?

6 A. (Gravel) Yes. But nothing like this one.

7 Q. Okay. Do you know whether Brookfield has one for
8 Granite Reliable?

9 A. (Gravel) I don't believe they do.

10 Q. Okay. And, does the one in place for -- or, does
11 Iberdrola's apply both to Groton and to Lempster or --

12 A. (Gravel) Yes. Theirs is more of a corporatewide, that
13 covers nationwide projects.

14 Q. Okay. And, you also suggested that conducting
15 additional research for its own sake after the
16 construction, the mortality studies, was, and I guess
17 maybe I'm putting words in your mouth, but a waste of
18 time?

19 A. (Gravel) You're definitely putting words in my mouth.

20 Q. Okay.

21 A. (Gravel) I said that it provides information, it can --
22 it may provide information for future wind projects,
23 but it doesn't do anything to help the species.

24 Q. Okay. So, that's your testimony at this point?

1 A. (Gravel) Yes.

2 Q. And, isn't it true, Mr. Gravel, and perhaps you, too,
3 Mr. Valleau, I can't remember for sure, I just -- I'm
4 used to working with Mr. Gravel quite bit.

5 A. (Valleau) Sure.

6 Q. And, you were the consultant for the developers in both
7 Granite Reliable and in Groton?

8 A. (Gravel) That's true.

9 Q. Okay. And, do you recall, in both of those orders that
10 were issued by this Committee, the terms regarding the
11 three years of post mortality studies?

12 A. (Gravel) I don't recall the terms.

13 Q. Okay. Well, I'll share them with you and see if you
14 agree with this. In the orders, and there may be
15 differences between the two, but I don't think they're
16 material, the Committee -- the Subcommittee found that
17 "The facility will not have an unreasonable adverse
18 effect on avian species and bats so long as sufficient
19 post construction population and mortality studies are
20 conducted so that appropriate mitigation measures may,
21 if necessary, be undertaken by the Applicant."

22 Now, does that sound like they're just
23 going to take those reports and use them for
24 interesting purposes for future development?

[WITNESS PANEL: Valleau|Gravel]

1 A. (Gravel) There's no mechanism described clearly
2 explaining a process as we proposed in the Avian and
3 Bat Protection Plan. And, I would also like to note --

4 Q. Let me just finish.

5 A. (Gravel) Let me finish, too, please.

6 Q. No, no. I want you to just answer my questions. I'm
7 not asking for your discussion.

8 MS. GEIGER: Excuse me. I'm going to
9 object to this further question. I think it's fair to let
10 Mr. Gravel finish his answer to the first question, before
11 we move on to another one.

12 MR. ROTH: He did answer.

13 WITNESS GRAVEL: I did not, actually.

14 MR. ROTH: I don't need him to engage in
15 lengthy explanations.

16 WITNESS GRAVEL: You're asking me about
17 two projects, and they are greatly different. So, I would
18 like to see the documents that you're reading off of,
19 because they're not the same. Both conditions --

20 MR. ROTH: I'm reading from --

21 WITNESS GRAVEL: Which project are you
22 reading from right now?

23 MR. ROTH: I'm reading from the Groton
24 order, and I believe that this is common to both projects.

[WITNESS PANEL: Valteau|Gravel]

1 WITNESS GRAVEL: It's not.

2 MR. ROTH: Okay. Then, --

3 MS. BAILEY: Mr. Roth, you need to let
4 him finish the answer.

5 MR. ROTH: He did.

6 MS. BAILEY: Okay. Well, I'm not sure
7 he did, and the attorney objected. So, are you all set,
8 Mr. Gravel?

9 WITNESS GRAVEL: I am now. I just
10 wanted to make the point that they're not both the same,
11 and the conditions on both projects are not exactly the
12 same.

13 MR. ROTH: Okay.

14 MS. BAILEY: Okay. Thank you.

15 BY MR. ROTH:

16 Q. Okay. After I ask you about this next provision,
17 perhaps you can educate us on the differences, if you
18 can remember them. In this order, it also says -- it
19 lists the number of things that have to be done. And,
20 then, it -- as conditions to the certificate. And,
21 then, it says "The New Hampshire Fish & Game
22 Department, in consultation with the U.S. Fish &
23 Wildlife Service, shall review and approve all study
24 protocols." Do you remember that?

1 A. (Gravel) Yes, I do.

2 Q. Okay. And, is that common to both Groton and Granite
3 Reliable?

4 A. (Gravel) It's common. In fact, actually, I helped Fish
5 & Game review the post construction plan for the
6 Granite Reliable Power Project. So, I guess what I'm
7 trying to say by that is that I'm also a resource in
8 the State of New Hampshire, given our experience with
9 the work. And, I reviewed all of the study plans with
10 Fish & Game side-by-side for the Granite Reliable
11 Project.

12 Q. Okay. And, I'm glad that you're involved in that. I'm
13 impressed with your credentials and your work, and you
14 should -- you should be proud. And, then, in number 10
15 here, it says "The annual report shall be submitted to
16 and discussed with the New Hampshire Fish & Game
17 Department and the United States Fish & Wildlife
18 Service, and shall serve as the basis for mitigation
19 measures if effects are deemed unreasonably adverse."
20 Do you remember that provision?

21 A. (Gravel) For the Groton Project, yes.

22 Q. Okay. And, there's nothing like that in the Granite
23 Reliable Project?

24 A. (Gravel) The Granite Reliable Project was more

1 species-specific, because it had rare species and rare
2 habitats.

3 Q. Okay. But is there something like this provision with
4 respect to rare habitat and threatened and endangered
5 species in the Granite Reliable order?

6 A. (Gravel) I don't recall what the language is or was.

7 Q. Okay. Do you believe that, if this Paragraph 10 that I
8 just read, about annual reports and discussions with
9 Fish & Game and U.S. Fish & Wildlife Service as the
10 basis for mitigation measures, do you think that that's
11 more than just making studies and for the basis of
12 informing other projects?

13 A. (Gravel) I don't think it's much more, because there's
14 no plan in place, no commitment to work with the
15 agencies over the life of the Project, and no
16 commitment to study minimization measures right from
17 the start. Because, having the experience that I have
18 that you just so noted, you can't, and I've said this
19 for the past three projects as well, that you can't
20 correlate pre-construction surveys with
21 post-construction mortality. Therefore, conducting
22 them again is not money well spent. Whereas, the
23 Granite Reliable Project is species-specific.

24 Q. Now, we both agree that, in Granite Reliable -- well,

1 at least in Groton, we already have an Avian and Bat
2 Protection Plan. And, on top of that, we have these
3 provisions that I just read to you. Why couldn't this
4 body, in addition to adopting the ABPP and requiring
5 compliance with it, also include three years of
6 monitoring and this kind of provision? Couldn't they
7 do that?

8 A. (Gravel) I mean, I guess I don't see the need, is what
9 my testimony is saying.

10 Q. Okay. Yes, I understand you don't see the need. But
11 you agree with me that that could be done?

12 A. (Gravel) Anything could be done.

13 Q. Okay. Now, there was a little bit of talk about
14 "lattice towers" yesterday. And, I think the
15 suggestion was made that the Project was mitigating
16 hazards to avian species by not using lattice towers.
17 Did I misunderstand that?

18 A. (Gravel) We're speaking about lattice tower --
19 lattice-type turbines, like the old-style turbines that
20 you find in the West, in California.

21 Q. Correct. And, was the suggestion made that this
22 Project was mitigating hazards to avian species but not
23 using that kind of a turbine?

24 A. (Gravel) What the suggestion was saying in the Avian

1 and Bat Protection Plan was that we address the
2 Service's recommendations.

3 Q. By not using lattice towers?

4 A. (Gravel) That's one of their recommendations.

5 Q. Okay. Now, you both professed a certain degree of
6 expertise on wind farms and siting them, and, you know,
7 perhaps developing them. In your opinion, is there any
8 way that you can put a 3-megawatt turbine on top of a
9 lattice tower? Is there anybody doing that anywhere in
10 the world?

11 A. (Gravel) We're biologists.

12 A. (Valleau) I have no idea. Yes. That's a question for
13 a turbine manufacturer.

14 Q. Is there anybody building turbines on lattice towers
15 anymore? Anywhere?

16 MS. GEIGER: Objection. They just
17 answered the question.

18 MR. ROTH: No. That's a different
19 question.

20 **BY THE WITNESS:**

21 A. (Gravel) The answer is, is we're wildlife biologists,
22 not turbine -- turbine manufacturers or turbine
23 developers.

24 BY MR. ROTH:

1 Q. Okay. So, you're saying you're not aware of any
2 turbines being built on lattice towers anymore?

3 A. (Gravel) I don't know.

4 Q. Okay. Now, turning your attention to the Fish & Game
5 letter of October 26th. And, with respect to Paragraph
6 (4), and that's Committee Exhibit Number 16.

7 MR. IACOPINO: For the Committee
8 members, this would not be a electronic exhibit as of yet.

9 BY MR. ROTH:

10 Q. And, in the second paragraph of Paragraph (4), the Fish
11 & Game Department says that it wants to be able to
12 "petition the Subcommittee for a final determination,
13 if necessary." And, as I recall, your testimony
14 yesterday was that you felt that that was "overly
15 burdensome", correct?

16 A. (Valleau) Correct.

17 Q. Okay. Now, you've both been here before, and I'm sure,
18 Adam, you're familiar with this, and I'll ask you. Are
19 you aware that, under RSA 162-H:4, III, "The committee
20 may delegate the authority to monitor the construction
21 or operation of any energy facility granted a
22 certificate under this chapter to such state agency or
23 official represented on the committee as it deems
24 appropriate." Are you familiar with that provision?

1 A. (Gravel) Again, I'm a wildlife biologist. So, thank
2 you for telling me about that provision.

3 Q. Okay. Do you think that New Hampshire law, based on
4 what I just read to you, allows this Committee to tell
5 Fish & Game to monitor the activities of the Project
6 with respect to avian mortality and the issues raised
7 in Paragraph (4) of their letter?

8 A. (Gravel) It has happened on each project.

9 A. (Valleau) Yes.

10 Q. Okay. And, so, if the Committee were to do that under
11 Paragraph -- under RSA 162-H:4, as requested by the
12 Fish & Game Department, do you think compliance with
13 this law would be overly burdensome?

14 A. (Gravel) We didn't testify to compliance to the law.
15 What we testified is our opinion on the appropriateness
16 of a -- of this. I mean, it seems to me that the state
17 and federal agencies, the state's experts, should be
18 capable of making those decisions and reaching out to
19 the appropriate technical staff as necessary.

20 Q. Do you think that, if this body were to tell Fish &
21 Game Department that they were to monitor and report
22 back to it about the compliance issues, that that would
23 be overly burdensome?

24 A. (Valleau) No. That's part of their role under the law.

1 Q. Okay. And, how is that different from what they were
2 asking for in Paragraph (4), in their August 20 -- or,
3 October 26 letter?

4 A. (Valleau) Seems to me it's different language. It's
5 the Fish & Game Department petitioning the SEC
6 Subcommittee to help them make a determination on
7 something that's in dispute. So, that's, to me, that
8 seems like it's -- it may be allowed under the law for
9 the Fish & Game Department, who is acting as an agent
10 for the SEC, to come to the SEC and ask their opinion
11 on something. But, to form another group to discuss a
12 dispute, seems to me to be adding something to a
13 process, which, in our Protection Plan, is already
14 there. There's already the option for a dispute
15 resolution by a third party.

16 Q. I guess I don't see where, in Paragraph (4), the Fish &
17 Game Department said anything about "forming another
18 group". All they're asking for is that, under the
19 ABPP, it specifically provide that the Department can
20 petition the Subcommittee to resolve a logjam. Isn't
21 that --

22 A. (Valleau) Well, let me ask you this. Can they do that
23 anyway under that law?

24 Q. Well, that's what I'm telling you. They can.

1 A. (Valleau) Okay.

2 Q. But, I'm asking you, is that overly burdensome if they
3 do that?

4 A. (Valleau) If we're in the middle of the Avian and Bat
5 Protection Plan dispute resolution process, to me, it
6 adds another step that we don't necessarily need to go
7 to.

8 Q. Okay. Now, under 162-H:12, it says "Whenever the
9 committee determines that any term or condition of any
10 certificate...is being violated, it shall...notify the
11 person holding the certificate of the violation and
12 order [them] to immediately terminate the violation."
13 How do you think that they get to do that? Do you
14 think that they just learn about that by reading about
15 it in the paper? Or, do you think that somebody comes
16 and tells them to -- tells them about it?

17 A. (Valleau) There's probably a process for them to tell
18 them about it.

19 Q. Okay. And, do you think, in a case like this, the
20 obvious person to tell them about it would be the Fish
21 & Game Department?

22 A. (Valleau) Sure.

23 Q. Okay. Now, my last questions really are about,
24 unfortunately, I gave my Page 5 of your supplemental

1 testimony to Ms. Manzelli, and she took it home and
2 jettisoned it. So, I'm going from memory here.

3 MR. ROTH: Yes. I thought I'd through
4 you under the bus on that one, Amy.

5 BY MR. ROTH:

6 Q. And, on Page -- I believe it was Page 5 of your
7 testimony, there was some discussion about the "U.S.
8 Fish & Wildlife Service Land-Based Energy" --
9 "Land-Based Wind Energy Guidelines".

10 MS. BAILEY: Mr. Roth, is this the
11 original testimony or the supplemental?

12 MR. ROTH: The supplemental.

13 MS. BAILEY: Thank you.

14 MR. IACOPINO: And, for the Committee,
15 that's Document 44 in AWE 9.

16 MR. ROTH: Oh, it's -- for the
17 testimony? Okay.

18 MR. IACOPINO: Yes. The testimony.

19 MS. GEIGER: Excuse me. Mr. Roth, was
20 this on your exhibit list that we compiled last week or is
21 this new?

22 MR. ROTH: No.

23 MS. GEIGER: Well, then, I'm going to
24 object to having this marked or introduced at this late

[WITNESS PANEL: Valleau|Gravel]

1 date. Seems to me these Guidelines have been in existence
2 for a long time, and they should have been marked for
3 identification earlier than now.

4 (Ms. Bailey conferring with
5 Mr. Iacopino.)

6 MS. BAILEY: I believe the document is
7 referenced in the testimony. So, I'm going to allow it.

8 MR. ROTH: Thank you.

9 MS. BAILEY: Mr. Roth, I have a paper
10 copy of the testimony, if you want it?

11 MR. ROTH: Somebody provided me a copy.

12 (Mr. Roth distributing documents.)

13 MR. IACOPINO: PC 21. Dr. Boisvert, did
14 you hear that? PC 21.

15 MR. BOISVERT: PC 21.

16 MS. BAILEY: We're going to mark this as
17 "PC 21", "U.S. Fish and Wildlife Service Land-Based Wind
18 Energy Guidelines".

19 (The document, as described, was
20 herewith marked as **Exhibit PC 21** for
21 identification.)

22 MR. ROTH: Is everybody ready?

23 MS. BAILEY: Proceed.

24 WITNESS VALLEAU: Yes.

1 BY MR. ROTH:

2 Q. Now, this is actually a rather small point, but I think
3 it's kind of important. Because, during your
4 cross-examination by Ms. Manzelli yesterday, she asked
5 you about the statements on Line 11 through 19 or 20,
6 basically, everything in that paragraph, on your
7 testimony, Page 5, your testimony of October 11th.
8 And, I think what she was trying to get at, and I hope
9 -- I hope I understood this correctly, was whether you
10 believe that these things, such as "sufficient
11 projected wind speeds at turbine height to produce
12 power in commercial quantities; proximity to adequate
13 transportation; proximity to electric transmission or
14 distribution infrastructure capable of handling the new
15 generation; adequate setbacks from residences or other
16 inhabited structures to ensure public safety", whether
17 those things came from the Fish & Wildlife Service
18 Guidelines as your testimony seemed to suggest. And,
19 as I recall yesterday from your -- during your
20 cross-examination, you both kind of doubled down on
21 that and said "Yes, it's in the Fish & Wildlife
22 Guidelines."

23 Now, I ask you, you've got the
24 Guidelines in front of you. Show me in those

1 Guidelines where those things are laid out in the
2 fashion you suggest they are in your testimony and on
3 your cross-examination. And, I suggest you not spend a
4 lot of time doing it, because you won't find it.

5 A. (Valleau) Well, I don't -- I don't think we said that
6 those were in the Guidelines. What Ms. Manzelli asked
7 us is whether that was a paraphrasing of what was in
8 the guidance from the U.S. Fish & Wildlife Service, and
9 that's what we agreed to. And, I think I even said
10 that this wasn't the exact language. And, so, --

11 Q. Okay.

12 A. (Valleau) So, I want to point out again that the U.S.
13 Fish & Wildlife Service, on October 26, said "The Avian
14 and Bat Protection Plan prepared by AWE, Antrim Wind
15 Energy, Project is consistent with the Service's
16 *Land-Based Wind Energy Guidelines*.

17 Q. Okay.

18 A. (Valleau) And, I think that's the important point.

19 Q. Well, right now, the question is "where in those
20 Guidelines does it describe that it's important to site
21 wind projects where there's sufficient wind; proximity
22 to transportation; proximity to electric", etcetera, as
23 you suggest in your testimony, and I believed as you
24 said yesterday?

