

1 **STATE OF NEW HAMPSHIRE**2 **SITE EVALUATION COMMITTEE**3 **November 7, 2017 - 9:12 a.m.** **DAY 57**4 49 Donovan Street
5 Concord, New Hampshire **Morning Session ONLY**6 *{Electronically filed with SEC on 11-20-17}*7 **IN RE: SEC DOCKET NO. 2015-06**
8 **Joint Application of Northern**
9 **Pass Transmission, LLC, and**
10 **Public Service Company of**
11 **New Hampshire d/b/a Eversource**
 Energy for a Certificate
 of Site and Facility.
 (Hearing on the merits)12 **PRESENT FOR SUBCOMMITTEE/SITE EVALUATION COMMITTEE:**13 **Chrmn. Martin P. Honigberg** Public Utilities Comm.
 *(Presiding as Presiding Officer)*14 **Cmsr. Kathryn M. Bailey** Public Utilities Comm.
15 **Dir. Craig Wright, Designee** Dept. of Environ. Serv.
16 **Christopher Way, Designee** Dept. of Business &
 Economic Affairs
17 **William Oldenburg, Designee** Dept. of Transportation
18 **Rachel Dandeneau** Alternate Public Member19 **ALSO PRESENT FOR THE SEC:**20 Michael J. Iacopino, Esq., Counsel for SEC
 (Brennan, Caron, Lenahan & Iacopino)

21 Pamela G. Monroe, SEC Administrator

22 *(No Appearances Taken)*23 **COURT REPORTER: Steven E. Patnaude, LCR No. 052**
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I N D E X

PAGE NO.

WITNESS PANEL: **MICHAEL LEW-SMITH**
(resumed) **JEFF PARSONS**
 MICHAEL AMARAL
 SCOTT REYNOLDS

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* * *

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* * *

E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
APP 385	Document "Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire"	44

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

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

2 CHAIRMAN HONIGBERG: Good morning,
3 everyone. It's Day 57. And we are continuing
4 with Counsel for the Public's witness panel
5 here.

6 Mr. Walker, you ready to go?

7 MR. WALKER: I am.

8 CHAIRMAN HONIGBERG: You may
9 continue.

10 *(Continuation of the*
11 *cross-examination of the Witness*
12 *Panel of **Michael Lew-Smith,***
13 ***Jeff Parsons, Michael Amaral,***
14 *and **Scott Reynolds.**)*

15 MR. WALKER: Good morning, gentlemen.

16 WITNESS PARSONS: Good morning.

17 WITNESS LEW-SMITH: Good morning.

18 WITNESS AMARAL: Good morning.

19 WITNESS REYNOLDS: Good morning.

20 BY MR. WALKER:

21 Q I want to start today by going through a bit
22 the Biological Opinion that was issued by U.S.
23 Fish & Wildlife Service. Had you seen that
24 before?

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1 A (Lew-Smith) Yes.

2 Q Okay. Now, the Fish & Wildlife Service is
3 another one of the agencies, a federal agency
4 in this case, for which this Committee has to
5 consider its determinations and conclusions
6 when rendering its decision, correct?

7 A (Lew-Smith) Correct.

8 Q And the Biological Opinion in this case, which
9 is Applicants Exhibit 124a, and it begins on
10 Page 85584. And I apologize. We're having
11 technical issues. So, when we're showing some
12 of these exhibits, it may not be as easy and as
13 clean as we were able to do it yesterday, but
14 hopefully you'll be able to read when I'm
15 referring to it.

16 And I suppose this question is for you
17 Mr. Lew-Smith. Have you seen biological
18 opinions before on other projects?

19 A (Lew-Smith) I've seen them, but not on a
20 project that I've been a consultant on.

21 Q Do you know generally what a biological opinion
22 is that's issued by the Fish & Wildlife
23 Service?

24 A (Lew-Smith) Yes.

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1 Q Essentially, it is the document by which the
2 Fish & Wildlife Service renders its opinions
3 with regard to federally threatened and
4 endangered species, correct?

5 A (Lew-Smith) Correct.

6 Q And, for this Project, and we can talk about --
7 we can look at individual pages, but the focus
8 of the Fish & Wildlife Service was on six
9 either federally threatened or endangered
10 species, right?

11 A (Lew-Smith) Correct.

12 Q And, ultimately, the Department of Energy,
13 before we get to the Fish & Wildlife Service
14 opinion, but the Department of Energy
15 determined that the Project may affect, but is
16 not likely to adversely affect, five species:
17 The small whorled pogonia, the Canada lynx, the
18 northern long-eared bat, the dwarf wedge
19 mussel, and the Indiana bat. Is that right?

20 A (Lew-Smith) That's correct.

21 Q And the Fish & Wildlife Service agreed in the
22 Biological Opinion that the Project is not
23 likely to adversely affect these five species,
24 correct?

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1 A (Lew-Smith) Correct.

2 Q Do you or anyone on the panel disagree with
3 that finding of Fish & Wildlife Service with
4 regard to those five species?

5 A (Reynolds) I don't disagree with the finding.
6 I would like to clarify, though, that the
7 Indiana bat was not initially part of the scope
8 of study for the Applicant.

9 Q Okay. And I appreciate that. I just want to
10 make sure, on these five species, I'll get to
11 that, --

12 A (Reynolds) Well, the Indiana is one of those
13 five species, though.

14 Q Right. But, as far as those five species, you
15 don't disagree with the findings of the Fish &
16 Wildlife Service, including the Indiana bat?

17 A (Reynolds) That is correct.

18 Q Okay. Thank you. With regard to the sixth
19 species -- I'm sorry?

20 A (Lew-Smith) Well, I should also point out,
21 though, that they have their -- the parameters
22 under which they consider effect, and may
23 adversely affect or may not adversely affect.
24 And we didn't conduct that analysis under those

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1 parameters.

2 Q No, I understand. But I guess my only question
3 is, do you have any reason to disagree with the
4 findings of the Fish & Wildlife Service on
5 those five species? And I think your answer
6 has been "no"?

7 A (Lew-Smith) No.

8 Q Let me ask you about the sixth species, which
9 is the Karner blue butterfly, KBB. And I
10 suppose that's best directed to you,
11 Mr. Amaral. I want to ask you, I take it
12 you've read the analysis in the Biological
13 Opinion with regard to the KBB?

14 A (Amaral) Yes, I have.

15 Q And there's a fairly extensive analysis with
16 regard to the KBB. But I want to point you to
17 the conclusions of Fish & Wildlife Service on
18 Page 22 of the Biological Opinion.

19 So, Dawn has pulled that up. Can you see
20 that on the screen, Mr. Amaral?

21 A (Amaral) Yes, I can.

22 Q And I'm going to ask you briefly on some of the
23 comments by the Fish & Wildlife Service. In
24 the first paragraph, ultimately, the conclusion

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1 of Fish & Wildlife is that "the Project, as
2 proposed, is not likely to jeopardize the
3 continued existence of the Karner blue
4 butterfly."

5 MR. WAY: We're not seeing it.

6 CHAIRMAN HONIGBERG: Off the record.

7 *[Brief off-the-record discussion*
8 *ensued.]*

9 CHAIRMAN HONIGBERG: Thank you, Dawn.
10 All right, Jeremy. You're back up and running.

11 MR. WALKER: Thank you.

12 BY MR. WALKER:

13 Q All right. Mr. Amaral, so that gave you a
14 little bit more time to review the Page 22 and
15 the conclusions. And, just very quickly, on
16 some of these conclusions, I was asking you
17 about the very first paragraph, "that the
18 Project, as proposed, is not likely to
19 jeopardize the continued existence of the KBB."
20 Do you see that?

21 A (Amaral) Yes.

22 Q Do you agree with that finding by the Fish &
23 Wildlife?

24 A (Amaral) Yes, certainly. The jeopardy standard

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1 within the Fish & Wildlife's Biological Opinion
2 is a determination of whether the Project that
3 they're reviewing is likely to cause the
4 extinction of the species across its range.

5 Since the Karner blue butterfly occurs in
6 small remnant populations from New Hampshire to
7 Wisconsin, it's certainly very reasonable to
8 conclude that an impact to part of the Concord,
9 New Hampshire population is not going to cause
10 the extinction of the species across its range.

11 Q Okay. Thank you. So, but if you look at the
12 next numbered paragraph, Number 1, the agency
13 concludes that "the Project would cause a
14 minor, temporary reduction in the species'
15 reproduction and numbers in the area of
16 effect."

17 So, now it's discussing this particular
18 project, correct?

19 A (Amaral) Yes.

20 Q And it lists a number of reasons supporting its
21 conclusion below it. And the first one is that
22 "the Project will implement measures to avoid
23 and minimize adverse effects on the KBB and its
24 habitat". I suppose you would agree with that?

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1 A (Amaral) Well, that's been a -- that's been
2 sort of a moving target. But, yes, at this
3 point in time, I do believe that efforts have
4 been made to minimize, avoid and minimize.

5 Q Okay. And, looking at the Paragraph (d), the
6 Fish & Wildlife Service says that "the Project
7 could affect up to 1,043 square feet of KBB" --
8 "known KBB habitat." And, it goes on to say
9 that "this area is only 3.7 percent of the
10 potential habitat for the species in the action
11 area, and 0.016 percent of the occupied habitat
12 in the Concord metapopulation, and
13 insignificant percentage of the species'
14 habitat rangewide."

15 Again, do you agree with that, Mr. Amaral?

16 A (Amaral) Yes. But it's also important to point
17 out that, since our supplementary prefiled
18 testimony in April, Project effects, in terms
19 of the square footage of lupine that is going
20 to be affected, has been greatly reduced
21 through a very positive project design
22 modification, by moving a set of towers out of
23 an important lupine patch.

24 So, yes. This current description of

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1 impacts I think is correct. I was perhaps a
2 little bit troubled when I reviewed the
3 Biological Opinion, in that nowhere in the
4 Opinion is it apparent that the author of the
5 document has ever visited the Concord Pine
6 Barrens, has any personal familiarity with the
7 species or its habitat there, and sought any
8 independent or third party review of all of the
9 Project description -- or, Project impact
10 analysis provided by either Eversource or the
11 DOE.

12 Q I understand. But do you know that to be the
13 case?

14 A (Amaral) I don't see it in the consultation
15 history or in the literature cited section.

16 Q But -- and I understand that. But, as far as
17 the conclusion, and I think I just heard you
18 say that this reduction of impact, now down to
19 1,043 square feet, is a positive -- a positive?

20 A (Amaral) It's a very positive Project
21 improvement.

22 Q And you're aware that that is temporary impact,
23 the 1,043 square feet? It's a temporary
24 impact?

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1 A (Amaral) Yes. But temporary -- "how temporary
2 is temporary?" I think is the question.

3 Q Well, but, I mean, even using the words of the
4 Fish & Wildlife Service, it's a reference to
5 "temporary impact" to the 1,043 feet. You
6 would agree with that? That's what the Fish &
7 Wildlife Service --

8 A (Amaral) Provided affirmative time of year and
9 other construction methods are used to minimize
10 those impacts.

11 Q And one thing I didn't hear you talk about
12 yesterday, I don't believe, but I can -- we can
13 talk about today, if you look at the bottom,
14 Paragraph 2, there's a reference to the
15 mitigation parcel. And it notes, if you see
16 that, "we expect the conservation of
17 approximately 7 acres of undeveloped habitat in
18 the Concord metapopulation to have long-term
19 benefits to the Karner blue butterfly."

20 Again, I assume that you would find that
21 you would agree with that conclusion with
22 regard to the mitigation parcel?

23 A (Amaral) Yes. As noted in that prefiled --
24 supplemental prefiled testimony, I think that's

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1 an excellent parcel to restore to benefit the
2 Karner blue butterfly and lupine. Fish & Game
3 will not have the resources to undertake
4 habitat restoration unless they are funded to
5 do so. So, that is the commitment to do that,
6 to restore that partially -- currently
7 partially developed property, from which much
8 of the topsoil has been removed, needs to be
9 committed to.

10 But then, yes. I think it is ideally
11 located, and it has the right soil
12 characteristics. It's between existing
13 populations of the Karner blue. I think
14 they're going to use it if it's restored.

15 Q Good. One last question, going back to Page
16 21, which is the last page prior to this, Dawn.
17 At the first full paragraph, starting with "The
18 parcel". Right. If you could look at the very
19 last sentence, and you can read the paragraph,
20 but, if you look at the very last sentence,
21 Fish & Wildlife Service concludes that "The
22 benefits of conserving this parcel", and
23 they're referring to the mitigation parcel,
24 "outweigh the costs of the 1,043 square feet of

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1 temporary habitat loss". Do you agree with
2 that?

3 A (Amaral) I do. I concur with that.

4 Q So, in light of this, and in light of the
5 Project now only impacting a 1,043 square feet
6 temporary impact, do you still believe that the
7 Project will have an unreasonable adverse
8 effect on the KBB?

9 A (Amaral) In anticipation of this question, I've
10 prepared some notes. So, if you'll --

11 Q Well, but just -- it is sort of a "yes" or "no"
12 question. So, I'm wondering, do you still take
13 the position that it will have an unreasonable
14 adverse effect on KBB?

15 A (Amaral) The answer is, no, provided that --

16 Q And that's fine.

17 A (Amaral) Okay.

18 Q I wanted to just get that and understand your
19 position.

20 A (Amaral) All right. So, my original
21 conclusion --

22 MS. CONNOR: Objection. I think the
23 witness should have an opportunity to explain
24 his answer.

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1 CHAIRMAN HONIGBERG: I actually don't
2 think Mr. Walker was going to stop him, but --

3 MS. CONNOR: Okay.

4 **BY THE WITNESS:**

5 A (Amaral) Yes. My April 2017 finding that
6 construction and operation of the Project is
7 likely or was likely to have an unreasonable
8 effect was based on what I thought at the time
9 to be an apparent lack of rigorous effort to
10 avoid impacts through modest project design
11 changes. A commitment to a time-of-year
12 restriction that would affirm construction
13 during winter, preferably when there is snow
14 and frozen ground conditions. And, three,
15 commitment to a right-of-way management plan,
16 any habitat restoration plan for the Z1 parcel
17 that would identify how long and at what level
18 of have funding restoration efforts would take
19 place.

20 Since that testimony in April, the
21 Applicant has significantly reduced the amount
22 of lupine that will be affected by construction
23 by moving that set of structures. This will
24 result in a proportionally reduced impact on

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1 Karner blue butterflies. Even though I had a
2 problem with the way the methods that were used
3 to assess the number of Karner blue eggs that
4 were likely to be taken, habitat is an
5 acceptable surrogate. So, we don't know how
6 many eggs may be present on the temporarily
7 affected lupine. But, proportionally, the
8 impact on the Karner blue is going to be
9 greatly reduced now.

10 BY MR. WALKER:

11 Q And I just want to ask you, because I know
12 you're reading from your notes, but many of
13 those things that you just described, including
14 the AMMs with regard to -- all of that is
15 referenced by the Fish & Wildlife Service as
16 supporting its conclusions?

17 A (Amaral) Yes.

18 Q Right?

19 A (Amaral) Yes.

20 Q And I know you have a lot of experience, you
21 were with the Fish & Wildlife Service for 33
22 years, I believe, based on your resumé. Based
23 on all of that, it sounds like you are agreeing
24 with the findings of Fish & Wildlife Service of

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1 no adverse effect with regard to the KBB?

