STATE OF NEW HAMPSHIRE

SITE EVALUATION COMMITTEE

September 26, 2017 - 2:11 p.m. DAY 40 Afternoon Session ONLY 49 Donovan Street Concord, New Hampshire

{Electronically filed with SEC on 10-12-17}

SEC DOCKET NO. 2015-06 IN RE:

NORTHERN PASS TRANSMISSION -EVERSOURCE; Joint Application of Northern Pass Transmission LLC and Public Service of New Hampshire d/b/a

Eversource Energy for a

Certificate of Site and Facility

(Hearing on the Merits)

PRESENT FOR SUBCOMMITTEE/SITE EVALUATION COMMITTEE:

Chmn. Martin Honigberg Public Utilities Comm. (Presiding Officer)

Cmsr. Kathryn M. Bailey Dir. Craig Wright, Designee Dept. of Environ. Serv. Christoper Way, Designee Dept. of Business &

Public Utilities Comm. Economic Affairs

William Oldenburg, Designee

Dept. of

Patricia Weathersby

Transportation Public Member

ALSO PRESENT FOR THE SEC:

Michael J. Iacopino, Esq. Counsel for SEC (Brennan, Caron, Lenehan & Iacopino)

Pamela G. Monroe, SEC Administrator

(No Appearances Taken)

COURT REPORTER: Cynthia Foster, LCR No. 14

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WITNESS PANEL	CHERILYN WIDDELL VICKI BUNKER	PAGE	NO.
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EXHIBITS

EXHIBIT ID DESCRIPTION PAGE NO.

CFP 489 NHDOT Standard Specs

2016-SEC 60

PROCEEDINGS 1 2 (Hearing resumed at 2:11 p.m.) PRESIDING OFFICER HONIGBERG: Good 3 4 afternoon, everyone. We're going to welcome 5 back Dr. Bunker and Ms. Widell, who are still 6 under oath, to continue their testimony. understand, Mr. Walker, that you have a brief 7 direct to conduct of one or both of them? 8 9 MR. WALKER: Just very briefly, yes. 10 PRESIDING OFFICER HONIGBERG: Go ahead. 11 DIRECT EXAMINATION 12 BY MR. WALKER: 13 0 Good afternoon, Ms. Widell. Did you have a change to make to your Supplemental Prefiled 14 15 Testimony? 16 (Widell) Yes. I do. On page 13, line 23. Α 17 PRESIDING OFFICER HONIGBERG: What exhibit 18 number? 19 MR. WALKER: It's Exhibit 95. 20 (Widell) A change from 6 to 7 historic Α 21 resources. And on line 26, further evaluation 22 of three instead of four properties. 23 Any further changes to your Supplemental 0 24 Testimony?

1 (Widell) No. There are not. Α 2 Do you have any other changes you wish to make Q to the Effects Tables that were submitted? 3 4 Α (Widell) Yes. One is related to the Upper 5 Ammonoosuc Cultural Landscape. 6 Let me interrupt you there just briefly. For 0 7 the record, that's 196 B, and you're referring 8 to the Upper Ammonoosuc which is tab 52 in that 9 exhibit. 10 Α (Widell) And it is the Effects Table. 11 map parcel mentioned in the revised table 12 correctly identifies it as number 4, 11, 15. 13 The Effects Table is in error showing it as 4, 14 11, 45. 15 0 Do you have any other changes to the Effects Tables that were submitted? 16 17 (Widell) Yes. In the page 23 of the Mount Α Prospect-Martin Meadows Pond Cultural Landscape 18 19 Effects Table should be labeled as existing conditions, not proposed conditions. 20 21 And just for the record, Mr. Chairman, that's 0 22 the same Exhibit 196 B. It is tab 47, page 23 23 of that tab. Thank you. Ms. Widell, with that change to your 24

```
1
           Supplemental Testimony, do you swear by and
 2
           affirm that testimony?
 3
      Α
           (Widell) Yes, I do.
           Thank you.
 4
      0
 5
               PRESIDING OFFICER HONIGBERG: Thank you,
 6
           Mr. Walker. I understand Counsel for the
 7
           Public, Mr. Aslin, you are grabbing the
           microphone today. Mr. Aslin, you may proceed.
 8
 9
               MR. ASLIN:
                            Thank you, Mr. Chairman.
10
                        CROSS-EXAMINATION
11
      BY MR. ASLIN:
12
           Good afternoon, Ms. Widell and Ms. Bunker.
      0
13
           Welcome back.
14
           (Widell) Thank you. Good afternoon.
      Α
15
      0
           I'm sure you're very excited to be back here
16
           again. Dr. Bunker, apologies in advance.
17
           of my questions, if not all, will be directed to
18
           Mr. Widell, but we're very happy that you're
19
                  I hope you enjoy the questioning.
20
               Ms. Widell, I'd like start by taking a look
21
           at the Programmatic Agreement which is
           Applicant's Exhibit 204. I believe it should be
22
23
           coming up on the screen in a minute.
24
           (Widell) I also have a copy in front of me.
      Α
```

```
1
      Q
           Very good. And is that up on everyone's screen
 2
           now?
 3
      Α
           (Widell) Yes. Thank you.
           And so this document, to try and move this
 4
      0
 5
           along, I'm going to make some representations
 6
           about what I think this document is and ask you
 7
           about if you agree and then, hopefully, we can
           move along quickly through this beginning
 8
 9
           section.
10
                So this document is part of the 106,
11
           Section 106 process, is that correct?
12
      Α
           (Widell) Yes, for this specific undertaking.
13
      0
           Right. The Northern Pass Transmission Project.
14
           And this is a document that's been executed by
15
           sort of the primary federal and state agencies
16
           involved in the 106 process as well as the
17
           Applicant; is that correct?
18
           (Widell) Yes.
      Α
19
           It's not directly related to the SEC process,
      0
20
           correct?
21
      Α
           (Widell) Yes.
22
           In other words, it doesn't govern the SEC's
      Q
23
           review or anything that the SEC has to do?
           (Widell) No, it does not.
24
      Α
```

1 And you would agree that this, the Section 106 0 2 process is an independent process sort of in 3 parallel with the SEC process, and it can continue beyond the decision point of the SEC? 4 5 (Widell) Yes. Α 6 Thank you. So would it be fair to say that the 0 information that is developed through the 7 Section 106 process, including the information 8 9 that's addressed in the Programmatic Agreement, 10 is information that is informative to the SEC 11 and that they may rely on as evidence in their 12 decision making process within the SEC 13 proceeding? 14 (Widell) Yes. Α 15 0 Okay. I want to take a first look at page 9 of 16 the Programmatic Agreement which is now on the 17 screen. And in paragraph 36, the "whereas" 18 clause, it speaks to the area of potential 19 effect for this Project; is that correct? 20 (Widell) Yes. Α 21 When I was reviewing this, it seems to me that 0 22 there may be somewhat of a change in the APE at 23 this stage from what we heard in testimony 24 earlier in this proceeding, and, specifically,