1 A. (Valleau) We distinguished --

2 MS. GEIGER: Excuse me, I'm going to
3 object to that. Excuse me, I'm going to object to that.
4 Because I think Mr. Valleau said that, in his testimony in
5 response to cross-examination from Attorney Manzelli, that
6 he did not purport that these statements came directly
7 from the U.S. Fish & Wildlife's *Wind Energy Guidelines*.

8 BY MR. ROTH:

9 Q. Well, you said that they were "paraphrased from that".
10 Show me what you used, how you paraphrased from these
11 Guidelines those types of concepts?

12 A. (Valleau) Well, first of all, the first statement about
13 "siting it where there's adequate wind", we said is not
14 from the Guidelines. That's a commercial decision.
15 It's the rest of it, where you're minimizing impacts by
16 siting things close to transportation, close to
17 transmission, it's those sort of concepts that come
18 from the *Wind Energy Guidelines*.

19 Q. Okay. Show me in the Guidelines where it says that,
20 under Tier 1 and Tier 2.

21 A. (Valleau) So, again, we said that that was -- that was
22 our language. And, under the "Tier 1 Questions", it
23 gets at minimizing impacts. So, you know, Number 1, --

24 Q. What page are you looking at?

1 A. (Valleau) Page 13, "Tier 1 Questions".

2 Q. And, the Tier 1 Questions are: "Are there species of
3 concern present...? Does the landscape contain areas
4 where development is precluded by law...? Are there
5 known critical areas of wildlife congregation...? Are
6 there large areas of intact habitat...?" Okay. Which
7 one of those questions speaks of "proximity to
8 transportation", "wind speeds at turbine height",
9 "proximity to electrical transmission", "infrastructure
10 cable of handling new generation", "setbacks from
11 residences or structures"?

12 A. (Valleau) Again, --

13 Q. How do you paraphrase that?

14 A. (Valleau) -- the wind speed has nothing to do with
15 these Guidelines. And, I think that I was clear
16 yesterday. Being close to transportation and being
17 close to transmission --

18 Q. Which one of the Tier 1 questions did you get that
19 implied from?

20 A. (Valleau) From all of them, collectively. If you're
21 close to transmission and close to transportation,
22 you're going to avoid impacts to wildlife, to the
23 extent you can. So, again, we didn't say that these
24 were explicitly, and they're not even cited in our

1 testimony as being from Tier 1 and Tier 2. We say that
2 "we're consistent with Tier 1 and Tier 2", and then we
3 described what we've done to minimize our impacts.
4 And, it doesn't have a citation directly after it
5 saying that "We're following Tier 1 and Tier 2 U.S.
6 Fish & Wildlife 2012."

7 Q. I think the point made, and I'll see if you -- you
8 probably won't agree with me on this, but, if you read
9 that paragraph of your testimony, between Line 8 and
10 22, I think it implies at least that those concepts
11 were derived from an analysis of Tier 1 and Tier 2.
12 And, what I heard you say yesterday was that you
13 believed that that was true, and, you know, you were
14 paraphrasing it, but those concepts were there. And, I
15 submit to you, and I ask you now to agree with me, do
16 those concepts appear in anything that would be called
17 a "paraphrasing" from the questions in Tier 1 or Tier
18 2?

19 A. (Valleau) Well, I think just the basic premise of Tier
20 1 analysis is to do a site analysis over a landscape
21 level. And, all of these are parameters that we would
22 look at at a landscape level.

23 Q. Okay. So, we're not talking about paraphrasing
24 anymore, we're talking about basic premises. Is that

1 your testimony now?

2 A. (Valleau) And concepts.

3 Q. And concepts.

4 A. (Valleau) Absolutely.

5 A. (Gravel) It's part of the balance of analyzing a
6 site --

7 (Court reporter interruption.)

8 **BY THE WITNESS:**

9 A. (Gravel) I think it's part of the -- what we were
10 trying to do is demonstrate the balance of the things
11 that you have to consider with wildlife and habitat,
12 and, you know, a feasible project. And, I think,
13 what's of importance, and, you know, we can spend a lot
14 of time here citing these, going through these
15 Guidelines, but I think of what's important is the U.S.
16 Fish & Wildlife Service e-mail that we just received
17 that said that we were in compliance with --

18 BY MR. ROTH:

19 Q. Okay.

20 A. (Gravel) -- their Guidelines.

21 Q. Okay. Now, I'll just ask you this question, and then
22 I'm finished. Given that, I think I've shown that your
23 testimony on this, your prefiled testimony of
24 October 11th, Page 5, is somewhat misleading, and

1 you're now backing away from--

2 MS. GEIGER: Objection. I'm --

3 MR. ROTH: Just let me finish the
4 question.

5 BY MR. ROTH:

6 Q. -- and you're backing away from your statement
7 yesterday about "paraphrasing", is there anything else
8 that you've said about the Fish & Wildlife Guidelines
9 in your testimony that's exaggerated or incomplete or
10 misleading that you'd care to correct right now?

11 MS. BAILEY: Ms. Geiger, do you --

12 MS. GEIGER: Yes. I will object to the
13 characterization interposed by Attorney Roth that these
14 witnesses' testimony is "misleading".

15 MR. ROTH: I'm entitled to characterize
16 it any way I like.

17 MS. GEIGER: I don't think so. I think
18 the record is pretty clear.

19 MR. ROTH: Absolutely. It's my
20 characterization, it's not theirs. And, I'm asking them
21 -- and I've asked the question and I ask that they answer.

22 MS. GEIGER: Are you asking if they
23 agree with you that you said that their testimony -- that
24 you said their testimony is "misleading"?

1 MR. ROTH: No. And, I would ask that
2 Ms. Geiger be instructed not to quarrel with me about the
3 form of my question, and that the witness be directed to
4 answer the question.

5 MS. BAILEY: Although the question about
6 "misleading", your "testimony being misleading" may be
7 inappropriate -- is inappropriate, I'd like you to answer
8 the question.

9 WITNESS VALLEAU: What's the question?

10 MR. ROTH: Can the reporter read the
11 question back please?

12 (Court reporter indicated it would take
13 a few minutes to locate the question.)

14 MR. ROTH: I'll try to rephrase the
15 question.

16 WITNESS GRAVEL: I remember the
17 question.

18 MR. ROTH: You remember the question?

19 WITNESS GRAVEL: Yes.

20 BY MR. ROTH:

21 Q. Are there any other places in your testimony or your
22 cross-examination where you have misstated the
23 Guidelines or exaggerated your tendency to comply with
24 them or provided misleading or incomplete statements

1 about your compliance with the Guidelines?

2 A. (Gravel) No. We haven't.

3 Q. Okay. Thank you.

4 A. (Gravel) And, if you read these Guidelines fully, you
5 would realize that there's a lot of this that's open
6 for interpretation, and that is resolved through
7 consultation with the Fish & Wildlife Service, which we
8 have done on several occasions to work through this
9 process and generate the Avian and Bat Protection Plan
10 that we have today. So, the answer is "no".

11 MR. ROTH: Thank you. That's all I
12 have. Thanks very much.

13 MS. BAILEY: Thank you. Questions from
14 the Committee? Mr. Robinson.

15 MR. ROBINSON: I do have a number of
16 questions, and, please, either one of you just answer. A
17 couple of them are general and a couple of them are
18 specific.

19 BY MR. ROBINSON:

20 Q. My first one is, after construction of the Project,
21 would you expect any changes to the wildlife community
22 in the Project area and surrounding conservation lands?
23 And, if so, to what extent?

24 A. (Valleau) I wouldn't expect any changes to the wildlife

1 community that's there.

2 A. (Gravel) And, I could add to that. In that, you know,
3 you'll see some changes at the Project footprint. The
4 surrounding lands, we wouldn't expect to see any
5 changes at all, you know, from the construction of the
6 Project. However, the Project footprint itself would
7 be changed, the habitat would be altered. You'll have
8 more edge habitat. So, in that incision area, there
9 will be some change for sure.

10 Q. Thank you. Second question deals with the diurnal
11 avian migration study, in Volume 3, Appendix 12B, on
12 Page 5. And, just for my clarification, just a couple
13 of questions on the timing of your surveys.

14 A. (Valleau) Sure.

15 Q. Your spring survey was actually conducted from March
16 25th to May 13th, if I'm reading that right?

17 A. (Valleau) Yes. That's correct.

18 Q. And, the actual timing of the fall survey was September
19 14th to November 8th?

20 A. (Valleau) November 18th.

21 Q. Eighteenth. Thank you. During that survey, did you
22 observe any migrating nighthawks, in either the spring
23 or the fall survey?

24 A. (Valleau) No, we didn't.

1 Q. Were there any other studies or surveys conducted to
2 look for migrating nighthawks in your work?

3 A. (Valleau) No. There weren't.

4 A. (Gravel) And, if I could add to that, too. With no --
5 no study is specifically designed to observe
6 nighthawks. However, the radar surveys, each season of
7 operation during the spring and fall migration period,
8 the radar was turned on just before sun -- like a half
9 an hour before sunset, and it was also turned off about
10 a half an hour after sunset. So, our biologist
11 operating that radar had opportunity to observe, 30
12 nights each season, observe any nighthawk activity. In
13 any survey we do, we're collecting incidental
14 observation, whether it's a direct survey for the
15 species or not, and a list is tallied, on incidental
16 observations, and we didn't see any either.

17 Q. And, all those surveys were conducted during that same
18 timeframe?

19 A. (Gravel) Yes. The radar surveys -- there were 30
20 nights. So, from the spring, radar surveys were
21 conducted on 30 nights between April 18th and May 26th.
22 And, then, the fall surveys occurred on 30 nights
23 between August 17th and October 8th.

24 Q. Okay.

1 A. (Gravel) So, kind of on each end of those time periods.

2 MS. BAILEY: Mr. Robinson, can I just
3 ask one clarifying question, before you move on?

4 MR. ROBINSON: Yes.

5 BY MS. BAILEY:

6 Q. You said that the radar survey was "half hour before
7 sunset to a half an hour after sunset". Did you mean a
8 "half an hour after sunrise"?

9 A. (Gravel) Yes, I did. I did that yesterday, too.

10 MS. BAILEY: Okay. I just wanted to
11 make sure, because I had that written from before.

12 WITNESS GRAVEL: Thank you.

13 MS. BAILEY: Thank you.

14 BY MR. ROBINSON:

15 Q. Are you aware that there are several thousand migrating
16 nighthawks that do come through the State of New
17 Hampshire each year?

18 A. (Gravel) Yes.

19 A. (Valleau) Yes.

20 Q. Are you aware that the general timeframe for those
21 migrations in the spring is the last two weeks in May
22 and, in August, the last two weeks of the month?

23 A. (Gravel) Yes.

24 Q. And, you had no person out there looking during that

1 timeframe for migrating nighthawks?

2 A. (Valleau) No. And, you know, we had circulated study
3 plans with the agencies during February of 2011, and
4 actually sat down, right down the road here, with U.S.
5 Fish & Wildlife and New Hampshire Natural Heritage and
6 DES to discuss our proposed studies, and nobody asked
7 us to do additional surveys for migrating nighthawks.
8 And, you know, all the projects I've been involved
9 with, we haven't done those sort of surveys. So,
10 again, with our diurnal raptor migration, we're focused
11 on raptors.

12 And, like Adam says, we'll collect
13 incidental information that we see out there. And, you
14 know, during the breeding bird survey, that's actually
15 when we -- how we documented the nighthawks, during
16 breeding bird. But those were incidental observations,
17 they weren't at point counts. However, you know, we
18 haven't been asked to do those surveys. So, that's why
19 they weren't done.

20 Q. Okay. I guess my point is, it appears to me that the
21 majority of the nighthawks migrated through outside of
22 the timeframe of your survey.

23 A. (Gravel) And, that's probably true. And, if I may add
24 to Dana's comment. These -- we've conducted these

1 studies at numerous wind projects throughout the
2 Northeast. I know that there's at least six projects
3 that are operational in Maine. And, I know that
4 there's thousands of nighthawks that migrate through
5 Maine as well. And, you know, we've -- both of us have
6 conducted very thorough post-construction studies at
7 these operational facilities. Which, as I described
8 yesterday, involves walking each turbine pad, a series
9 of transects spaced six meters apart. And, we didn't
10 find any nighthawk mortality. So, you know, I think
11 that, in this particular case, and given the incident
12 at Lempster, I think, in this particular case, you have
13 -- you're dealing with a project that had a nighthawk
14 nest very close to the project prior to construction.
15 So, you already knew -- we already knew there were
16 breeding nighthawks there, the project was built, and
17 then -- then that one was whacked.

18 And, I think that's the -- I think
19 that's the take-home here is that that's -- I think
20 that's the difference, anyways, that it occurred in the
21 breeding season, with an already known nest site near
22 the project.

23 A. (Valleau) And, I would like to add that, in all my
24 observations of migrating nighthawks, which have been

1 unrelated to project studies, I'm a birder, so -- I
2 definitely saw a nice migration this fall in Maine.
3 And, I have since I was young. And, they typically
4 follow river valleys, too. I haven't seen them on
5 ridge tops. And, they're not necessarily using wind.
6 You know, they're in powered flight when they're
7 migrating, from what I've seen. So, that's my
8 experience with nighthawks. So, I wouldn't expect
9 there to be a large volume crossing ridges. They're
10 typically following the river valleys.

11 MR. ROBINSON: Okay. Thank you. I have
12 one more question, madam Chair, or series of questions?

13 MS. BAILEY: Proceed.

14 BY MR. ROBINSON:

15 Q. My final series of questions has to do with
16 post-construction wildlife mortality survey.

17 Yesterday, you mentioned the "transects" as your search
18 method in that survey. Do the transects extend beyond
19 the cleared gravel area into the woodlands when you're
20 doing these searches or intend to do these searches?

21 A. (Gravel) No, they do not.

22 Q. Wouldn't you expect mortality to occur or the carcasses
23 to fall outside of the gravel area, as well as within
24 the gravel area?

1 A. (Gravel) We do know that there are some mortality that
2 falls outside of that, that search area. The one thing
3 that -- but the other thing that we do know, in places
4 where we've been able to search all the way out beyond
5 the height of the turbine, in each direction of the
6 turbine, in places like New York, where it's all
7 agricultural lands, and you're able to search the
8 ground much easier at long schedules. We found that 85
9 percent of mortality occurs within 40 meters of the
10 base of the turbine. So, that was -- that's kind of --
11 that knowledge, plus, actually, there's one that we're
12 doing right now in Maine, where it has exceptionally
13 large turbine pads, because there was no revegetation
14 -- you know, there was no revegetation plan at that
15 project. We're actually working to further enhance
16 that correction. Basically, what I'm trying to say is
17 the New York projects that you're able to search that
18 greater distance out, a correction factor has been
19 established to adjust for what we're missing in those
20 projects that have much smaller turbine pads and on
21 forested ridgelines.

22 Q. My next question is, how often during any given week
23 will you be conducting these mortality surveys?

24 A. (Gravel) During a typical study, you're there, and

1 especially in the case of Antrim, there's ten turbines,
2 so it would be -- each turbine would be searched. And,
3 to do ten turbines would be about three days. So,
4 somebody would be there three days each week. Of
5 course, a project that's 25 turbines, that's closer to
6 a week's worth of effort to search all of them. So, in
7 that case, you would be -- somebody would be there five
8 days a week each week. So, in this Project, because
9 it's small, I would expect probably no more than three
10 days per week.

11 Q. And, would this go on for every week during the year?

12 A. (Gravel) Every week, except for the summer period, when
13 mortality has dropped off at other projects. So, it
14 would be -- I think it's from April 15th to June 1st,
15 and then, again, from July 1st to October 15th, would
16 be the search period. So, every week in between those
17 timeframes.

18 Q. Okay. Given the relative small size of bats and birds
19 that might be struck by a turbine, wouldn't you expect
20 that their carcasses would be fairly quickly scavenged
21 by species, such as coyotes and foxes and whatnot?

22 And, to that end, what percentage of dead birds do you
23 actually think you'd find, and bats, when you're doing
24 your surveys?

1 A. (Gravel) Yes. So, that's a very good question. So,
2 you have -- you have two variables that we know of that
3 affect our ability to find carcasses. One of them is
4 scavengers, as you just indicated, and one of them is
5 searcher efficiency. How well can you see things on
6 the ground? Is the grass three feet tall or is it
7 three inches tall? So, what we do is what's called
8 "blind trials". So, for the observer searching the
9 turbine pads, we have another biologist go out and
10 plant ten carcasses, up to ten carcasses, unannounced
11 to the observer doing the work, as a test. How many do
12 you find? You know, how many is this person going to
13 find out of those ten carcasses I dropped? And,
14 they're discretely, you kind of just throw them up in
15 the air as if they fell from the turbine. It's not
16 planted, you're not trying to hide them or anything
17 like that. So, that's the searcher efficiency. I mean
18 -- yes, the searcher efficiency trial. So that, you
19 come up with a correction factor based on that result.
20 Then, the same is true for scavengers.
21 What we do is we plant another ten carcasses. And, we
22 do this throughout the -- at least four times a year to
23 cover the four seasons. And, we put game cameras on,
24 so we know where the carcasses are, we put game cameras

1 on those carcasses, to document which species are
2 scavenging where the carcass is. And, then, how long,
3 in how -- how many days does it take for them to
4 disappear? So, the observer will visit those carcasses
5 each day to see if they're still there. And, as soon
6 as they're gone, that's your day at which carcass
7 persistence status. So, at Day 7, the carcass is gone,
8 then that means, you know, that's your rate. Seven
9 days is your persistence -- it persists on the site for
10 seven days, and then a scavenger is going to remove it.