2 A (Amaral) No. I'm agreeing with their
3 non-jeopardy stance.

4 Q Okay. I'm sorry. I meant that. I misspoke.

5 A (Amaral) And I'm near the end, so indulge me.

6 Q I know Mr. Parsons has to leave here, and so
7 I'm trying to move this along.

8 A (Amaral) Again, since April, those Project
9 modifications have occurred. And you've also
10 made a commitment to a non-growing season time
11 of the year restriction, and the use of timber
12 matting whenever construction occurred.

13 So, I can now find that the Project does
14 not -- is not likely to have an unreasonable
15 adverse effect on the Karner blue butterfly,
16 provided that the terms and conditions
17 stipulated in the Fish & Wildlife Service's
18 Biological Opinion on Page 25 are affirmatively
19 implemented. And those speak to proactive
20 lupine restoration, --

21 Q All the things you've been talking about.
22 Correct.

23 A (Amaral) -- right-of-way management,
24 time-of-year restrictions.

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1 Q Okay. Thank you, Mr. Amaral.

2 MS. PACIK: Could I just put
3 something on the record? My apologies to
4 interrupt. I found out yesterday that new site
5 plans were submitted to Counsel for the Public
6 in August, and the City of Concord has not
7 received those.

8 They are confidential documents, we
9 weren't notified until yesterday that they had
10 even made changes to that parcel. So, we are
11 trying to get a copy of the site plan. We do
12 have an expert --

13 CHAIRMAN HONIGBERG: Have you spoken
14 with counsel for the Applicant?

15 MS. PACIK: I have. I sent them an
16 e-mail yesterday. I'm waiting to see if I can
17 get it. But I just want to put on the record
18 that I was -- I haven't seen them, so I haven't
19 had an opportunity to ask this witness about
20 the changes. So, I just wanted to get on that.

21 CHAIRMAN HONIGBERG: Okay. Thank you
22 for noting that. I would recommend strongly
23 that you speak with counsel, who is two tables
24 in front of you, about the situation at the

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1 first possible opportunity, and see if you need
2 relief of some sort.

3 MS. PACIK: I have spoken to them,
4 and I have e-mailed them. So, yes. We have
5 been in communication about trying to get me a
6 copy.

7 CHAIRMAN HONIGBERG: Okay.

8 MS. PACIK: I just --

9 CHAIRMAN HONIGBERG: Mr. Walker.

10 BY MS. WALKLEY:

11 Q I'm going to circle back to our discussion from
12 yesterday. And I'll direct these to
13 Mr. Lew-Smith, because I was asking you
14 yesterday these questions or something related.
15 But, if any of you wants to answer, instead of
16 Mr. Lew-Smith, please do.

17 I want to circle back to our discussions
18 when I showed you yesterday the Site Evaluation
19 Committee rule, and the fact that, when the
20 Committee is considering whether the Project
21 has an unreasonable adverse effect on water
22 quality and the natural environment, this
23 Committee has to consider the findings and
24 determinations of the various agencies.

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1 And you are aware, Mr. Lew-Smith, of the
2 ongoing interactions and communications that
3 the Project has been having with the various
4 state agencies?

5 A (Lew-Smith) Yes, I am.

6 Q Including New Hampshire Fish & Game, Natural
7 Heritage Bureau, DES, and also Fish & Wildlife
8 Service?

9 A (Lew-Smith) Yes.

10 Q Okay. I think you said you reviewed some of
11 these communications, but not all of them. Is
12 that accurate?

13 A (Lew-Smith) Yes.

14 Q And yesterday you explained your role and your
15 company's role was to review the proposed
16 Project, the Applicants' assessment of
17 environmental impact, and to provide your
18 analysis of that assessment. Correct?

19 A (Lew-Smith) Correct.

20 Q But you've not had the same level of
21 involvement or ongoing interaction with the
22 Project as these different agencies has, right?

23 A (Lew-Smith) Not the same level. We have
24 interacted with those agencies regarding the

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1 project. But not to the same level, correct.

2 Q Fair to say that the agencies probably have
3 more information than you do with regard to the
4 Project, the design, some of the changes that
5 have been made?

6 A (Lew-Smith) Well, I hope not. I mean, we were
7 supposed to get all the information about the
8 Project as well.

9 Q Okay. But you haven't had -- you haven't
10 reviewed all of those communications between
11 the agencies and the Project?

12 A (Lew-Smith) Right. But you were asking me if
13 we -- if they had the same information about
14 the Project design that we have.

15 Q Right. Fair enough. You know that the DES has
16 approved the different permits, including the
17 Wetlands Application permit?

18 A (Lew-Smith) Correct.

19 Q And you know that the Fish & Game has had
20 considerable input into the proposed AMMs for
21 wildlife on the Project?

22 A (Lew-Smith) Yes.

23 Q And you know that the Natural Heritage Bureau
24 has had input and has approved the AMMs with

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1 regard to plant protection?

2 A (Lew-Smith) I understand they have input. I
3 wasn't aware of an official approval status.

4 Q Okay. Do you have any reason to believe that
5 the Natural Heritage Bureau has any
6 disagreement with the AMMs that have been
7 proposed for the plant protection?

8 A (Lew-Smith) Since I haven't been to any of
9 those meetings, I can't say either way.

10 Q And you know that the DES permit approval
11 requires all work to follow the various AMMs
12 and the time-of-year restrictions, correct?

13 A (Lew-Smith) Correct.

14 Q And yesterday, when I asked you about this, you
15 noted that there were particular findings or
16 conclusions of the agencies that you had some
17 disagreements with, right?

18 A (Lew-Smith) Correct.

19 Q But, when this Committee has to consider the
20 determinations and findings of these various
21 agencies in making its determination as to
22 whether there's an unreasonable adverse or
23 adverse effect on water quality and the natural
24 environment, are you suggesting that this

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1 Committee should disregard the findings and
2 conclusions of those agencies and supplant it
3 with yours where there's disagreement?

4 A (Lew-Smith) No. Even if I suggested that, I
5 think they wouldn't listen to me. I'm
6 suggesting that they take in all the
7 information that they have. And that our
8 professional opinion is another piece of that
9 information.

10 Q And if this Committee were to condition the
11 issuance of any certificate for this Project on
12 the Project's compliance with the various AMMs
13 that have been ultimately, if they're approved
14 by those agencies, or the different conditions
15 imposed by the DES, is it your position that
16 the Project would still have an unreasonable
17 adverse effect on certain species?

18 A (Lew-Smith) Yes.

19 Q So, I think what you're essentially saying is
20 that these agencies have issued permits that
21 are so defective, that even with the
22 Applicants' compliance with all these permit
23 conditions, it still will result in an
24 unreasonable adverse effect to different

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1 species?

2 A (Lew-Smith) I'm not saying that they're
3 defective in any way. They have their
4 regulatory framework that they issue permits
5 for, and the SEC has its own regulatory
6 framework that it issues permits and conditions
7 for. And the language is different and the
8 process is different.

9 Q But, even these different agencies that have
10 required certain conditions, your position
11 that, even if those conditions are followed,
12 the Project will still have an unreasonable
13 adverse effect on certain species?

14 A (Lew-Smith) Yes.

15 A (Reynolds) If I can add a clarification, too.
16 My understanding of the SEC job is they have
17 seven criteria for determining unreasonable
18 adverse impact. And review and analysis of the
19 recommendations of agencies is point four of
20 those seven. There are six other criteria that
21 are part of their decision that are not part of
22 whether or not they're permitted for this
23 Project. And we're looking at those other six
24 criteria as well.

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1 Q So, then, Mr. Reynolds, following up on that,
2 is it your position, do you have a different
3 position than Mr. Lew-Smith with regard to the
4 permits issued by these agencies, and, if the
5 Project were to follow all the conditions
6 required by the agencies and the AMMs, that the
7 Project would still have an unreasonable
8 adverse effect on certain species?

9 A (Reynolds) Well, I have the luxury of having a
10 very narrow focus on three species. In terms
11 of -- in terms of the approval of the relevant
12 agencies, U.S. Fish & Wildlife Service spoke on
13 the Indiana bat and the northern long-eared
14 bat. My original testimony said it was -- this
15 Project was unlikely to have an unreasonable
16 adverse impact on the northern *myotis*. I did
17 not address Indiana *myotis*, because it was not
18 a species of issue at that time. But I affirm
19 the Fish & Wildlife Service's conclusion on
20 that.

21 It did not deal with the state-listed
22 species, the small-footed bat, which becomes an
23 issue for the New Hampshire Fish & Game.

24 Q But you're agreeing with the Fish & Wildlife

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1 Service --

2 A (Reynolds) So, Fish & Wildlife Service, for the
3 two species, yes.

4 Q Okay.

5 A (Reynolds) But, for the Fish & Game and the New
6 Hampshire Natural Heritage Bureau, they do not
7 have a single person on either staff that
8 studies or is knowledgeable about bats. So,
9 although I respect the ability of those
10 agencies, I also am fully aware of the
11 limitations of those two agencies to make an
12 opinion on this group of animals.

13 Q And I'll get back to you after with regard to
14 the AMMs recommended by the Project and sent to
15 the Fish & Game. We'll talk about that with
16 regard to the bats.

17 But let me turn back to you,
18 Mr. Lew-Smith, or whomever may be appropriate,
19 because I want to ask some questions about the
20 wild lupine and the habitat for the KBB. So
21 Mr. Amaral, you may weigh in as well. But you
22 are aware that the total area of wild lupine
23 patches in the Northern Pass right-of-way in
24 Concord is approximately 28,000 square feet?

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1 A (Lew-Smith) I don't recall that number, but
2 that sounds reasonable.

3 Q And, for the record, that is in the Appendix 35
4 of the Applicants' exhibit, and it's Table 21a.
5 Mr. Amaral, I see you shaking your head. Does
6 that figure sound right to you?

7 A (Amaral) I remember seeing that figure in the
8 early Wildlife Technical Reports.

9 Q Okay. Do you have any reason to disagree with
10 that figure of 28,000 square feet?

11 A (Amaral) I didn't independently corroborate it.
12 But, no, I have no reason to distrust it for
13 any reason.

14 Q And now we have -- we know that the impact has
15 been reduced to 1,043 square feet of the wild
16 lupine area, which I will represent to you is
17 less than four percent of the area of lupine in
18 Concord, correct?

19 A (Lew-Smith) That is correct. If I could -- we
20 haven't really talked about the wild lupine in
21 Pembroke. And I think it illustrates --

22 Q Well, let me just finish my questions with
23 regard to Concord.

24 A (Lew-Smith) Okay. Yes.

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[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 Q Because my question is, what I wanted to ask
2 you, is yesterday, Mr. Lew-Smith, I believe you
3 testified that additional impact reductions
4 were still possible beyond the 1,043 square
5 feet. And I think you said based -- you
6 believe that an access road could be relocated
7 in that area in Concord?

8 A (Lew-Smith) Correct. I did state that.

9 Q And I'm wondering, when you made that statement
10 or you have that contention, are you
11 considering other constraints related to the
12 equipment length, the height, the turning
13 radii relative to different structures, all of
14 those considerations? Are you taking that into
15 account when you make that contention?

16 A (Lew-Smith) I'm certainly aware of all of the
17 engineering constraints that come with
18 relocating structures and roads and all that.
19 I'm not an engineer. And, so, I don't have the
20 plans to make that call. Looking at -- knowing
21 the site, and looking at the lupine populations
22 and the impacts, I've made an assessment that
23 says "Hey, look. It looks like things can be
24 moved." And this is -- it's the same technique

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1 we used at the very beginning when we were
2 involved, and we said "hey, it sure looks like
3 you could move some structures and some roads
4 here". And the response was "well, we've done
5 everything we can." And now it turns out that
6 actually they were able to move some structures
7 and roads.

8 Q But, Mr. Lew-Smith, my question was pretty
9 simple. Did you consider all of those
10 different factors when you made your assertion
11 that "further impact beyond the 1,043 square
12 feet could be made by moving the access road"?
13 Did you have any of those considerations in
14 mind?

15 A (Lew-Smith) Yes.

16 Q Okay. What particular information did you
17 consider?

18 A (Lew-Smith) As I mentioned before, I'm not an
19 engineer. But, knowing the site, and looking
20 at the distribution of the impacts, roads, the
21 lupine, the topography on the site, from a
22 non-engineering point of view, it looked to me
23 like further reductions would be possible.

24 Q All right. But I'm talking about design

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 constraints. You did not have any particular
2 design constraints in mind when you made that
3 determination?

4 A (Lew-Smith) I did not.

5 Q Okay. Let me turn to licorice goldenrod. And,
6 Mr. Lew-Smith, I think yesterday you testified,
7 or maybe it wasn't yesterday, I'm sorry, it may
8 have been in your prefiled testimony, that the
9 Project should minimize impacts to a population
10 of licorice goldenrod by shifting the
11 construction access route across the
12 right-of-way to where part of the population
13 was recently eliminated. Do you recall that?

14 A (Lew-Smith) Yes.

15 Q And this is in Pembroke, correct?

16 A (Lew-Smith) Yes.

17 Q If the Northern Pass -- if the Project was able
18 to make an agreement with the landowner to
19 shift the access road to that portion of the
20 right-of-way, would you consider this
21 sufficient avoidance and minimization?

22 A (Lew-Smith) Yes.

23 Q Turning now to vernal pools, Mr. Lew-Smith. I
24 heard you say yesterday you do not have any

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 criticism of the data collection methodology
2 that Normandeau used for identification of the
3 vernal pools, is that right?

4 A (Lew-Smith) That's correct.

5 Q But you criticized the methodology that
6 Normandeau used to rank the quality of the
7 vernal pools?

8 A (Lew-Smith) Correct.

9 Q But it's true that neither federal or state
10 regulators required the Project to use a
11 particular methodology, is that right?

12 A (Lew-Smith) That's my understanding, yes.

13 Q And are you aware that neither the EPA, nor any
14 other agency, have taken issue with the method
15 used by the Project to rank the quality of
16 vernal pools?

17 A (Lew-Smith) That was stated by I think Ms.
18 Carbonneau in her testimony, yes.

19 Q Do you have any reason to disagree with that?

20 A (Lew-Smith) No.

21 Q Okay. In fact, that the DES approved the
22 Wetlands Permit application, which included
23 vernal pool identification and impact
24 assessment details, right?

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[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 A (Lew-Smith) Correct.

2 MR. WALKER: Dawn, if you could pull
3 up that Exhibit 75 please. And this is the DES
4 permit, and particularly I want to look at Page
5 10, which is Bates 44455. It may be best to
6 blow up Finding Number 9 please.

7 BY MR. WALKER:

8 Q You see where it says "Overall temporary
9 wetland impacts were reduced by 76,009 square
10 feet, which includes avoiding two high value
11 vernal pools, and permanent wetland impacts
12 were reduced by 732 square feet", and then it
13 goes on.

14 Do you have any reason to disagree with
15 that, Mr. Lew-Smith?

16 A (Lew-Smith) No. No.

17 MR. WALKER: Also on that same page,
18 Dawn, if you could go to Finding Number 14
19 please.

20 BY MR. WALKER:

21 Q I'll let you read that statement with regard to
22 vernal pools. Do you have any reason to
23 disagree with the DES's findings? This
24 particular finding?

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 A (Lew-Smith) Well, again, I don't necessarily
2 agree with the high value ranking that was
3 used. I know, when I looked at the data, using
4 their methodology, I'd find vernal pools that
5 were categorized as "high value", but the data
6 didn't support it. And then other pools where
7 the data did support it and they weren't
8 categorized as "high value". And, so, that
9 would be my only concern about this.