1 I'll point, direct your attention to the APE for 2 indirect effects to underground sections of the 3 Project. And as I read it here, towards the 4 bottom of the paragraph, there's a defined APE 5 for indirect effects as 200 feet approximately 6 from the edge of pavement on both sides of 7 existing roads. And that's in paragraph 36 towards the bottom of the paragraph. 8 9 Did I read that correctly or does that 10 summarize that correctly? 11 Α (Widell) That was for the indirect APE. 12 So that would be visual impacts, potentially 0 13 some other impact? 14 (Widell) For the underground. Α Okay. Is that a different indirect APE 15 0 Yes. 16 from what you had previously been using in this 17 process when you were presenting your testimony 18 earlier in the proceedings? 19 (Widell) No. Α Okay. I may just be confused because I had been 20 0 21 remembering that there's, we had focused on the 20-foot direct APE for underground sections, but 22 23 I hadn't recalled there being explicit 24 discussion of an indirect APE for undergrounding

```
1
           and going out 200 feet.
 2
           (Widell) Yes. Most of the discussion was
      Α
           related to the direct APE on underground.
 3
 4
      0
                In the work that you did for your
 5
           testimony in this proceeding, so I guess I can
 6
           represent that's in part work that went into the
 7
           106 process but was done initially for the
           Application for the SEC, did you look to the
 8
 9
           underground sections of the Project for
10
           potential indirect effects to historic
11
           resources?
12
           (Widell) No.
      Α
13
           So that was not part of your testimony that was
      0
14
           submitted as part of the Application here?
15
      Α
           (Widell) No.
16
                 So let me ask then.
                                       Is the 200-foot
      Q
17
           indirect APE for buried sections of the Project
18
           something that has developed during the 106
19
           process as an additional criteria or is it, has
           it been there all along in the 106 process?
20
21
           (Widell) No. I don't believe it has. I would
      Α
22
           have to refer back to the 2013 letter between
23
           the Department of Energy and DHR which
24
           established precisely the APE for both the
```

```
1
           underground and the aboveground sections of the
 2
           Project.
           Okay. But for purposes of your Direct Testimony
 3
      0
           and Supplemental Testimony in this proceeding,
 4
 5
           your analysis, I think just told me, did not
 6
           look to indirect effects for the underground
 7
           portion of the Project out to 200 feet to either
           side of the roadways; is that correct?
 8
 9
      Α
           (Widell) Yes. To my knowledge there are not
10
           visual effects related to an underground portion
11
           of this Project.
12
           But you didn't actually study that as part of
      0
13
           your review leading up to your direct and
14
           Supplemental Testimony?
15
      Α
           (Widell) No.
16
      Q
           Okay.
                  Thank you. Subsequent to your
17
           Supplemental Testimony being filed in this
18
           docket, have you gone back and done a further
19
           review of the underground portions of the
20
           Project to look specifically at potential
21
           indirect effects within the 200-foot APE to
22
           either side of the roadways?
23
           (Widell) Yes, I have.
      Α
24
           And has that, the result of your review, has
      0
```

```
that been submitted in some form to the
 1
 2
           Committee or to the parties?
           (Widell) Yes.
 3
      Α
           Is that the Effects Tables that we have recently
 4
      0
 5
           received?
 6
           (Widell) Yes.
      Α
           Thank you. So within the recent Effects Tables
 7
      Q
           which I believe are incorporated in Applicant's
 8
 9
           Exhibit 196 B, you have addressed the indirect
10
           effects out to 200 feet to either side of the
11
           roadway?
12
      Α
           (Widell) Yes.
13
      0
           Thank you. Now I'm going to skip ahead to the
14
           substance of the Programmatic Agreement for a
15
           moment. And then we've got page 13 up on the
16
           screen.
                   At the bottom of page 13, do you see
17
           that there's a heading, III Identification and
18
           Evaluation of Historic Properties?
           (Widell) Yes. I see that.
19
      Α
20
           And I'm showing the page, but you have the
      0
21
           document. Is that, do you understand that that
22
           is one of the stipulations that's contained in
23
           the Programmatic Agreement?
24
      Α
           Yes.
```

```
1
           And if we, well, I'll start at the bottom here.
      0
 2
               Part of what the Programmatic Agreement
 3
           appears to be doing is setting up a process that
           could incorporate the identification of
 4
 5
           additional resources within the APE; is that
 6
           correct?
 7
      Α
           (Widell) Yes.
           That's what this, part of what this stipulation
 8
      Q
 9
           is getting at?
10
      Α
           (Widell) Yes.
11
      Q
           And if we could go to the next page, please?
12
               So at the top here we've got stipulation 3,
13
           paragraph or section A(1)(a) and (b),
14
           specifically (b), and it's asking or requiring
           that there will be additional identification
15
16
           investigations in New Hampshire, and then
17
           there's a list of the types of things that will
18
           be investigated. Is that correct?
19
           (Widell) Yes.
      Α
20
           And those include the Phase 1 A and B
      0
21
           archeological investigations, architectural
22
           inventory, cultural landscape inventory and
23
           Phase II archeological investigations; is that
24
           right?
```

```
1
                 It also has letters beyond it, but yes.
      Α
 2
                 Okay. And my understanding is that this,
      Q
           Yes.
 3
           much of that work has been done at this point;
           is that correct?
 4
 5
           (Widell) I cannot speak to (b)(1), I'll have to
      Α
 6
           turn to my colleague, Dr. Bunker.
           Sure. This is your big moment, Dr. Bunker.
 7
      Q
           (Bunker) I'll make it brief. Yes.
 8
      Α
 9
           And has that been completed at this point?
      0
10
           Specifically, identification investigations
11
           including the Phase 1 A and 1 B archeological
12
           investigations?
13
      Α
           (Bunker) Yes. 1 A and 1 B is completed and
14
           Phase II is completed.
15
      Q
           Has that been completed for the entirety of the
16
           Project?
17
           (Bunker) No.
      Α
18
           What hasn't been done yet?
      Q
19
           (Bunker) There's still a small segment of the
      Α
20
           Project in the North Country on locally
21
           maintained roads where Phase 1 A has been
22
           completed, but we have not gone any further in
23
           the other steps. These are in the towns of
24
           Clarksville and Stewartstown.
```

```
1
                 Thank you.
      0
           Okay.
 2
           (Bunker) You're welcome.
      Α
           Other than that section of the Project in
 3
      0
           Clarksville and Stewartstown, have all the
 4
 5
           archeological investigations been completed?
 6
           (Bunker) Yes. Correct.
      Α
 7
      Q
           Okay. Thank you.
           (Bunker) You're welcome.
 8
      Α
 9
           Back to Ms. Widell. In terms of the other
      0
10
           categories, the architectural inventory and the
           cultural landscape inventory, I understand that
11
12
           that process has been ongoing, and, indeed,
13
           we're going to talk about some of the recently
14
           submitted materials. In your opinion, have you
15
           completed all of the investigations of resources
16
           that you anticipate completing in this process?
17
           (Widell) Yes, but I would like to clarify that
      Α
18
           DHR has been very much involved in the
19
           identification of historic resources and very
20
          helpful in directing which properties they
21
           wanted to be identified as well as working on
22
           identifying the cultural landscapes along with
23
           the consulting parties. So I would not
24
           characterize it as what I'm choosing to
```

```
1
           identify. That has been done in complete
 2
           consultation with DHR who also is consulting
 3
           with the Department of Energy.
 4
           Right. And that's part of the 106 process,
      0
 5
           correct?
 6
           (Widell) Yes.
      Α
 7
      Q
           DHR and DOE's role is within the 106 process, to
 8
           clarify?
 9
      Α
           (Widell) Well, to clarify, not exclusively.
10
           certainly provides information and direction in
11
           the SEC process as well.
12
           But in terms of identification of resources and
      0
           assessment of effects, that's primarily part of
13
14
           the 106 process; is that correct?
15
      Α
           (Widell) Yes. Primarily.
           If I understand what you're saying, I'll try and
16
      Q
17
           summarize. You've completed what you believe to
           be the identification phase, but the DHR and DOE
18
19
           haven't completed their review so there could be
20
           additional investigations required?
21
           (Widell) No. That's not accurate. And first I
      Α
22
           would characterize, it's not my identification.
23
           There have been at least 8 different firms
24
           qualified under what we call the Secretary of
```

```
1
           Interior standards for professionals involved in
 2
           the completion of inventories, and Public
 3
           Archeological Laboratory has been done for the
           cultural landscapes so I would not characterize
 4
 5
           it as what I chose or my completion.
 6
           Understand. I'm speaking of the royal "we," I
      0
 7
           quess.
           (Widell) Okay. So I think you had a second part
 8
      Α
 9
           of that question.
10
      0
           Yes.
           (Widell) Could you please repeat it so I can
11
      Α
12
           answer it for you.
           I'd be happy to, and I'll rephrase it slightly.
13
      0
14
               The Applicant has submitted the
           identifications of Historic and Cultural
15
16
           Resources at this point, but there's the
17
           potential under this Programmatic Agreement that
18
           there could be additional investigations
19
           required or recommended?
20
           (Widell) Yes, with an undertaking of this size,
      Α
21
           and once again, I may have to turn to my
22
           colleague, Dr. Bunker, it is always possible
23
           that you missed something. Most often in my
24
           professional experience it has to do with
```

```
1
          archeology.
 2
                  Thank you. And if we could go back two
      Q
          Okay.
 3
          pages, please? 16. So now I'm showing you,
          we're still within Applicant's Exhibit 204, the
 4
 5
          Programmatic Agreement, and this is page 16, and
 6
          it's paragraph 2. I lost track of the exact
 7
          outlining phase there, but it's the paragraph
          that's labeled number 2 here. And it here
 8
 9
          directs Northern Pass to prepare a Work Plan
10
          prior to carrying out the identification
11
          investigations. Would I be correct in assuming
12
          that that has already occurred?
13
      Α
           (Widell) My understanding is that a Work Plan
14
          has been developed and submitted to the
15
          Department of Energy as of last year.
16
          Last year. Okay. And that would be before the
      Q
17
          investigations were completed as called out
18
          here?
19
           (Widell) Yes.
      Α
20
          Were you involved in creating that document?
      0
21
           (Widell) No.
      Α
22
          Do you know who was?
      Q
23
           (Widell) No. I do not.
      Α
24
          Okay. And do you know what is included in that
      0
```

```
Work Plan?
 1
 2
           (Widell) No.
      Α
 3
           Okay. Do you have an understanding of what the
      0
 4
           purpose of that Work Plan is?
 5
      Α
           (Widell) The purpose was to fulfill the
 6
           recommendation in this Programmatic Agreement to
 7
           do a Work Plan.
           Okay. And is it your understanding that there
 8
      Q
           is a continuing role for that Work Plan at this
 9
10
           point in the Section 106 process?
11
      Α
           (Widell) I'm not sure.
12
           Okay.
      0
13
      Α
           (Widell) Because the identification has pretty
14
           well been completed through the direction of the
15
           DHR in consultation with Department of Energy,
16
           but it certainly would dictate any future
17
           identification activities according to this
18
           Programmatic Agreement.
19
           We're not going to go through all the details
      Q
20
          here, but this section of the Programmatic
21
           Agreement sets forth the process whereby the
22
           investigations that have already taken place
23
           more or less followed, but going forward, any
           additional investigations would follow through
24
```

```
1
           this process within the broader 106 process?
 2
           (Widell) Yes.
      Α
 3
           And it stipulates who is going to have times to
      0
           review submissions by the Applicant and when it
 4
 5
           gets a final stamp from DOE and DHR is approved,
 6
           I guess approved isn't the right word, but if
 7
           they agree with the identification that's
           presented by the Applicant?
 8
 9
      Α
           (Widell) Yes, because I wanted to just say not
10
           exactly because, as you know, this is a
11
           consultation process. It is not a permitting
12
                     So what is outlined is entirely review
           process.
           and comment and consultation.
13
14
          And at the end of the road, it's DOE that makes
      Q
           a final decision about the identification of
15
16
           resources as being eligible for the National
17
           Register of Historic Places?
18
           (Widell) No.
      Α
19
           Who makes that decision?
      0
20
      Α
           (Widell) DOE recommends what is eligible and
21
           then consults with DHR, and usually there is
22
                       If there is not agreement, there is
           agreement.
23
           a process to pursue related to that.
24
      0
           And that's also something that that process is
```

```
1
           also covered by the Programmatic Agreement?
           (Widell) Yes. And federal regulations.
 2
      Α
 3
           Okay.
      Q
               PRESIDING OFFICER HONIGBERG: Hang on, Mr.
 4
 5
           Aslin. Off the record.
 6
                   (Discussion off the record)
 7
      Q
           Okay. And now we are skipping ahead, we were
 8
           just speaking about stipulation 3, correct?
 9
           (Widell) Yes.
      Α
10
          And now I'm going to skip ahead to stipulation 4
      0
11
           which is titled Assessment of Effects on
12
           Historic Properties within the APE. And broadly
13
           speaking, this is the next phase within the 106
14
                     After identification is assessment of
          process.
15
           whatever effects there may be on those resources
16
           that have been identified, correct?
17
           (Widell) Yes. The effects are identified as
      Α
18
           three types.
19
           We've had testimony on that.
      0
20
      Α
           (Widell) Yes. Correct. Okay.
           Go to the next page, please.
21
      0
22
                      So in the middle of this, this is
               Okay.
23
           page 23 now of the Programmatic Agreement, and
           in the middle of the page under Section E 2 it
24
```

```
1
           speaks to the appropriate effects documentation,
 2
           and that directs you to create Effects Tables;
           is that correct?
 3
 4
      Α
           (Widell) Yes.
 5
          And that is what's been submitted recently.
      0
 6
           Well, there was some submitted prior, but we
 7
           have gotten a recent batch that was Exhibit 196
           B; is that correct?
 8
 9
      Α
           (Widell) Yes.
10
          We're going to come back to those in a minute,
      0
11
           but I wanted to flag it in the agreement.
12
               Move to page 26, please. And then
13
           stipulation 5 which begins on page 26 addresses
14
          Resolution of Adverse Effects. Am I correct
15
           that that is the portion of the process that
16
           deals with avoidance/minimization and mitigation
17
           of effects?
18
           (Widell) Yes. I would clarify that often
      Α
19
           avoidance and minimization begins even prior to
           that Resolution of Effects as well.
20
21
      0
           Understood. This is the process to kind of take
22
           it to the end game.
23
           (Widell) Yes.
      Α
24
           And on the next page which is page 27, there is
      0
```