11 So, that gives you another correction factor that
12 you're adding to that raw count total.

13 Q. Thank you. I have one more question. Given that a
14 typical wildlife survey conducted by state wildlife
15 agencies, Fish & Wildlife Service, or universities,
16 typically goes for a minimum of three years in
17 duration, in order to increase the statistical
18 viability of your data and to smooth out any
19 uncertainties, such as weather. Do you believe that
20 your one year sampling timeframe would give you the
21 same level of confidence that a three year study would
22 do?

23 A. (Gravel) Are you talking "pre-construction"?

24 Q. No. We're still in post-construction.

1 A. (Gravel) Post-construction?

2 Q. Yes.

3 A. (Gravel) Yes. I think that it would, given all of the
4 other projects that we have operational as well. So,
5 it's not just this one dataset. It kind of -- you're
6 able to look at the trends over -- across a number of
7 projects. And, I think, the large part is because
8 we're documenting -- and most of the mortalities are
9 occurring during the migration season. So, those same
10 migrants could be passing all these other projects as
11 well.

12 So, I think, yes, I think that one year,
13 given the past at least ten years of data collected at
14 other operational facilities, I think one year would
15 get you what you need to target -- target-focused
16 effort for future work. So, I don't -- I'm expecting
17 that one year will give us the information, one year
18 coupled with the other projects, will give us the
19 information we need to focus efforts on individual
20 species or issues.

21 So, the point of this evaluation study
22 is to figure out what the impact is and figure out if
23 there are any, you know, any problems that we didn't
24 anticipate, like a higher bat mortality, for example.

1 So, I think one year of study would help us direct
2 another, you know, more focused effort. So, instead of
3 monitoring the whole thing, you're looking at a
4 particular issue more closely the next -- the next
5 year.

6 Q. Three year studies conducted by wildlife agencies
7 generally are done to give you an 80 to 90 percent
8 confidence level in your data. Are you saying that a
9 one year study will give you that same level of
10 confidence to be able to project over a project?

11 A. (Gravel) I think that, even with a 95 percent
12 confidence, you're limited with what that -- what you
13 can use that data for, I guess is what we're trying to
14 say.

15 Q. Yes. That's normal with any study.

16 A. (Valleau) And, it may depend on what the purpose or
17 goal of the study is, too. If you're going sort of
18 like something like a population estimate, you would
19 absolutely want more data to get closer to that
20 95 percent. The studies that are typically performed
21 for wind projects aren't population studies. For
22 example, the daytime raptor use surveys or the eagle
23 use surveys are to see how an eagle uses the ridge, and
24 to give us a rate of observation. Same thing with the

1 diurnal raptor. You know, it's a rate of passage that
2 we're going for. We're not trying to reach 95 percent
3 confidence with statistics on these. They're more
4 general observations, than something that, say, a deer
5 census or a moose census or something like that. So,
6 you've got to think about the goal of the study. And,
7 the goal here is to see if there's any issue that needs
8 further study, --

9 Q. Yes, I understand.

10 A. (Valleau) -- to just identify it.

11 MR. ROBINSON: Yes, I understand that.

12 WITNESS VALLEAU: Yes.

13 MR. ROBINSON: Thank you. That's all I
14 have.

15 MS. BAILEY: Mr. Simpkins.

16 MR. SIMPKINS: Yes. I had a few
17 questions about the tree clearing that's referenced in the
18 Avian and Bat Protection Plan, as well as the prefiled
19 direct testimony.

20 BY MR. SIMPKINS:

21 Q. What's the total acreage that's going to be cleared of
22 trees?

23 A. (Valleau) The total disturbed area is 63 acres. And,
24 some of that is already cleared. There's a laydown

1 area down along Route 9. That doesn't have any tree
2 cover. It's got some alders and sapling cover on it.
3 And, then, on the ridge itself, there's been logging
4 activity that is unrelated. You know, it's landowner
5 harvesting.

6 Q. Okay. So, that actually led into my next question, I'm
7 just curious, how much of the 63 acres have actually
8 been harvested or cleared already?

9 A. (Valleau) I don't really know. We haven't been
10 monitoring that. Again, that's a landowner that's
11 doing that harvesting.

12 Q. Okay. Question about the timing. We had quite a bit
13 of discussion about this yesterday. In the ABPP, it
14 talks about the preferred time for tree clearing would
15 be during frozen ground conditions, and I think
16 everyone agreed that that would be preferable, or when
17 the ground is dry. But, ultimately, it was when at
18 least as dictated by the date of permit application
19 approval and other commercial agreements. And, so,
20 according to your testimony yesterday, it sounded like
21 the timing of the tree clearing would actually be
22 dictated more by administrative timelines, versus when
23 environmental conditions were best suited to mitigate
24 impact to the site. Is that a fair statement?

1 A. (Valleau) I think it's more that there's a balance, a
2 balancing that needs to go on, between commercial needs
3 and environmental needs. And, so, if it can be
4 completely avoided during a sensitive time, that would
5 be -- absolutely would be the preference. So, --

6 Q. For instance, if the permit applications were approved
7 in April, do you see timber clearing commencing during
8 mud season?

9 A. (Valleau) No, I don't think anybody would do that. I
10 mean, you know, it's hard to commit to something now,
11 here and now, because we don't know when things are
12 going to be, and I don't know anything about the
13 commercial side, to be honest with you. So, other than
14 there's commercial issues to take into consideration,
15 when balancing it against environmental concerns.

16 Q. Okay.

17 A. (Valleau) So, that question may be better for one of
18 the commercial people.

19 Q. Okay. This is a question for both of you. I'm just
20 curious. Are either of you familiar with the
21 publication called "*Good Forestry in the Granite*
22 *State*"?

23 A. (Gravel) Yes, a little bit. And, that's the --

24 A. (Valleau) I'm not.

1 A. (Gravel) -- the "Best Management Practices for Forestry
2 in New Hampshire"?

3 Q. Correct.

4 A. (Gravel) Yes.

5 Q. Okay. And, Mr. Valleau?

6 A. (Valleau) Yes, I'm not.

7 Q. Okay. In Section 6.1.2 of the Avian and Bat Protection
8 Plan, you talk about you're going to be following "best
9 management practices" for mitigating the "spread of
10 invasive species". Could you describe what those BMPs
11 are?

12 A. (Valleau) Just want to read the language.

13 A. (Gravel) What page did you say that was on, I'm sorry?

14 Q. Page 46 of the Avian and Bat Protection Plan, at the
15 bottom of the page. It's right after the "Tree
16 Clearing" section. It's titled "Invasive Species
17 Avoidance".

18 A. (Gravel) I mean, "best management practices", I don't
19 think that we have any in mind beyond the ones that we
20 list here; cleaning construction vehicles, revegetation
21 with native species.

22 A. (Valleau) Yes. You know, re-seeding with native seed.

23 Q. So, if I may ask a question about that one in
24 particular. So, it says "re-seeded with native seed",

1 and, then, in parentheses, it says "to the extent
2 possible pending seed availability". Does that mean,
3 if it's not native seed, if native seed is not
4 available, you would re-seed with non-native seed? Or,
5 does that mean you wouldn't re-seed if you can't find
6 native seed?

7 A. (Valleau) I think we'd try to find native seed. I
8 don't -- I think that phrase is in there so there is
9 some flexibility there. And, I do know that, in
10 working with U.S. Fish & Wildlife on seeding plans at
11 other places, there are some species of non-natives
12 which are acceptable, because they're so widespread and
13 not non-invasive. So, "non-native" doesn't necessarily
14 mean "invasive". So, you know, redtop grass is a
15 classic one that is not a native grass in a lot of
16 places in New England, and it's used in U.S. Fish &
17 Wildlife Service and National Park Service seed mixes,
18 because it catches well, and provides opportunity for
19 other native seed to get established.

20 So, I think that phrasing is just there
21 for flexibility. And, I've been working on a project
22 for the last two years trying to get seeding
23 established. And, it's -- we're using 100 percent
24 native seed there. So, it's available. And, it's not

1 actually significantly more costly than the non-native
2 seed mix that are typical, like DOT mixes.

3 Q. As far as the cleaning of construction vehicles and
4 equipment, is there a schedule for cleaning? It just
5 says "regularly cleaned". Is that whenever they show
6 up to the site for the first time?

7 A. (Valleau) That would be the typical practice, is to
8 clean them before they go on-site. And, that would
9 take place at, say, the laydown yard. So, the first
10 place that they land on. And, the major laydown yard
11 for this Project is a previously disturbed borrow pit.
12 So, it's kind of a good spot to do it.

13 (Court reporter interruption.)

14 WITNESS VALLEAU: Borrow, b-o-r-r-o-w.

15 BY MR. SIMPKINS:

16 Q. Another question, this one is kind of switching gears
17 from the tree clearing. Again, there's been several
18 questions already asked about this, but I just wanted
19 to make sure I'm clear. In the e-mail from the U.S.
20 Fish & Wildlife Service, dated October 26th, they
21 recommend that a "take permit" be gotten. Is it the
22 intent that a take permit will be gotten for the bald
23 eagle based on the recommendations or not?

24 A. (Valleau) Our intent is to have more discussions with

1 the U.S. Fish & Wildlife and see where that takes us.

2 Q. Okay. So, as of right now, you don't know if you're
3 going to be getting a take permit or not?

4 A. (Valleau) Yes. We haven't made that decision. We just
5 got this last Friday.

6 Q. And, my last question is, if this Project received a
7 certificate, and the Committee required a condition
8 that tree clearing only occur during dry ground or
9 frozen ground conditions, in your opinion, would that
10 be acceptable?

11 A. (Valleau) That would be acceptable. Dry ground and
12 frozen ground, yes.

13 MR. SIMPKINS: Thank you. No further
14 questions.

15 MS. BAILEY: Ms. Lyons.

16 BY MS. LYONS:

17 Q. I'm looking at Section 9.3 on the Avian and Bat
18 Protection Plan. It's at Page 65.

19 MR. IACOPINO: That is AWE -- I'll just
20 get the number for everybody, it's AWE 6, and it's
21 Document 06, 06, in the electronic version.

22 BY MS. LYONS:

23 Q. And, I just have two questions. Can the phased
24 consultation process be initiated by others, like Fish

1 & Game or Fish & Wildlife Service?

2 A. (Valleau) I think that is addressed in the second
3 sentence in that first paragraph: "Under unforeseen
4 circumstances, however, the phased consultation process
5 may be initiated based on the results of annual
6 reporting under the provisions of the WMMP." So, I
7 would assume that annual reporting done by the Project
8 to New Hampshire Fish & Game or U.S. Fish & Wildlife
9 could prompt New Hampshire Fish & Game or U.S. Fish &
10 Wildlife coming back to the Applicant and asking for
11 consultation to start.

12 Q. Well, I did see that. But I was wondering if there was
13 a more immediate need?

14 A. (Valleau) I'm going to guess that, if New Hampshire
15 Fish & Game or U.S. Fish & Wildlife had a concern, that
16 the Project operations would take notice immediately,
17 though.

18 Q. And, my last question is, is there a public
19 notification at the end of all this phased
20 consultation? Would there be a report generated,
21 publicly noticed, or is it just an agreement between
22 the agencies?

23 A. (Valleau) I think that anything that's a public
24 document would be something that's submitted to New

1 Hampshire Fish & Game or U.S. Fish & Wildlife. I don't
2 think we've contemplated any public notice. However,
3 if it's submitted to either of those departments, then
4 those documents are public.

5 MS. LYONS: Okay. Thank you.

6 MS. BAILEY: Mr. Stewart.

7 BY DIR. STEWART:

8 Q. I'm in the PC 21, "U.S. Fish & Wildlife Service
9 Land-Based Wind Energy Guidelines". And, I'm trying to
10 understand, I guess "compliance" is too strong a word,
11 but how your process adhered, or didn't, to the Fish &
12 Wildlife Guidelines. So, the first page that I'm on is
13 Executive Summary, which is vi in that document. And,
14 first, can you describe what the purpose of this
15 guideline is generally?

16 A. (Valleau) Generally, it's to guide investigation of a
17 site and to select a site that's suitable for
18 development.

19 A. (Gravel) And, to trigger or encourage consultation with
20 the Fish & Wildlife Service. So, it's a framework for
21 consultation and evaluation.

22 Q. Okay. And, what I've learned, from my quick read here,
23 is that there's multiple tiers to this approach. And,
24 I guess I'm looking at the Executive Summary, and I'm

1 also looking at Page 9, which is a general framework of
2 the tiered approach. And, I'd like you to describe how
3 you go through these tiers. I guess you're through
4 Tier 3 now. But how do you -- what's the decision
5 process and how do you go through these tiers, and how
6 does that relate to the specific project?

7 A. (Valleau) Tier 1 corresponds with initial consultation
8 letters that we send out to state and federal agencies
9 requesting data for a particular area. So, we're
10 looking for species of concern or mapped habitats that
11 is in the database that's used by the New Hampshire
12 Fish & Game, New Hampshire Natural Heritage, State
13 Historic Preservation Office, U.S. Fish & Wildlife,
14 pretty much hitting all the state and federal agencies
15 to kind of a landscape overview, see if there's any
16 issues that deserve further study, or, if there's any
17 issues that are --

18 A. (Gravel) That automatically kick in.

19 A. (Valleau) -- nonstarters.

20 Q. Do you evaluate alternative sites in Tier 1, or have
21 you in this case?

22 A. (Valleau) As part of the Army Corps process, which is a
23 separate and distinct permit process, because we have
24 to demonstrate an alternatives analysis.

1 Q. So, what were the --

2 A. (Valleau) So, that's part of -- part of what goes into
3 this initial broad approach. You know, the Guidelines
4 are kind of focused in on the wildlife issues. But --
5 so, an alternatives analysis with -- through the Corps
6 process is a bit broader in scope.

7 Q. Within this -- let's go to Tier 2, as it's described in
8 the Executive Summary. "Site Characterization", and
9 then, in parentheses, it says "broad characterization
10 of one or more potential project sites". So, are there
11 alternatives that are evaluated or have been evaluated
12 in the context of the Fish & Wildlife Service
13 Guidelines? Were there other ridgelines that were
14 looked at or anything of that sort?

15 A. (Valleau) We didn't do that for this, no.

16 Q. Okay.

17 A. (Valleau) No. We had this general area to look at.
18 So, I guess, in theory, there were -- our search area
19 was much larger than just Tuttle Hill and Willard
20 Mountain.

21 Q. Okay. What would an unacceptable site look like? What
22 would be the characteristics of an unacceptable site?
23 Or, one that would get rejected? And, again, I'm
24 working off of Executive Summary and the general

1 framework.

2 A. (Gravel) Yes.

3 Q. And, the general framework has, you know, kind of a
4 decision matrix, reject -- "abandon site or proceed to
5 Tier 2", "abandon project", under "Tier 2", if criteria
6 are wrong.

7 A. (Gravel) It would be, if you had species that would
8 trigger the site to be a "high risk" site. You know,
9 if you had, you know, a number of rare species that
10 this project would eliminate habitat for, or especially
11 eliminate habitat for the -- for the state even. I
12 mean, it depends on what scale you're looking at. This
13 is, in the decision-making process here, Tier 2 is in
14 coordination with the agencies. It's not -- it's not
15 just something we make up. It's an evaluation of the
16 sensitive species, the species that could be of most
17 impact. Same with, you know, bald eagles or eagles is
18 another thing. And, I think Tier 2 is kind of how we
19 started to think about the evaluation proposal that we
20 have in the Avian and Bat Protection Plan. Kind of, as
21 we looked at everything as a whole, we knew we didn't
22 have rare species on the site. Didn't have eagle nests
23 -- eagle nesting close to us anyway. So, it was -- but
24 we do know that bat mortality is something that's been

1 documented at any wind facility. And, given the
2 decline of white-nose syndrome, we've identified that
3 that was the species that we needed to pay attention
4 to, or the species group. So, that's kind of where the
5 concept of the evaluation phased curtailment proposal
6 came into play, was when we went through the Tier 2
7 study and realized we didn't have the sensitive species
8 or sensitive habitats that could support rare,
9 threatened, or endangered species. But we identified
10 the bats, you know, bat group, as the one that we
11 needed to further investigate.

12 Q. When would the migration fly-away come into play as an
13 issue, in terms of potentially rejecting the site or
14 accepting it?

15 A. (Valleau) So, that "Atlantic Raptor Migration
16 Corridor", is that what you're referring to?

17 Q. I'm an engineer. So, --

18 A. (Valleau) Yes.

19 Q. Yes. In general, yes. So, I'm wondering about the bat
20 migration and the general bird migration.

21 A. (Valleau) Yes.

22 Q. Not just the hawks, but there's other species that I
23 know migrate.

24 A. (Valleau) Yes. So, when would that be raised as a

1 significant impact? Is that your question?