10 In terms of your question about
11 questioning the amount of impacts, I don't have
12 any reason to not believe that.

13 Q Okay. Just to be sure I understand that. You
14 do not disagree with the DES's findings on the
15 impacts?

16 A (Lew-Smith) Correct.

17 Q I want to turn to bats now, and I suppose this
18 is for you, Mr. Reynolds. And much of your
19 findings are in Appendix B of the report that
20 was submitted with the prefiled testimony.

21 MR. WALKER: Dawn, if you could pull
22 up Exhibit 136 please, and particularly
23 Appendix B. And if you could go to Page Bates
24 3643, which is the first page of that report.

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1 At 3643, right?

2 This is where I explained it won't be
3 as pretty as yesterday. So, bear with me
4 please. Thank you.

5 BY MR. WALKER:

6 Q If I can direct your attention to the last
7 paragraph that starts with "ultimately". And
8 the second sentence, and you note "Despite the
9 general absence of site-specific data, it's
10 your opinion that there is relatively little
11 risk that development of the Project would have
12 a detrimental impact on any of the state
13 species of concerns." And I want to ask you
14 about that. This relates to the northern
15 long-eared bat, for one, correct?

16 A (Reynolds) No, it does not. No, it does not.

17 Q Why not?

18 A (Reynolds) These are the species of concern.
19 These are the tree-roosting bats that were,
20 according to the SEC rules, considered
21 significant wildlife resources, but were never
22 addressed by any of the pre-construction
23 analyses.

24 Q All right. Let me go on then in the next

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1 sentence. "I'm also confident that, in the
2 context of appropriate construction and
3 post-construction monitoring plans, there will
4 be no unreasonable adverse effect of the
5 Project on the federally threatened northern
6 *myotis*." That's the northern long-eared bat,
7 correct?

8 A (Reynolds) Correct.

9 Q Do you have a concern that the AMMs being
10 negotiated with Fish & Game, I think you
11 explained this yesterday, they don't provide a
12 time-of-year restriction for those segments of
13 the route where the acoustic survey results
14 were inclusive? Is that how I understood your
15 concern yesterday?

16 A (Reynolds) I have a concern that the AMMs have
17 gone from a BMP to an AMM. And the three
18 versions I've seen have gotten more vague as
19 each version has been released. So, I don't
20 know what they -- what limitations they have
21 right now.

22 MR. WALKER: Dawn, if you could pull
23 that up please, the AMM. It's Exhibit 124a.
24 And it's Bates 85620.

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1 BY MR. WALKER:

2 Q I want to ask you, because you did go through
3 this a bit yesterday in questions from Ms.
4 Connor. And I believe you said that one of the
5 problems that you had was that they removed the
6 time-of-year restriction -- or, restriction on
7 this particular AMM?

8 A (Reynolds) No. That's for the eastern
9 small-footed bat.

10 Q All right. So, you don't have that same
11 concern here?

12 A (Reynolds) No. The time -- these are the
13 original time restrictions. And I've said in
14 my supplemental testimony and at other
15 occasions that those are reasonable time
16 restrictions.

17 Q Okay.

18 A (Reynolds) They are missing the recommendation
19 for a time restriction and a buffer zone for
20 the known hibernacula for this species that was
21 put in the Biological Opinion, not the formal
22 -- put in at the -- was requested by New
23 Hampshire Fish & Game. So, there should be a
24 restriction on activities near known

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1 hibernacula for this species, both geographic
2 buffer zones and time restrictions.

3 Q Okay. Let me ask you then on the Indiana bat,
4 Mr. Reynolds. The Fish & Wildlife Service also
5 concluded that the Project is not likely to
6 have --

7 *[Court reporter interruption.]*

8 MR. WALKER: Sorry.

9 BY MR. WALKER:

10 Q The Fish & Wildlife Service concluded that the
11 Project is not likely to have an adverse effect
12 on the Indiana bat, correct?

13 A (Reynolds) Yes, it did.

14 Q And I'm curious about your views with regard to
15 the Indiana bat. Do you believe it to be a
16 resident of New Hampshire?

17 A (Reynolds) I do not. I would caution, though,
18 it's still unclear what information the U.S.
19 Fish & Wildlife Service had with regard to the
20 Indiana bat, because of the reanalysis of the
21 2015 data, which incorporated Indiana bats.

22 Q No, I understand. And you explained that
23 yesterday.

24 A (Reynolds) Well, but what I didn't explain

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1 yesterday was that the 2017 data, which I had
2 just received Sunday night, did not look for
3 the Indiana bat. So, it's unclear whether, had
4 they used the same methodology as they used in
5 the revised 2016 reanalysis, they would have
6 found more occurrences, potential occurrences
7 of Indiana bats. And whether that information,
8 had it been supplied in the Biological Opinion,
9 may have altered the U.S. Fish & Wildlife's
10 opinion of that project.

11 But my opinion is that, if they follow the
12 AMMs for the northern long-eared bat, it's
13 unlikely this Project would have unreasonable
14 adverse impact.

15 Q Great. Let me turn now to the small-footed
16 bat, the last bat on my list.

17 MR. WALKER: And, Dawn, on the AMMs,
18 if you could pull up 85621 please.

19 BY MR. WALKER:

20 Q And I heard you say that this is the area where
21 you were concerned about the time-of-year
22 restrictions being removed for this particular
23 species, is that right?

24 A (Reynolds) Yes. I have several issues with

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 this AMM, yes.

2 Q But that was one. That you mentioned yesterday
3 that the AMMs now have removed the time-of-year
4 restriction?

5 A (Reynolds) The original -- the original time
6 year of restrictions were not biologically
7 appropriate. And, so, rather than put
8 reasonable biological -- or, reasonable time
9 restrictions, they just removed the time
10 restrictions.

11 Q But didn't I hear you say yesterday that these
12 bats may be in rocky crevices all year round?

13 A (Reynolds) Yes, they can.

14 Q So, it's better to not limit the different
15 restrictions based on time of year, correct,
16 and rather have those restrictions all year?

17 A (Reynolds) That they need to coordinate when
18 they're going to do surveys around when they're
19 going to do construction. And here, there's no
20 allowance for that. This basically says that
21 they can do surveys. And, if those surveys
22 find that they're not there, they can do
23 construction. But they could survey in the
24 winter, when they're not going to find the

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1 bats, and then clear them for construction in
2 the summer, when the bats could be there.
3 There's no -- there's no conditions on this
4 that the surveys have to be temporally
5 appropriate for the time that the construction
6 is going to occur, --

7 Q Okay.

8 A (Reynolds) -- and how to do those surveys.

9 Q But you're addressing something a little
10 different. I mean, the issue that you raised
11 yesterday was "they removed the time-of-year
12 restriction". But wouldn't you agree with me
13 now that these different restrictions that are
14 included, they apply all year long, and that's
15 actually more protective?

16 A (Reynolds) I'm not sure what restrictions that
17 are in this AMM for time of year.

18 Q Okay. Well, do you see any restriction here
19 limited to a time of year?

20 A (Reynolds) No. That's my point.

21 Q Right. And that's the point we're making or
22 I'm making as well, is now you've removed any
23 time-of-year restriction. This is actually
24 more protective.

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1 A (Reynolds) I'm not following that logic. If
2 they shouldn't be doing construction in certain
3 times of the year, then not having any
4 time-of-year restrictions is not intrinsically
5 more protective than not doing construction.

6 Q Well, I'm looking at, for instance, the last
7 bullet: "If no bats are present, work can
8 proceed." That applies all year, that
9 restriction. If you have bats, work cannot
10 proceed.

11 A (Reynolds) What does the term "if no bats are
12 present" mean?

13 Q All right. I understand. We're going to
14 disagree on your position and my position on
15 this. But I was focusing specifically on your
16 comment yesterday with regard to the removal of
17 the time-of-year restrictions.

18 And the concern for the small-footed bat
19 is construction activity affecting the rocky
20 crevices that are used to roost and hibernate,
21 right?

22 A (Reynolds) I'm sorry. Can you say that again?

23 Q The concern for the small-footed bat is
24 construction activity affecting the rocky

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1 crevices that are used to roost and hibernate.

2 Is that right?

3 A (Reynolds) For the most part. I mean, there
4 could be small habitat ongoing issues,
5 particularly, if they're going to be doing
6 vegetation management in some of this habitat
7 post-construction. But, yes. The primary
8 issue that I was addressing was the
9 construction issue.

10 Q And the first AMM states that the real concern
11 is direct construction impact to these rocky
12 areas, correct?

13 A (Reynolds) Correct.

14 Q And, if the structures are not built on these
15 exact spots, then there will be no direct
16 impact to the areas where they roost and
17 hibernate?

18 A (Reynolds) Not necessarily, because of the
19 nature of our geology, there's obviously
20 construction blasting on a large slab of
21 granite near a contiguous piece of granite that
22 has roosting structures in it could have an
23 effect. That's why there are BMPs out there to
24 look at the impact of sound and vibration on a

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1 buffer zone around these sites.

2 Q Are you aware of any known small-footed bat
3 hibernacula in the right-of-way?

4 A (Reynolds) No, but no one's ever looked for
5 them.

6 Q But you're not aware of any in the right-of-way
7 for this Project, are you?

8 A (Reynolds) You can't see what no one looks for.

9 Q Well, let me ask you a few questions -- or,
10 actually, this wouldn't be directed to you,
11 Mr. Reynolds, on herons. And, Mr. Parsons, let
12 me turn to herons. And you suggested yesterday
13 your concern with the AMMs related to the
14 330-foot buffer. Did I hear you correctly?

15 A (Parsons) Yes. And also the method of survey
16 for the --

17 Q Well, let me just ask you about the buffer at
18 this point.

19 MR. WALKER: And, Dawn, if you could
20 pull up that 85620 please.

21 BY MR. WALKER:

22 Q It's the second bullet item with regard to
23 330 feet.

24 A (Parsons) Yes.

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[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 Q "No work shall be done within the 330 feet."

2 And you expressed some concern with that

3 distance, the 330 feet?

4 A (Parsons) There is some considerable literature

5 that suggests that 330 feet may be

6 insufficient.

7 Q Are you aware that, in this case, the Fish &

8 Game recommended the Project to use the Good

9 Forestry Guide in the Granite State?

10 A (Parsons) I wasn't aware of that specifically,

11 no.

12 MR. WALKER: Dawn, if you could pull
13 up that please, this particular guide. And,
14 for the record, this is Applicants Exhibit 385.
15 And that's the first page. But, Dawn, if you
16 could turn to Page 145, which deals with herons
17 please.

18 That's actually Page 142. Do you
19 have that page available or --

20 MS. GAGNON: Yes.

21 MR. WALKER: All right. And,
22 actually, Dawn, if you could go down on that
23 page please, "Recommended Practices".

24 BY MR. WALKER:

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[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 Q And I realize you haven't seen this particular
2 guide, Mr. Parsons. But, just looking at this,
3 and you see that that guide, which I will
4 represent to you is the guide that was
5 recommended by Fish & Game, references a
6 "330-foot" buffer, correct?

7 A (Parsons) This document certainly does, yes.

8 Q And did you say yesterday that that's a buffer
9 that's often used in Vermont as well?

10 A (Parsons) Yes, it is.

11 Q Let me ask you, Mr. Parsons, I want to turn my
12 direction to the marten. I think you said
13 yesterday that you had some general concerns
14 about the Project not avoiding habitat as much
15 as you would like to see for purposes of the
16 marten. Is that fair?

17 A (Parsons) Yes.

18 Q And your area of interest on the marten is
19 particularly the 32 miles of new right-of-way
20 in the north?

21 A (Parsons) That's correct.

22 Q Did you -- did you conduct any analysis of the
23 marten habitat in that area?

24 A (Parsons) I visited the area, and I spent

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1 probably an hour in the woods in what would
2 have been marten habitat, but no specific
3 assessment.

4 Q Okay. Do you know what extent the Project
5 route considered avoidance of the highest
6 ranked habitat designated by the Fish & Game as
7 part of its Wildlife Action Plan?

8 A (Parsons) I know that they did some avoidance
9 of the highest ranked habitat.

10 Q But are you aware that that was one of the
11 Project routing design criteria right from the
12 outset of the siting work for the Project?

13 A (Parsons) No. I don't think I was.

14 Q You also said yesterday that you had some
15 concern about snowmobile use in the
16 right-of-way, correct?

17 A (Parsons) That's correct.

18 Q And this is the new right-of-way up in the
19 North Country?

20 A (Parsons) That's correct.

21 Q Are you suggesting that one way to reduce
22 impact to marten habitat would be to prohibit
23 snowmobiling in the right-of-way?

24 A (Parsons) Yes, I am.

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[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 Q What about all the other snowmobile trails up
2 in the northern part of New Hampshire, are they
3 impacting marten habitat?

4 A (Parsons) Potentially, they could be.

5 MR. WALKER: Dawn, if you could pull
6 up the AMMs on -- the wildlife AMMs again
7 please, Exhibit 124a. And it's Bates 85617.

8 Nothing on my screen, Dawn. Oh, it's
9 coming.

10 BY MR. WALKER:

11 Q I want to focus you on the AMMs related to
12 "High Elevation Areas" at the bottom of that
13 page. And high elevation habitat or areas,
14 that's good marten habitat, correct?

15 A (Parsons) Correct.

16 Q Would you agree that the AMMs dealing with high
17 elevation areas are helpful to protecting
18 marten habitat?

19 A (Parsons) Yes.

20 Q Mr. Parsons, just a few questions on the Canada
21 lynx. And I don't want to go through
22 necessarily the Biological Opinion from the
23 Fish & Wildlife Service. But the conclusion by
24 Fish & Wildlife is that it concurred with the

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1 Department of Energy that the Project is not
2 likely to adversely affect the Canada lynx. Do
3 you agree with that conclusion?

4 A (Parsons) I would agree, if I felt confident
5 that the survey methodologies could identify
6 lynx, in particular, in the areas where
7 potential denning habitat was identified within
8 the proposed right-of-way. I believe it is in
9 the northern 32-mile section. So, if
10 appropriate methodologies would be developed to
11 identify potential lynx that wouldn't disturb
12 them within their denning areas, yes, I would
13 agree with that.

14 Q Well, but the AMMs do address denning habitat,
15 correct?

16 A (Parsons) Yes, they do.

17 Q Do you know how many Canada lynx dens have been
18 found in New Hampshire in recent years?

19 A (Parsons) No, I do not.

20 Q Are you aware of any Canada lynx dens that have
21 been found in New Hampshire in recent years?

22 A (Parsons) I don't believe anyone's looked for
23 Canada lynx dens in New Hampshire in the
24 previous few years.

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1 Q And you're not aware of any den out there,
2 correct?

3 A (Parsons) No, I'm not.

4 Q All right. The last line of questioning is
5 with regard to some comments that were made
6 yesterday relating to Environmental Monitors.
7 And I suppose, Mr. Lew-Smith, I think you were
8 talking about this most yesterday. So, I'll
9 direct my questions to you, but, obviously, if
10 anyone else wants to weigh in on that.

11 Going back to the DES approval --

12 MR. WALKER: And, Dawn, that's
13 Exhibit 75.

14 BY MR. WALKER:

15 Q And Condition 2, on Page 2, which is 44447,
16 which I think you have. And this is the
17 condition that requires all the work to follow
18 the different AMMs and the different plan note
19 sheets and such, correct?

20 A (Lew-Smith) Yes.

21 Q And you're aware that some of those plans and
22 note sheets deal with Environmental Monitors?

23 A (Lew-Smith) The plan sheets deal with
24 Environmental Monitors? I'm not sure about

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1 that.