1 reference to a requirement that the Applicant 2 prepare a HPTP which somewhere above is defined 3 as the Historic Properties Treatment Plan; is 4 that correct? 5 (Widell) Yes. Α 6 And would you agree that that is the plan that 0 gets into some of the details about mitigation 7 efforts that may be needed for properties that 8 9 have an adverse effect? 10 Α (Widell) Yes. According to stip 5 A on the plan for resolution of adverse effects will be 11 12 documented as part of it. So usually there is 13 discussion about the properties that have 14 adverse effects that cannot be basically changed 15 through avoidance or minimization, and they, the decisions on how to deal with that would be 16 17 documented as part of the Historic Properties 18 Treatment Plan. 19 Would you agree that the Programmatic Agreement Q 20 itself doesn't get into the details for specific 21 mitigation of individual properties, and that's 22 something that would be in the Historic 23 Properties Treatment Plan? 24 (Widell) Yes. Α

1 Q Has the Historic Properties Treatment Plan been 2 created in this, for this undertaking? 3 Α (Widell) I'm going to refer to my colleague, Dr. Bunker, regarding the Historic Properties 4 5 Treatment Plan. 6 (Bunker) The answer to your question is it has Α not been finalized. It has not been completed 7 in whole. However, last year portions of it 8 9 were in draft preparation as a starting point. 10 The plan now will go forward and be completed as 11 part of this Agreement. 12 Okay. And you said it will go forward. Is Q 13 there a time frame for its completion? 14 (Bunker) I don't know that. Α 15 0 Does the completion of the -- I'm going to use 16 the acronym, HPTP, require a final determination 17 of adverse effects by DHR and DOE before you can 18 complete the plan? 19 (Bunker) I'm really not sure of that sequencing. Α 20 But the mitigation will be, the mitigation plans 21 for the specific effects are part of what 22 happens in Step II of the plan. 23 Okay. So if the plan is going to address 0 24 mitigation of adverse effects, you first need to

```
1
           know which effects, where there are adverse
 2
           effects; isn't that right?
           (Bunker) Yes.
 3
      Α
           And that determination is something that is done
 4
      0
 5
           through DOE and DHR within the 106 process,
 6
           correct?
 7
      Α
           (Bunker) Yes.
           So until that determination is made within the
 8
      Q
 9
           106 process, you wouldn't be able to have a
10
           final HPTP to address mitigation of adverse
11
           effects?
12
      Α
           (Bunker) That's correct.
           Okay. And at that point, there is no final
13
      0
14
           determination from DHR and DOE on adverse
15
           effects for the entirety of the Project.
16
           (Bunker) Not to my knowledge.
      Α
17
           Ms. Widell, do you agree with that?
      Q
18
           (Widell) Yes.
      Α
19
           Okay. So we heard a lot about the Programmatic
      0
20
           Agreement during your testimony a week or so
21
           ago, maybe a couple weeks now, as addressing
22
           these mitigation issues for specific properties,
23
           but if I'm understanding correctly, it's really
           the HPTP which is a subset or follow-on to the
24
```

```
1
           Programmatic Agreement that will have that
 2
           detail in it; is that right?
           (Widell) Yes.
 3
      Α
           Okay. And I believe, Dr. Bunker, you indicated
 4
      0
 5
           that you're not sure when that plan may be
 6
           complete.
           (Bunker) I don't know the dates, no.
 7
      Α
           Since you're answering that question about the
 8
      Q
 9
           plan, am I correct to assume that you've been
10
           involved to some extent with the drafting of
11
           that plan?
12
      Α
           (Bunker) Yes. I was involved last winter in
13
           preparing information at the request of Mark
14
           Doperalski.
15
      Q
           Is Mr. Doperalski the primary person working on
16
           that plan for the Applicant?
17
           (Bunker) To my knowledge, he is.
      Α
18
                  Thank you. At this point in the process,
      Q
           Okay.
19
           would you agree that we have the Applicant's,
20
           specifically, your recommendations about where
21
           there may be adverse effects from the Project,
22
           but we don't have a final determination from DOE
23
           and DHR, and we don't know what specific
24
          mitigation elements may be recommended or
```

1 proposed for those adverse effects? Is that a 2 correct summary of where we stand? 3 Α (Widell) Yes, but let me explain. The Effects Tables were completed not by myself alone, 4 5 although I fully participated in the completion 6 They were, the Effects Tables of them. themselves were designed by DHR, basically, and 7 given for their completion and working with 8 9 Preservation Company on the Effects Tables, 10 professionals in the field completed them. 11 Q I understand that you're not solely responsible for all those decisions. 12 13 Α (Widell) Thank you. 14 I'd like to turn now to -- I want to touch on 0 15 one other part. Sorry. 16 Within the HPTP, do you agree that there 17 are subplans or specific plans that are part of 18 that broader document? And I can direct you to 19 the next few pages of the Programmatic 20 Agreement. On the bottom of the page that we're 21 looking at it says it will include plans for 22 monitoring, unanticipated discoveries and 23 training of NPT personnel which will be 24 stand-alone appendices to the HPTP?

```
1
      Α
           (Widell) Yes. And I'm sure that's why
 2
           Dr. Bunker was involved because the
 3
           archeological resources, those are areas that
 4
           are important. They're also important for above
 5
           ground resources in this particular Project.
 6
           Yes, and if we flip ahead to the next page,
      0
           there's a number of detailed requirements for
 7
           the monitoring plan, and then on the following
 8
 9
           page, 29, Requirements for an Unanticipated
10
           Discovery Plan, and for a training plan. And
11
           those are all details about how the Applicant
12
           will handle historic and cultural resources
13
           going forward within the 106 process; is that
14
           correct?
15
      Α
           (Widell) Yes.
16
      Α
           (Bunker) Yes.
17
           And we, at this point, have any of those plans
      Q
18
           been finalized?
19
           (Bunker) No.
      Α
20
      Α
           (Widell) No.
21
      0
           Do you have an expectation of when they may be
22
           finalized?
           (Bunker) The schedule hasn't been set. I don't
23
      Α
24
           know if there is a date.
```

```
1
          That's fair enough. Can you estimate that it is
      0
 2
          going to be finalized within the next six
 3
          months? Or a year? Ballpark? Anywhere within
 4
          that range?
 5
      Α
           (Bunker) I'm sorry. It's not my decision.
 6
          don't know. I would hope sooner rather than
 7
          later.
          Fair enough. But it could be a year from now?
 8
      Q
 9
      Α
           (Bunker) I don't know.
10
          You don't have enough information. Okay.
      0
11
               Now I'd like to shift gears a little bit
12
          and move into the discussion of the cultural
13
          landscapes. If I understand correctly, Ms.
14
          Widell, the DHR at some point during this
15
          process requested that the Applicant conduct
16
          studies of potential cultural landscapes within
17
          the Project area?
18
           (Widell) Yes, but let me clarify that.
      Α
19
          first mention of them came from the Project Area
20
          Forms that were completed by the Department of
21
          Energy. In those Project Area Forms, there were
22
          two study areas that were identified. They were
23
          the Pemigewassett River Valley and the Suncook
          River Valley, and Public Archeological
24
```

1 Laboratories were identified by Northern Pass to 2 complete those cultural landscape reports to see 3 if there were, in fact, any cultural landscapes 4 in those two study areas. 5 Okay. Thank you. And at some point, that 0 6 expanded to a five different study areas; is that correct? 7 (Widell) Yes. In January of 2017, a meeting 8 Α 9 was, a public meeting was held with the 10 consulting parties, and three additional study 11 areas were added. They were the Ammonoosuc 12 River Valley, the Great North Woods, and 13 Deerfield, and there was information provided 14 to, and I'm now going to use the term PAL which 15 is the consultant that completed the cultural 16 landscapes, from local historians and included 17 letters, emails, local documents, suggestions 18 for information and provided to PAL to take into 19 consideration in the completion of the study 20 area for cultural landscapes. 21 Thank you for that clarification. 0 The PAL, 22 Public Archeology Laboratory, I'll stick with 23 PAL, I think you just said conducted all five of 24 those studies?

1 Α (Widell) Yes. 2 Did you have a role in the creation or the Q 3 development of those studies? (Widell) Yes. I participated and reviewed and 4 Α 5 commented and also visited them. Yes. 6 Okay. And those five studies have been 0 7 submitted as Applicant's Exhibit 211, I believe. (Widell) Let me clarify for you. The study 8 Α 9 areas were quite large, except for Deerfield, 10 but they were quite large, and from those study 11 areas then there were specific areas that were 12 identified as cultural landscapes. Those that 13 were in or proximate to the area of potential 14 effects for the Northern Pass Project, and those 15 that were within the study area but not in any 16 way close or proximity to the area of potential 17 effect. So there were ten cultural landscapes 18 out of those four study areas that were 19 identified, and I believe you know that 20 Deerfield, it was decided that Deerfield did not 21 warrant completing a cultural landscape study. 22 Q All right. You got ahead of me, but that's 23 fine. So to summarize, there were five. You 24 identified the five study areas?

```
1
      Α
           (Widell) Yes.
 2
           PAL conducted the studies and identified within
      Q
 3
           four of those study areas a total of ten
           cultural landscapes, potential cultural
 4
 5
           landscapes that are in or adjacent to the APE.
 6
           (Widell) Yes.
      Α
           Then in addition to those ten, I counted between
 7
      Q
           13 and 16 additional potential cultural
 8
 9
           landscapes that were recommended for future
10
           study because they were outside of the APE.
                                                         Is
11
           that correct?
12
           (Widell) Yes. That's what I had just stated,
      Α
13
           yes.
14
          And those, all that information is outlined in
      Q
15
           great detail within the cultural landscapes
16
           studies which are Exhibit 211?
17
           (Widell) Yes.
      Α
18
           We'll take a look at those in a second.
      Q
19
               For the ten cultural landscapes that were
20
           identified or potential cultural landscapes, you
21
           then went on and conducted an assessment of
22
           effects and produced Effects Tables; is that
23
           correct?
24
           (Widell) Not exactly. We did do Effects Tables
      Α
```

1 for the cultural landscapes, but the first thing 2 that really was done was better understanding 3 the significance, integrity, boundaries, important elements of the cultural landscape for 4 5 each of those ten and their proximity to the 6 area of potential effect. So we first really understood the integrity and significance of 7 each and every cultural landscape, and I 8 reviewed each of those and once again visited 9 10 those areas. 11 Q Is that the information that is contained in the different volumes of the studies? 12 13 Α (Widell) Yes. 14 I want to take a look at one of those cultural 0 15 landscape studies, and this is, yes, this is the 16 Ammonoosuc River cultural landscape, or sorry. 17 The Ammonoosuc River Valley study area Back up. 18 report or study. This is Volume 1 which 19 addresses the broad study area. And I want to 20 take a look first at what is a cultural 21 landscape because that's a little harder to 22 understand than a general historic resource 23 where you're talking about a structure or an 24 archeological site.