2 Q. Yes. And, when would it trigger rejection, as opposed
3 to, --

4 A. (Valleau) Yes.

5 Q. -- you know, a project abandonment under this tier
6 structure?

7 A. (Valleau) Right. So, we know we're within migration
8 areas. And, you know, the nocturnal migrants are a
9 broad front. They're not necessarily focused on
10 anything over the land that -- as a focal point. So,
11 on any given area, there's going to be night migrants
12 flying over.

13 A. (Gravel) And, that could be as far from -- you know,
14 for nocturnal migrants, the migration corridor could
15 be, you know, from the east coast of Maine to Ohio.
16 It's very wide. Because it's -- it's especially very
17 wide in the north where habitat is wider. Whereas, you
18 know, like Canada. For example, a lot of our wildlife
19 species travel north during the breeding season. But,
20 during the fall migration, they're traveling to their
21 winter grounds, which is a much smaller area. So, the
22 southern end of the migration route becomes much
23 narrow, maybe 50 miles. Whereas, the northern part of
24 the migration route is, you know, almost a 1,000 miles.

1 Q. So, can you think of a scenario or do you know of a
2 scenario where one of these ridgelines could
3 potentially be rejected due to the migration, or have
4 you had that happen?

5 A. (Valleau) Yes, I have. On the first project I worked
6 on, during daytime migration, there was one spot where
7 most of the raptors came to for updrafts. And, so,
8 that was a red flag to everybody not to build there.
9 And, we didn't build the turbine there. I have another
10 -- we had another listed species on the site that also
11 led to eliminating the road and a turbine, because
12 there was a state-listed species that lived in this
13 particular habitat where there was a turbine proposed.
14 So, it kind of comes down to, say, with the migrants,
15 we're looking for places that focus the volume, the
16 number of migrants, into a small area, as opposed to
17 being across an entire ridge or across the entire
18 landscape. And, for the RTE species, we're looking for
19 particular habitats or a nest site or something like
20 that. Something in particular that should be avoided.
21 And, again, it's -- the hook is that there's a focal
22 point that we would destroy or disturb. And, under the
23 Endangered Species Act, if you disturb/harass, you
24 know, any number of ways, impact a listed species, then

1 it's considered "take".

2 Q. In this area, again, I'm not a bird person, but I know
3 that there's a -- that Pack Monadnock attracts a lot of
4 people to look at the hawks in migration?

5 A. (Valleau) Right.

6 Q. Is that an example of --

7 A. (Valleau) That's an example of a good focal point for
8 raptor migration, yes. You know, and, we compared the
9 numbers there with some of our days that we had, and
10 they would have ten times or more the number of raptors
11 that we had at Antrim. So, that there's -- on the same
12 day.

13 Q. Okay.

14 A. (Valleau) So, that's an obvious focal point there.

15 Q. The order of magnitude is ten difference between --

16 A. (Valleau) Yes.

17 Q. I'm trying to get a --

18 A. (Valleau) Yes, at least. At least ten.

19 A. (Gravel) But that, to answer your question, too, that
20 would be a place that we would recommend "no project",
21 Pack Monadnock. You know, to go back to the migration
22 route, it's so large that it covers most of New
23 Hampshire into Maine. And, there's a series of
24 ridgelines that have been established for

1 hawk-watching, because they have been shown over the
2 years to be high-use areas. And, that's why we
3 compared the pre-construction data to what we see at
4 those known high-use areas.

5 Q. Okay. On through my tiers here. Tier 3, is that the
6 kind of study that you did on this site? Would it be a
7 Tier 3 study or --

8 A. (Gravel) Yes. Tier 3 studies are all of the
9 pre-construction studies that kind of go into -- into
10 evaluating the project. And, those studies are based
11 on the agency consultation we have during the Tier 2
12 stage. So, it's studies that we, after Tier 2
13 evaluation, we identify the things that might require
14 additional follow-up. We know nocturnal birds, we know
15 diurnal raptors, and bats have been found at wind
16 projects. So, those are the three key studies that you
17 do. And, then, additional consultation or through
18 consultation, you identify those species that you might
19 need to, you know, do additional surveys for it. In
20 this case, it was mist netting, bat mist netting, to
21 identify, we already did acoustic surveys, but we
22 wanted to know -- the agency feedback wanted to know if
23 there's any listed species of bats on-site, so we
24 conducted mist netting surveys to identify them.

1 A. (Valleau) And, we also did additional eagle surveys,
2 due to the proximity to Lake Nubanusit.

3 Q. Okay.

4 A. (Valleau) So, you know, that was something that was
5 identified by the agencies as something else they
6 wanted some more information on.

7 Q. That's useful. All right. I was quite finished with
8 Tier 2. If you go to Page 9, "Figure 1".

9 A. (Gravel) Uh-huh.

10 A. (Valleau) Yes.

11 A. (Gravel) Yes.

12 Q. So, we're in Tier 2, and there's a decision matrix.
13 Where did this Project fall in this, the scheme of 1
14 through 4, "unknown", "low", "moderate", "high", in
15 terms of "significant" -- "potential for significant"
16 -- or, "probability of significant adverse impacts"?

17 A. (Valleau) Under 2, "low".

18 Q. Okay.

19 A. (Valleau) And, then, you know, through additional study
20 and analysis by U.S. Fish & Wildlife, they have pointed
21 out the bald eagle risk is at the "low end of
22 moderate". So, you know, it can also be applied down
23 to -- down to species. But, overall, it's low
24 probability. There's a low number of bats. There's

1 none of the RTE species of bats. There's no RTE birds
2 nesting on the site, things like that.

3 Q. So, the --

4 A. (Valleau) So, through the tier process, it would fall
5 out as "low".

6 Q. So, the target species or what have you for study where
7 the bats, and potentially the eagles, but they were on
8 the low end for the eagles?

9 A. (Valleau) Correct.

10 Q. Okay. Again, I'm just a layperson on this.

11 A. (Valleau) Sure.

12 Q. So, you did the equivalent of a Tier 3 study, so I am
13 trying to move this along, I know I'm taking a lot of
14 time. The Tier 3 studies are done, and what's the
15 probability of significant adverse impacts coming out
16 of those studies?

17 A. (Valleau) Again, that would be "low". Nothing was
18 identified as requiring mitigation. And, you know,
19 there is still that bald eagle take permit, which is
20 open for discussion. But that's really the only thing
21 that the U.S. Fish & wildlife raised as a potentially
22 significant issue, because getting a take permit is a
23 significant undertaking.

24 Q. One last question. The Tier 4, or post-construction,

1 is that what I have gathered from my really quick read
2 of this?

3 A. (Valleau) Correct.

4 A. (Gravel) Yes.

5 Q. And, I noticed on Page 55 of this document, there's
6 something called a "Bird and Bat Conservation
7 Strategy", which then, in the second sentence of the
8 first paragraph, talks about "Aviation [Avian?] and Bat
9 Protection Plans", and then makes note of the fact
10 these have generally been used on transmission lines,
11 rather than wind energy projects. How does your
12 approach comply or adhere to this guidance from Fish &
13 Wildlife?

14 A. (Gravel) This, the "Bird and Bat Conservation Strategy"
15 is actually the new name for "Avian and Bat Protection
16 Plan", prior to the March -- I believe these are the
17 March 2012 -- this is the March 2012 version. Prior to
18 the March 2012 Service guidance, it was actually called
19 the "Avian and Bat Protection Plan". So, we used the
20 terms of the previous guidance, when it's the same as
21 the Bird and Bat Conservation Strategy.

22 Q. Okay. So, is this the basis for the Fish & Wildlife
23 letter, and their recommendations going forward, is
24 their review of your study in this context?

1 A. (Valleau) In the context of the Avian and Bat
2 Protection Plan?

3 Q. Well, the whole --

4 A. (Valleau) Yes. Yes. So, you know, the Avian and Bat
5 Protection Plan is meant to encapsulate all of the
6 wildlife studies that were taking place
7 pre-construction, lay some of those results out, and
8 then lay out a post-construction program and conflict
9 resolution and consultation process. It's meant to be
10 the guiding document for all of the wildlife issues.

11 DIR. STEWART: Thank you. I have no
12 more questions.

13 MS. BAILEY: Dr. Boisvert.

14 MR. BOISVERT: Could I ask our counsel a
15 quick question before I go forward?

16 MR. IACOPINO: Sure.

17 (Mr. Boisvert conferring with Atty.

18 Iacopino.)

19 BY MR. BOISVERT:

20 Q. My first question relates to the issue of
21 "fragmentation", which was discussed early on in your
22 testimony. There are, as I understand it, a variety of
23 things that contribute towards fragmentation, and may
24 be on variable levels. Fragmentation for a Blanding's

1 turtle would be a different kind of area than
2 fragmentation for moose, that sort of thing?

3 A. (Valleau) Correct.

4 Q. Correct. And, different features on the landscape
5 would contribute to fragmentation. Would the cleared
6 area for a power transmission line be one of those
7 factors that contribute to fragmentation?

8 A. (Valleau) Some consider it that way. However, the New
9 Hampshire assessment for unfragmented blocks didn't
10 carve out the transmission line in this -- that's in
11 this unfragmented block. So, it was not treated as
12 "fragmented". But I have seen that, transmission
13 corridors cited as "fragmentation".

14 Q. So, it is possible. It would depend upon the
15 environment, it would depend upon the transmission
16 line?

17 A. (Valleau) Probably, the width of the line, the type of
18 structures in the line, the type of access down the
19 line, things like that. You know, if you've ever been
20 to Niagara, New York, and you look around, it's
21 transmission lines everywhere as far as you can see.
22 And, that's heavily fragmented. There are large steel
23 structures, there's roads in the transmission line, the
24 corridors allow them to access the towers with

1 vehicles. However, in New Hampshire and Maine, most of
2 the transmission lines, like the one at this site, is
3 what would be characterized, say, as a "wild lands" or
4 a "shrub-management" type of corridor. So, it's still
5 wildlife habitat. There's no big established road in
6 it. The structures are relatively small, they're
7 wooden. So, in this case, the state decided not to
8 count that as -- they counted it within the
9 unfragmented block. So, they considered it
10 "unfragmented".

11 Q. Okay. The reason for my question is that, as I look at
12 this map behind you, the tall one?

13 A. (Valleau) This one?

14 Q. Yes. You might want to put that up. Also, --

15 MS. BAILEY: Which exhibit number is
16 that?

17 MR. BOISVERT: 38B. AWE's 38B.

18 MS. BAILEY: Thank you.

19 BY MR. BOISVERT:

20 Q. I've been kind of looking at it for a day or so, so I
21 won't need to see it right now. I notice that the --
22 you have the long stretch with the road connecting the
23 towers and so forth. There's no scale on that. What's
24 the distance of that cut?

1 A. (Valleau) The length of the road?

2 Q. Yes.

3 A. (Valleau) It's approximately 4 miles.

4 Q. All right. So, eyeballing it, the corridor that
5 intersects it at the -- this end here (indicating).

6 A. (Valleau) With the transmission line?

7 Q. Yes. It looks like it's illustrated at about a mile,
8 roughly, about a quarter of the length?

9 A. (Valleau) You mean the detail of the transmission
10 corridor?

11 Q. Yes.

12 A. (Valleau) Yes, it probably goes out a mile.

13 Q. All right. And, in your opinion, this does not combine
14 in an accumulative sense to represent a possibility of
15 fragmentation?

16 A. (Valleau) I don't think so. This type of corridor,
17 again, is something you could characterize as, say,
18 "wild land", and it provides actually excellent habitat
19 for species that rely on early successional type of
20 habitats. So, you know, mostly it's managed as shrub,
21 shrub land. So, there's a lot of brows in there for
22 undulates [sic]. And, there's also a lot of nesting
23 habitat for neo --

24 (Court reporter interruption.)

1 **BY THE WITNESS:**

2 A. (Valleau) -- neotropical migrant warblers, so,
3 yellow-throat, chestnut-sided warbler, things like that
4 actually provide excellent habitat for them, and it's
5 maintained as shrub habitat. So, typically, in the
6 Northeast, shrub habitat, that's not wetland,
7 progresses into forest. So, it's an ephemeral type of
8 habitat.

9 BY MR. BOISVERT:

10 Q. So, you view --

11 A. (Valleau) So, in my opinion, this type of transmission
12 right-of-way is not fragmentation.

13 Q. So, you view it as an asset as opposed to a liability?

14 A. (Valleau) Correct.

15 Q. Are there ATV trails in that corridor?

16 A. (Valleau) There are a few. They don't appear to be
17 heavily used. We didn't use those ATV trails much for
18 accessing the Project. You know, when we first landed
19 here, we had to figure out where the best trails were
20 to get around the Project site. And, there weren't
21 many in that corridor that we ended up using.

22 Q. I mention that, because there may be programs to
23 maintain it in shrub and so forth, but there is
24 unauthorized use of many transmission line corridors

1 for ATV trails and other uses that are, in fact, quite
2 detrimental, impacting wetlands, *etcetera*. But your
3 statement is that this area is not particularly
4 impacted by ATV trails?

5 A. (Valleau) I don't believe so. From what I've seen in
6 this corridor, it's a pretty vegetated corridor. It's
7 not an easy one to walk.

8 Q. Okay. Check my notes. Okay. In regard to the issue
9 of a one-year versus three-year monitoring
10 post-construction program, I recall, Mr. Gravel, you
11 said that "the monitoring wasn't particularly
12 advantageous or useful for actually assisting in
13 reducing the bird and bat fatalities, that it was
14 monitoring, but didn't go anywhere." Is that a fair
15 characterization?

16 A. (Gravel) Yeah. If you just monitor and don't do --
17 don't implement any management actions, based on what
18 you find.

19 Q. But, later, in reference to defending the one-year
20 period, you said that you would be "employing
21 information from other studies", is that correct?

22 A. (Gravel) Yes. I mean, I also said that, you know, the
23 Project wouldn't be implementing studies until 2015,
24 which gives a lot of time to learn more. There's a lot

1 of studies. I mean, the GRP Project, for example
2 hasn't issued their --

3 Q. Excuse me, what's the "GRP Project"?

4 A. (Gravel) The "GRP Project", Granite Reliable Power
5 Project, hasn't issued their first year monitoring
6 study report yet. I don't believe that's due until the
7 end of January. Groton isn't operational yet, and I
8 know they will be doing post-construction surveys next
9 year, following the three-year requirement that the
10 Board put on the project -- on the conditions on the
11 project last year. So, that's another piece of
12 information that will help add to what we know.

13 So, my -- I guess point was that, tying
14 to -- tying your hands to specific years or methods now
15 may not be as helpful as the adaptive management
16 process that we've proposed, that allows us to continue
17 to consult with the agencies, that to collectively come
18 up with a study to address specific issues that we
19 find.

20 Q. So, it's my recollection, from sitting on the Groton
21 Wind Committee, that the Applicant argued against the
22 three-year post-construction monitoring program, but it
23 was still implemented. You're now referring to
24 utilizing that information when it becomes available,

1 to help guide this, and potentially other projects, if
2 I can extend your logic. So, it does seem as though
3 there is utility to the three-year post monitoring
4 construction program. It may not, as I understand your
5 statement, directly affect that project, but it can be
6 used as very useful information on other projects, is
7 that correct?

8 A. (Gravel) Yeah. It's correct. And, that I don't -- I
9 stand pretty firm with what I testified at the Groton
10 Project, and that I don't believe -- and, so, I think
11 what we're going to learn is that we didn't learn much.
12 I don't -- we all got to go through these things to
13 figure out what the right things to do are. But I have
14 been doing this for quite a while now. And, I haven't
15 seen one particular study do -- repeat all of the
16 pre-construction studies over again. But I have
17 repeated bat detector surveys at operational
18 facilities. I have repeated raptor surveys at
19 operational facilities. I've repeated radar surveys at
20 operational facilities. And, the numbers aren't
21 matching up. You have equal numbers or similar numbers
22 of migrants moving over any given project as you did
23 before the project was built. But you're not finding
24 anywhere near the mortality that correspond to the

1 numbers. And, you're also finding very similar levels
2 of mortality within this -- within a much smaller
3 subset of what's actually moving over a project area.

4 Q. So, still in all, you do employ that information and
5 it's useful to your argument as I understand it. So, I
6 would consider that the three-year study program does
7 have utility in a much broader sense. And, you
8 mentioned that you would be bringing this into
9 discussions with Fish & Wildlife and Fish & Game under
10 your Adaptive -- forgive me, I forget the full title,
11 but that discussions with those agencies would only be
12 prompted by decisions at the Antrim Wind end, it would
13 not be prompted by decisions at the agency end,
14 correct?

15 A. (Gravel) No, that not correct. I mean, it's a
16 commitment to consult with the agencies. There's a
17 immediate alert procedure. So, if anything was
18 documented on-site that was a surprise or was -- should
19 be, like a rare, threatened or endangered species, Fish
20 & Game and Fish & Wildlife Service will be notified
21 immediately. And, then, there's a reporting
22 requirement that consults with the agencies at the end
23 of each study. So, it's a -- there's many ways in
24 which that will happen, and it won't be initiated just

1 on -- it won't be up to AWE to decide if they consult
2 or when. It's dependent upon the results of the study
3 and the requirements of the reporting schedule.