2 Q Okay. Well, we can reference some of those and
3 have you look at those.

4 A (Lew-Smith) Okay.

5 Q With regard to --

6 MR. WALKER: Dawn, if you could also
7 turn to Condition 35 please.

8 BY MR. WALKER:

9 Q You see this requirement with regard to the
10 Applicant "notifying the Wetlands Program in
11 writing of the certified wetlands scientist or
12 qualified professional, as applicable", and
13 then it goes on, correct?

14 A (Lew-Smith) I can see that, yes.

15 Q I'm sorry. If you can go to the next page.
16 And I'll ask you to also take a look at 36
17 please. Bear with me.

18 Have you had a chance to review those two
19 different conditions, 35 and 36?

20 A (Lew-Smith) Yes.

21 Q And, again, I won't go through the different
22 plant AMMs. But I will represent to you that,
23 on those plan sheets, there is a requirement
24 that "locations of known rare plants will be

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1 surveyed and flagged with coded flagging by a
2 qualified botanist prior to clearing and site
3 preparation."

4 A (Lew-Smith) Yes, I have reviewed that.

5 Q Okay. And also that "the Environmental Monitor
6 will discuss threatened and endangered plant
7 issues at the morning tailboard meetings with
8 contractors for all clearing, site preparation,
9 and construction work taking place in sensitive
10 areas." Have you seen that?

11 A (Lew-Smith) Yes, I have.

12 Q Lastly, the wildlife AMMs also say that "any
13 additional reporting and environmental
14 qualification requirements" -- "Environmental
15 Monitor qualification requirements specified by
16 the Fish & Game as a condition of issuing the
17 collection permit shall be adhered to." You've
18 seen that?

19 A (Lew-Smith) Yes.

20 Q Lastly, I want to pull up that one plan sheet
21 that I was referring to, which is --

22 MR. WALKER: Dawn, it's Applicants
23 Exhibit 199, and it's Bates 67293.

24 BY MR. WALKER:

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1 Q And on the far right side of that plan sheet,
2 you'll see a variety of requirements relating
3 to the construction monitoring. And I'm not
4 going to ask you about all of these. But have
5 you seen these, Mr. Lew-Smith, and the various
6 requirements?

7 A (Lew-Smith) Yes, I have.

8 Q Okay. With all of these conditions regarding
9 Environmental Monitors, it's fair to say that
10 the Project is required to have a number of
11 qualified monitors with various reporting
12 requirements to the different agencies,
13 correct?

14 A (Lew-Smith) Correct.

15 Q And, in your supplemental prefiled testimony,
16 yes, and then we can get the cite if you would
17 like, but you suggest that, if the Project goes
18 forward, an independent monitor should be
19 required. And you assert that it should be "an
20 independent firm with sufficient resources",
21 correct?

22 A (Lew-Smith) Yes. An independent monitor with
23 sufficient resources.

24 Q And I want to ask you about that. I mean, what

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1 do you mean by that? Would your firm be able
2 to serve in that role?

3 A (Lew-Smith) Someone who is -- right, who is
4 independent, and has the authority to stop work
5 if some permit conditions are not being met.
6 And who is not only -- answerable solely to the
7 Applicant, but also to either the SEC or a
8 state regulatory agency.

9 Q Okay. And I appreciate that. But your
10 supplemental testimony, you mention "an
11 independent firm with sufficient resources and
12 budgets should be required".

13 A (Lew-Smith) Right.

14 Q Sounds like you're saying it should be a large
15 enough outfit that could perform this service?

16 A (Lew-Smith) Correct.

17 Q Okay. Is your firm an outfit like that?

18 A (Lew-Smith) No.

19 Q How about Normandeau? Do you have any reason
20 to believe that Normandeau couldn't handle that
21 function?

22 A (Lew-Smith) Just in terms of staffing?

23 Q Right.

24 A (Lew-Smith) I have no reason to believe they

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1 couldn't, in terms of staffing.

2 Q And when you talk about "independent reporting"
3 to the different agencies, --

4 A (Lew-Smith) Uh-huh.

5 Q -- are you suggesting that these different
6 Environmental Monitors should not be hired by
7 the Applicants?

8 A (Lew-Smith) Not necessarily, no.

9 Q I mean, you're not suggesting that, if they are
10 hired by the Applicants, these Environmental
11 Monitors would not be independent or impartial
12 in their judgment, are you?

13 A (Lew-Smith) No.

14 Q And you've served as an environmental monitor,
15 right?

16 A (Lew-Smith) Personally, I have not done --
17 served that role. Hold on a second.

18 *[Witnesses conferring.]*

19 **BY THE WITNESS:**

20 A (Lew-Smith) Sorry. He reminded me of one.

21 Yes, I have. Yes.

22 BY MR. WALKER:

23 Q And I take it you would not operate any
24 differently, if you were hired by the Applicant

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1 or by another entity, in making your
2 determinations or conclusions?

3 A (Lew-Smith) No. I mean, it's not necessarily
4 who's writing the check. It's the chain of
5 command and who you're actually answering to.

6 Q Right. But, as an independent monitor, as an
7 environmental monitor, you're going to come to
8 the same professional conclusions regardless?

9 A (Lew-Smith) Yes.

10 MR. WALKER: Thank you. No further
11 questions.

12 CHAIRMAN HONIGBERG: Members of the
13 Committee, who has questions for the panel?

14 Mr. Wright.

15 DIR. WRIGHT: Mr. Chairman, are we
16 going to start -- does Mr. Parsons need to
17 leave or not?

18 WITNESS PARSONS: I would stay for 20
19 minutes, if you think -- thought you could
20 complete your questions to me by then.

21 DIR. WRIGHT: Okay. I'll start with
22 you then. But I don't know if other members of
23 the Committee may have questions as well.

24 WITNESS PARSONS: Okay.

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1 DIR. WRIGHT: So, I'll try to start
2 with you and focus in on you.

3 BY DIR. WRIGHT:

4 Q When I look at an earlier version of the AMMs,
5 compared to what was submitted over this past
6 weekend, there seems to be, in some areas, some
7 changes, obviously, that we've been talking
8 about today. And, in particular, I wanted to
9 talk about the deer winter areas --

10 A (Parsons) Uh-huh.

11 Q -- and the great blue heron nesting.

12 A (Parsons) I don't have the old --

13 CHAIRMAN HONIGBERG: The microphone.

14 WITNESS PARSONS: Oh, I'm sorry.

15 **BY THE WITNESS:**

16 A (Parsons) I don't have the previous version of
17 the AMMs.

18 BY DIR. WRIGHT:

19 Q Well, I would represent that the previous
20 version of the AMM, which was dated February
21 28, 2017 for great blue heron suggested a
22 quarter mile buffer zone versus the 330 feet.
23 I assume you'd be more comfortable with that,
24 based on what you've said today?

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1 A (Parsons) Yes.

2 Q You've mentioned -- Mr. Walker just mentioned
3 that the "330 feet" comes out of a New
4 Hampshire Forestry Guide. And you were not
5 familiar with that New Hampshire Forestry
6 Guide?

7 A (Parsons) That's correct.

8 Q You mentioned other documents that you've
9 reviewed?

10 A (Parsons) Yes.

11 Q Are those documents part of this record, do you
12 know?

13 A (Parsons) They're not. And I must -- yes,
14 they're not.

15 Q Should they be part of this record for us to
16 consider?

17 A (Parsons) I can provide them.

18 CHAIRMAN HONIGBERG: Do you want to
19 make that request, Mr. Wright?

20 DIR. WRIGHT: Yes, I would.

21 CHAIRMAN HONIGBERG: Ms. Connor?

22 MS. CONNOR: We'll certainly provide
23 them.

24 BY DIR. WRIGHT:

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1 Q Did you have concerns also on the great blue
2 herons with respect to the survey method of
3 finding active nests?

4 A (Parsons) Well, the indeterminate method of
5 survey. There's no provision for the type of
6 survey that will be conducted or whether or not
7 that will consider areas outside of the
8 right-of-way itself. And it seems to me the
9 only way to accurately or -- we'll say
10 accurately review the entire distance lateral
11 to the right-of-way would be using a
12 helicopter. It seems as if, if someone's
13 trying to look three, four hundred feet lateral
14 to the right-of-way while walking in that
15 narrow right-of-way, the line-of-sight may be,
16 you know, corrupted and they may not see nests
17 lateral to the right-of-way. So -- unless
18 they're up in the air.

19 Q So, you made that same recommendation with
20 respect to active raptor nests, I believe, that
21 it should be an aerial survey and not a foot
22 survey?

23 A (Parsons) Yes. And great blue heron.

24 Q Okay.

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1 A (Parsons) I mean, and bald eagle. Sorry.

2 Q Okay. And that's not covered in the AMMs, as
3 far as you're concerned?

4 A (Parsons) The specifics aren't provided, no.

5 Q Okay. With respect to the deer wintering
6 areas, the previous AMAs [AMMs?] that I saw had
7 a snow depth limitation, versus the current
8 AMA -- AMMs, which seemed to allow clearing at
9 any time of the year. Is that accurate?

10 A (Parsons) Well, I believe the snow depth
11 limitation was related to construction
12 activities, not to clearing activities.

13 Q Okay.

14 A (Parsons) And that remains, you know, my major
15 concern is the construction activities.

16 Q Okay. So, you're not concerned with the
17 clearing activities during the winter months at
18 all?

19 A (Parsons) I think I mentioned that I believe
20 that there will be some displacement effect of
21 the deer away from active chainsawing and
22 silvicultural activity. I don't believe that
23 would be, you know, unreasonable, in terms of
24 the distance, that deer may stay away from

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1 chainsawing and logging activities. And, in
2 fact, you often see deer move in to take
3 advantage of the brush that's on the ground
4 when, you know, the loggers go home at night,
5 so it can benefit by providing some food during
6 the winter. Although, there's not a lot of
7 nutrition or energy within cut brows that, you
8 know, is left on the ground during the winter.

9 Q So, are deer readily adept at finding new
10 wintering grounds? If, for example, the
11 cutting went through a wintering ground, could
12 they readily find another wintering ground?

13 A (Parsons) Well, not without some impact. Deer
14 that are displaced into an already saturated,
15 in terms of deer numbers, deer yard, can
16 overbrowse their habitat, can, you know, aid
17 the spread of disease. There can be social
18 interactions that become violent. So, there
19 are effects of pushing deer out of, you know,
20 deer yards into neighboring deer yards that are
21 negative.

22 Q Okay. But the deer can readily find other
23 wintering yards you think?

24 A (Parsons) Not if they're already full of deer.

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1 Q Okay.

2 A (Parsons) Not without effects.

3 Q So, are you satisfied with the AMMs for the
4 deer wintering yards at this point?

5 A (Parsons) I'm satisfied with them to the effect
6 that they protect from direct impacts. But
7 absolutely not in terms of indirect impacts,
8 and in terms of -- the AMMs only provide
9 protection for currently identified deer
10 wintering areas. And, as we know, New
11 Hampshire Fish & Game, they actually map these
12 deer yards going back to the 1970s, when I
13 spoke to the Project Manager, '70s, '80s, and
14 '90s. So, they wouldn't have mapped
15 appropriate deer wintering areas for a
16 structure that was too short at that time, too
17 small in stature. But, in some cases, 35 years
18 have elapsed since that mapping. And, in
19 speaking with New Hampshire Fish & Game, they
20 have not updated the boundaries. They have
21 gone out, since 1990s or early 2000s, to see if
22 a deer wintering area is actually being used or
23 not, but have not adjusted those boundaries.
24 So, New Hampshire Fish & Game recommended to

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1 Normandeau that they -- that they actively map
2 the habitat that they see in the field, just
3 don't use the existing deer yard maps, deer
4 wintering area maps, and they did not do that.

5 So, I have concerns that, especially south
6 of the northern 40, that there may be some deer
7 yards or deer wintering areas, they're used
8 interchangeably, that are there and occupied by
9 deer, and are not currently one of the, like,
10 18 deer yards that were identified.

11 Q Okay.

12 A (Parsons) So, I do have concerns.

13 Q Okay. I want to move on to the Canada lynx. I
14 think you just indicated that you're okay with
15 the dates in the AMM. I think your concern
16 lies with the methodology of identifying the
17 denning areas, is that correct?

18 A (Parsons) Yes. And that may be very difficult,
19 if there's no snow on the ground, or the
20 presence of lynx, when there's no snow on the
21 ground, which is going to happen during, you
22 know, late March, April, May, when the deer are
23 moving -- excuse me -- the lynx are moving into
24 denning areas.

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1 If they have to go and physically shake
2 the brush to see if there are lynx in there,
3 it's not good. You know, disturbs the lynx
4 that may be denning. And, secondly, in my
5 experience with lynx, and I've taught a course
6 in the subarctic for 20 years, so I've been up
7 in lynx country a lot. You don't see them.
8 They hear you coming and they're gone. And, if
9 there's no snow on the ground, you're not going
10 to know that there was a lynx present. So, --

11 Q So -- I don't mean to cut you short. So, your
12 basic message, your thought is, the only way
13 you can actively appropriately identify the
14 denning areas is the surveying needs to be done
15 with snow on the ground. Is that an accurate
16 summary?

17 A (Parsons) Yes, it's just that it's difficult.
18 They may not have moved to denning areas while
19 there's still snow on the ground. So, it's a
20 problem with, you know, there being
21 insufficient methodologies to do this work in
22 the first place.

23 Q There's not very many lynx sighted in New
24 Hampshire every year, that's correct?

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 A (Parsons) No.

2 Q We're at the southern end of their range?

3 A (Parsons) Yes. That's true.

4 Q Okay. I assume, if you believe in climate
5 change, that won't improve any time soon? You
6 don't have to answer that.

7 Sorry to jump. The common nighthawk, you
8 had mentioned that there's no buffer zone
9 identified in the current AMMs for the nesting
10 sites, is that correct?

11 A (Parsons) That's correct.

12 Q But I understand that will be negotiated with
13 Fish & Game as part of the AMM?

14 A (Parsons) Yes. And I can't offer an
15 appropriate buffer zone as an expert on this
16 species.

17 Q Okay. That was going to be my question.

18 A (Parsons) Yes.

19 Q Did you have a recommendation?

20 A (Parsons) No.

21 Q And the answer to that is "no". Okay. I'll
22 trying to go and jump here. Sorry about this.
23 I only really received a copy of these current
24 AMMs this morning. So, I don't know if there's

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1 other, you're fur --

2 ADMIN. MONROE: Fur and feathers.

3 BY DIR. WRIGHT:

4 Q Fur and Feathers.

5 A (Parsons) Fur, feathers, and insects.

6 Q Okay. Oh, insects. Thank you. The frosted
7 elfin and the duskywing skipper, are they state
8 or federally endangered or threatened?

9 A (Parsons) State, endangered, I believe both.

10 Q So, should there be a separate AMM for them or
11 should there -- or, is there a -- is the AMM
12 for the Karner blue butterfly sufficient for
13 those species as well?

14 A (Parsons) Well, if the work had been done, the
15 sensing survey to determine the presence of the
16 species, if there were individuals present that
17 are going to be harmed by this project, the
18 AMMs would have been appropriate. But that
19 work was never done, and we've been using the
20 Karner blue as a sort of surrogate for these
21 species.

22 DIR. WRIGHT: I think my other
23 questions could probably be answered by the
24 other panelists.

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1 CHAIRMAN HONIGBERG: All right. Do
2 other members of the Committee have questions
3 for Mr. Parsons?