1 So what I'm showing you here is part of the 2 study report by PAL, and it's the definition of a cultural landscape, and I'll just read it into 3 the record, and everyone can think about it for 4 5 a second, but it says, "A cultural landscape is 6 a reflection of human adaptation and use of 7 natural resources and is often expressed in the way land is organized and divided, patterns of 8 9 settlement, land use, systems of circulation, 10 and the types of structures that are built. The 11 character of a cultural landscape is defined 12 both by physical materials, such as roads, 13 buildings, walls and vegetation, and by use 14 reflecting cultural values and traditions." 15 Did I that read that correctly? 16 (Widell) Yes. Α 17 And that's part of the National Park Services' Q 18 quidance document on cultural landscape, right? 19 Α Yes. 20 So I've read that several times, and it seems 0 21 very broad and not 100 percent clear what is 22 encompassed by cultural landscape. It seems to

where you have a group of structures perhaps

me that it is something broader than a district

23

24

1 that are identified together because it speaks 2 to natural resources, organization of land, 3 systems of circulation. Can you summarize what you understand a cultural landscape to be and 4 5 how it relates to what sort of we would maybe 6 call a more additional historic property? (Widell) Let me make sure I understand your 7 Α question. Would you like me to compare it, say, 8 9 to a Rural Historic District which is 10 traditionally the type of property, if you will, 11 that in New Hampshire has been used for larger 12 vernacular areas? 13 0 That would be a good start. 14 (Widell) There are actually very similar, and Α the Rural Historic District quidance is used in 15 16 the identification and understanding of cultural 17 landscapes. Cultural landscapes may also 18 include natural features, they might also 19 include land in between the buildings, but they 20 have concentrations of historic buildings. And 21 what is very similar, of course, is that you are 22 still using the same criteria for integrity and 23 significance that we talked about previously 24 when I was here testifying before for individual

1 historic properties, meaning the A, B, C or D 2 National Register criteria of broad patterns of 3 history or architecture or biography and also the 7 measurements of integrity that have been 4 5 established by the National Park Service. 6 Did that help? So would you agree that a cultural 7 Q Somewhat. landscape can include, features I think is the 8 9 right word, but correct me if that's not, 10 features that are not by themselves a historic 11 property? 12 Α (Widell) Could you give me an example? 13 0 I'm thinking of things like where it says in the 14 definition of patterns of land use or systems of circulation. 15 16 (Widell) Patterns of land use. Good example in Α 17 New Hampshire would be the range road system 18 which is a pattern of the way land was divided 19 during settlement periods. Land use, obviously fields, farm fields, versus a mining district 20 21 where the use of land would be very different. 22 Those are two examples of land use that would 23 have patterns that you would be able to read in

the landscape and identify because you'd be able

24

```
1
           to say oh, this is a different way of using the
 2
           land or the land has been divided or even
 3
           getting around it which is circulation patterns.
           Okay. And that's roadways and different, what,
 4
      0
 5
           okay.
 6
               Am I correct in my understanding that a
 7
           number of fields together may not be historic
           but when you look at how they relate to each
 8
 9
           other and associate together with historic
10
          properties but also just a way to look at the
11
          history of our state that that can then become a
12
           cultural landscape?
           (Widell) It really depends upon the presentation
13
      Α
14
           of those things that are in the definition that
           the Park Services give.
15
16
           And again, you need significance and integrity
      Q
17
           in order to be a landscape?
18
           (Widell) Yes.
      Α
19
           I think another way that, what I'm trying to get
      0
20
           at is there are certain contributing resources
21
           or features that make up the pieces of the
22
           cultural landscape, right?
23
           (Widell) Yes.
      Α
24
           And not all of those would necessarily by
      0
```

1 themselves be historic properties or historic 2 resources individually? 3 Α (Widell) That is true. They might be features, character defining features, that contribute to 4 5 significance, but they might in and of 6 themselves not be. Yes. And the flip side of that, there may be 7 Q contributing resources within a cultural 8 landscape that are individually historic 9 10 resources. 11 Α (Widell) Yes. 12 And so we're looking at some conglomeration or 0 association of those different features and 13 14 historic resources that relate to each other in 15 the way that reflects the history of that 16 region. 17 (Widell) Yes. Α 18 Okay. So I want to start looking at some of the Q 19 specifics of the different landscapes that were 20 identified. And this I'm showing you now is 21 Figure 5-1 from the Ammonoosuc River Valley 22 Study Area Report which is Applicant's Exhibit 23 211. I'm not sure which tab it is, but it's in 24 And this is a map of the study area there.

```
1
           that's the dark black line that goes around the
 2
           big parcel shown on the map, and then there are
 3
           two cultural landscapes identified in the
                  Is that correct?
 4
           center.
 5
      Α
           (Widell) Yes.
 6
           So those were the two cultural landscapes or
      0
           potential cultural landscapes identified within
 7
           this study area that are in or adjacent to the
 8
 9
           APE.
10
      Α
           (Widell) Yes.
11
      Q
           And they are the Gale River Cultural Landscape
12
           and the Ham Branch River Cultural Landscape.
13
      Α
           (Widell) Yes.
14
           Okay. And then jumping ahead a few pages to
      Q
15
           Figure 5.2, these are the two potential cultural
16
           landscapes that were identified for or
17
           recommended for future study but are not within
18
           or adjacent to the APE; is that correct?
19
           (Widell) Yes.
      Α
20
           And that's the basic format for all of the
      0
21
                     They looked at those that are within
           studies.
22
           the APE and those that are without?
23
           (Widell) Or in close proximation, yes.
      Α
24
           Okay. So with that kind of high level
      0
```

```
1
           background, let's look at the Ham Branch River
 2
           Cultural Landscape.
               So this is a map from, believe it's Volume
 3
           2 of the Ammonoosuc River Valley Study Area that
 4
 5
           shows specifically the Ham Branch River Cultural
 6
           Landscape; is that correct?
           (Widell) Yes. This is, I have Figure 2. --
 7
      Α
           Figure 2.1?
 8
      Q
 9
           (Widell) You have Figure 2.1.
      Α
10
           It's on page 5, Volume 2.
      0
11
      Α
           (Widell) I have it. Thank you.
                                             Yes.
12
           So this shows the outline of the cultural
      0
13
           landscape area and also identifies some of the
14
           contributing resources within the cultural
15
           landscape; is that right?
16
      Α
           (Widell) Yes, but let me explain. They are more
17
           contributing elements, yes, is what they were,
18
           yes.
19
           Contributing elements as opposed to resources?
      0
           (Widell) Well, for purposes of this discussion
20
      Α
21
           they are the same.
22
           Okay. And this also shows patterns of land use
      Q
23
           to some extent where it shows agricultural land,
24
           wooded land, trails and other aspects of the
```

```
1
           landscape?
 2
           (Widell) Yes.
      Α
 3
           That's important in a cultural landscape because
      0
           it goes to the discussion we had before; these
 4
 5
           are all features that relate to each other to
 6
           show the historic association of this area?
           (Widell) Yes, and it might also show modern
 7
      Α
           development, modern intrusions where they're not
 8
 9
           likely to be contributing resources or
10
           contributing elements, yeah.
11
      Q
           Okay.
                  Okay. I lost track of what page this was
12
           because it's farther down in the report.
13
           this is a section of the study report that is
14
           talking about visual character and intangible
15
           qualities. Are those aspects of the cultural
16
           landscape that kind of go into that higher level
17
           review other than looking beyond just the
18
           individual resources within the landscape?
19
           (Widell) I want to understand your question so I
      Α
20
           can answer it accurately. Can you help me
21
           clarify it?
22
      Q
           Yes, I'm trying to understand what intangible
23
           qualities are for a cultural landscape.
24
           Intangible qualities go directly to the
      Α
```

1 integrity test of feeling, for one thing, 2 particularly, and feeling is where, is the 3 property able to convey its significance, meaning in laymen's terms, could you understand 4 5 and learn from place, learn about the history of 6 place by being in that location. Are there 7 enough qualities and integrity in that place so 8 that you can actually see what it might be like 9 in the late mid 19th century at that farm. 10 Okay. 0 11 Α (Widell) Okay? 12 That's helpful. Thank you. And this 0 Yes. 13 speaks to both land use and natural resources of 14 the area as well as patterns of development and 15 circulation, the roadways; is that correct? 16 (Widell) Yes. Α 17 Those are all components to what makes it a Q 18 cultural landscape. 19 (Widell) They're actually describing the Α 20 character of this particular cultural landscape, 21 yes. 22 And it also speaks to recreation and Q tourism-related resources and agrarian 23 24 resources?

```
1
           (Widell) Yes. It says that.
      Α
                                         Um-hum.
 2
           And are those referenced here because they are
      Q
 3
           some of the character defining features of this
           cultural landscape?
 4
 5
           (Widell) Yes. And also it is information
      Α
 6
           related to the history and land use patterns,
 7
           yes.
 8
           Okay.
      Q
 9
      Α
           (Widell) What the properties were used for, yes.
10
          And then for each of those cultural landscapes
      0
11
           that were identified, because they were
12
           identified as cultural landscapes, there was a
13
           determination that they have some significance
14
           and integrity, and the significance could be
15
           under any of the four criteria, A, B, C and D?
16
           (Widell) Yes.
      Α
17
           I'm not going to go through that for each of
      Q
18
           these, but am I correct that it's safe to assume
19
           that because these have been identified in the
           view by PAL were found to have significance and
20
21
           integrity?
           (Widell) Yes.
22
      Α
23
           I'm going to turn now to take a look at the
      0
24
           Effects Table for this cultural landscape which
```

{WITNESS PANEL: WIDELL, BUNKER}

```
1
           is part of Applicant's Exhibit 196 B.
                                                   I'll give
 2
           you a second to find it.
 3
      Α
           (Widell) I have it. Thank you.
           There's one of these Effects Tables for each of
 4
      0
 5
           the five cultural landscapes that were
 6
           identified, correct?
 7
      Α
           Yes.
           And who created the Effects Tables?
 8
      0
 9
      Α
           (Widell) DHR.
10
           DHR.
      0
11
      Α
           (Widell) Yes.
12
           Did they create them on their own or did they
      0
13
           have input from the Applicant and its
14
           consultants?
15
      Α
           (Widell) The Applicant prepared a draft and
16
           submitted it to DHR, and there were discussions.
17
           I participated in some of those discussions.
18
           And so for each Effects Table there is a
      Q
           finding, a recommended finding of whether there
19
20
           is an adverse effect or no adverse effect,
21
           right?
22
      Α
           Yes.
23
           Is that finding recommended by DHR at that
      0
24
           point?
```