4 Q. Okay. I raise this, because I'm going back to
5 Section 4 of the New Hampshire Fish & Game Department
6 letter of October 26. It's the Committee's Exhibit 16.
7 Where you made the argument that that would be
8 burdensome to comply with, because you're already doing
9 something. Is that a fair characterization of your
10 position on that?

11 A. (Valleau) Yes, that's what I would say. We already
12 have -- that's one of the goals of the Avian and Bat
13 Protection Plan, is to have that process already in
14 place.

15 Q. Okay. And, one last comment, I guess. In your
16 testimony, Mr. Gravel, you mentioned that there were
17 some stonewalls noted in the area, and you're referring
18 to the historic agricultural use of the area?

19 A. (Valleau) That was me.

20 Q. Yes. By chance, did you pass this information onto the
21 Cultural Resources people?

22 A. (Valleau) Oh, I'm sure. They walked the site, so --

23 Q. I'm just curious.

24 A. (Valleau) Yes. Yes, I mean, that's something that we

1 would note.

2 Q. Uh-huh. But you didn't happen to pass it on?

3 A. (Valleau) I probably told Rick about it, yes.

4 Q. Just curious.

5 A. (Valleau) Yes.

6 Q. The more eyes the better.

7 A. (Valleau) Yes. Typically, when we do like a site
8 recon, we're looking for pretty much any potential
9 issue. And, as -- say we come across stonewalls, we
10 actually have those noted on plans that are -- like we
11 develop an access plan for people to use that are going
12 out to do field surveys, so they know the lay of the
13 land. And, I pick up stonewalls, I pick up iron pipes
14 at property corners, things like that, to help orient
15 us on the site. And, we have a list of things that we
16 look for, including cellar holes and just kind of the
17 obvious things that are potential issues that might
18 need more investigation.

19 Q. Do you use blister rust maps?

20 A. (Valleau) No, I don't. I don't look at blister rust
21 maps.

22 Q. You know what they are?

23 A. (Valleau) I don't know what that is.

24 Q. For the information of the Committee and others, for

1 approximately 40 or 50 years, individuals were sent out
2 into the woods of New Hampshire looking specifically
3 for evidence of the blister rust disease.

4 A. (Valleau) Oh, on white pines?

5 Q. On white pines.

6 A. (Valleau) Yes, yes.

7 Q. And, it happened that, as they mapped the blister rust,
8 they generated exceptionally accurate and useful maps
9 of cellar holes, stonewalls, cemeteries, *etcetera*,
10 which were easier to see in the 1940s than they are
11 today. And, for their time and methodology, they were
12 actually rather accurate, and can be useful for
13 investigating the use -- land use history. I was just
14 curious if they were used.

15 A. (Valleau) And, you know, you might want to ask Rick a
16 little about that.

17 Q. Yes. And, that would be more in his --

18 A. (Valleau) Yes, that's his bailiwick. But that's good
19 to know. That's a resource I wasn't aware of. Are
20 those available electronically or --

21 Q. They're available at the New Hampshire Archives, which
22 is about 300 yards from here.

23 A. (Valleau) Yes. Okay. Great.

24 MR. BOISVERT: That's all my questions.

1 MS. BAILEY: Thank you. I don't want to
2 cut any Committee questions off, but we're probably at
3 about the time we need to take a break for the reporter.
4 How are you doing?

5 MR. PATNAUDE: You can keep going, I
6 guess.

7 MS. BAILEY: Okay. Any other questions?
8 Chairman Ignatius.

9 CHAIRMAN IGNATIUS: Thank you. I
10 probably have I don't know if it's ten minutes or so.
11 And, it may be that there are a few things that I get into
12 that have already been addressed, and for that I apologize
13 if I missed a good explanation of it yesterday.
14 Obviously, I'll read the transcripts of everything that
15 I've missed.

16 BY CHAIRMAN IGNATIUS:

17 Q. But, starting fairly generally, would you take off the
18 large exhibit of the road and turbine locations and,
19 thank you, keep the colorful one of the habitat
20 mapping. If you were to map the entire state with that
21 coding of habitats, would Antrim look different than
22 the majority of this state and the amount of land
23 marked with the highest tier red color?

24 A. (Valleau) I'm not sure. That's been done, I don't

1 believe I've looked at it in that context, as the
2 entire state. But --

3 Q. And, that's probably over -- the question sort of
4 overstates it. I guess what I'm really wondering is,
5 is Antrim, as you look at how Antrim comes out on that
6 mapping, does it seem typical for a town in New
7 Hampshire, an area in New Hampshire, or is it low on
8 the amount of high-value habitat or extremely high on
9 that high value?

10 A. (Valleau) From what I've focused on, which is the
11 general area, maybe just extending a little bit beyond
12 what's shown here, it's pretty typical for that
13 Monadnock region. And, one thing that does stand out
14 to me, though, is the amount of land that is in
15 conservation in that area. There's a lot of land in
16 conservation. Very high proportion of the Town is
17 protected, as is in Stoddard, too, next door.

18 Q. All right. And, is it your sense that, even though
19 some of the turbine locations and road cross into that
20 red-marked area, that that doesn't diminish the value
21 of those lands from a habitat perspective?

22 A. (Valleau) Up close here, actually, I don't think any of
23 the turbine locations are in it. But the road
24 certainly intersects it, the red, which is the highest

1 ranked habitat, in three places. And, the total
2 acreage of those three places is 5.4 acres. And,
3 that's disturbed area. And, some of that will be
4 restored, of course, it won't be back to what it is
5 now. But, proportionally, it's a very small amount,
6 relative to the rest of the highest ranked habitat in
7 that area. So, going along with my thoughts on
8 fragmentation, it's not a significant fragmentation
9 impact. And, it's not a significant impact that
10 dramatically changes the value of the rest of that
11 habitat that will remain.

12 Q. I'd like to ask some questions about the bat population
13 and what you're proposing here. And, you may have gone
14 through much of this yesterday. So, if you did, feel
15 free to say "I think your answers are going to be in
16 the transcript." If we look at the -- I mean, the
17 overall concern that you've acknowledged everyone is
18 aware of is a significant decline in the bat
19 population, because of things having nothing to do with
20 wind turbines, but because of this white-nose syndrome.
21 Given that fact, any incidence of further threat to the
22 bat population is of concern, would you agree?

23 A. (Gravel) Yes. I would.

24 Q. So, because we are not faced with an abundant

1 population right now, do you look at the potential risk
2 differently, you know, losing a few in an abundant
3 population, compared to losing a few in a very small
4 population? How do you factor that in when you look at
5 the potential for collisions or the kind of trauma that
6 bats can suffer even if they don't collide, but because
7 of the turbulence?

8 A. (Gravel) We're not -- we're not studying populations.
9 We don't -- it's not our role in the world, I guess.
10 But Fish & Game and U.S. Fish & Wildlife Service do, to
11 some extent. And, through consultations with them,
12 we've identified the curtailment strategy. That is
13 what -- that's kind of the best foot forward to
14 minimize any potential. As you've seen before,
15 previous projects haven't done that. Part of the
16 reason is because that was before populations were
17 declining significantly.

18 But, I think, you know, the other part
19 to think of is, you know, I totally recognize that the
20 populations are declining, but it's things that -- it's
21 other sources, too, that we could learn from. Like, I
22 know that one of the bigger things for -- in the state
23 is, in Maine, where I live, is nuisance bats, bats in
24 people's attics. How many people do you know that

1 have, you know, smacked a bat with a tennis racquet to
2 get it out of their house or something like that. I
3 think that, you know, those are the things that, you
4 know, I think that you need to kind of add to the
5 picture anyway. And, those really are easy things,
6 easy, inexpensive ways to help protect bat species.
7 So, anyway, for this project, that's why we've offered
8 the curtailment strategy.

9 Q. So, can you describe the curtailment strategy again?
10 And, I guess two things, and then I'll let you just
11 answer it the best way you can. One is, what it
12 actually would involve, you know, hours that it would
13 be imposed, that sort of thing. But, also, is that
14 something that would kick in immediately, from the
15 first day of operation, or is it something that might
16 kick in after you see a certain level of response?
17 Because, I confess, I couldn't get that from what I was
18 reading.

19 A. (Gravel) It's kind of simultaneous. So, it would be,
20 as the Project begins operation, there would be an
21 evaluation phase, at which 50 percent of the turbines
22 would be test turbines and 50 percent would be just
23 your standard operation turbines. So, part of it is --
24 part of the rationale behind that is that this, the

1 whole curtailment strategy has only really been tested
2 twice. It's been tested since then, but it's not in
3 public reports yet. But the two public reports have
4 shown that it's been effective, in Calgary and
5 Pennsylvania.

6 So, the intent here is to study the
7 effectiveness of it in New Hampshire. And, in order to
8 test that, we're looking at treating five turbines and
9 not treating five other turbines. And, the way it
10 works is that, so those other two studies that we
11 talked about found that bat fatalities decreased at
12 wind speeds at or below 5 meters per second. And, they
13 had a very positive decrease when -- so, I think it was
14 anywhere from 80 -- 70 to 80 percent, 70 to mid 80s.
15 It effectively reduced bat fatalities by 70 to
16 85 percent. Not completely, but it was very positive
17 results. So, that's why we --

18 MR. IACOPINO: At which speed?

19 WITNESS GRAVEL: Five meters per second.

20 **BY THE WITNESS:**

21 A. (Gravel) So, the goal here is to test that in New
22 Hampshire, see if it's effective. And, the way it
23 would be tested would be, the turbines, with their own
24 anemometers, on each turbine, has their own -- is able

1 to document wind speed and changes throughout the
2 night, would be automatically programmed to shut down
3 during the periods when the wind speeds hit five meters
4 per second or less. So, the turbines wouldn't be
5 spinning.

6 And, that's an automatic system, because
7 the -- it's called a "SCADA" system. It basically is
8 tracking the weather constantly. I think it's hourly
9 average or even 10-minute averages. So that it allows
10 the turbines to monitor those periods and shut down
11 when it reaches those turbines. And, then, when it
12 exceeds those conditions, turn back on again. So, once
13 you hit 5 meters per second or greater, then the
14 turbines will turn back on and operate normally.

15 BY CHAIRMAN IGNATIUS:

16 Q. Why do the low speeds pose a greater risk than the
17 higher speeds?

18 A. (Gravel) I think it's -- it's not really known. The
19 hypothesis is that they're small, they're small
20 animals, and they're small animals that forage on
21 insects, which are way -- much smaller. Insects don't
22 do that well in heavy winds. So, they're more
23 dispersed at that point. And, the other part is that
24 bats don't, at least the smaller bats, probably don't

1 fly as well in higher wind speeds. So, on the windier
2 nights, you have bats flying lower, because they're
3 able to hide behind the trees and stay out of direct
4 wind, which is well below turbine height. But, on
5 those low wind speed nights, where it's calm above the
6 tree canopy and up into the air space, insects are more
7 condensed, they're sticking around. They're not
8 getting blown away by the wind. And, the bats are able
9 to forage higher, because they can maneuver and fly in
10 the wind, in no wind as well. So, that's the
11 hypothesis. Nobody really knows, though.

12 Q. If you've seen from the results of the Calgary and the
13 Pennsylvania test that there was a really significant
14 drop in the collisions, using this low-speed
15 curtailment, why would you not go to 100 percent set
16 with that automatic shut-off?

17 A. (Gravel) Well, those are -- the places where those
18 studies were conducted were in places that have
19 documented very high bat mortality. In New Hampshire
20 -- well, in New England, the highest range for bat
21 mortality is right around six bats per turbine per
22 year. In places like Calgary and Pennsylvania, it's
23 been around 55 bats per turbine per year. So, a lot
24 greater mortality in those places. And, that's where

1 the uncertainty comes in, is we may find that it won't
2 matter in a place where mortality has been low, we may
3 not find the difference. So, it's leaving that
4 flexibility to evaluate the effectiveness for us,
5 because it does come at a cost, too.

6 Q. What are the costs?

7 A. (Gravel) That would be a question for Eolian. I didn't
8 bring a model of that.

9 Q. All right. But is it -- would it be costs, in terms of
10 its capacity factor, that it would operate fewer hours?

11 A. Yes. I mean, that's the idea, is that it won't,
12 because the normal cut-in speed for wind turbines is
13 two and a half to 3 meters per second, is that right?
14 Three (3) meters per second. So, this would -- so,
15 you're -- so, that's when they're generating power is
16 three meters per second or higher. This is reducing
17 that period when they could actually be producing
18 power.

19 Q. All right. And, then, you also talked about the
20 "before" -- I'm going to get it backwards, like you
21 keep getting it backwards, "before a sunrise and after
22 a sunset" --

23 A. (Gravel) Yes.

24 Q. -- measures, is that only during -- would that be

- 1 applied at all times or only certain times of the year?
- 2 A. (Gravel) That would be during the times when we know
3 bats are active and susceptible -- have been most
4 susceptible to fatalities. So, it wouldn't happen in
5 the wintertime. Bats are not moving around in the
6 wintertime, they're hibernating for the wintertime.
7 But it would happen in -- so, it would happen from
8 April to June, and then there will be a little bit of
9 time off between -- then it would happen from July 1 to
10 October 15th. And, really, in all of the studies that
11 we've evaluated, myself and other companies have
12 evaluated, the majority of bat fatality occurs in the
13 late summer/early fall period, generally, August and
14 early September.
- 15 Q. And, during these high-activity times, where there's
16 greater risk, what is the Company's proposal? What are
17 talking about that would happen during this "before
18 sunrise and after sunset time"?
- 19 A. (Gravel) Fifty (50) percent of the turbines would be
20 curtailed at five meters per second or less, instead of
21 being able to operate and kick on at three meters per
22 second.
- 23 Q. All right. And, so, that's a helpful clarification. I
24 thought we were talking about two different curtailment

1 things; it is all one. The first thing that we talked
2 about is, in fact, it's the time when that cut-in speed
3 would be changed?

4 A. (Gravel) Yes. Right.

5 Q. What about the trauma risk? Is it "barotrauma"? Is
6 that -- am I pronouncing that right?

7 A. (Gravel) Yes, you are.

8 Q. Is there any way that one can lessen the risks to bats
9 of that kind of the trauma from the turbulence, even if
10 they don't collide?

11 A. (Gravel) Yes. The same -- so, this curtailment
12 strategy has shown to be effective for both collision
13 and barotrauma. So, because that's when there's enough
14 wind speed for the turbines to be spinning to cause
15 barotrauma. But it's also the -- that's also the time
16 period when more bats are in the air, at those lower
17 wind -- at that lower wind speed, but wind speed
18 greater enough to cause barotrauma, which is that
19 5 meters per second area.

20 Q. And, the higher wind speeds of the higher speeds of the
21 turbines don't cause that kind of trauma to bats or
22 they're just not going to be near them, so that's not
23 why they're at risk?

24 A. (Gravel) Yes, they do. They certainly can cause that

1 trauma. But that, you're right, in that that's the
2 period at which the risk is the lowest, because there's
3 fewer bats in the air.

4 Q. Am I right that, of the species that you saw of bats,
5 with the exception of the big brown bat and the little
6 brown bat, they're all either listed as
7 state-endangered or species of special concern?

8 A. (Gravel) I don't believe that's correct.

9 Q. All right.

10 A. (Gravel) I think, as far as I know, the only one listed
11 in New Hampshire is small-footed bat. I know that --
12 well, the Indiana bat, I don't think that too many
13 agents -- I don't think that Fish & Game or Fish &
14 Wildlife Service would agree that they actually reside
15 in this state, but there's always that potential.

16 Q. Well, let's take a look at the bat survey, which I
17 think is 12C. And, I may have misunderstood it. Page
18 -- perhaps Page 21, I'm not sure. We'd have to pull it
19 up. I had thought that eastern small-foot was called
20 "state-endangered and critically impaired". And, then,
21 northern long-eared/silver-haired/tri-colored/eastern
22 red, and hoary were all listed as "special concern".
23 Did I get that wrong?

24 MS. BAILEY: Can you help us get there

[WITNESS PANEL: Valleau|Gravel]

1 for the record? And, maybe Mr. Iacopino can.

2 CHAIRMAN IGNATIUS: Yes.

3 MR. IACOPINO: Which report is it?

4 CHAIRMAN IGNATIUS: So, Appendix 3, I
5 think, is where you start.

6 WITNESS GRAVEL: I don't have the
7 appendices on my binder. Do you have the --

8 MR. IACOPINO: I have it. It's AWE 3
9 electronically. It's Document 20 in that. It's the
10 Spring 2011 Radar and Bat -- Radar and Acoustic Bat Survey
11 Report.

12 WITNESS GRAVEL: Thank you. I've got
13 that.

14 MR. ROTH: Which appendix is it in the
15 volume?

16 MR. IACOPINO: It's Appendix 20, I'm
17 sorry.

18 MS. BAILEY: I think this might be a
19 good time for a break for the reporter. Let's take a
20 ten-minute break and resume at 11:15.