4 Mr. Way.

5 BY MR. WAY:

6 Q So, Mr. Parsons, just one question. Back to
7 that last point you mentioned, about the
8 frosted elfin sort of taking a backseat to the
9 Karner blue. Are the AMMs for the Karner blue
10 pretty much, if those are observed, will those
11 address the issues of the frosted elfin? Or do
12 you think there is more that has to be done?

13 A (Parsons) It's a roll of the dice with respect
14 to the frosted elfin, because we have no idea
15 which patch, subpopulation of the wild lupine
16 they are going to choose the year construction
17 moves through their habitat. So, there is a
18 risk, although that risk has probably been
19 reduced as the impact area for wild lupine has
20 been reduced, but it hasn't been eliminated.

21 I guess that's your decision in the end,
22 as to whether or not, you know, the risk is
23 something that is still outstanding and
24 shouldn't be.

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1 Q And, so, just so I understand, the elfin may
2 have a different interaction with the lupine,
3 we just don't know? Is that what you are
4 saying? Or, at least that you don't know at
5 what time?

6 A (Parsons) Yes. There's insufficient
7 information about the elfin to make a
8 determination that there is not an
9 unreasonable, undue effect on it. We just
10 don't know. And we don't know how it differs
11 from the Karner blue in terms of choosing which
12 subpopulation of wild lupine to lay its eggs
13 on. So, we're really kind of in the dark with
14 this species.

15 MR. WAY: All right. Thank you.

16 CHAIRMAN HONIGBERG: Any other
17 questions for Mr. Parsons?

18 Mr. Oldenburg.

19 MR. OLDENBURG: Just a clarification.

20 BY MR. OLDENBURG:

21 Q Are you turtles and snakes as well?

22 A (Parsons) No, I'm not.

23 MR. OLDENBURG: Okay. I have no
24 questions.

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1 DIR. WRIGHT: I have one more.

2 CHAIRMAN HONIGBERG: Mr. Wright.

3 DIR. WRIGHT: I just -- sorry, I just
4 want to follow up on one more different area,
5 the American marten.

6 BY DIR. WRIGHT:

7 Q So, am I to understand that the high elevation
8 area AMMs are meant to address the American
9 marten or are they just complementary to what
10 is needed to address the American marten?

11 A (Parsons) They don't mention the American
12 marten. So I don't know the intention behind
13 the high elevation AMMs. They could certainly
14 help preserve habitat or preserve the American
15 marten.

16 Q So, they would be helpful and effective towards
17 preserving them. That's what you just said?
18 That would be true?

19 A (Parsons) Yes. Yes.

20 Q Okay.

21 A (Parsons) That eliminates one of my major
22 concerns. The other would be recreational use
23 in winter.

24 Q Well, I was going to ask that question again.

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1 And I just want to understand. I think the
2 concern there is, if there's snowmobile trails
3 in the winter, it creates a pathway for other
4 predators that would be competitive to the
5 American marten. Is that the concern?
6 A (Parsons) Yes. There are species that either
7 compete directly for food or they actually
8 predate upon the American marten. They're
9 differentiated from the American marten,
10 because the American marten, for a small
11 animal, has very large feet, and as such, can
12 live and probably escapes to habitats that have
13 deep, powdery snow, that things like the
14 eastern coyote and the red fox and the fisher,
15 maybe a little less the fisher, can move
16 through during the deep, you know, snowy
17 periods during midwinter. And, once you pack
18 the trail down, it gives these species access
19 into these higher elevations, where they
20 actually use this packed snow. And, in the
21 case of one of the wind projects in New
22 Hampshire, they actually found predation on the
23 marten by fisher that utilized packed snow
24 relating or associated with a wind project,

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1 wind power project.

2 Q I have to admit, I wasn't able to dig this back
3 up this morning when I was thinking about this.
4 But I recall, in the northern tier, where
5 there's new right-of-way, the Applicant has
6 committed to not allowing ATV usage. I don't
7 recall if that was also applicable to
8 snowmobile usage during the winter.

9 I suspect your recommendation, it should
10 be applicable to snowmobile usage in the
11 winter?

12 A (Parsons) Yes. I believe it should. We have
13 not seen that in writing.

14 DIR. WRIGHT: Okay. And I have to
15 admit, I'm not 100 percent clear. I would need
16 to go back and look at the record myself. I
17 just couldn't find it first thing this morning.

18 But, thank you.

19 CHAIRMAN HONIGBERG: Anyone else from
20 the Committee with questions for Mr. Parsons?

21 *[No verbal response.]*

22 CHAIRMAN HONIGBERG: Ms. Connor, do
23 you have questions for Mr. Parsons, redirect?
24 Because we're going to circle back to the rest

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1 of the panel from the Committee. But this
2 would be a good shot for you, if you have
3 something for him. No?

4 MS. CONNOR: No.

5 CHAIRMAN HONIGBERG: Okay. Thank
6 you, Mr. Parsons. It seems like you can go
7 teach your class.

8 We'll take a ten-minute break, and
9 then come back with further Committee questions
10 for the rest of the panel.

11 *(Recess taken 10:29 a.m. and the*
12 *hearing resumed at 10:45 a.m.)*

13 CHAIRMAN HONIGBERG: All right.
14 Further Committee questions? Mr. Wright, I
15 understand you have some questions for the
16 panel.

17 DIR. WRIGHT: Good morning again.

18 WITNESS LEW-SMITH: Good morning.

19 BY DIR. WRIGHT:

20 Q I want to turn again to the AMMs and the
21 time-of-year restrictions. And I know you guys
22 just got this over this past weekend. So, I'm
23 sure you haven't totally digested it at this
24 point. But I was kind of curious, if, as the

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1 Applicant is implementing the AMMs and the
2 time-of-year restrictions, and a conflict
3 arises between the Applicant and Fish & Game,
4 ultimately, who's the arbiter?

5 A (Lew-Smith) That's a good question. I don't
6 know who the arbiter is. I think there was
7 some language in here that, in the event that
8 NPT and New Hampshire Fish & Game were unable
9 to reach an agreement, the final decision will
10 be the responsibility of NH DES.

11 Q I read that as well.

12 A (Lew-Smith) So, if either of you can --

13 Q So, okay. I had found that kind of
14 interesting.

15 A (Lew-Smith) Yes.

16 Q Because I don't know necessarily that DES would
17 always be the expert in all of these various
18 things. So, --

19 A (Lew-Smith) Right. I agree.

20 Q Okay. Sorry, I'm going to jump around here,
21 because this is how my notes are arranged at
22 this point. I think, Mr. Reynolds, you're the
23 mussel guy or is that --

24 A (Lew-Smith) No. That's me.

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1 Q Oh. I'm sorry, Mr. Lew-Smith. So, I know you
2 made a specific reference to some mussel
3 species in the Soucook River in the Concord
4 area, is that correct?

5 A (Lew-Smith) Yes. Normandeau had done an
6 inventory or had an inventory done, and found a
7 couple rare and threatened species there.

8 Q And you seem to have some concerns with how the
9 Applicant was going to approach best management
10 practices in and around the construction site
11 around those species?

12 A (Lew-Smith) I guess my concerns -- my concerns
13 were that I hadn't seen them, and so couldn't
14 really come to a definitive conclusion on
15 whether or not they would be sufficient to, you
16 know, prevent sedimentation, which would
17 negatively affect the mussels.

18 Q But I assume, ultimately, it's DES's
19 responsibility to review the sediment control
20 plans and the erosion control plans?

21 A (Lew-Smith) Yes, it is.

22 Q Do you have faith in DES that they'll do a good
23 job?

24 A (Lew-Smith) In that circumstance, yes.

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1 Q Okay. So, is there any additional conditions
2 we need to consider or is the conditions of the
3 DES permit sufficient to ensure that there
4 would be no harm to those mussel species?

5 A (Lew-Smith) It's likely sufficient.

6 Q Okay. Mr. Amaral, I had some questions on the
7 Karner blue, but they were largely answered
8 this morning based on your responses to
9 Mr. Walker. But I did have a couple follow-up
10 questions.

11 Are you satisfied with the time-of-year
12 restrictions in the current AMMs?

13 A (Amaral) They're going in the right direction,
14 but there appears to be some ambiguity. In the
15 best case, construction would only occur in the
16 winter, which means -- to me means December 21
17 to toward the end of March, where you're most
18 likely to have frozen and -- frozen ground
19 conditions and snow cover. Adding the phrase
20 "to the extent practicable" brings uncertainty
21 into whether there's a real commitment to doing
22 construction then.

23 Q Who gets to make that decision, "to the extent
24 practicable"?

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1 A (Amaral) I think -- I don't know who makes that
2 decision.

3 Q Is it Fish & Game or is it the Applicant?

4 A (Amaral) No. I think it's either the Applicant
5 or the Applicant in consultation with DES
6 perhaps.

7 Q Okay. And it may be the Applicant in
8 consultation with Fish & Game, would be my
9 guess.

10 A (Witness Amaral nodding in the affirmative).

11 Q Okay. The mitigation package, I think you've
12 already agreed to the 6.9 acres is more than
13 sufficient, in terms of the impacts potential
14 on the Karner blue butterfly?

15 A (Amaral) Yes.

16 Q I think you had one caveat, though. There
17 needs to be some sort of firm commitment from
18 the Applicant to fund the transformation of
19 that site into suitable habitat?

20 A (Amaral) Yes. The mitigation parcel in its
21 present condition does not have the biological
22 features on it that are going to support the
23 butterfly. So, it needs to be -- those
24 features need to be restored.

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1 Q I assume those features are wild lupine?

2 A (Amaral) Well, wild lupine is the obligate
3 larval host for Karner blue butterfly
4 caterpillars, and it is on or very near wild
5 lupine that female Karner blues will lay their
6 eggs. But adult butterflies, nectar
7 requirement are on a whole suite of flowering
8 plants over a longer period in the summer than
9 lupine blooms. So, that's been one of my
10 concerns during the discussions this morning,
11 is that we've collapsed the whole discussion
12 about Karner blues, and frosted elfin for that
13 matter, into a discussion about impacts to
14 lupine. But their habitat needs are much --
15 are much more broader, are much broader than
16 just wild lupine.

17 Q Yes. Absolutely. I can understand that. But
18 you feel that this parcel can be put into a
19 condition sufficient --

20 A (Amaral) Oh, yes. Yes. And I remember, when
21 I -- when I worked for the U.S. Fish & Wildlife
22 Service, before this parcel was -- before the
23 topsoil was removed and that foundation was
24 built, it had -- it had wild lupine on it.

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1 And, so, I have every confidence that it can be
2 restored there.

3 Q Is that -- I assume that's a multiyear process
4 to restore that site?

5 A (Amaral) Yes.

6 Q Okay.

7 A (Amaral) That's correct.

8 Q And I assume you'd be, if we grant a
9 certificate, a condition that they fund those
10 activities would be appropriate, in your
11 opinion?

12 A (Amaral) I don't think they would be able to
13 occur otherwise.

14 Q Okay. Shifting gears to Environmental
15 Monitors. There's been a lot of discussion
16 about that throughout these proceedings. I
17 don't know if you guys were here during the
18 Construction panel or when the Applicants'
19 Environmental panel were here. But there's
20 been a lot of discussion about the
21 Environmental Monitors and the roles. And
22 we've had some of those discussions this week
23 as well.

24 A (Lew-Smith) Yes.

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1 Q So, my understanding is that there will be --
2 there currently is envisioned two sets of
3 Environmental Monitors. There would be the
4 Environmental Monitors that are hired by the
5 Applicant, who would have the overall
6 responsibility of reviewing the sites. But
7 there would also be Environmental Monitors
8 hired by the contractors. Is that your
9 understanding as well?

10 A (Lew-Smith) I'm not aware of that, no.

11 Q Okay. That was my understanding, is that there
12 would be two sets of Environmental Monitors. I
13 mean, this is a pretty big project
14 geographically, 192 miles. What would your
15 expectations be of how frequently an
16 Environmental Monitor would be on a
17 construction site?

18 A (Lew-Smith) Certainly setting up, before
19 pre-construction flagging resources. In some
20 cases, like with the turtles, you know, perhaps
21 daily on a construction site. So, they would
22 have to have a significant presence.

23 Q So, this is not one person, obviously?

24 A (Lew-Smith) Oh. God, no.

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1 Q This is multiple people. And I think this
2 question has been asked, "how many is the right
3 number?" I don't know that anybody has been
4 able to give us an estimate. Do you have any
5 thoughts on that?

6 A (Lew-Smith) I think a lot of it's going to
7 depend on how construction would proceed. If
8 they really are taking their time, and they
9 have one construction that they're just working
10 down the line, then it would take a lot fewer,
11 than if they have construction going on in
12 multiple places, you know. So, it's really
13 going to depend a lot on the activity of
14 construction.

15 Q And you still believe at this point, based on
16 everything I've heard, that you think a third
17 independent Environmental Monitor should be
18 hired to oversee this Project?

19 A (Lew-Smith) I don't -- that wasn't my
20 intention --

21 Q Okay.

22 A (Lew-Smith) -- to give that impression.

23 Q Okay.

24 MR. WAY: Mr. Wright?

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 DIR. WRIGHT: Sure.

2 BY MR. WAY:

3 Q So, a question on the Environmental Monitors.
4 Is it, and looking back at some of the
5 testimony of the past day, the Environmental
6 Monitor, one of their tasks would be to sweep
7 the area, the construction area, before the day
8 begins?

9 A (Lew-Smith) Correct. Yes.

10 Q How long and how involved is a process like
11 that?

12 A (Lew-Smith) Well, I think it would depend on
13 how big the work pad area is. If, for example,
14 the work pad area was, say, the size of this
15 room or twice the size of this room, you could
16 basically walk back and forth and sweep it in,
17 you know, however long that would take, maybe
18 less than an hour, and then be done with that.

19 Q So, a room about this size, probably about an
20 hour?

21 A (Lew-Smith) Less than that.

22 Q And, so, when we look at multiple construction
23 zones, let's say, looking at 116, Route 116,
24 where you're going to have several zones, that

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1 would seem to say you're going to need a
2 monitor for each of those construction zones,
3 or you'd never be able to get started down the
4 line for that day. Wouldn't that be correct?

5 A (Lew-Smith) Potentially. I think the other
6 option they had with the -- at least for the
7 reptiles, was that they, instead of sweeping
8 daily, they would have kind of a door that they
9 close after construction, and then open it up.
10 I can't remember the specifics of it.

11 Again, you know, I'm not sure I'm the one
12 to ask about --

13 Q But you don't think that, if the proper
14 precautions are put in place, there's not a
15 need to sweep daily prior to construction?

16 A (Lew-Smith) I think that's true. Yes.

17 MR. WAY: All right. Thank you.

18 BY DIR. WRIGHT:

19 Q Just one other area here. You weren't here
20 when Ms. Carbonneau was testifying as part of
21 the Environmental panel?

22 A (Lew-Smith) Yes, we were.

23 Q You were here? Okay.

24 A (Lew-Smith) We weren't here for the

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1 Construction panel.

2 Q Okay. I asked her a question, because she had
3 made a couple statements, that if she felt it
4 was in the Applicant's best interest to comply
5 with environmental regulations. And she -- she
6 expressed her opinions that it was in their
7 best interest to comply with environmental
8 regulations. Do you agree with that, her
9 assessment?