1 (Widell) No. DHR has not reviewed the Effects Α 2 Tables at this point. Okay. But I think you just testified that they 3 Q created the Effects Table. 4 5 (Widell) Yes. I'm sorry if I didn't make it Α 6 clear. They have, they created the format. The 7 language. The numbering system. They incorporated the definition of an adverse effect 8 from the Section 106 process in the federal 9 10 regulations and then all of the examples that 11 needed to be gone through and considered for 12 each historic property or in this case cultural 13 landscape. Does that help? 14 Thank you. That was my understanding as Q Yes. 15 well. 16 (Widell) And there were photographs and maps and Α 17 that sort of thing --18 Q Yes. 19 (Widell) -- that needed to be included. Α 20 So DHR has a form and a sort of procedure that 0 21 you, you being broadly, the Applicant and its 22 consultants, followed to create these actual 23 documents that were submitted as Effects Tables? 24 Α (Widell) Yes. DHR had requested that the

```
1
           information be provided in a particular format.
 2
           To my knowledge, this is the first time, but --
 3
      0
           Okay.
           (Widell) In this particular format. It's new.
 4
      Α
 5
           Although the questions and everything are
 6
           standard for determining adverse effect.
 7
      Q
           Okay. And then was it PAL then that compiled
           this information in this format?
 8
 9
      Α
           (Widell) No. Preservation Company and myself
10
           participated in this review.
11
      Q
           Okay.
                  Thank you. And so you, am I correct in
12
           assuming that you relied on the studies
13
           performed by PAL in part in developing these
14
           Effects Tables?
15
      Α
           (Widell) Yes. And in some cases, certainly
16
           there were a number of historic properties that
17
           were incorporated into the cultural landscapes
18
           that we were familiar with from the submission
19
           of the assessment report in October of 2015 and
20
           then subsequent inventory forms that were
21
           completed as well.
22
      Q
          For each of these Effects Tables, there's sort
23
           of the form on page 2 which we can show you.
24
           And then there's a description and a set of
```

```
identification of properties with historic
 1
 2
           features in or near the APE.
                                         Is that correct?
 3
      Α
           (Widell) In this particular Effects Table, what
           was used was a table that identified individual
 4
 5
          historic properties or features on the landscape
 6
           that might be affected by the underground.
           so we took a look at each one of those
 7
           particular features and displayed them in a
 8
 9
                   That was done for all of the cultural
10
           landscapes for the underground section of the
11
           Project.
12
           Thank you. So that starts on page 4 of the
      Q
           Effects Table.
13
14
           (Widell) Yes.
      Α
15
      0
           Thank you. That's specific to the direct APE,
16
           the 20-foot from edge of pavement area?
17
           (Widell) Yes.
      Α
18
      Q
           Okay.
19
           (Widell) But obviously they're, yes. Yes.
      Α
20
           And it says that the table below identifies
      0
21
           those properties with historic features in or
22
           near the direct APE. Is this a complete list of
23
           all properties with historic features within the
24
           APE?
```

1 (Widell) Within the direct APE. Α Yes. 2 believe that it is comprehensive. Okay. And in this, for the Ham Branch River 3 Q cultural landscape, which we didn't really talk 4 5 about it, but it runs through kind of the 6 southern portion or southwest portion of 7 Franconia down Route 116 through Easton; is that 8 correct? 9 Α (Widell) Yes. That is on page 9 under number 4, 10 the relationship of the Project to the property. 11 Yes. And we have precisely how many linear 12 miles that is. 13 0 And then there's maps included in the 14 Effects Table as well. 15 Α (Widell) Yes. 16 Okay. So sticking with page 4 here, this table Q 17 of properties that are in or near the direct 18 APE, there are several that appear to be very 19 close to the roadway. So, for example, the 20 second one on the page is a barn, and it says it 21 is sited close to the road and the entire long 22 side is within the APE. So do I understand 23 correctly that the edge of that barn is actually 24 within the 20 feet of the pavement for this

```
1
           area?
 2
           (Widell) Yes.
      Α
 3
           Okay. And then there's four or five pages of
      0
 4
           these identifying properties that are within the
 5
                 And some of those are stone wall features,
           APE.
 6
           some of them are structures, some of them are
 7
           mature trees, and other historic features, all
           that are within the APE?
 8
 9
      Α
           (Widell) Yes.
10
           Okay. So if we go back to page 2, the table on
      0
11
           the evaluation table, I guess I will call it, in
12
           that first box under evaluation on the
           right-hand column, it indicates that signs and
13
14
          property markers, building facades, steps and
           stone walls are located within the APE.
15
                                                     Is that
           referring to those features that are shown in
16
17
           the next several pages?
18
           (Widell) Yes, it is.
      Α
19
           And then it goes on to say, "but direct effects
      0
20
           of those features will be avoided by Project
21
           design."
22
      Α
           (Widell) Yes.
23
           So in your and Preservation Company's assessment
      0
24
           of the effects, you've determined that the
```

1 Project will avoid interacting with any of those 2 properties that are within the 20-foot APE? 3 Α (Widell) Yes. Are you aware that at this point in the process 4 0 5 the final design for the Project has not been 6 completed? 7 Α (Widell) Yes. Are you aware that the Project may or may not go 8 Q 9 outside of the bounds of the roadbed itself into 10 the shoulders? 11 Α (Widell) Yes. 12 And are you able to say, given that there's no 0 13 final design, are you able to, how are you able 14 to say with assurance that all the properties that are within the APE will be avoided? 15 16 (Widell) Well, we have provided this information Α 17 to the design engineers. There is also a 18 provision that if there is any disturbed areas, 19 and you will see it is in the same block on the 20 last sentence, we'll be restored to 21 preconstruction conditions. So we will avoid, 22 our first choice, of course, these features. Ιf 23 that's absolutely not the case, we will restore 24 the disturbed areas to preconstruction

1 conditions. 2 Are you able to do that in all cases? Q Restore 3 mature trees that are cut down that may have, be part of the setting of the feature within the 4 5 cultural landscape? 6 (Widell) I don't believe that we had identified Α 7 any trees. I think there may be one in the next cultural 8 Q 9 landscape. We can get back to that. But if 10 you, with regard to the barn we took a look at, 11 if Project engineering requires that that area 12 be disturbed, how in your experience would that be handled? Would the barn be removed and then 13 14 replaced? (Widell) That's actual conjecture. I can't 15 Α 16 speak to that right now. 17 Well, in your experience, have you ever dealt Q 18 with an effect to a historic resource that 19 requires it's, I mean, if the Project has to go 20 through that part of the barn, it would either 21 be destroyed or there would be some other 22 mitigation that would be done. In your 23 experience, what types of mitigation are 24 possible?

1 (Widell) This is kind of a conjecture. Α 2 For any structure that might be within the path? Q 3 Α (Widell) For anything. Moving comes to mind. But having worked with this Project and these 4 5 Project engineers in discussions, I think that 6 they would go to a great deal of effort to avoid this historic property. 7 Okay. So when you state that any disturbed 8 Q 9 areas will be restored to preconstruction 10 conditions, if you're in a situation 11 hypothetically where engineering requires that 12 the Project is going to go through a structure 13 like this barn that we were looking at, that may 14 not be possible to restore it to its 15 preconstruction conditions? 16 (Widell) Not necessarily. It may be moved or it Α 17 may be moved and moved back. You know, I'm not 18 going to speak precisely about this barn. 19 giving you examples from previous experience. 20 Okay. Would you agree then that at this moment 0 21 we don't know which of these properties will 22 potentially have a direct effect because we 23 don't know the final engineering? 24 (Widell) No. I wouldn't agree with that Α

1 statement. 2 So why do you not agree with that statement? 0 3 Α (Widell) Because our Project design will avoid these features that have been identified in the 4 5 final design. 6 Is that commitment something that is 0 Okay. 7 documented anywhere other than in this Effects Table? 8 9 Α (Widell) I cannot speak to that, but I do know 10 that this information has been provided to those 11 completing the final design. 12 Fair enough. Farther down in the evaluation Q 13 table here, under paragraph V, I guess, which 14 deals with the introduction of visual, 15 atmospheric or audible elements that distinguish the significance of the integrity of the 16 17 property's significant historic features, your 18 evaluation or your Preservation Company's 19 evaluation is that temporary construction 20 impacts consulting from Project construction 21 will not differ from those experienced in 22 typical state and local road construction 23 That statement, I can understand how projects. 24 it might relate to visual impacts, but it

{WITNESS PANEL: WIDELL, BUNKER}

```
1
           doesn't actually state there will be no visual
 2
           impacts, does it?
           (Widell) It does not state that.
 3
      Α
           Is it your opinion that there will be no visual
 4
      0
 5
           impacts to properties within the cultural
 6
           landscape?
           (Widell) Yes.
 7
      Α
           And does that opinion include understanding that
 8
      Q
 9
           the engineering of the Project may require some
10
           vegetation removal along the boundaries of the
11
           roadway?
12
      Α
           (Widell) I want to clarify your question there.
           Vegetation removal wouldn't necessarily cause a
13
14
           visual adverse effect. You're making that
15
           assumption in your question.
16
                I wasn't assuming it would have a visual
      Q
           No.
17
           effect.
18
      Α
           Okay.
19
           I'm asking if you considered the possibility of
      0
20
           vegetation removal.
21
           Absolutely. Yes.
      Α
22
           Are you aware of the specific portions of the
      Q
23
           Project where vegetation will be removed?
24
           (Widell) In this particular area or other
      Α
```

1 portions of the Project? 2 In this particular area, within the Ham Branch Q 3 River Cultural Landscape. (Widell) It was considered in our identification 4 Α 5 of character defining features. Yes. 6 When you say it was considered, you mean 0 vegetation removal was considered? And then you 7 said in your assessment of character defining 8 9 features. Did I get that correct? 10 Α (Widell) Okay. I want to clarify this because 11 some things are, you're identifying historic 12 character defining features that might be 13 affected by the Project. When you're doing an 14 Effects Table, you're determining whether there's an adverse effect being caused by the 15 16 Project. There might be bushes that are not 17 contributing to the character of the historic 18 resource. I cannot give you precisely an example. So if there were historic features of 19 20 the setting that were identified, they would 21 have been part of this discussion in the identification of character defining features 22 23 that would be affected by the Project. I don't

want to use too much language.