21 CHAIRMAN IGNATIUS: Thank you.

22 (Whereupon a recess was taken at 11:04
23 a.m. and the hearing reconvened at
24 11:20 a.m.)

1 MS. BAILEY: Okay. We're going to
2 proceed with Chairman Ignatius's questions.

3 CHAIRMAN IGNATIUS: Thank you.

4 BY CHAIRMAN IGNATIUS:

5 Q. When we broke off, I had asked about the status of the
6 bat species that you had located on the site, and you
7 were going to check the -- I may have gotten it wrong
8 on what categories they were in. Did you get a chance
9 to find that?

10 A. (Gravel) Yes, I did. And, I believe you were correct,
11 in that the small-footed bat is the only listed species
12 in the state listed as "endangered". All of the other
13 species known to occur in the state are listed as
14 "special concern".

15 Q. All right. And, then, I read something, and I
16 apologize, I can't remember what it was, but said
17 there's talk of moving the little brown bat into some
18 higher classification as well?

19 A. (Gravel) Yes. Little brown bat and northern long-eared
20 bat are the two species that have been most affected by
21 white-nose syndrome. And, whose populations have
22 declined significantly because of white-nose syndrome.
23 So, those species are two species that will probably be
24 listed, I don't know the status in the state, I know

1 that Vermont has listed them recently, and I know Maine
2 is looking to list them as well.

3 Q. And, if they were "listed", meaning they would be put
4 into which category?

5 A. (Gravel) My assumption would be they would be put into
6 the "endangered" category, like Vermont, but I don't
7 know.

8 Q. All right. And, they're also identified under the --
9 oh, maybe that's where that listing comes from, the New
10 Hampshire Wildlife Action Plan. Is that who designated
11 these categories or does that come from some other
12 source?

13 A. (Gravel) Yes, that's where, that and the New Hampshire
14 Fish & Game website also has -- provides the list of
15 threatened, endangered, and special concern species.

16 Q. So, given that they're facing a significant decline and
17 have been recognized that the populations are dropping
18 to put them into these various categories, it doesn't
19 seem to be turning around or stabilizing, if more of
20 them are being moved into those categories, don't you
21 have a concern that any greater threat to those bat
22 populations has to be really looked at carefully, to
23 make sure that we're not hastening what's already
24 looking like a pretty bad drop?

1 A. (Gravel) Yes, I do. I have a lot of concern for
2 additional impacts to the species and populations. I
3 think that, I guess what we're trying to do, what we're
4 trying to say here is that we feel like we have
5 investigated the potential risks. And, as I mentioned
6 earlier, that there's uncertainty in that prediction.
7 And, that we've created a process that will evaluate
8 what has been documented in other places to minimize
9 mortality, and the adaptive management plan, to commit
10 to future and further consultation based on the results
11 of the studies to further minimize it.

12 I think that, as a whole, though, as a
13 society, we need to look at all of the variables that
14 affect bat mortality. And, I know that there are a lot
15 of other sources that are far greater than wind has
16 been, in the Northeast. You know, there's been
17 significant mortality events elsewhere. But I think,
18 you know, there's, you know, if you have a bat
19 population living in your attic, instead of calling the
20 exterminator, you should contact somebody that may be
21 able to relocate them or rather than terminating them.

22 Q. I completely agree with that. If there were a
23 condition imposed to require the curtailment strategy
24 on 100 percent of the turbines, rather than 50 percent,

1 is there any technological reason that couldn't be
2 done?

3 A. (Gravel) There's no technological reasons that it can't
4 be done, but it's the -- you know, it would be -- I'm
5 not convinced that it's the perfect solution yet in the
6 Northeast. So, it's -- I guess that's why we keep
7 leaning on the adaptive management framework, because
8 it allows us to adapt as we learn. And, you know, from
9 my experience, the conditions aren't too flexible on
10 these project permits. And, I think that there needs
11 to be flexibility, to make sure that -- make sure that
12 the right things are being investigated and the right
13 things are being done, based on new information or as
14 we learn more about the site, too.

15 So, in theory, it could be -- it could
16 be a good idea. But I think that, to be a condition,
17 without evaluation, is too early.

18 Q. The alternative, though, is we see how many die and
19 count up the carcasses, and it's too late at that
20 point, for those at least?

21 A. (Gravel) Yes, but it's that year set evaluation phase.
22 So, it's a test -- test the effectiveness, because we
23 don't know that it's effective yet. So, it's the
24 testing of the curtailment strategy as a whole in New

1 Hampshire at this Project. And, based on what we
2 learn, we adapt. So, it's written in the Avian and Bat
3 Protection Plan as well. But, if we find that this
4 evaluation phase proves to be effective at reducing bat
5 mortality, then the AWE has committed to implementing
6 that throughout the Project. So, it's still -- it's
7 the uncertainty that you don't want to place -- I guess
8 we're hesitant to place specific bounds on an operation
9 -- the operation of the project to find out that it's
10 not really working, I guess. And, that's why the
11 adaptive management comes in.

12 Q. So, your concern is, if you put it on 100 percent, and
13 you get no fatalities, you don't know if that's because
14 that was the right curtailment strategy or because it
15 wouldn't have happened anyway, whether it was in place
16 or not?

17 A. (Gravel) Yes, that's one, one thought. Or, you know,
18 or you may find that you still get them, and that's not
19 the solution either. Do you know what I mean?

20 Q. What would the trigger be at the end of -- you'd have
21 to wait a full 12 months before you'd evaluate whether
22 next -- a further mitigation effort should be
23 undertaken? Or, as you begin to see results, could you
24 -- would you be recommending action prior to that?

1 A. (Gravel) Yes. I mean, it would be dependent upon what
2 happens. I think that, you know, if things are looking
3 good, and mortality is low or lower, consistent or
4 lower than other studies that have shown to be
5 acceptable, then the 12-month period would be
6 sufficient. However, if we document a listed species,
7 then that, to me, and according to the Avian and Bat
8 Protection Plan, would be an immediate alert procedure,
9 is that it would be discussed immediately, and
10 discussed with the agencies. And, that's when we'd put
11 our heads together to come up with a Plan B. You know,
12 "how do we address this concern for a particular
13 species?"

14 Q. And, what are the triggers for what's considered
15 needing an alert? And, it may be in the report and
16 I've just forgotten.

17 A. (Gravel) It's the listed species, listed species, or a
18 high mortality event. And, the "high mortality event"
19 hasn't been defined, but other places, for example,
20 Maine, has used five, five or more bats at one turbine.
21 And, you know, that's kind of the threshold that
22 triggers that immediate action.

23 And, I can say that, you know, in terms
24 of population levels, I look at that as pretty low.

1 So, I look at it as being conservative. And, we've
2 only, I think, had one project in Maine that actually
3 triggered that threshold. No other projects have
4 actually found five or more at a turbine.

5 Q. So, if you had four at each of ten turbines, and not
6 that that is a realistic expectation, I certainly hope
7 not, but, technically, that could not trigger the
8 alert?

9 A. (Gravel) Well, what I just threw out was a hypothetical
10 of what was in, you know, the threshold used in Maine.
11 I think that that "threshold" has to be something that
12 is negotiated between the Applicant and Fish & Game. I
13 think Fish & Game and Fish & Wildlife Service, you
14 know, we need that help, I guess is what I'm saying.
15 We're not monitoring populations, statewide and
16 regionwide populations, we're monitoring activity on
17 the site. So, I think we need to take kind of our
18 knowledge, and couple it with the agencies' knowledge,
19 to come up with those thresholds. And, that's, you
20 know, that's something that hasn't been discussed at
21 this time.

22 Q. So, a threshold that might take both an individual
23 turbine count or a cumulative count among the ten
24 turbines might work?

1 A. (Gravel) Yes.

2 Q. And, if you find that the consequences are significant,
3 and you've got a number of bat fatalities, what further
4 mitigation actions might be undertaken?

5 A. (Gravel) It depends on the -- it kind of depends on
6 what happens, I guess. You know, one thought is, by
7 searching every turbine, you'd be able to identify if
8 there's any one turbine that's causing the problem.
9 So, maybe that's the turbine you need to deal with.
10 You know, in particular, nighthawks. Let's say, you
11 know, that, although we haven't seen it yet, maybe
12 creation of the Project creates nesting habitat, in
13 which case, you know, maybe this same kind of strategy
14 could be used during the period at dawn and dusk, when
15 we know nighthawks are active around turbines. But,
16 you know, again, this is hypothetical. I'm talking
17 about, you know, examples. But you can't -- you don't
18 -- it depends on what happens. And, it depends on the
19 species, and that drives the management actions that
20 could be taken.

21 Q. Well, in other projects, I'm not asking to predict what
22 might take place here, but, from your experience, what
23 are the kinds of things that wind turbine operators
24 have done to minimize risk, when it's apparent that

1 there's some real problems present?

2 A. (Gravel) The curtailment for bats is one thing that's
3 been done. And, another project in Maine, we've been
4 monitoring eagles. So, we actually had an observer on
5 the ridgeline monitoring eagle use. And, if an eagle
6 came within a quarter mile of a turbine, we'd talk to
7 the operation staff, they would shut down that turbine.
8 So, those are two examples that, you know, it's largely
9 dependent on the issue and the species. But those are
10 two examples of things that we have done. The
11 revegetation is another one, too, actually to limit
12 opportunity for foraging by raptors, or in this, you
13 know, in the Lempster case, maybe limit opportunity for
14 nesting nighthawks. So, there's -- it depends on the
15 species. But those are a few examples of things that
16 we've done in the past. And, they worked, actually.
17 That's the other part.

18 Q. Did you work on the Lempster Project? Were you part of
19 the team evaluating the risks in advance?

20 A. (Gravel) Prior to the construction of the project?

21 Q. Yes.

22 A. (Gravel) Yes, I did.

23 Q. And, you had said earlier this morning that you said
24 "as feared, the identified nest of a nighthawk led to"

1 -- I don't know quite how you put it, but that, you
2 know, something -- "the worst happened", it wasn't the
3 way you phrased it, but sort of awareness before the
4 Lempster Project went forward that that was a real
5 risk?

6 A. (Gravel) It was a potential risk. I mean, with all of
7 these projects, we're making a prediction without the
8 impact there. So, we're not able to document it. So,
9 there's a lot of uncertainty with that prediction.
10 And, that's, you know, part of the adaptive management
11 framework that we're following here. But, in that
12 particular case, what I was trying to point out is
13 that, these pre-construction surveys are very good at
14 documenting the species of concern. I mean, you've all
15 heard me say that it's hard to connect your
16 pre-construction survey results to what's going to
17 happen in post-construction. But they are very good at
18 identifying those species that reside there.

19 In the case of the Lempster Project, I
20 found that nighthawk nest 350 feet from, I said
21 "meters" yesterday, actually, it's 350 feet from
22 Turbine 11. I found those during pre-construction
23 breeding bird surveys before there was anything there.
24 So, that raised a concern, in my mind. Pretty close to

1 a turbine, we know their behavior. But, then again,
2 it's, you know, that's not up to me either. I take --
3 we all take the information we collect and bring it
4 back to the agencies for a discussion. Sometimes they
5 show up to the table and actually have the discussion
6 with us, or sometimes not. And, in the case of the
7 Lempster Project, I've handed over all my photographs,
8 the GPS point, everything, and nothing came of it. The
9 project was built. And, two years, two or three years
10 after operation of the project a nighthawk was found.
11 So, I guess my -- what I was talking about this morning
12 is the distinction between the two. I think it's
13 important to, because I feel like we are able to
14 document species presence without pre-construction
15 surveys, that it's important to look at that
16 information when you're talking about risks. I don't
17 think saying nighthawks to -- you know, I guess what
18 I'm saying is the same risk is not here, because we
19 didn't find them.

20 Q. Is there anything that you found in your surveys that
21 are of concern to you, but weren't picked up as being
22 significant by any of the authorities you handed it off
23 to that nevertheless we should know about?

24 A. (Gravel) No. In fact, actually, this one, this site,

1 in -- you know, Dana's work had similarities, it's, you
2 know, pre-construction raptor migration rates, breeding
3 bird surveys, or similar species composition as what we
4 saw in other projects, and what you'd expect to see in
5 this state, in that -- in those habitats. My acoustic
6 bat work and mist netting and radar work showed lower
7 results than what we've seen at other projects. So,
8 lower traffic over the site than what we saw at other
9 projects.

10 And, then, the mist netting survey
11 documented -- we only caught one bat, which was, you
12 know, depressing for us to be out there for many nights
13 until 3:00 a.m., and only to catch one bat and a couple
14 flying squirrels. So, that -- and, that, I guess, that
15 was the difference. Is that that is the -- that is one
16 thing that's become apparent to me, over time, is the
17 significant decline in *myotis* species. Our acoustic
18 surveys, for example, pre-2005 were dominated by
19 acoustic results, by *myotis* species, and now they're
20 not. Now, we can't even catch one.

21 So, that's -- that was recognized by the
22 Applicant and is why this Avian and Bat Protection
23 Plan, in part, was developed, and the evaluation phase
24 curtailment monitoring was proposed, because it has

1 been effective at reducing mortality elsewhere.

2 Q. I know that you had said that just studying something
3 for three years in some ways is less meaningful than a
4 study with a mind towards what you do with the input,
5 the results of what you're gathering. Is that sort of
6 a fair description of your distinction between the
7 three-year studies and the one-year you're proposing
8 here?

9 A. (Gravel) Yes. I mean, and that's the -- this one year
10 is the evaluation phase. It's the adaptive management
11 that I feel is important, coupled with that monitoring.
12 So, it could be more than one year of monitoring. That
13 one year is just the evaluation phase, with a
14 commitment to consult and adapt for future years, if
15 necessary.

16 Q. It doesn't have to be all or -- one or the other,
17 though, does it? I mean, whether it's a one-year study
18 or a three-year study, isn't -- the real desire is to
19 make use of what you learn?

20 A. (Gravel) Yes. Exactly.

21 Q. And, so, if we were to require that evaluation study
22 period, but with some short timeframes for setting in
23 any mitigating changes, any measures that could be
24 imposed if you did find troublesome results, and not

1 wait three years before you have that conversation.

2 That would work, wouldn't it?

3 A. (Gravel) Yes. And, that's the intent of this plan, is
4 to have that frequent -- have those frequent
5 discussions based on what you're finding.

6 Q. Even beyond the one year?

7 A. (Gravel) Yes. I mean, the one year is just -- is
8 defining the evaluation phase. And, that's at which
9 we're planning on doing a full suite of
10 post-construction monitoring, with the acoustic bat
11 surveys, and the testing of curtailment.

12 Q. And, then, what would be envisioned for subsequent
13 months or years?

14 A. (Gravel) It would be dependent upon the -- what's found
15 during the monitoring. It depends on what we learn
16 from that monitoring.

17 Q. Right. And, my concern is that it gets very vague.
18 It's hard to -- I know you can't predict what you're
19 going to find. But you're asking -- the Company is
20 asking for us to approve something with an agreement
21 that "there will be more to come", but we don't know
22 what the more to come is. And, so, suggestions like
23 maybe "come back before the Subcommittee for further
24 definition", we're told "well, that would be very

1 burdensome." It's got to be one or the other, doesn't
2 it? I mean, we either have to set all of it in place
3 now, and make "If (a) happens, then (b) kicks in." "If
4 (b)", you know, you sort of set out what we think are
5 possible results and the consequences. And, albeit,
6 that's guessing. We don't know. Or, we have the "see
7 what you get and come up with some good plans", but
8 then that's got to come back before us. It can't be --
9 it's got to be one or other, doesn't it?

10 A. (Gravel) I don't know. I mean, I guess the way I'd
11 look at it is I feel like, and having been here for a
12 few projects, I feel like sometimes it's not focused on
13 the data. And, emotions are also factor into that.
14 And, I guess that's part of the point here, is that we
15 need to -- I think it's important, in that stage of the
16 game, that it's very technical. It's specific to the
17 issues that arise or based on what we find. And, less
18 of the -- less of the emotions at that point, I guess.
19 So, that's what we mean by that.

20 CHAIRMAN IGNATIUS: I think that's a
21 fair comment. But I think we have to find the process
22 that meets the ultimate goals of the statute that find the
23 right balance between development and protection. All
24 right. I have no other questions. Thank you.

1 MS. BAILEY: Okay. I just have a very
2 few brief questions, I think.

3 BY MS. BAILEY:

4 Q. Mr. Valleau, you said that "getting a take permit is a
5 significant undertaking", is that correct?

6 A. (Valleau) Correct.

7 Q. And, your plan is to discuss further with U.S. Fish &
8 Wildlife whether a take permit is really necessary?

9 A. (Valleau) Correct.

10 Q. And, if they decide that it's really necessary, will
11 you undertake that significant undertaking or what
12 might happen?

13 A. (Valleau) I think, probably, the next step would be to
14 find out what they have in mind for actions to go along
15 with that take permit. So, typically, a take permit
16 would include potentially additional study, additional
17 mitigation, things like that. So, they will allow you
18 to take, which the take permit allows you to
19 unintentionally take an animal, with conditions that
20 you need to follow through with. So, that's kind of
21 the next step. Is, all right, if they're absolutely
22 set on requiring a take permit, then we just need to
23 find out what they're going to need to support that
24 take permit.