10 A (Lew-Smith) Yes.

11 Q Why would you agree with that? I mean, what
12 are the risks to the Applicant for failing to
13 comply with the environmental regulations?

14 A (Lew-Smith) So, just in terms of protecting the
15 resource, I would say that's one of the reasons
16 they should comply with the environmental
17 regulations.

18 Beyond that, you know, there are
19 consequences to not complying with
20 environmental regulations, in terms of, you
21 know, enforcement of conditions of permits and
22 things like that. So, there are financial and
23 bureaucratic ramifications.

24 Q And, certainly, potentials in shutting -- the

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1 state agency shutting down the Project, I
2 assume, --

3 A (Lew-Smith) Absolutely.

4 Q -- would be a significant consideration on
5 behalf of the Applicant?

6 A (Lew-Smith) Absolutely.

7 Q During Mr. Walker's questioning regarding the
8 findings of DES and Fish & Game, I don't think
9 I heard you say this, so I don't want to put
10 words in your mouth. But you're not -- you're
11 not indicating that those agencies made an
12 error in finding of either fact or law with
13 respect to their regulatory responsibility, are
14 you?

15 A (Lew-Smith) No.

16 Q Okay. I didn't think so, and I didn't want to
17 put words in your mouth.

18 I guess my last question is,
19 Mr. Lew-Smith, I think this morning you made
20 reference to one issue that hasn't been talked
21 about, and if I misunderstood you, please
22 clarify, that you still some concerns with the
23 wild lupine in the Pembroke area. We had spent
24 a lot of time talking about Concord. Did I

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1 hear you correctly?

2 A (Lew-Smith) Yes, you did.

3 Q And what are those concerns in particular?

4 A (Lew-Smith) So, the Pembroke lupine population,
5 it's on an Army National Guard property and is
6 managed by them. There's hundreds of plants.
7 It sits in one side of the -- it's confined to
8 just one side of the right-of-way, maybe a
9 quarter of the way across the right-of-way.
10 Their proposed road goes right through that
11 population.

12 We had suggested that they consider
13 rerouting the road to avoid impacts. In their
14 next iteration of plans, they reduced impacts
15 by a very small amount. So, small that I
16 think, when it was brought up, the Committee
17 couldn't see really the difference between the
18 before and after. The most recent plan set
19 that I viewed still has the road going through
20 the Pembroke population.

21 Again, my concern is that they're -- I
22 don't feel like the Applicant has made -- has
23 met their burden of proof that they have done
24 anything reasonable to avoid those impacts. If

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1 they have, because of some design
2 consideration, they haven't shared that with
3 anyone.

4 And, so, as a resource specialist, I'm
5 looking at the plan and seeing a direct impact,
6 when there is three-quarters of the
7 right-of-way that has no significant resources.
8 So, from my perspective, it looks like it could
9 be avoided.

10 Q So, more work could be done in that area?

11 A (Lew-Smith) Yes.

12 DIR. WRIGHT: Okay. Thank you.

13 CHAIRMAN HONIGBERG: Mr. Oldenburg,
14 do you have questions?

15 MR. OLDENBURG: I do. Thank you, Mr.
16 Chairman.

17 BY MR. OLDENBURG:

18 Q A few questions about Arrowwood as a company.
19 I noticed in like your resumé and the
20 experience with Arrowwood, it seems to do a lot
21 of assessment and inventories and things like
22 that. How much of the -- how much work does
23 the Company do in like construction monitoring
24 or, you know, working on construction projects,

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1 either in a design aspect or actually in the
2 field?

3 A (Lew-Smith) Probably 70 to 80 percent of our
4 work is done -- is development-related work.
5 And, so, anything from a homeowner wanting to
6 build another garage and there's wetland
7 impacts, up to large-scale utility wind
8 projects or transmission line projects. And,
9 so, it really kind of runs the gamut of that.

10 Q Because a lot of the testimony I heard was "in
11 literature", "in exist" -- it was a lot of
12 theoretical, it seemed to me like a lot of
13 theoretical input that was being offered. And
14 I wanted to make sure that you have hands-on
15 construction experience as well?

16 A (Lew-Smith) Absolutely. Right. And, so, what
17 we didn't want to have happen is, come to a
18 conclusion that wasn't based on the science.
19 And, so, that's what you hear when we say
20 "well, there's literature that says X, Y, and
21 Z."

22 You know, we just wanted to be sure that
23 it was based on the best science that we could
24 find.

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 Q All right. I'm going to sort of beat the
2 Environmental Monitors again. So, the way I
3 understand it, the Project is like split into
4 the four sections. There's an overhead, an
5 underground, there's transition stations, and
6 there's substations. And each one of those,
7 according to the org chart we've seen, is going
8 to have an Environmental Project Manager, if
9 you will, assigned by the contractor -- the
10 contractor is going to have.

11 A (Lew-Smith) Uh-huh.

12 Q And they're going to interact with the monitors
13 themselves. But "environmental monitor" seems
14 to be a pretty broad term. I mean, we're going
15 to have monitors that are going to monitor
16 reptiles and turtles, and we're going to have
17 monitors that are going to monitor best
18 management practices, from erosion control and
19 things like that. So, you'll have -- I don't
20 know if they're also called "environmental
21 monitors", but historical and archeological
22 monitors, if you will.

23 So, it seems like we concentrate a lot on
24 the animals monitoring. But some of the other

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1 folks that are also doing work in the field,
2 erosion control, the folks that are putting up
3 erosion control, could be sort of a first line
4 of defense. They may not be trained, but they
5 know what a turtle and snake are. Is that
6 true?

7 A (Lew-Smith) Yes. That's true.

8 Q Okay.

9 A (Lew-Smith) And I think even the things they
10 were mentioning about actually doing contractor
11 training is an important piece of that, yes.
12 Because I think, at least with my experience,
13 you know, folks that actually are the
14 contractors coming in and doing construction,
15 they have got their job, and it's like this.
16 But, if you train them and like, "hey, you
17 know, snakes and turtles and things", you know,
18 it makes a big difference.

19 Q There is the environmental version of "see
20 something, say something", right? "If you see
21 a snake or a turtle, say something."

22 A (Lew-Smith) Yes, say something. Right. Right.

23 Q Because you have no idea what it is, but you
24 say something, and somebody comes and looks at

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1 it and says "yes".

2 A (Lew-Smith) Yes.

3 Q So, on the turtle and snake aspect of it, I
4 work for the DOT, and some of our projects we
5 get involved, especially on the Seacoast, with
6 Blanding's turtles. And one of the mitigation
7 efforts that we have used or has been employed
8 that we've used, to keep turtles off the road
9 is we use larger rocks. So, you line the edge
10 of the road with, you know, 6-inch stone.

11 A (Lew-Smith) Uh-huh.

12 Q Turtles don't like that. They don't like
13 climbing on stones, so they avoid it. And it
14 sort of keeps them away.

15 One of the things in the overhead section
16 is the access roads and the crane pads are
17 going to be built with gravel or stone as a
18 bedding. Well, one, do you -- have you heard
19 or used stone to keep turtles out of areas?
20 And will that, if that works, will those access
21 roads and crane pads and that that are built
22 out of gravel sort of deter the turtles from
23 going there?

24 A (Lew-Smith) So, I haven't personally used the

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1 stone barriers for turtles or been involved in
2 a project that has. I would suspect that the
3 construction of an access road with gravel
4 would not necessarily deter them. You would
5 need kind of a semi-vertical barrier, as it
6 were. And, in many cases, I would suspect
7 that's not going to be the natural result of a
8 road-building effort.

9 Q Okay. So, one of the other things, when
10 they -- if they started to build this, they
11 would be opening up the earth. And I have to
12 believe, as part of their environmental permit,
13 their AOT permit or whatever, they're going to
14 have to do erosion control measures. And one
15 of the first things that we always see, is you
16 encapsulate the site in a silt fence or a silt
17 sock or something, and that's toed into the
18 ground, it should be toed into the ground. So,
19 doesn't that sort of silt fence create that
20 barrier that are going to keep turtles and
21 snakes out of the work zone as well?

22 A (Lew-Smith) Yes. That would be sufficient.
23 And I think that that's -- that I think was one
24 of the things they recommended using to, you

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1 know, kind of cordon off work areas is a silt
2 fence.

3 Q So, that will help --

4 A (Lew-Smith) Yes.

5 Q -- alleviate the intensive need every day of
6 having to go in and survey the site for
7 reptiles?

8 A (Lew-Smith) As long as there's that kind of
9 door or gate that you can close, yes.

10 Q Okay. So, this is more of wetlands, but we'll
11 call it "vernal pools", --

12 A (Lew-Smith) Okay.

13 Q -- because they sort of go together. One of
14 the things that was stated during the
15 Construction panel months and months ago was
16 that the access roads and the crane pads and
17 the work areas were sort of overestimated or
18 overpermitted, if you will.

19 A (Lew-Smith) Uh-huh.

20 Q So, the access roads, if I remember it right,
21 were estimated as 20 feet wide everywhere.
22 They don't need to be 20 feet wide. But they
23 were made that way so the contractor has some
24 leeway in moving or adjusting the actual

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1 construction, and the pads may not necessarily
2 have to be those perfect 100 by 100 squares or
3 whatever they're shown. So, there's some
4 leeway.

5 In your review of the impacts to like
6 vernal pools and anything like that, did you
7 see where the intention was to avoid them or
8 did it just seem to be that the access roads or
9 the pads were placed without trying to avoid
10 vernal pools?

11 A (Lew-Smith) I think there was both
12 circumstances. There were a couple of places
13 where it looked like, you know, there was a
14 vernal pool, and the road went around it.
15 There were a number of other places where it
16 looked like there was a vernal pool, and
17 there's a road that goes right through it. So,
18 I think the report outlined a number of places
19 where both those situations occurred.

20 Q Okay. Because I struggle with the fact of,
21 you're permitted for this sort of
22 overestimation, if you will, --

23 A (Lew-Smith) Yes.

24 Q -- so that the contractor is given some

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1 latitude to do what makes sense in the field.

2 But that doesn't mean that -- I mean, doesn't
3 that really give them the ability to impact all
4 those wetlands?

5 A (Lew-Smith) Well, but we, because they
6 overestimated, our assessment was based on that
7 overestimate.

8 Q Right.

9 A (Lew-Smith) And, so, you know, if there are
10 places where we said, you know, "this really
11 should be avoided", maybe that's one place
12 where they should have gone back and said
13 "okay, we're not going to overestimate. We're
14 going to give you the actual location of the
15 road." I haven't seen that, but that certainly
16 could be a stepwise process.

17 Q Okay. The Karner blue butterfly impacts: Now,
18 we talked a lot about when the work should be
19 done to meet the AMA [AMM?]. So, if it's snow
20 covered, the ground's frozen, the timber mats
21 are used, but not in place for more than so
22 many days. I never really heard a -- I heard a
23 "don't put them there for more than, you know,
24 for two months, because that's too long." What

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1 is -- I didn't read the AMMs about the timber
2 mat usage. But, in the Karner blue butterfly
3 area, if you didn't want to do damage to the
4 lupines under the ground, would -- is there a
5 recommendation for how long you would leave the
6 timber mat in place?

7 A (Lew-Smith) You know, if they're there during
8 the winter, it's not going to matter how long
9 they're there. During the growing season, I
10 mean, I guess I'd have to look into it. I'm
11 not prepared to say "it's got to be X number of
12 days". But we can certainly provide you with a
13 recommendation at a later date, if that's what
14 you're looking for.

15 Q I mean, if they had it, that would probably be
16 good. Because I have a feeling that -- I don't
17 know, my gut feeling is that there might be
18 conditions put upon the certificate, if there
19 is in that area, so that might be helpful.

20 I wish I had more time to look at the
21 plans versus where the Karner blue butterfly
22 areas are. But there's a number of sideroads
23 that you can get into the corridor in that
24 area. So, you know, there's Regional Drive,

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1 there's Chenell Drive, there's Industrial
2 Drive. There's a number of roads, and the way
3 you could actually get into the transmission
4 right-of-way to build these.

5 In your review, was the impacts minimized
6 from the standpoint of whether -- everywhere
7 else, the access road went straight through.
8 And there weren't access roads that were "I can
9 get to this tower from this side, and to this
10 tower from that side, and I'm not going to do
11 any in the middle." Did you find that there
12 were -- that the Applicant actually reviewed
13 the impacts and minimized the impacts to those
14 areas?

15 A (Lew-Smith) So, from our review, you know, like
16 you say, most of the impacts are kind of within
17 the right-of-way. And you have the tower here,
18 a tower here, work pads, access road in
19 between. I believe that -- well, we've been
20 told that the access in between the towers is
21 necessary for construction and maintenance,
22 right?

23 Again, I'm not an engineer. Could you
24 access this one here and then actually

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1 construct and get around? Maybe.

2 Q But you didn't actually review that from a
3 constructability standpoint of how to --

4 A (Lew-Smith) Yes.

5 Q -- how to access the towers. You used their
6 plans and --

7 A (Lew-Smith) Right. Yes. That's kind of beyond
8 our wheelhouse, as it were.

9 Q Okay. All right. So, I think -- I think it
10 was Mr. Reynolds, who, on cross from Ms.
11 Connor, mentioned the restrictions on blasting
12 due to the bats. And, if there's blasting just
13 in, you know, for foundations for towers. So,
14 if the ledge is -- they dig for the tower, and
15 they get through 5 feet of dirt, and then
16 there's a knob of ledge that has to be blasted
17 for five feet, you know, to put the foundation
18 in, is the impact to the bats, is it the
19 vibration? Because, I mean, the bats aren't
20 living underground, they're living, I have a
21 feeling, in crevices or caves. Or is it the
22 vibration of the blasting that would impact
23 them?

24 A (Reynolds) The bats could be living

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1 underground.

2 Q Oh.

3 A (Reynolds) So, I mean, they're underground.
4 They're under surface. They may be
5 aboveground, but in crevices within the rock.
6 How far they penetrate is depending on time of
7 year. You know, in a summer roost, they may
8 only be six inches into a crevice. In winter,
9 they may be a foot or two, even farther. We
10 don't know that much about the structure of
11 those roosts, because they're somewhat
12 difficult to sample.

13 In terms of the blasting impacts, it
14 really, you know, and again I'm not a
15 geological engineer, but, if a piece of geology
16 that they're blasting, you know, if the ledge
17 that they're blasting is contiguous with an
18 exposed outcrop, so that, if they're going down
19 five feet topsoil, run into ledge, and when it
20 blasts that, if that piece of ledge is
21 contiguous with an outcrop 50 feet away that
22 the bats are using, I have a pretty strong
23 feeling that there's going to be a vibration
24 that's going to transmit through that rock that

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1 would never have been observed or documented,
2 because that outcrop is -- there's no buffer
3 zones. There's an outcrop maybe 25 feet off
4 the right-of-way, so it won't ever be observed
5 to look whether or not there's an impact.

6 So, yes. The original AMM talked about
7 the unlikelihood that blasting would seal all
8 available crevices. So, the original proposal
9 looked at the likelihood, it was unlikely that
10 all of the spaces that the bats were using
11 would be collapsed. That's partly vibration,
12 that's partly just loss of roost habitat.

13 So, it's vibrations, a measurement -- I
14 don't think the vibration itself is the issue.
15 The vibration would be an indicator of the
16 likelihood of collapse. But it's not a cave
17 structure, it's crevice structures, which, by
18 design or by geology, are fairly unstable.