24

1 0 I think you've answered the question. 2 you. 3 Α (Widell) Okay. But at this moment in time, you do not have 4 0 5 specific information about what vegetation will 6 be removed during the construction of this 7 Project, do you? (Widell) No. Not precisely. 8 Α 9 Okay. Thank you. The table that it appears on 0 10 pages 4 through 8 of the Effects Table, we talked about a little bit. That's the listing 11 12 of properties with historic features that are in 13 or near the direct APE, correct? 14 (Widell) Yes. Α I think there are 19 or 20 that are listed for 15 0 16 this cultural landscape. 17 (Widell) Eighteen, it looks like. Α 18 Roughly. 19 Thank you. In the cultural landscape study that 0 20 was performed by PAL, there is a list of 21 resources that are within the area of -- not 22 visual. In this case if you could, in the 23 middle of this bottom paragraph which is on page 24 52 of Volume 2 of the Ammonoosuc River Valley

```
1
          Study which is part of Applicant's Exhibit 211,
 2
          PAL identified, quote, "The following identified
 3
          resources are located within or immediately
          adjacent to the APE for the Northern Pass
 4
 5
          Project," and then there is a listing of a
 6
          number of resources.
 7
      Α
           (Widell) Yes. I see that.
          When I tried to compare this list to the table
 8
      Q
 9
          that is in your Effects Tables, I couldn't match
10
          them up. In fact, the addresses that are listed
11
          here, there are some that match, but not all.
12
          Could you explain why there's a discrepancy
          between the two lists?
13
14
           (Widell) Yes. The Effects Table is actually
      Α
15
          precisely the character defining features that
16
          would be affected potentially by the
17
          underground. There may be some properties that
          would not potentially be affected once we made
18
19
          an actual site visit to the property.
20
          So where PAL created this list, are you
      0
21
          testifying that this list includes properties
          that do not have character defining features?
22
23
           (Widell) No.
      Α
24
          Okay. Clarify for me what you're trying to
      0
```

1 explain. 2 (Widell) They may not have character defining Α 3 features that upon visiting them were in close proximation to the underground APE. 4 5 Okay. So the distinction being the identified 0 6 resources may be within the APE but character defining features of those resources may not? 7 (Widell) Correct. It might be affected by the 8 Α 9 Project. Some of them may not have a stairway 10 that's within the direct APE. They may sit back 11 sufficiently from the roadway, not to be 12 affected, although they are in the APE. 13 that help? 14 Are we talking about direct and indirect APE? Q Is that the distinction? 15 16 (Widell) No. Your house has a front stair. Α You 17 can look at that table. You can see them. 18 is in close proximation to the pavement and 19 obviously where the underground APE is. In that 20 case, that particular house is likely to be 21 where there could be a direct effect. 22 If your house does not have a set of stairs 23 and sits back, it still is a historic building, 24 it may be within an APE but doesn't have any

```
features out there by the pavement that would be
 1
 2
           affected.
                      If you look at that table you'll see
           it has to do with fences and stairways and
 3
 4
           corners of buildings and front porches and
 5
           facades. Okay?
 6
      0
           Okay.
 7
      Α
           (Widell) Does that help?
          Yes, it did.
 8
      Q
               PRESIDING OFFICER HONIGBERG: Off the
 9
10
           record.
                   (Discussion off the record)
11
12
      BY MR. ASLIN:
           So this is now moving on to page 9 of the
13
      0
           Effects Table for Ham Branch River Cultural
14
15
           Landscape, and towards the bottom of the page,
16
           you discuss vibration and other temporary
17
           construction impacts. You state that those
18
           impacts from construction will not differ from
19
           those experienced in typical state and local
20
           road construction projects.
21
           (Widell) Yes.
      Α
22
           And you state that no blasting is intended to be
      Q
23
           used. And then you reference a preconstruction
           condition survey of structures will be conducted
24
```

1 in accordance with the New Hampshire DOT 2 standard specifications relating to vibration effects. 3 So I'd like to take a look at what those 4 5 standards are. Are you familiar with the 6 vibration monitoring standards? 7 Α (Widell) Yes. I am. And let me back up for one second. Within the 8 Q Ham Branch River Cultural Landscape, do you 9 10 understand that there will be horizontal 11 directional drilling for portions of the Project 12 along this area? 13 Α That was my understanding. 14 As well as trenching for burial of the line? 0 15 Okay. And those are the types of construction 16 activities that might have vibration impacts. 17 (Widell) Yes. Α 18 Okay. We've marked as Counsel for the Public Q 19 Exhibit 489 the Section 211 from the standard specifications that you referenced. 20 21 recognize that which is appearing on the screen? 22 Α (Widell) My copy of it is slightly different. 23 I'll represent this copy came off of New 0 24 Hampshire DOT's website. Downloaded it. So it

```
1
           may be a different version. This is a 2016
 2
           version.
           (Widell) This is 2016. It's Section 211.
 3
      Α
                                                       It.
 4
           just, it seems to have different numbering,
 5
           and --
 6
           Let's try walking through it and if you see
      0
           something that's materially different from your
 7
           version, we can discuss that.
 8
 9
      Α
           (Widell) I think that's fair. Thank you very
10
          much.
11
      Q
           As I read through this to try and understand it,
12
           I understand that under this specification there
           will be a vibration consultant brought on to
13
14
           look at potential effects of vibration?
15
      Α
           (Widell) Yes, and that actually is the person
16
           that I have. Mine begins at 3, down underneath
17
           the construction requirements, 3.23. So yes.
18
      Q
           Okay.
19
           (Widell) Vibration monitoring plan.
      Α
20
           So there will be a vibration consultant, and
      0
21
           they will come up with a vibration monitoring
22
           plan. Is that correct?
23
           (Widell) Yes.
      Α
24
           And it says at the end of Section 3.2 that the
      0
```

1 construction activity shall not begin until the 2 plan has been approved. Who approves that plan? (Widell) I do not know. 3 Α Okay. Would it be a safe assumption to say that 4 0 5 it's probably New Hampshire DOT? 6 (Widell) I cannot speculate. Α Neither can I actually so I don't know the 7 Q 8 answer. 9 Section 3.21 talks about conducting a test 10 program to establish the allowable vibration limits subject to approval. Have you in your 11 12 experience been involved with vibration 13 monitoring plans such as this one in other 14 Projects or dealing with other historic 15 resources? 16 Not such as this one precisely. Α (Widell) No. 17 But I have been involved in some Projects that 18 have had vibration concerns for historic 19 buildings, yes. And it goes on to specify some things 20 0 21 that should be included in the plan, and if you 22 look at Section 3.2.2(d) in the middle there it 23 says there's going to be a recommendation for 24 structures, utilities and all other facilities

1 as to whether they'll require a pre and post 2 construction condition survey, and it says 3 relevant to what we're talking about, this 4 recommendation shall pay particular attention to 5 historic structures, structures in poor 6 conditions, et cetera. So part of this is to as I understand it, assess whether there may be 7 vibration impacts to historic structures in the 8 9 vicinity of construction. Is that correct? 10 Α (Widell) It appears that is the intention, yes. I do not have this portion on the piece of, the 11 12 Section 211. As I said, mine begins at 3.2.3. 13 Му сору. 14 Okay. And is that the purpose of your reference Q to these specifications in your Effects Table? 15 16 (Widell) It was referenced to the Section 211 Α 17 provision, yes. If there is an indication that 18 there may be vibration, this is the method that 19 would be dealt with, yes. 20 0 Section E which you may or may not have under 21 3.2.2 says. "Recommendations. If it is 22 determined that the proposed construction 23 activity could not be reasonably implemented 24 without exceeding vibration limits that are

1 necessary to protect adjacent facilities." 2 grammar is a little funny there, but I take that to mean that there could be a situation where 3 4 the vibration consultant would say you can't 5 perform the particular construction that you 6 wanted to in this location because it may exceed vibration limits. Is that your understanding? 7 8 Α (Widell) That's what it says, yes. 9 And then the next section, 3.2.3 at the top of 0 10 the next page goes on to say, "The engineer may 11 require modifications to the submittal to 12 include but not limited to surveying and 13 monitoring of additional structures, a number of 14 monitoring sites and the distances for 15 monitoring." 16 So it seems to me that part of this 17 specification is an iterative process of 18 assessing the impacts of vibration, and in order 19 to prevent any vibration impacts to any 20 structure but in particular here, historic 21 structures, there is some authority given to 22 some unknown entity to require modifications to 23 the Project or at a minimum to stop the Project 24 temporarily while they figure out what to do

1 next.

If we go to the third page, indeed Section 3.8 at the top, it says in the second sentence, "If the monitoring data indicates that the ground vibration limits for any of the three mutually perpendicular components have been exceeded, the contractor shall cease the particular construction activity and submit a written report giving corrective action."

So again, this seems to suggest that if vibration becomes a factor, the Project could halt and there may have to be changes to the engineering developed, and am I correct that by referencing this section, you are asserting that if there are any potential vibration impacts to historic properties that they'll be dealt with through this process?

- A (Widell) Yes. That is the, yes, that is the commitment. Yes. To avoid adverse effects to historic properties or their character to final features, yes.
- Q Okay. Thank you. Are you aware of whether this vibration monitoring specification applies to horizontal directional drilling?

{WITNESS PANEL: WIDELL, BUNKER}

```
1
           (Widell) I do not.
      Α
 2
           And then looking at this, your evaluation for
      Q
 3
           this cultural landscape, your recommended
 4
           finding was no adverse effect, correct?
 5
           (Widell) Yes.
      Α
 6
           And if I read your Effects Tables correctly, the
      0
 7
           basis for that is because you found there would
 8
           be no visual impact and that all direct impacts
 9
           will be avoided.
10
           (Widell) Yes.
      Α
11
      Q
           And again, we've discussed that the Project's
12
           final engineering hasn't been determined yet or
13
           finalized at this point, but your assertion is
14
           that the Applicant will find a way to avoid all
15
           effects.
16
           (Widell) Yes.
      Α
17
           Okay. Thank you. Off the record.
      Q
                   (Discussion off the record)
18
19
               PRESIDING OFFICER HONIGBERG: Why don't we
20
           take a ten-minute break.
21
                 (Recess taken 3:36 to 3:56 p.m.)
22
               PRESIDING OFFICER HONIGBERG: Mr. Aslin,
23
           you may continue.
24
               MR. ASLIN: Thank you, Mr. Chairman.
```

1 BY MS. ASLIN:

2

3

4

5

6

7

8

9

10

11

21

22

23

24

- Q I'm going to shift gears to the Gale River
 Cultural Landscape which is the second of two
 identified cultural landscapes within whichever
 section we're on. The Ammonoosuc River Valley
 Study Area. Okay. And so I've put up on the
 screen the map for the Gale River Cultural
 Landscape, and you can see it stretches from
 parts of Sugar Hill down through Franconia and
 through the downtown area of Franconia. Is that
 correct?
- 12 A (Widell) Yes.
- 13 Q That's part of Route 18 and this section of the 14 Project is underground. Correct?
- 15 A (Widell) Yes.
- 16 Q And, again, the map here shows a number of 17 contributing features that are part of the 18 cultural landscape?
- 19 A (Widell) Yes.
- 20 Q Okay. That gives us our context.