[WITNESS PANEL: Valleau|Gravel]

1 Q. And, could, depending on what they require, could that
2 impact the development of the Project?

3 A. (Valleau) Absolutely.

4 Q. Okay. And, Mr. Gravel, you said that you informed the
5 agencies about the nighthawk nest, and nobody did
6 anything with that. And, you've informed us about an
7 eagle nest on Gregg Lake? Is it Gregg Lake?

8 A. (Valleau) Nubanusit.

9 Q. Nubanusit.

10 A. (Valleau) Yes. Yes, that's in the Application
11 materials.

12 Q. Right, right, right. Are we -- do you expect us -- I
13 mean, do either one of you think that that's of enough
14 concern that you're advising us that we should do
15 something about that?

16 A. (Valleau) We actually did some additional study on
17 that, because of that. So, initially, we had only the
18 nest surveys for eagles and fall and spring migration
19 surveys for raptors. And, because of the proximity of
20 that nest, that U.S. Fish & Wildlife asked us to do an
21 eagle use survey during the summer. So, we did some
22 additional study there, and zero eagles were observed
23 in the Project area during the summer survey.

24 Q. And, so, do you have --

- 1 A. (Gravel) Yes, I have a couple more things to add to it,
2 I guess. In that, with the eagle nest, it's much
3 further away than the nighthawk nest that I was
4 speaking of. And, the other part, too, is that, you
5 know, Maine has a very dense population of eagles.
6 And, it's also one of the places I know the best. And,
7 we have a few operational projects with nests
8 surrounding these sites, so more than just one nest
9 within three miles of a project. And, we haven't found
10 eagle mortality at those projects. I mean, that I
11 think is -- it's important to note that there's quite a
12 few projects that are operational now in the Northeast
13 that have eagles migrating through or nesting in
14 proximity, and haven't been a problem there.
- 15 Q. So, just to be really, really clear, neither one of you
16 is advising us that there's anything for us to worry
17 about about that eagle nest?
- 18 A. (Gravel) Based on the knowledge that we have,
19 recognizing that there's uncertainty with everything we
20 do, unfortunately, we don't feel that there is.
- 21 A. (Valleau) Yes. The eagle risk modeling that the U.S.
22 Fish & Wildlife Service did noted that there's -- the
23 risk is highest during the migration periods to bald
24 eagles, and not during the summer nesting season. So,

1 that nest essentially is only putting those eagles at a
2 -- in the proximity of the nest to the Project, it's
3 only exposing those eagles to a very low risk. In
4 other words, they don't use -- they're not using the
5 Project site as a primary, say, commuting route between
6 different areas their feeding or things like that, that
7 they're not using the Project area. And, that's why we
8 did the surveys, to see if they were using the Project
9 area.

10 Q. Okay. I have one nagging question in my head about the
11 post-construction survey and how you conduct it. And,
12 I'm wondering why you don't just put infrared video
13 cameras on the turbines and review them and see what
14 gets killed? Wouldn't that be more accurate?

15 A. (Gravel) It would -- it has a lot of problems,
16 actually, though. You wouldn't be able to account for
17 scavenger removals. So, you wouldn't -- you'd be able
18 to count -- you may be able to count mortality, but you
19 won't be able to count what takes them away. And, our
20 work with infrared cameras in the past hasn't provided
21 -- so, you're able to see a blade at a time. So, you
22 need -- you almost need three cameras per one turbine.
23 And, then, you need them at every turbine.

24 Q. Right.

1 A. (Gravel) And, then, you would need to play them back.

2 Q. Uh-huh.

3 A. (Gravel) Which we haven't found technology to play them
4 back in less than real-time. So, you're essentially
5 there for the entire -- you're sitting there all day
6 watching that nice video. But you also miss things.
7 And, you can't identify the species with the infrared.
8 So, migrants are, you know, they're flying a pretty
9 straight line, so you wouldn't be able to tell if it
10 was a bat or a bird necessarily, or what kind of bird
11 it was. So, you wouldn't be able to document the
12 species of concern that you'd want to be able to
13 document.

14 Q. Okay.

15 A. (Valleau) Yes. Their use has definitely been
16 investigated by a few different people, including Ed
17 Arnett, who is kind of the leading authority on bats in
18 North America, has done a bunch of work with it. And,
19 it has not come out as one of the monitoring techniques
20 that's used.

21 A. (Gravel) That, to also add, that's a -- it's a good
22 concept, and it's been added to -- it's in the Avian
23 and Bat Protection Plan. There may be technology that
24 comes out that better evaluates this very issue. And,

1 there's consideration to that in the Avian and Bat
2 Protection Plan, and it's part of the adaptive
3 management concept, too. And that, if something, new
4 technology comes out that would deter bats from hitting
5 -- bats or birds from hitting these things, that would
6 be considered as well. So, --

7 Q. Would that only be considered if the new technology
8 came out in the first year, after post-construction?

9 A. (Gravel) No, that's -- I think that's the thing. The
10 adaptive -- you know, this first year is just for the
11 evaluation. And, I think that the plan is what the
12 outcome of that, that first year, is what will be
13 implemented the next year, if necessary. I mean, if,
14 you know, if we do the work, and there's, you know, no
15 mortality or next to no mortality, then maybe there
16 isn't any additional follow-up needed.

17 Q. Or, maybe Fish & Game could recommend that you study it
18 for another year, and then would you do that? Is that
19 part of your adaptive possibility?

20 A. (Gravel) Yes. And, the other part of the adaptive
21 management plan is that, all on-site operations staff
22 that have to be there anyway to run the Project, would
23 be trained on identification and -- identification of
24 mortality as well. So, it's something that -- it's a

1 plan that would be implemented throughout the life of
2 the Project through operation staff that would be
3 highly trained on identifying species, carcasses on the
4 ground, and a procedure for reporting those --
5 documenting and reporting those observations.

6 MS. BAILEY: Okay. Thank you.

7 Mr. Iacopino.

8 MR. IACOPINO: Thank you.

9 BY MR. IACOPINO:

10 Q. First, let me address the Lempster nighthawk incident.
11 Was there just one dead nighthawk found?

12 A. (Gravel) I'm not sure. I'm not sure. I know that one
13 has, at least one. And, there hasn't been a report or
14 a posting anywhere that I know of.

15 Q. And, the one that has been found, has there been a
16 determination that it was, in fact, killed by a
17 collision with the tower?

18 A. (Gravel) No, it hasn't been.

19 Q. Okay. I want to turn your attention to AWE 43, which
20 is the letter from -- e-mail from Sarah Nystrom. And,
21 now, you're going to get questions from a lawyer, so be
22 ready. I don't read this as a final decision by U.S.
23 Fish & Wildlife, because the first paragraph
24 specifically says that the responsibility for that is

1 in a different part of -- a different part her agency,
2 being the Field Office.

3 A. (Valleau) Right.

4 Q. Is that correct?

5 A. (Valleau) That's correct.

6 Q. Okay. Are you expecting something further from the
7 Field Office?

8 A. (Valleau) We're expecting a formal letter, yes.

9 Q. Okay. Any idea on when that formal letter will be
10 issued?

11 A. (Valleau) I tried to get that date, and wasn't able to
12 get a date.

13 Q. To the best of your knowledge, is the Field Office
14 investigating or researching or reviewing anything
15 different than Ms. Nystrom?

16 A. (Valleau) To my knowledge, no.

17 Q. When you deal with the United States Fish & Wildlife
18 Service in the past, how long do you usually wait for
19 that official letter, after you get the unofficial
20 word?

21 A. (Valleau) It's hard to say. Could go anywhere from a
22 week to multiple years.

23 Q. Okay. And, having looked at their Guidelines, which
24 were marked as "PC 21", do you take this letter to mean

1 that the "adaptive management/phased consultation
2 process" in your Avian Bat Protection Plan -- Avian and
3 Bat Protection Plan, that that comports with what they
4 basically have as the Tier 4 criteria and Tier 5? In
5 other words, are they saying that your Bat Protection
6 -- Avian and Bat Protection Plan meets their criteria
7 under their Guidelines?

8 A. (Gravel) That's how we take it, yes.

9 A. (Valleau) Yes.

10 Q. Anybody -- is there any reason to think that the Field
11 Office would consider it differently?

12 A. (Valleau) None.

13 A. (Gravel) No.

14 Q. Let me turn to the New Hampshire Fish & Game letter,
15 which is Committee Exhibit 16. I do want to note
16 something on the last page, Director Normandeau is --
17 makes very clear that you were -- that you were in
18 constant -- well, not "constant communication", but
19 that you attempted to get their comments, and that the
20 Department is late with the information. So, first of
21 all, thank you for keeping on the ball and trying to
22 work with the Department.

23 The question that I have with respect to
24 this goes to the second page of Committee 16. And,

1 it's the same thing, you've addressed this in a couple
2 of different questions. But, as a lawyer, it gives me
3 a concern that you have sort of this reticence to have
4 a dispute, an unresolvable dispute with the agency to
5 be resolved by the Committee. And, I understand you're
6 saying that there is a -- that that's just another
7 layer of bureaucracy, if you will, I understand that.
8 But, I guess, what does your Avian and Bat Protection
9 Plan say occurs if there is an unresolvable dispute
10 between an agency and the Applicant?

11 A. (Valleau) Yes. So, on Page 67, Section 9.3.6, "Dispute
12 Resolution", what it says is: "If an occasion should
13 arise where consulting parties do not agree on
14 resolution and closure, a mediating entity (e.g., a
15 third party technical committee, appropriate legal
16 counsel, or other mediating party) will be selected
17 and/or established as appropriate to assist in
18 resolution."

19 Q. Okay.

20 A. (Valleau) So, there's already something there in the
21 plan.

22 Q. As a lawyer, I don't see that person or that third
23 party as having any ability to order you to do
24 anything.

[WITNESS PANEL: Valleau|Gravel]

1 A. (Valleau) Well, the purpose is to resolve the dispute.

2 Q. Right. And, let's say, at the end of that mediation
3 process, if it's a mediation process, you still
4 disagree. What happens then?

5 A. (Valleau) Well, then, probably the proponent and the
6 agencies will want to come back maybe.

7 Q. Okay.

8 A. (Valleau) It might be that, through this, the operation
9 of the Avian and Bat Protection Plan, they both decide
10 to come back to the Subcommittee. I guess I'm just
11 reticent about having it be a strict condition that we
12 come back to the Subcommittee with every dispute we
13 have.

14 Q. Okay. In the past, can you please give the Committee
15 an idea of -- have you worked under this sort of
16 situation before, with a resolution process like this?

17 A. (Valleau) Yes. And, never had a dispute that we
18 couldn't resolve.

19 Q. Do you have the same experience, Mr. Gravel?

20 A. (Gravel) Yes.

21 Q. Have you gone through these processes in other states?

22 A. (Gravel) Yes, in Maine and Vermont, West Virginia and
23 Pennsylvania.

24 Q. And, you've always been able to resolve disputes with

1 the agency?

2 A. (Gravel) Yes.

3 Q. And, in those states, have you ever had to come back to
4 a board, such as the Site Evaluation Committee, or
5 maybe a more local variant of what we do on this
6 Committee, in order to resolve a dispute?

7 A. (Gravel) No, not that I can recall.

8 Q. Actually, while I'm trying to find where I want to go,
9 I just -- there was some discussion, and I don't
10 remember where I heard it, something about "the Forest
11 Service was not granting eagle take permits east of the
12 Mississippi River." Is that your understanding?

13 A. (Valleau) U.S. Fish & Wildlife Service, and it's Golden
14 Eagle Take Permit. They are issuing Bald Eagle Take
15 Permits.

16 Q. Okay.

17 A. (Valleau) I'm not sure they have actually issued one
18 yet, though.

19 Q. But there's a process --

20 A. (Valleau) It's a relatively new process.

21 Q. But there is a process in place, they have an
22 application or whatever needs to be done to start the
23 process?

24 A. (Valleau) Yes.

1 Q. But, as a regulatory agency, they're saying "don't even
2 come to us for Golden Eagle Take Permits?

3 A. (Valleau) They're not going to issue one in the East.

4 Q. There was some discussion earlier, I think it was
5 during Public Counsel's cross-examination of you, about
6 the ABP for the Iberdrola Project in Groton. And, Mr.
7 Gravel, you indicated that you found this particular
8 ABPP to be more advantageous than the Groton one. Can
9 you just give us a list of reasons why you believe
10 that?

11 A. (Gravel) Well, it's the purpose of it, I guess. It's
12 the commitment. Really, the only difference that I see
13 is the adaptive management part of this, and the
14 willingness to discuss the results and think about ways
15 to account, you know, to reduce or eliminate those
16 impacts. So, it's really essentially very similar,
17 except this plan incorporates the curtailment strategy,
18 to evaluate effectiveness of that plan in the state.
19 And, this plan also includes the commitment to continue
20 working with the agencies, and not just monitor and
21 submit a report afterwards. And, I guess that's the
22 way I see the difference. Although, Mr. Roth pointed
23 out that the conditions of the Groton Project will push
24 them to -- folks from Groton to consult again with the

1 agencies, which I think is good, but it's not part of
2 their plan necessarily.

3 Q. Okay. So, basically, I'm hearing you say three things,
4 I just want to confirm this. The adaptive management
5 process that's contained in your plan, the curtailment
6 study, and what was the third one?

7 A. (Gravel) The curtailment study -- yeah, I think that
8 was it, actually. Just two.

9 Q. Okay. All right. So, other than -- the curtailment
10 study is obviously something new. So, it's really a
11 change in process that you're pointing to as being a
12 better -- making it a better plan, is that right?

13 A. (Gravel) Yes. It's a change in process, and it's going
14 to account for all of -- it accounts for the
15 uncertainty, or commits to continue to consult for the
16 uncertainty. And, it also -- it allows for -- it
17 allows to adapt as you learn more. As I said earlier,
18 there's at least two or three new studies coming out
19 each year. That's the part that --

20 Q. If that's the case, is it possible that, under the
21 adaptive management program, a developer might actually
22 have more headaches and have to spend more money than
23 under a program where they simply are required to
24 perform certain studies?

1 A. (Gravel) Yes. And, I know that Jack didn't like to
2 hear these words come out of our mouths a while ago.
3 But AWE definitely listened and they went in.

4 A. (Valleau) And, I think I want to point out that the
5 Applicant is interested in spending their money in
6 places where it will provide some results that are
7 useful to the agencies and to other developers and
8 themselves, as opposed to potentially doing studies
9 that they're locked into that aren't useful. So, that
10 that's, if they're going to spend money, they want to
11 make sure it has some benefit.

12 Q. All right. Let me switch gears on you for a moment.
13 You talked about the scavenger hunts. And, I just want
14 to ask you one question, okay, about the scavenger
15 hunts. You talked about the fact that the -- that
16 there's an 85 percent success rate, if you will, in
17 terms of -- or that's what you estimate that you're
18 getting when you do these, that you're getting about 85
19 percent of the kills that occur within the turbine
20 cleared area?

21 A. (Gravel) Yes.

22 Q. Okay. I assume that, whenever you issue a report from
23 these studies, that report doesn't -- it reports the
24 total kill levels being higher than was actually found

1 then?

2 A. (Gravel) Oh, definitely. It's quite a bit higher than
3 the raw numbers that were found.

4 Q. Okay. And, so, when and if this Committee ever looks
5 at one of those reports, have to understand that the
6 actual number of found dead animals was less than what
7 the final report is?

8 A. (Gravel) Yes. And, we provide both numbers, as well as
9 we also map each turbine pad, road and width, and
10 actually map each carcass found in relation to the
11 turbine. So, you can visually see, you know, dots on
12 the map, where you found carcasses in relation to the
13 turbine. Yes.

14 Q. Mr. Valleau, you mentioned during your
15 cross-examination that there was an alternatives
16 analysis done for the Army Corps of Engineers. Can you
17 tell us under which Army Corps program that analysis
18 was done for this particular project?

19 A. (Valleau) Under -- can't remember if we did an
20 individual permit for this one or it's under the
21 general permit.

22 Q. Well, you are under the general permit, at least
23 according to your Application on this.

24 A. (Valleau) Okay. Okay. So, it would be in there. And,

1 actually, the Applicant did an alternatives analysis
2 before we were even involved that I wasn't necessarily
3 aware of. So, there is something in the SEC
4 Application with an alternatives analysis that I didn't
5 do personally.

6 Q. But my question involves the one that was done for the
7 Army Corps.

8 A. (Valleau) With the Army Corps, right.

9 Q. And, so, that's something that was actually filed with
10 the Army Corps application? Or, actually, you're under
11 the general program. So, that's information that was
12 provided to the Corps to be determined that you're
13 under the PGP?

14 A. (Valleau) Something like that, yes. Yes.

15 MR. IACOPINO: I don't have any further
16 questions. Thank you.

17 DIR. STEWART: Just to follow up, if --
18 I'm sorry?

19 MS. BAILEY: Proceed.

20 BY DIR. STEWART:

21 Q. Is there any indication that the Corps is going to
22 elevate the permit, the wetlands permit, to the federal
23 -- to their individual -- to an individual permit for
24 their review?