19 Q Thank you. That's interesting. The
20 underground section: Now, there was -- as you
21 know, the plans have changed. And we haven't
22 quite seen what the final plans are going to be
23 in the underground section. But is it safe to
24 say that most of the -- so, if the plan was

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1 originally to put the line under the pavement,
2 and now it's, say, 10 feet off the edge of
3 pavement, is it safe to say that's outside of
4 most animal habitat, that that would affect
5 animal habitat?

6 A (Lew-Smith) So, our real animal habitat guy is
7 gone.

8 Q Sorry.

9 A (Lew-Smith) But we are talking -- we are
10 talking, basically, in a road right-of-way,
11 just off the shoulder of the road.

12 Q Correct.

13 A (Lew-Smith) Right. It's habitat for some
14 species, right? But I would agree that it's --
15 agree with that.

16 Q But, mostly, the animals that we've been
17 talking about, the Canada lynx and the marten,
18 they don't live that -- they don't tend to live
19 that close to the road?

20 A (Lew-Smith) It's certainly not significant
21 habitat for them, correct.

22 Q Okay. And is that, generally, would you find a
23 lot of vernal pools that close to the road?

24 A (Lew-Smith) Vernal pools you can find close to

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1 the road. Especially if a road was built
2 through one, you would just find it off to the
3 side.

4 Q So, from a final plan stage, there's 50 some
5 odd miles of the plan that we really don't know
6 what the final vernal pool impacts would be --

7 A (Lew-Smith) Right.

8 Q -- or environmental impacts would be?

9 A (Lew-Smith) Right.

10 Q One of the things that you had talked about was
11 the SEC process for issuing a certificate
12 versus the environmental regulations. And it
13 seemed to be that you said that the SEC
14 requirements were more stringent than some of
15 the environmental processes or requirements, is
16 that true?

17 A (Lew-Smith) No, I didn't mean to imply that.
18 It's a different process. You know, you have
19 your list of criteria, things you consider, and
20 those are not the same as what the DES is
21 issuing a Wetland Permit for, for example. I
22 mean, if they were exactly the same, then you
23 wouldn't have any need to put any conditions on
24 any permits at all. I mean, why are they even

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1 here? Right. So, you'd consider a much
2 broader issue.

3 MR. OLDENBURG: Okay. All right.
4 Thank you. I believe that's all I have. Thank
5 you.

6 CHAIRMAN HONIGBERG: Commissioner
7 Bailey.

8 CMSR. BAILEY: Thank you.

9 BY CMSR. BAILEY:

10 Q Mr. Lew-Smith, I think this question is for
11 you. You mentioned that you had something to
12 say about the lupine in Pembroke. And then we
13 talked about the licorice goldenrod in
14 Pembroke. And, if the Project is shifted, if
15 the Project shifts an access road, that would
16 be an appropriate AMM for the licorice
17 goldenrod. Does it also help your concern
18 about the lupine or was that something
19 different?

20 A (Lew-Smith) No. That's the same thing. If
21 they can shift that road to avoid impacts, then
22 I would be satisfied with that. Yes.

23 CMSR. BAILEY: Okay. Thank you.

24 CHAIRMAN HONIGBERG: Ms. Dandeneau.

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 MS. DANDENEAU: Good morning,
2 gentlemen.

3 WITNESS LEW-SMITH: Good morning.

4 WITNESS AMARAL: Good morning.

5 WITNESS REYNOLDS: Good morning.

6 MS. DANDENEAU: My name is Rachel
7 Dandeneau. I'm the alternate public member for
8 the Committee. I apologize for not being here
9 yesterday. I was proctoring a tree and shrub
10 identification file.

11 Some of this stuff that I ask you
12 guys about might be repeat from yesterday, and
13 I apologize for that. But I'm going to be
14 selfish and just ask the questions anyways.

15 BY MS. DANDENEAU:

16 Q In a lot of your prefiled testimony, you
17 commented that there didn't seem to be enough
18 detail available to you to evaluate different
19 processes that you were being asked about.
20 What level of detail would you want to see to
21 feel comfortable about the construction
22 approach for this Project?

23 A (Lew-Smith) Maybe I'll start, and see if they
24 want to add anything.

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1 For the most part, a lot of those details
2 have come out. And, in our supplemental
3 testimony and during testimony, we've kind of
4 said "okay, this is how we feel about it, based
5 on these AMMs."

6 And, so, for my resources in general, I
7 feel like there is enough information for me to
8 say "unreasonable adverse" or "not". So, I'm
9 okay.

10 A (Amaral) Relative to the Karner blue butterfly,
11 I think they're pretty straightforward. We'd
12 just like to see a very firm commitment of a
13 time of year when construction is going to
14 occur, and pretty much the measures that have
15 already been identified, such as flagging or
16 fencing off all of the known locations of rare
17 plants that are important to the Karner in
18 those locations and avoiding them.

19 You know, and then following that up,
20 that's during construction, following that up
21 with how the right-of-way will be maintained
22 after construction. Some sort of agreement
23 that is -- that is completed in consultation
24 with the Heritage Bureau and New Hampshire Fish

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1 & Game that takes those rare features into
2 consideration.

3 And, then, again, you know, details on the
4 time and level of funding for restoration of
5 the mitigation parcel, Z1, on Regional Drive.

6 A (Reynolds) For the bats, you know, they did the
7 minimum sampling effort for the northern
8 long-eared. And, so, I'm comfortable about the
9 potential impact for that species. But, you
10 know, really, there's virtually no effort done
11 to look at the small-footed bat. And, so, we
12 don't know really where they are along the
13 Project site. And the AMM for that is really
14 qualitative. It just says, you know, they will
15 do some surveys, in consultation with Fish &
16 Game. So, we don't know where they are. We
17 don't know what they're qualifying as known for
18 any of the species. But it's just too vague to
19 give a strong opinion. So, I was trying to be
20 conservative. We just need more information,
21 particularly with the small-footed bat.

22 Q Okay. Thank you.

23 A (Lew-Smith) Can I -- I'm sorry, can I add one
24 more thing?

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1 Q Please.

2 A (Lew-Smith) The one issue where I feel like
3 there is not enough information is the small
4 whorled pogonia. Again, I had stated yesterday
5 that I felt like the inventory methodology
6 wasn't sufficient to detect all potential
7 populations. And, so, for that one, I don't
8 feel comfortable saying there would be no
9 unreasonable adverse impact.

10 Q All right. Thank you. In your supplemental
11 testimony, you expressed some lingering concern
12 about the spotted and Blanding's turtles. What
13 are some of the things that Northern Pass could
14 do, if granted a certificate, to help minimize
15 these concerns? I think you specifically said
16 that the best management practices don't go far
17 enough to protect these species. So, what are
18 some additional things that they could do to
19 fully protect them in your eyes?

20 A (Lew-Smith) So, the most recent acceptable
21 management practices/BMPs that came out
22 improved that situation quite a bit. There was
23 a couple of issues that I had mentioned
24 yesterday. One is that they're doing it in --

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1 they're employing these -- the fencing of the
2 area as excluding turtles from mapped turtle
3 habitat. I haven't seen the map. So, I don't
4 know where that encompasses.

5 The other issue I had was turtle nests. I
6 don't think there's a really good way to not --
7 well, let me rephrase. There's potential for
8 impacting turtle nests during construction.
9 And, so, I suggested that adding some nest
10 creation mitigation sites would -- could
11 mitigate for those potential impacts.

12 So, if those -- if those steps are taken,
13 then I don't feel there would be an
14 unreasonable adverse impact on the Blanding's
15 or spotted.

16 BY MR. WAY:

17 Q And I've got a quick question on the Blanding's
18 turtles. I would imagine, if you're creating
19 those nest sites, then, and I think I saw this,
20 that you're physically picking up the turtles?
21 Did I see that? That that was one method,
22 picking up the turtles and moving them to the
23 site?

24 A (Lew-Smith) Not really. The picking up of the

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1 turtles and moving them was, I think, to remove
2 them from the construction zone. And, so, then
3 you create the nests, you know, the nest
4 habitat, and then just let them find it.

5 Q You let them find it. But you're physically
6 taking them from the construction zone?

7 A (Lew-Smith) Just to avoid direct impact.

8 Q And, so, how do Blanding turtles respond to
9 being picked up and moved? Is there a high
10 mortality rate? Does it bother them at all?
11 Are they fine?

12 A (Lew-Smith) I mean, without being inside of
13 one's head, it's hard to know. But I don't
14 think there's any like lasting impact on them.
15 It's a lot better than being run over by a
16 truck, so --

17 MR. WAY: I guess I'd agree with
18 that. Thank you.

19 BY MS. DANDENEAU:

20 Q Mr. Amaral, I think my next question is for
21 you. It's in regards to the Karner blue. You
22 had mentioned that some of your concerns
23 regarding impacts to their habitat could be
24 mitigated by doing construction in the winter.

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1 Do you have any concerns about a mild winter?
2 And I only ask that because of some of the
3 changes that we've seen, lack of snow cover.
4 And I'm from up north. So, we see some of
5 those changes up north. And I know that some
6 of those changes are more severe down here in
7 this area of the state. So, do you have any
8 concerns with work being done in winter, in a
9 mild winter?

10 A (Amaral) Well, yes. I think the reason why I'm
11 fairly adamant about constructing only in
12 winter is because I think we -- we used to
13 consider the non-growing season to begin
14 perhaps in September, early September. And now
15 I think we've seen an extension of our growing
16 season. So, by restricting construction, in
17 this really small area, to winter, I think -- I
18 think those concerns are going to be -- are
19 going to be addressed.

20 In addition, the former utility, PSNH, has
21 done work in that location in the past. I
22 think they were upgrading some of the poles.
23 And they used the timber mats. And, so, I got
24 to observe sort of what the habitat looked like

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1 before that winter construction season, and
2 then in the following summers. And I was happy
3 with the results.

4 Q Excellent. Thank you. In general, do any of
5 you have any concerns about invasive species?
6 Either the movement of them within the corridor
7 or introduction of new invasive species?

8 A (Lew-Smith) Well, you know, certainly I think
9 utility power transmission lines can often be
10 kind of highways for invasive species, and they
11 can spread from there. That being said, we
12 didn't really assess their plans for control or
13 anything like that.

14 So, I don't feel ready to kind of comment
15 on that.

16 Q We've heard a lot from the public about wanting
17 the line to be buried if a certificate was
18 granted. Do you feel that burial of the line
19 would be less environmentally harmful in
20 general?

21 A (Amaral) I can only speak for the short section
22 of the right-of-way in Concord. And, unless it
23 were directional drilling and burial, I think
24 open trench burial, through the right-of-way

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1 south of Pembroke Road, would have greater
2 environmental effects than overhead.

3 A (Reynolds) In the context of the small-footed
4 bat, if the burial is going to involve blasting
5 along the whole route, then, if that's one of
6 the primary or potential impacts, then that
7 would probably increase as well.

8 Q Mr. Lew-Smith, any comment?

9 A (Lew-Smith) You know, again, depending on what
10 the technique for burying the line is, it could
11 be, in terms of rare plants, it certainly could
12 be more impactful during construction. It's
13 hard to say, you know. Without actually having
14 looked at plans and seeing what the impact is,
15 you know, it's theoretical.

16 *[Witnesses conferring.]*

17 **BY THE WITNESS:**

18 A (Lew-Smith) Mr. Amaral mentioned that also the
19 route, depends if it's following existing roads
20 or it goes through undisturbed habitat. So, --

21 BY MS. DANDENEAU:

22 Q Sure. Thank you.

23 A (Lew-Smith) Uh-huh.

24 Q I had one last question about temperature and

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1 sedimentation impacts on small streams that
2 cross the right-of-way. Either in areas that
3 are already currently maintained as
4 right-of-way, and maybe even more specifically
5 in the several miles of new right-of-way that
6 will be created in the Wagner Forest. Do you
7 guys have any concerns regarding thermal
8 impacts or sedimentation impacts? I'm thinking
9 specifically in terms of fish, eastern brook
10 trout, but in general also.

11 A (Lew-Smith) Yes. Unfortunately, that's not
12 something that we really dug into on this
13 Project. So, I don't really feel comfortable
14 making a determination.

15 MS. DANDENEAU: All right. Thank you
16 very much.

17 WITNESS LEW-SMITH: You're welcome.

18 CHAIRMAN HONIGBERG: Mr. Way.

19 MR. WAY: Good morning again.

20 WITNESS LEW-SMITH: Good morning.

21 BY MR. WAY:

22 Q Mr. Reynolds, a few questions for you about the
23 bats. And I think I heard yesterday that the
24 long-eared bat had been identified in ten

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1 communities, is that correct? And was it the
2 Indiana bat that was identified I think in an
3 additional 12 communities?

4 A (Reynolds) So, yes. So, Normandeau reanalyzed
5 their data from 2015, and released a supplement
6 or a reanalysis in December of 2016. And in
7 those data they had 11 sites that would be
8 identified as potential -- potential capture
9 sites for the northern long-eared. That was in
10 Table 3 of that release. And then 23 sites for
11 Indiana *myotis*, and that would be across 12
12 towns.

13 Q And, when you have that data there in front of
14 you, those towns -- well, let me strike that.
15 Do the bat species we're talking about, do they
16 tend to overlap? In other words, are you going
17 to find it -- are those 10 separate towns, 12
18 separate towns, do those species tend to
19 coexist?

20 A (Reynolds) Yes. I don't think you can add them
21 up to be whatever that would be, 23 separate
22 towns.

23 Q Right.

24 A (Reynolds) I think the sampling -- the sampling

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1 overlaps.

2 Q But the bats do tend to coexist with one
3 another?

4 A (Reynolds) Yes.

5 Q All right. And have you been an environmental
6 monitor before?

7 A (Reynolds) I have not.

8 Q And I'm just trying to get a sense of, with
9 regards to bat issues, what would be the duties
10 do you anticipate for an Environmental Monitor
11 on an ongoing basis?

12 A (Reynolds) If you go to the AMMs for the two or
13 three species of bats that would be relevant,
14 for the northern long-eared bat, someone needs
15 to determine what is known, in terms of known
16 locations. So, that would not need to be done
17 on-site by an Environmental Monitor, but that
18 needs to be clarified.

19 For the small-footed bat, the
20 Environmental Monitor would have to do survey
21 work. But, again, the AMM does not identify
22 what the survey work would be. So, at a
23 minimum, it would be acoustic monitoring. But,
24 if they're going to follow the U.S. Fish &

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1 Wildlife guidance documents, then the
2 documentation of presence, if transferred to
3 the small-footed bat, they would have to
4 actually then do mist netting. So, they would
5 need state permitting, but not federal
6 permitting.

7 If their goal was to find out where these
8 bats were roosting, then they would actually
9 need to radio tag the bats, which means they
10 need expertise in how to attach and track bats.
11 And then some type of roost emergence. It's a
12 fairly narrow skill set.

13 Q Is it fair to say that these are all
14 pre-construction activities? During the actual
15 construction phase, you've pretty much
16 completed what you need to do with regards to
17 identification and taken the appropriate
18 measures?

19 A (Reynolds) It's hard to say. I mean, some of
20 these could be done well in advance of
21 construction. But the AMMs, as they're
22 written, it's not clear when -- you would not
23 want to be doing this, it's not like the turtle
24 sweeps, you would not want to be doing surveys

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1 the day before intended blasting. That would
2 be done -- they would have to be seasonally
3 appropriate for the time of blasting, and they
4 would have to be analyzed, because the results
5 are interpretive, however they classify these
6 calls, because these calls have significant
7 overlaps between other species. Someone would
8 have to make that analysis. That analysis
9 would have to be vetted by a regulatory agency.
10 That result would then have to go through
11 consultation, informal, probably not U.S. Fish
12 & Wildlife, unless some of the calls were
13 identified as *Indiana myotis*. And then the
14 permission to proceed would then be given, and
15 that could take months.