Similar to the Ham Branch River Cultural

Landscape, you completed an Effects Table, and
that is here as part of Applicant's Exhibit 196

B; is that right?

1 Α (Widell) Yes. 2 Okay. And it's the same format, correct? Q 3 You've got a, second page has an evaluation 4 table and then you have a description, and then 5 you have your table of properties with historic 6 features in or near the direct APE. 7 Α (Widell) Yes. And again, those include properties that have 8 Q 9 character defining features that are within 20 10 feet of the roadway that have the potential, the 11 theoretical potential to be impacted? 12 Α (Widell) Yes. 13 0 Okay. And I wanted to direct you to page 5. 14 And the third one down, you'll see, you've 15 listed there are mature trees along the sidewalk 16 and edge of the street that abut the APE. 17 then if we flip to the second, the next page, 18 page 6, again, in the middle picture you've 19 identified mature pine trees that front the 20 property named Pine Haven that are within and 21 abut the APE. 22 Α (Widell) Yes. 23 Are these two examples where the trees 0 themselves are character defining features? 24

```
1
           (Widell) Yes, they are.
      Α
 2
           In this case those trees, those mature trees or
      Q
 3
           both of those cases are within the 20-foot
           direct APE?
 4
 5
           (Widell) Yes.
      Α
 6
           And again, if for some reason, hypothetically,
      0
 7
           engineering said we can't put this anywhere but
           through those trees, then there would be a
 8
 9
           direct effect to those two properties or there
10
           would be a direct effect to the cultural
11
           landscape?
12
      Α
           (Widell) Yes. But it's unlikely that New
13
           Hampshire Department of Transportation would
14
           allow that to happen.
15
      Q
          Understood. But it's a possible, it's a
16
           potentiality. Unlikely but it's a potential.
17
           And, again, we don't at this point know the
18
           final design of the engineering for the Project.
19
           So we can't say with a hundred percent certainty
20
           where the line is going to be buried along this
21
           route, correct?
22
      Α
           (Widell) Yes. The design has not been
           finalized.
23
24
           And if we flip back to page 2, again, you've
      0
```

```
1
           made similar findings here as to the last
 2
           cultural landscape where you find that there are
           features within the direct APE, but you state
 3
           direct effects on these features will be avoided
 4
 5
           by Project design and that any disturbed areas
 6
           will be restored to preconstruction conditions.
           (Widell) Yes.
 7
      Α
           And again, you find no visual diminishment of
 8
      Q
 9
           integrity.
10
      Α
           (Widell) Yes.
11
      0
           And because of those two findings that, you're
12
           finding that there will be no direct effect to
           the features within the APE and no visual impact
13
14
           you've identified or you and Preservation
           Company have identified no adverse effect for
15
16
           this cultural landscape, right?
17
           (Widell) Yes.
      Α
18
           And the same issue with regard to vibration for
      Q
19
           this landscape as well? Because it's an
20
           underground section, correct?
21
           (Widell) I do not believe that we thought that
      Α
22
           there would be any vibration.
                                           It's not
23
           specifically referenced but should that arise,
24
           yes.
```

1 On page 7 you do reference this specifications 0 2 from DOT for the Section 211 vibration. 3 Α (Widell) Yes. Thank you. It's in a different 4 place. Thank you. 5 Not a problem. So safe to say this, the 0 6 assessment of effects here and the potential 7 impacts or lack thereof in your opinion are similar to the Ham Branch Cultural Landscape 8 9 because it's also undergrounded? 10 Α (Widell) Yes. 11 Q And it's the same set of assumptions or findings 12 that lead you to that outcome? 13 Α (Widell) Yes. 14 Okay. Let's now turn to the Pemigewassett Study Q Area which included two identified cultural 15 16 landscapes, the first being the Franklin Falls 17 Dam/Hill Village Cultural Landscape. 18 And so I'm showing you Table 2.1-A which is part of Applicant's Exhibit 211. I believe this 19 20 would be in Volume 2 of the Pemigewassett 21 Cultural Landscape Study Report. And again, 22 this, it goes on to the next page going north, 23 but this identifies the area that is included in 24 the cultural landscape for the Franklin Falls

```
1
           Dam/Hill Village Cultural Landscape, correct?
 2
           (Widell) Yes.
      Α
           In this case, that includes a few different
 3
      0
           subsets of resources or features.
 4
                                               In the south
 5
           we have the Franklin Falls Dam complex, and then
 6
           at the top of the page here we have both the Old
 7
           Hill Village and the New Hill Village area of
 8
           the landscape.
                          Is that correct?
 9
      Α
           (Widell) Yes.
10
          And as I understand it, this landscape was in
      0
11
           part significant because of its history as an
12
           area of flood control management?
13
      Α
           (Widell) Yes.
                          It is.
14
          And the Old Hill Village was a village that had
      Q
15
           to be abandoned and a New Village created
16
           because of the likelihood of it being flooded;
17
           is that correct?
18
           (Widell) Yes.
      Α
19
           Would you agree that this cultural landscape
      0
20
           also is significant because it has designed
21
                      In this case, the New Hill Village is
           features?
22
           a designed village?
23
      Α
           (Widell) Yes. I believe it is significant under
24
           Criteria A for community planning and design.
```

```
1
           Yes.
 2
           Okay. And then also I believe it references in
      Q
 3
           the PAL report that there are designed
 4
           recreation areas within the designed landscape?
 5
      Α
           (Widell) Yes.
 6
           Let's take a look at that. Is that what's
      0
 7
           reflected here in the study report by PAL that
           there are designed recreational areas,
 8
 9
           landscapes?
           (Widell) Yes.
10
      Α
           And then there's a list of them down at the
11
      Q
12
           bottom of the highlighted section?
13
      Α
           (Widell) Um-hum.
14
           And where the significance comes in part from
      Q
15
           designed natural resources or recreational
16
           areas, would you agree that views from those
17
           recreation areas are character defining
18
           features?
19
           (Widell) They may be, yes.
      Α
20
           Would that apply generally to this entire
      0
21
           cultural landscape or at least portions of it
           where there are views that are part of the
22
23
           designed elements of the landscape?
24
           (Widell) Most likely related to the recreation,
      Α
```

```
1
                 Not so much to the archeological values of
           ves.
 2
           the Old Hill Village.
 3
           Okay. With regard to the Village, would you say
      Q
           then that the setting is part of the character
 4
 5
           defining feature?
 6
           (Widell) Yes.
      Α
           Okay. Now, we're looking at the Effects Table
 7
      Q
           for this cultural landscape, and that's part of
 8
 9
           Applicant's Exhibit 196 B, and, again, this is a
10
           little different for effects because it's an
11
           aboveground section of the Project, correct?
12
      Α
           (Widell) Yes.
           So we're not dealing with the 20-foot APE
13
      0
14
           anymore. We're dealing with a bigger APE, the
15
           whole right-of-way width, and then a larger
16
           indirect APE as well going out a mile to either
17
           side of the right-of-way?
18
           (Widell) It's a mile on either side of the, yes,
      Α
19
           the Project, yes.
20
                  Thank you. In this case, you again, you
      0
           Okav.
21
           and Preservation Company who created the Effects
22
           Table came to the recommended finding of no
23
           adverse effect for this cultural landscape?
24
                We did.
      Α
           Yes.
```

1 And is that largely because there's in your 0 2 opinion only limited visibility of the Project? (Widell) No. It is because the visibility does 3 Α not diminish the character, the significance of 4 5 the property in a way that it would make it no 6 longer eligible for the National Register. In the column on the right here, in the 7 Q Okay. section about Visual Impacts, you say, "Although 8 9 there will be views of the Project from certain 10 locations in the cultural landscape, they will 11 be limited by topography, vegetation and 12 distance and will not be extensive enough to diminish the cultural landscape setting for 13 14 landscape." 15 So when you say it doesn't diminish the 16 significance, that's because you found that the 17 views are of limited nature. 18 Α (Widell) Yes, and the significance of the 19 property in this case, its primary significance 20 is related to the flood control project, the 21 dam, the new Hill town and the old Hill town and 22 yes, the recreational properties contribute to 23 that significance, but its primary significance

has to do with the Franklin Falls Dam.

24

```
1
           You performed or let me ask it a different way.
      0
 2
           There was viewshed mapping used to assess the
 3
           visual impacts to this cultural landscape; is
 4
           that correct?
 5
           (Widell) Yes. We used viewshed mapping, yes.
      Α
 6
           And that viewshed mapping relies in part on
      0
 7
           vegetative screening?
 8
      Α
           (Widell) Yes.
 9
           Incorporates vegetative screening?
      0
10
      Α
           (Widell) Yes.
11
      Q
           I believe it states in your Effects Table that
12
           you also used 3-D modeling to assess what may or
13
           may not be visible from various places within
14
           the cultural landscape.
15
      Α
           (Widell) Yes, and there was also some photo sims
16
           in the back for Hill.
17
           In addition, you relied in part on Mr. DeWan's
      Q
18
           photo simulations?
19
           (Widell) Yes.
      Α
20
           And visual assessment. So going back to the
      0
21
           viewshed mapping and the 3-D modeling, did that
22
           modeling incorporate leaf-off conditions?
23
      Α
           (Widell) Could you repeat that? I want to make
           sure I get the precise --
24
```