1 A. (Valleau) No.

2 Q. And, that could occur if, for example, the Fish &
3 Wildlife Service determined that they wanted the
4 Project elevated, or the EPA or somebody, other federal
5 agencies.

6 A. (Valleau) Correct.

7 Q. Is there any indication that that would occur at this
8 point?

9 A. (Valleau) No. No. And, we've had EPA and the Corps
10 and U.S. Fish & Wildlife on-site together. And, there
11 was no discussion of elevating it beyond the
12 Programmatic General Permit.

13 DIR. STEWART: Thank you.

14 MS. BAILEY: Mr. Dupee.

15 MR. DUPEE: Thank you, madam Chair.

16 Just one fast question for Mr. Gravel.

17 BY MR. DUPEE:

18 Q. Essentially, when you're doing your carcass recovery
19 study, essentially, that's a mark and recapture
20 process?

21 A. (Gravel) Yes.

22 Q. And, how did you mark the carcasses?

23 A. (Gravel) Discretely marked them with a string on a leg.
24 So, it's not -- it's never visible to -- it's never

[WITNESS PANEL: Valteau|Gravel]

1 visible to the observer until they grab it.

2 Q. But you just mentioned you threw them up so they came
3 down sort of randomly, I think in your testimony?

4 A. (Gravel) Yes. But it's a discrete band up under kind
5 of the armpit for a bat. It's kind of tucked
6 underneath and it's concealed. And, it's also, for
7 birds, it's own their leg, but up under the feather,
8 where the feathers come over their leg.

9 Q. Subtle enough that the person doing the study has to
10 actually look -- physically look at the carcass to tell
11 whether it's marked or not?

12 A. (Gravel) Yes.

13 MR. DUPEE: Thank you.

14 MS. BAILEY: Okay. Redirect?

15 MR. HOWE: Madam Chair, I have a
16 follow-up question for -- after Mr. Robinson's questions,
17 if I may? Attorney David Howe, for New Hampshire Audubon.

18 MS. BAILEY: Oh. I'm sorry. Could you
19 repeat what you just said please.

20 MR. HOWE: I would like to follow up
21 questions made by Mr. Robinson concerning nighthawks, if I
22 may?

23 MR. ROTH: I do not have any follow-up
24 questions.

1 MS. BAILEY: I apologize, Mr. Howe, but
2 I think we really need to keep going. So, we're going to
3 go to redirect.

4 MR. HOWE: Very well.

5 MS. BAILEY: Thank you.

6 **REDIRECT EXAMINATION**

7 BY MS. GEIGER:

8 Q. I'm going to ask Mr. Valleau and Mr. Gravel to look at
9 what's been marked as "PC 21", it's "U.S. Fish and
10 Wildlife Service Land-Based Wind Energy Guidelines"
11 please. And, could you turn to Page 49 of that
12 document. Actually, I'll have maybe, Mr. Valleau,
13 could you please read the first paragraph on Page 49
14 into the record please.

15 A. (Valleau) "Chapter 7: Best Management Practices. Site
16 Construction and Operation: During site planning and
17 development, careful attention to reducing risks" --
18 "risk of adverse impacts to species of concern from
19 wind energy projects, through careful site selection
20 and facility design, is recommended. The following
21 best management practices can assist a developer in the
22 planning process to reduce potential impacts to species
23 of concern. Use of these best management practices
24 should ensure that the potential adverse impacts to

1 most species of concern and their habitats present at
2 many project sites would be reduced, although
3 compensatory mitigation may be appropriate at a project
4 level to address significant site-specific concerns and
5 pre-construction study results."

6 Q. Okay. Could you read the paragraph numbered "4" on
7 that page please.

8 A. (Valleau) "Minimize, to the maximum extent practicable,
9 roads, power lines, fences, and other infrastructure
10 associated with a wind development project. When
11 fencing is necessary, construction should use wildlife
12 compatible design standards."

13 Q. And, are you familiar with the rest of those, I guess
14 they would be called "best management practices" there,
15 on that page, as well as the following couple of pages?

16 A. (Valleau) Yes.

17 Q. And, what do they generally tell a developer to do?

18 A. (Valleau) To work on siting a project to minimize your
19 impacts by being mindful of how you're accessing the
20 site, how you're transmitting your electricity from the
21 site, what sort of structures you have on the site.
22 Essentially, it's guiding on how a site is designed and
23 constructed.

24 Q. Okay. Could you please turn to Page 55 of that

1 document.

2 A. (Valleau) I'm there.

3 Q. And, could you please read the paragraph under the
4 heading, at the bottom right-hand corner of the page,
5 Project Interconnection Lines".

6 A. (Valleau) "Project Interconnection Lines: The
7 Guidelines are designed to address all elements of a
8 wind energy facility, including the turbine string or
9 array, access roads, ancillary buildings, and the
10 above- and below-ground electrical lines which connect
11 a project to the transmission system. The Service
12 recommends that the project evaluation include
13 consideration of the wildlife- and habitat-related
14 impacts of these electrical lines, and that the
15 developer include measures to reduce impacts of these
16 lines, such as those outlined in the Suggested
17 Practices for Avian Protection on Power Lines (APLIC
18 2006). The Guidelines are not designed to address
19 transmission beyond the point of interconnection to the
20 transmission system. The national grid and proposed
21 smart grid system are beyond the scope of these
22 Guidelines."

23 Q. Okay. Thank you. Now, I believe, in response to a
24 recent question from the Bench, you indicated that the

1 Applicant did conduct an alternatives analysis
2 regarding proposed locations for this Project, is that
3 correct?

4 A. (Valleau) Correct.

5 Q. And, do you happen to know -- well, let me just show
6 you the Applicant's Application. Would it be correct
7 to say that that information is contained in Section H
8 of the Application? Take a look at that. Take a look
9 at Pages 46 to 47, and then Page 52.

10 A. (Valleau) So, on Page 46, H.2, "Identification of the
11 applicant's preferred location and any other options
12 for the site of each major part of the proposed
13 facility."

14 Q. And, then, on Page 52, is there information about
15 alternatives?

16 A. (Valleau) Fifty -- 50 and 51.

17 Q. All right.

18 A. (Valleau) H.2.a, "Alternatives analysis".

19 Q. Okay. Thank you. Now, do you know whether, I guess
20 getting back to a question from Chairman Ignatius,
21 about the nature of the habitat in Antrim as depicted
22 on the large blow-up map behind you, and how that
23 relates overall to the State of New Hampshire's ranked
24 habitat. Are you familiar with that in any great

1 degree?

2 A. (Valleau) Well, we consulted the Wildlife Action Plan,
3 which is where the mapping is found. And, we actually
4 did some consultation with New Hampshire Fish & Game
5 regarding how things were ranked.

6 Q. And, do you know if the New Hampshire Wildlife Action
7 Plan has a map of the State of New Hampshire that
8 depicts, in the same colors that are behind you for the
9 region around Antrim, for the whole State of New
10 Hampshire?

11 A. (Valleau) Yes. Yeah. We actually acquired the digital
12 data to create that map. So, yes, there is a map of
13 the entire state in that document.

14 MS. GEIGER: And, I'd ask the Committee,
15 if they think that that information would be helpful, we'd
16 be willing to bring the map of the State of New Hampshire.
17 I actually have it, have this on an iPod [iPad?] here,
18 that shows you the entire State of New Hampshire in the
19 same colors, in terms of depicting where the ranked
20 habitat is throughout the state, if that would assist you.
21 And, we'd be happy to provide that, if you want it?

22 MS. BAILEY: Okay. Thank you. We would
23 be happy to look at it.

24 MS. GEIGER: Thank you.

1 CHAIRMAN IGNATIUS: I was asking if we
2 all get an iPod to go with it; but guess not.

3 MS. GEIGER: Not this time. So, there
4 will be a number reserved for that. We just will get it
5 at the break, is that correct?

6 MR. IACOPINO: Well, when you have the
7 actual exhibit, we'll mark it at that point in time.

8 MS. GEIGER: Okay. Thank you very much.

9 BY MS. GEIGER:

10 Q. Shifting gears a little bit. Do you recall questions
11 yesterday from Mr. Jones of the Stoddard Conservation
12 Commission concerning what he believes to be the width
13 of the roads that are proposed to be constructed at the
14 Antrim Wind Project?

15 A. (Valleau) Yes.

16 Q. And, do you recall him saying that the roads would be
17 "50 feet to 100 feet wide"?

18 A. (Valleau) Yes, I do remember that.

19 Q. Is that correct?

20 A. (Valleau) He's correct in talking about the disturbed
21 area being "50 to 100 feet wide". But the road width,
22 during construction on the crane path is 34 feet, and
23 on the access road, below the crane path, is 16 feet.
24 And, after construction, the crane path road would be

1 narrowed to 16 feet.

2 Q. Okay. So, Mr. -- So, if Mr. Jones were to say that the
3 roads themselves were going to be "50 to 100 feet
4 wide", he'd be incorrect?

5 MR. ROTH: I don't think Mr. Jones said
6 that. I think he was talking about the disturbed area and
7 the clearing, as the witness just described.

8 MS. GEIGER: Okay.

9 BY MS. GEIGER:

10 Q. Okay. In response to a question from Attorney Manzelli
11 yesterday, I believe you, Mr. Valleau, testified that
12 you thought or believed that "post-construction certain
13 wildlife would continue to use the Willard/Tuttle
14 ridge, and that the Project would not disrupt -- would
15 not disrupt the ridgeline's use as a travel corridor."
16 Do you remember that discussion?

17 A. (Valleau) Yes.

18 Q. Do you have any -- well, let me show you what we've
19 marked as the Applicant's I believe number 15, a series
20 of photographs. And, I'd ask you to describe for the
21 record what those paragraphs show?

22 MS. BAILEY: Before we do that,
23 Ms. Geiger, could you tell me which exhibit we're on?

24 MS. GEIGER: Fifteen. AWE 15, I

1 believe. Does everyone have it?

2 BY MS. GEIGER:

3 Q. Okay. Either Mr. Gravel or Mr. Valleau, could you turn
4 to the first page. What does that show? What does
5 that picture show?

6 A. (Valleau) It depicts a collector line, which is above
7 ground, turbine access roads, and a turbine spinning,
8 and a moose in the collector line corridor.

9 Q. How about the second picture?

10 A. (Valleau) Shows a moose walking from restored area into
11 a turbine pad.

12 Q. How about the third picture?

13 A. (Valleau) That shows the same moose, and all three of
14 these are the same cow moose. And, it has crossed the
15 access road, and now is on the bank within the
16 disturbed area, adjacent to the roads.

17 Q. Okay. How about Page 5?

18 A. (Valleau) Page 4 is the same, yeah. Page 5 shows a
19 white-tail deer along an access road to a turbine.

20 Q. Page 6?

21 A. (Valleau) Shows a black bear foraging on a turbine pad.

22 Q. And, do you know where that happened to be taken?

23 A. (Valleau) That's Mars Hill, in Aroostook County, Maine.

24 Q. Page 7?

[WITNESS PANEL: Valleau|Gravel]

1 A. (Valleau) Page 7 is a red fox, also it appears to be
2 foraging on a turbine pad.

3 Q. How about Page 8?

4 A. (Valleau) Page 8 is a small bull moose with small
5 antler growth, crossing a -- or, walking on a project
6 road, with turbines in the background.

7 Q. And, how about the last page, Page 9?

8 A. (Valleau) I think this is actually a photo from a
9 scavenger removal trial, a game camera, and it's a bull
10 moose walking through a turbine pad.

11 Q. Okay. So, what, if anything, do those pictures suggest
12 to you?

13 MR. ROTH: Madam Chairman, I would like
14 to object to the introduction of these pictures. The
15 witness hasn't testified when these pictures were taken or
16 who took them or their authenticity. We have no idea, in
17 the days of photoshop, whether these pictures have been
18 redone to portray these animals. We don't know what date
19 this was taken. There's so much information that we don't
20 have about them, that I don't think it's appropriate to
21 admit them as an exhibit or allow questioning about them.

22 WITNESS VALLEAU: The last two actually
23 have time/date stamps on them, if that helps at all. And,
24 they are game cameras.

[WITNESS PANEL: Valleau|Gravel]

1 MS. GEIGER: Well, why don't we ask Mr.
2 Gravel if he knows where these pictures came from?

3 WITNESS VALLEAU: I know where some of
4 them and Adam knows where some of them were.

5 MS. GEIGER: Okay. Why don't you let --
6 let's authenticate these pictures then.

7 BY MS. GEIGER:

8 Q. Why don't you go ahead and tell us.

9 MS. BAILEY: I'll allow it.

10 **BY THE WITNESS:**

11 A. (Valleau) So, the first series of the cow moose?

12 A. (Gravel) Those came from Audie Arbeault [sic], our
13 field technician that did post-construction monitoring
14 at Kibby Mountain. The Stetson I photo of the deer is
15 a picture that I took of a deer at Stetson.

16 BY MS. GEIGER:

17 Q. So, you took that photo?

18 A. (Gravel) Yes, I did.

19 Q. Okay.

20 A. (Gravel) And, the black bear at Mars Hill was a picture
21 taken from First Wind operations staff at Mars Hill.
22 And the fox was a picture taken by a First Wind
23 operations staff at Mars Hill. And, the pictures of
24 the moose with the date and time stamp and temperature

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[WITNESS PANEL: Valleau|Gravel]

1 was taken from our game cameras that were set out for
2 scavenger removal trials at the Kibby Wind Project.

3 MS. GEIGER: Okay. Thank you.

4 MS. BAILEY: And, do you know when they
5 were taken, the ones that aren't marked?

6 WITNESS GRAVEL: I don't, off the top of
7 my head. I would have to get the --

8 WITNESS VALLEAU: Well, the Kibby one
9 here, we're doing mortality searches up there during 2011.

10 WITNESS GRAVEL: Well, yes. So, the
11 ones from the game camera have their -- have the date and
12 time on them. And, the other ones I would have to get
13 that information from my computer.

14 MS. GEIGER: If you would like us to
15 provide that, we can do that?

16 MS. BAILEY: That will be good. You may
17 proceed.

18 MS. GEIGER: Okay. Thank you.

19 BY MS. GEIGER:

20 Q. I believe Attorney Manzelli, and she can correct me if
21 I got this wrong, I believe she asked if the Project
22 would be willing to consider input from others, in
23 terms of any revisions to the Avian and Bat Protection
24 Plan.

1 MS. GEIGER: Did I get that correct?

2 MS. MANZELLI: Uh-huh.

3 BY MS. GEIGER:

4 Q. Did the Project seek any input from New Hampshire
5 Audubon in developing its Avian and Bat Protection
6 Plan?

7 A. (Valleau) From what I know about the consultation with
8 Audubon is, the Project actually started early in
9 reaching out to Audubon, and Audubon was not interested
10 in consulting.

11 Q. Okay. I guess I need to go back, because I've been
12 reminded that Mr. Roth interrupted my question of you
13 concerning what you believed those photographs
14 suggested?

15 A. (Valleau) Oh, yes. The photographs depict animals
16 going about some of their normal activities, such as
17 foraging. And, they're not disturbed by the operation
18 of the turbines.

19 Q. Okay. Now, do you believe that --

20 MR. ROTH: I'm going to object to this,
21 because there's been no establishment that the turbines
22 are operating. So, to say that they were "operating and
23 not disturbing the animals" seems to me to be quite a
24 reach, unless he can establish that the turbines were, in

1 fact, in operation. In several of these pictures, it
2 appears the turbine blades are still, the deer shot. You
3 can't tell anything about Mars Hill, because it's just a
4 bear, and the fox. Similarly, the game camera shots, you
5 can't -- there's no evidence in here that the turbines are
6 operating, and thus the conclusion that "the animals are
7 not disturbed by them", itself a bit of a reach based on
8 snapshots, I think is not supported.

9 WITNESS VALLEAU: Right on Page 1, you
10 can see the turbine blade is blurred.

11 MR. ROTH: And that could be because the
12 camera shook.

13 WITNESS VALLEAU: But the moose is not
14 blurred. And, you can actually see the collector lines
15 very clearly, so -- I'm also speaking somewhat from
16 personal experience and not having a quick camera to take
17 a picture of an animal walking by operating turbines.

18 BY MS. GEIGER:

19 Q. So, could you please explain that.

20 A. (Valleau) So, I'm injecting a little bit of personal
21 observation into these photos. The other thing that
22 I'd like to point out that these demonstrate is that
23 animals are crossing the roads and traversing the
24 project area that's been disturbed.

[WITNESS PANEL: Valleau|Gravel]

1 MS. GEIGER: That's it. I have no
2 further questions. Thank you.

3 MS. BAILEY: Okay. Thank you for your
4 testimony and the panel is excused. And, this is a
5 perfect time for a lunch break. We'll have us be back at
6 1:30. And, we will pick up with Butler/Martin. Thank
7 you.

8 (Whereupon the lunch recess was taken
9 and this *Morning Session ONLY* ended at
10 12:27 p.m. The hearing to resume in a
11 transcript to be filed *under separate*
12 *cover* so designated as "*Afternoon*
13 *Session ONLY*".)

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