16 Q And, so, I guess what I'm trying to get to is,
17 different than fur and feathers, once you've
18 identified the areas, and you've taken the
19 measures for the bat -- excuse me -- you've
20 taken the measures, during the construction
21 phrase you seem to suggest that there might be
22 some things that would happen during the
23 construction phase? Or, likely is that -- is
24 that all done with regards to bats?

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1 A (Reynolds) There are best management practices
2 for monitoring sound and vibration levels that
3 would have to be done at the time of
4 construction. But those are not implied in the
5 AMM that they would be doing any of those.

6 Q So, there's sound/vibration requirements that
7 should be observed in those areas during the
8 construction phase?

9 A (Reynolds) If you're trying to do best
10 management practices, yes.

11 Q And is that something the Environmental Monitor
12 has to be present to do or is that something
13 that can be taught to the field crew?

14 A (Reynolds) That's not my field of expertise. I
15 assume the equipment records. So, I don't know
16 as you have to have somebody sitting there and
17 looking -- watching the little needle go up and
18 down. But, you know, the most appropriate
19 timing for that and ensuring that the sound
20 levels and vibration levels don't meet a
21 threshold that's pretty much real-time, I don't
22 know what protocols would be put in place if
23 those sound levels or those vibration
24 thresholds are exceeded.

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1 But the places where I've seen them used,
2 and I can reference one. So, in some places,
3 the coal industry is required to use subsurface
4 geophones to look at vibration within 500 feet
5 of a project site, monitoring vibrations up to
6 0.2 inches per second. And those are being
7 done while they're doing coal mining.

8 Another site recommends sound concussion
9 of less than 150 dB and shock waves less than
10 15 psi with a 2-kilometer setback.

11 So, these were -- some of these were being
12 monitored during the actual blasting operation.
13 And, if the sound or the pressure or the
14 vibration exceeds the threshold, then they stop
15 activity, until they can confirm no presence of
16 the bat.

17 Q Until they confirm no presence?

18 A (Reynolds) They would have to stop. Either
19 have to find a way to get the activity below
20 those thresholds, or they have to not do that
21 activity until the bats are no longer --

22 Q I was going to say that --

23 A (Reynolds) Sorry?

24 Q So, in terms of confirming no presence of the

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1 bat, that would be kind of difficult to do,
2 would it not?

3 A (Reynolds) Not with planning. I mean, if you
4 know you're going to construct this site in the
5 Summer of 2019, then doing appropriate levels
6 of survey in the Summer of 2018, to make sure
7 they're not summer roosting in those sites. I
8 mean, you're making an assumption, if they're
9 there one year, they might be there the next
10 year. But it's a lot better assumption than
11 going out in the Spring of 2018, and using
12 those data to assume presence or absence in
13 2000 -- Summer of 2018.

14 And, likewise, for the winter surveys in
15 particular, or the winter -- any winter
16 construction, you can't sample them in the
17 winter or you can't be confident that sampling
18 in the winter is going to show you presence,
19 because they're sleeping, they're hibernating.
20 But, if you did full winter surveys in the
21 winter prior to any construction, I have a
22 paper that just came out that counsel has and
23 can make available on overwintering activity of
24 the species. If you do long-term monitoring at

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1 potential roost sites, wintering sites, you
2 will find them coming out on warm days. And
3 you can document their presence at an exposed
4 area, which will give you some confidence that
5 they're probably going to be there the next
6 winter as well.

7 But you can't go into a site in the Winter
8 of 2018, put up some monitors, hear no bats,
9 and have any confidence that there are no bats
10 there, because they're hibernating. So, it
11 just takes planning.

12 Q Thank you, Mr. Reynolds. And I think, for the
13 others, I know this is shocking, but I'm going
14 to ask questions about Environmental Monitors.

15 Mr. Amaral, have you been an environmental
16 monitor?

17 A (Amaral) No, I have not.

18 Q Mr. Lew-Smith, you drew the short straw,
19 because you've done it once.

20 A (Lew-Smith) Okay.

21 Q So, I think one of the things that we're all
22 asking the same question about is, when we take
23 this from the desktop, when we take it from the
24 written word, and we actually take it out to

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1 the field, and we have environmental monitors,
2 we have wetland scientists, we have, as was
3 mentioned earlier, compliance specialists, we
4 have a whole team of people that are going to
5 be on the ground. And they're going to have to
6 be there at certain times to make sure that
7 construction can commence, or they're going to
8 have to survey wide swaths.

9 In your experience from that one time
10 you've done it, or in the experience that
11 you've talked about with others that have been
12 involved in the experience, how does that
13 actually work out in the field? Does it -- I
14 mean, do you have the authority to stop? Does
15 that actually work? Or what is your real-world
16 impression of the life of an environmental
17 monitor in these types of activities?

18 A (Lew-Smith) You know, organizationally, making
19 that whole beast kind of function will be a
20 task. And I think it's possible to make it
21 work, but it will take some work.

22 You know, in terms of my experience being
23 an environmental monitor, it's not easy, in
24 part, because you kind of sometimes have to be

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1 a jerk, right? You have to be willing to
2 challenge the people that are doing the
3 construction. And, if you don't have stop work
4 authority, you're basically, to their eyes,
5 you're just blowing a lot of hot air, right?

6 And, so, you -- they need to know that you
7 have stop work authority, because then you can
8 actually get something done and you can protect
9 the resources that you're there to protect.
10 So, from my experience, that's very important.

11 How that works up through the
12 organizational chain of, you know, the
13 compliance monitors and who answers to it all,
14 and who over sees it? It's complicated. And I
15 don't feel like I've given it quite enough kind
16 of thought to really give you the answer right
17 now. But I do believe that it -- they should
18 ultimately be answerable to someone other than
19 the Applicant.

20 Q And, so, -- oh, Mr. Reynolds?

21 A (Reynolds) Yes. If I can modify or clarify,
22 I've never been an environmental monitor. But
23 I have worked several years as an environmental
24 and safety corridor within an industry. And

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1 it's some of the same issues. So, I was
2 responsible for making sure the corporation I
3 was working for met environmental and safety
4 regulations. And it's sort of that "jerk"
5 mentality. It can work really well, but really
6 depends on the organizational structure, it
7 depends on support from management. And it
8 really gets not to who's paying your check, but
9 sort of who you're accountable for. And, at
10 one of the places I worked, I worked within
11 facilities. And they are the problem. They
12 are the people who most of the safety
13 regulations and environmental regulations are
14 geared towards. And it was very difficult
15 working, when my boss was the person most
16 likely to be violating safety or environmental
17 rules.

18 In another situation, I worked for the
19 upper management. And I was accountable for --
20 I was accountable only to the upper management.
21 And, so, I was parallel to the facilities
22 manager, and it worked really well.

23 So, it's not -- it's a skill set, but it's
24 also an organizational structure of how they

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1 are reporting, and how -- you know, stop work
2 authority, and what is the ethos of the people
3 above them, and do they truly have the ability
4 to independently stop work and cost somebody
5 thousands, tens of thousands of dollars.

6 Q And it's also the ethos of the people that are
7 there on site as well. Because, while you're
8 the jerk on site, not to imply that, but when
9 you're having to take that position on site,
10 this is a team effort, I would have to imagine.
11 If, as Mr. Oldenburg said, "if you see
12 something, you say something." But, having
13 that rapport with the environmental monitor,
14 having that rapport with a compliance officer,
15 wetlands, all those people, does it get to a
16 point where it's difficult for construction to
17 commence? Or, are we talking about a very
18 small portion of a job day?

19 A (Lew-Smith) Difficult for construction to
20 commence, because of all of the conditions on
21 the permits you mean or --

22 Q Right.

23 A (Lew-Smith) I don't think it has to be. I
24 think -- I mean, there's nothing that I've seen

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1 so far in the AMMs that, to me, seem outrageous
2 and unreasonable for a construction site.

3 Q So, you're not seeing something that would
4 cause unreasonable delays?

5 A (Lew-Smith) I don't think so, no.

6 Q Mr. Reynolds?

7 A (Reynolds) Just understaffing environmental
8 monitors. If there's only two, two of them
9 along a 192-mile route, and you need -- you
10 have three ongoing construction sites, that
11 could be an issue. I mean, making sure that
12 there's adequate environmental monitors would
13 be the only potential -- or, would be one
14 potential for delays.

15 MR. WAY: All right. Thank you.

16 CHAIRMAN HONIGBERG: I have no
17 questions for the panel that haven't already
18 been asked.

19 Is there anything else?

20 *[No verbal response.]*

21 CHAIRMAN HONIGBERG: Ms. Connor, do
22 you have redirect for the panel?

23 MS. CONNOR: Just a couple questions.

24 **REDIRECT EXAMINATION**

1 BY MS. CONNOR:

2 Q Mr. Amaral, you were asked, actually, the whole
3 panel was asked by Ms. Dandeneau whether or not
4 your concerns regarding detail, both in terms
5 of the identification and the impact on various
6 species had been addressed, and you mentioned
7 the Karner blues. But you didn't address the
8 frosted elfin, the dusky skipper and the pine
9 minion. Can you address whether, in fact, the
10 Applicant has both identified those populations
11 and addressed the impact of this project on
12 those populations?

13 A (Amaral) Okay. Well, yes. My scope of work
14 was to really focus in on impacts to Karner
15 blue butterflies and wild lupine. And sort of
16 on the coattails of wild lupine, you also pick
17 up the ecological requirements of some of those
18 other state-listed moths and butterflies that
19 co-occur in the same habitat. You know,
20 unfortunately, those, unlike the Karner blues,
21 those species have no readily accessible
22 species experts. And, because they do not
23 enjoy federal listed status, there's been
24 virtually no federal money available to state

[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 wildlife agencies to conduct research, needed
2 research on those species.

3 So, there wasn't a lot of existing
4 information that the Applicant was able to tap
5 into in order to assess how the Project would
6 affect them. And I think perhaps a missed --
7 there was a missed opportunity, where maybe
8 some of that missing information could have
9 been collected that would have allowed a more
10 informative impact analysis.

11 Q Well, certainly, an inventory could have been
12 done with regard to those species, could it
13 not?

14 A (Amaral) Yes. I think, you know, any
15 naturalist, anyone with biological training,
16 could be trained to make a species
17 identification for them.

18 Q And, Dr. Reynolds, you mentioned this morning
19 that you still -- that you believe the Project
20 will have an unreasonable impact upon the
21 small-footed bat, and I believe that is also
22 tied back to the lack of identification and
23 inventory with regard to the bat, is that
24 correct?

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1 A (Reynolds) Listening to Mr. Amaral's response
2 about the butterflies was the exact -- he
3 worded it better than I would have, but it's
4 the same issue for the small-footed, because
5 they're not granted the protection and the
6 funding of a federally listed species. We know
7 virtually nothing about them. And this was a
8 missed opportunity. If they basically only
9 looked at three sites, they made the argument
10 in the Wildlife Report that the effort that
11 they did for the northern bat was complementary
12 to the small-footed bat. But, if you look at
13 the actual small-footed bat report, they found
14 more documentation of small-footed bats at the
15 three sites that they sampled at than they
16 found across the 208 sites that they sampled at
17 with the northern. So, the surveying effort
18 for the northern does not complement that.

19 And, actually, in their Wildlife Report,
20 they also stated that the distribution, and
21 this was sort of pre-survey work, "the
22 distribution of the small-footed bat species is
23 as much a function of the distribution of
24 survey efforts as a reflection of the

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[WITNESS: Lew-Smith|Parsons|Amaral|Reynolds]

1 distribution of the species." So, they knew
2 you got to look for them, and they really
3 didn't.

4 So, part of my concern and inability to
5 say there would be no unreasonable adverse
6 impact is because we just don't know enough
7 about impact on this species, because they
8 weren't looked at.

9 Q And am I correct that in your report you noted
10 that, although they found -- they are
11 characterizing three locations as known
12 locations, they erroneously eliminated up to 21
13 locations?

14 A (Reynolds) I wouldn't say "erroneously", they
15 just -- it wasn't clear. That in the Wildlife
16 Report it says they were given 24 potential
17 locations by the Heritage Bureau, and 21 were
18 eliminated because they didn't -- they didn't
19 meet both the summer and winter criteria for
20 roost habitat. And why they lumped the two or
21 what they used to distinguish those, short
22 of -- I think there's a statement about "deep
23 fissures", but none of the fissures were
24 measured. So, 21 were eliminated qualitatively

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1 or visually, and then three were monitored.

2 Q And am I correct that, unlike perhaps the lynx,
3 which apparently are quite rare in New
4 Hampshire, are small-footed bats rare in New
5 Hampshire?

6 A (Reynolds) Not once you start looking for them.
7 I have a project that I've been doing in New
8 Boston, New Hampshire, that we've sampled
9 small-footed bats almost every year we've been
10 there.

11 I've been on other projects, particularly
12 development projects, throughout the Eastern
13 U.S. And, when we come across habitat that
14 looks like it's potential small-footed habitat,
15 and we set up monitors, we found them and
16 captured them. And I have colleagues in
17 southern New Hampshire who can find them fairly
18 easily, if they go to the right habitat.

19 So, yes. It's not the same scenario as
20 the lynx, where this is a really rare bat, and
21 the reason we're not finding them is because
22 there just not abundant. This is probably the
23 most abundant *myotis* bat -- I mean, I wouldn't
24 say "probably", it is our most abundant *myotis*

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1 bat in the state at this moment. But, if you
2 don't look where they live, you're not going to
3 see them.

4 Q And what would need to be done in order to look
5 for and sufficiently confirm where the
6 small-footed bats may be along the length of
7 this corridor?

8 A (Reynolds) You can do what the Fish & Wildlife
9 recommended in 2013, which would be to do some
10 JS-modeling for the habitat, which is work that
11 Arrowwood did, and we submitted I believe in
12 our supplemental testimony, to identify rock
13 features that are likely or a potential
14 habitat, and then you go and monitor those
15 sites. I would argue acoustically is better
16 than just visually looking at it. And then, in
17 the places where you're getting potential
18 small-footed activity, you pursue those sites.

19 Q And, if that survey location is not done, and
20 small-footed bats are not searched for along
21 the route, would you expect this Project to
22 have direct mortality on the small-footed bats?

23 A (Reynolds) It's very possible, yes.

24 MS. CONNOR: Thank you. I have

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1 nothing further.

2 CHAIRMAN HONIGBERG: All right.

3 Thank you, gentlemen. I think you are excused.

4 We appreciate your time.

5 Given the hour, I think we'll take an
6 early lunch break, come back at one o'clock.

7 Off the record.

8 (Lunch recess taken at 11:54
9 a.m. and concludes the **Day 57**
10 **Morning Session.** The hearing
11 continues under separate cover
12 in the transcript noted as
13 **Day 57 Afternoon Session ONLY.**)
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C E R T I F I C A T E

I, **Steven. E. Patnaude**, a Licensed Shorthand Court Reporter, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of these proceedings taken at the place and on the date hereinbefore set forth, to the best of my skill and ability under the conditions present at the time.

I further certify that I am neither attorney or counsel for, nor related to or employed by any of the parties to the action; and further, that I am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in this action.

Steven E. Patnaude, LCR
Licensed Court Reporter
N.H. LCR No. 52
(RSA 310-A:173)

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