1 0 Certainly. 2 Α Thank you. Sorry. That's quite all right. Any time you need a 3 0 repetition, that's fine. 4 5 The question was in your 3-D modeling did 6 you take into account both leaf-on and leaf-off conditions? 7 The 3-D modeling provides a tree 8 Α (Widell) No. 9 wall that is a conservative 40 feet. 10 possible certainly to see the Project without 11 that in the areas where forest area exists, but 12 we did not use that precisely to analyze and come to our decision on no adverse effect for 13 14 this cultural landscape. 15 0 When you say didn't use "that," what's the 16 "that"? (Widell) Not including where there would have 17 Α 18 been forested areas in our evaluation for view. 19 Okay. But you did use 3-D modeling to determine Q whether there would be views from various 20 21 locations within the cultural landscape? 22 Α (Widell) Yes. And if I'm understanding what you just testified 23 0 24 to, the 3-D modeling incorporates a vegetated

```
1
           tree wall?
 2
      Α
           Yes.
 3
           Forty foot.
      0
           (Widell) For where it is located. Where such a
 4
      Α
 5
           forest occurs within the particular viewshed
 6
           that you are looking at, yes.
           Okay. But it does not take into account
 7
      Q
           potential increased views that would occur in a
 8
 9
           leaf-off condition. In the winter.
10
      Α
           (Widell) It would be possible only by not
11
           including any forest characterization at all in
12
           the 3-D modeling, and so, no, we did not include
           no trees at all because that would not have been
13
14
           an accurate depiction of what the landscape
15
           actually showed.
16
           I understand. With regard to the photo
      Q
17
           simulations by Mr. DeWan, those were from
18
           specific scenic resource locations within the
19
           cultural landscape?
20
           (Widell) Yes, and they include leaf-off.
      Α
21
           Yes, but Mr. DeWan's photo sims do not take into
      0
22
           account all the various locations within the
23
           cultural landscape, correct?
24
      Α
           (Widell) No.
                         They do not.
```

```
1
           Right. And that's why you relied on the 3-D
      0
 2
           modeling and general viewshed analysis in
 3
           addition to come to your conclusions?
           (Widell) Yes.
 4
      Α
 5
           On page 3 you have a discussion of the New Hill
      0
 6
           Village and down at the bottom paragraph,
 7
           highlight that. It states here that the New
           Hill Village is itself a National Register
 8
 9
           eligible-village. Is that correct?
10
      Α
           (Widell) Yes.
11
      Q
           And it has approximately 110 contributing
           buildings within it?
12
13
      Α
           (Widell) Yes.
14
          Did your Visual Assessment take into account the
      Q
15
           visibility from one each of those contributing
           buildings?
16
17
           (Widell) No, not each of them, but where the
      Α
18
           viewshed mapping showed that there might be
19
           possible views we would have looked at that.
                                                          Τ
20
           would particularly point out also that the New
21
          Hill Village was identified as a Historic
22
          District in the Assessment Report that was
23
           submitted to the SEC with the Application in
          October of 2015. So we actually did an
24
```

1 evaluation, a visual evaluation for potential 2 adverse effects two years ago. 3 Is that what is referenced by the photo Q simulations of Veterans Memorial Park that 4 5 Mr. DeWan did? 6 (Widell) Yes. Α That's one location within the Hill Village that 7 Q was deemed to have a scenic quality? 8 9 Α (Widell) Yes. And they are separate. We also, 10 as I stated, previously looked at viewshed modeling in the Hill Village to see if there was 11 12 any potential views as well. 13 0 I want to go back to the point you were just 14 making that the new Hill Village was assessed 15 individually at a different part of this 16 process. Does that, does the fact that there is 17 an individually eligible resource within the 18 cultural landscape change the impact on the 19 cultural landscape in any way? 20 (Widell) No. Α No. 21 If an individually eligible resource within a 0 22 cultural landscape has an adverse effect, is it 23 the case that the cultural landscape will also 24 always have an adverse effect?

1	A	(Widell) No, not necessarily. And let me help
2		clarify that. The direction on the document
3		that was provided by the Division of Historic
4		Resources in New Hampshire at the point where
5		these cultural landscape reports were being
6		committed or created is and before I tell you
7		the reason why Division of Historic Resources
8		provided some guidance on this is this is
9		absolutely new and innovative for New Hampshire
10		to have ever done or received or required
11		cultural landscapes. So they used a document
12		from 1999 that was done by Caltrans which is the
13		California Department of Transportation for
14		identifying and evaluating historic landscapes,
15		and in that there is some direction for how to
16		determine adverse potential adverse effects in
17		cultural landscapes.
18	Q	Okay. Thank you for that.
19	A	(Widell) Okay.
20	Q	Can we go back to my question which was about
21		whether an adverse impact to an individually
22		eligible resource that is within a cultural
23		landscape would then necessarily result in the
24		cultural landscape having an adverse effect?

```
1
      Α
           (Widell) And I answered no. And the reason I
 2
          gave you more information is because in that
 3
          document, there's a very precise way that, well,
 4
          it's not very precise, but there is direction
 5
          for how to identify effects in cultural
 6
          landscapes.
          And those directions for effects, if I'm
 7
      Q
          understanding where you're going, is that you
 8
 9
          don't simply look at the individual effects to
10
          individual resources within the cultural
11
          landscape.
12
      Α
           (Widell) That is true.
13
      0
          Okay. Thank you. And for Franklin Falls Dam
14
          Cultural Landscape, we talked a bit about the
15
          designed recreation areas. I believe, well, I'm
16
          not sure. Did you assess the visual effect on
17
          those designed recreation areas within this
18
          cultural landscape?
19
           (Widell) Yes. We took it into consideration,
      Α
          and I think that it's discussed in the
20
21
          relationship with the Project to the property.
22
      Q
          And ultimately, you found there was not a
23
          significant visual impact?
           (Widell) Yes. That's correct.
24
      Α
```

```
1
           Not enough to create an adverse effect?
      0
 2
      Α
           (Widell) Yes.
 3
                  I'd like to take a quick look at the
      0
           other cultural landscape within the
 4
 5
           Pemigewassett Study Area. I apologize.
                                                     I have
 6
           an incorrect reference in my notes.
 7
               Based on your recollection, and you
           probably have the document in front of you, the
 8
 9
           Route 3 Franconia Notch Cultural Landscape runs
10
           from -- there we go. Just north of the
11
           Franconia Notch area of I-93 and then all the
12
           way down into the town of Woodstock. Is that
13
           correct?
14
           (Widell) Yes.
      Α
15
      0
           And with regard to this cultural landscape, the
16
           Project only impacts a small portion of the
17
           cultural landscape where it comes into the town
18
           of Woodstock off of Route 112?
19
           (Widell) Yes. Basically Woodstock Town Hall,
      Α
20
           yes.
21
           Then it runs south about a mile within the
      0
22
           cultural landscape?
23
      Α
           (Widell) Um-um.
24
           So this particular cultural landscape has a
      0
```

```
1
           relatively small relation to the Project.
 2
           (Widell) Yes.
      Α
           Because of that, in your Effects evaluation, you
 3
      0
           ultimately found no adverse effect?
 4
 5
           (Widell) Yes, but it wasn't necessarily because
      Α
 6
           it was a small area. We looked carefully at the
 7
           potential for adverse effects.
           And in this location it's underground Project,
 8
      Q
 9
           correct?
10
      Α
           (Widell) Yes.
11
      Q
           So this is similar to the Ham Branch and Gale
12
           River landscapes?
13
      Α
           (Widell) Yes. It is.
14
           Where because you found that all direct effects
      Q
           will be avoided by Project design and that there
15
16
           will be no indirect visual effects that there's
17
           no adverse effect to the --
18
           (Widell) Yes.
                          That's correct.
      Α
19
           And I wanted to just touch on one piece here.
      0
20
           If we go to page 4. One of the resources that's
21
           a contributing resource to this cultural
22
           landscape is also an eligible resource that's
23
           the Montaup cabins, is that right?
24
           (Widell) Yes.
      Α
```

```
1
           I guess one of the cabins is shown here in your
      0
 2
           Table of Properties that have encroachments in
 3
           the direct APE as being the facade of a cabin, a
           resurfaced sidewalk with old granite curbing and
 4
 5
           a fire hydrant are within the APE, correct?
 6
          Um-hum.
      Α
 7
      Q
           So in this case, you've separately assessed the
           Montaup cabins as a historic resource, correct?
 8
 9
      Α
           (Widell) Yes. An Inventory Form was completed
10
           on that Project, yes, and determined eligible.
11
           Individually. Yes.
           Is that an Effects Table for that individual
12
      0
13
           resource as well?
14
           (Widell) No. Not individually for that historic
      Α
15
          property.
16
           Okay. So to the extent that it's shown in my
      Q
17
           Effects Table, it's part of this cultural
18
           landscape?
           (Widell) I believe that's correct.
19
      Α
20
           In this case, one piece of that resource is
      0
21
           within the direct effect APE?
22
      Α
           (Widell) Yes.
23
          And your assumption is that direct effects will
      0
24
          be avoided for that?
```

```
1
           (Widell) Yes.
      Α
 2
           Let's turn to the Great North Woods which is
      Q
 3
           another of the study areas. Okay. So this is
 4
           Figure 5-1 of the cultural landscape study for
 5
           the Great North Woods, and this is in Volume 1
 6
           of that portion of Applicant's Exhibit 211. And
 7
           this shows the large study area of the blackout
           line and then the four individual cultural
 8
 9
           landscapes that were identified within the study
10
           area, correct?
11
      Α
           (Widell) Yes.
12
           And those are the Mount Prospect-Martin Meadow
      0
13
           Pond Cultural Landscape, the Lost Road Lost
14
           Nation Road Cultural Landscape, the Upper
15
           Ammonoosuc Cultural Landscape and the Harvey
16
           Swell Cultural Landscape, correct?
17
           (Widell) Yes.
      Α
18
           And that stretches through the North Country
      Q
19
           portion of the Project which is mostly
           aboveground but there are some smaller sections
20
21
           of undergrounding, correct?
22
      Α
           (Widell) Could you repeat that?
                                            I'm sorry.
23
                 This portion of the Project is mostly
      0
           Yes.
24
           aboveground?
```

1 Α Yes. 2 Except for a stretch? Q 3 Α There is a stretch up on the extreme north Yes. and also Dummer. 4 5 Okay. So now we have our orientation. 0 6 (Widell) I'm wrong about that. I'm sorry. Α The 7 extreme north part. Let's take a look at the Mount Prospect-Martin 8 Q 9 Meadow Pond Cultural Landscape specifically. 10 And that's shown here in Figure 2-1 from, it's 11 Volume 2 of the Great North Woods Study Area 12 Report. And this cultural landscape encompasses 13 Prospect Mountain and Weeks State Park and also 14 moving to the east the Martin Meadow Pond; is 15 that correct? 16 (Widell) Yes. It is. Α 17 And again, the map shows a number of Q 18 contributing resources within the cultural 19 landscape, correct? 20 (Widell) Yes. Α 21 This is another, this is page 56 of this same 0 22 document, and it states that only 27 percent of 23 the landscape lies within the APE for this 24 cultural landscape, correct?

```
1
      Α
           (Widell) Yes.
 2
           And so most of the landscapes outside of the
      Q
 3
           APE.
           (Widell) Yes. That's true.
 4
      Α
 5
           Okay. We'll go to the Effects Table.
      0
                                                   In this
 6
           case, the ultimate finding here, recommended
 7
           finding, rather, is that there is an adverse
           effect for this cultural landscape, correct?
 8
 9
      Α
           (Widell) Yes. For the Weeks State Park part of
10
           the cultural landscape, yes.
11
      Q
           Well, am I incorrect to say that there's an
12
           adverse effect on the cultural landscape as a
13
           whole?
14
           (Widell) That is to be determined by the DOE in
      Α
           consultation with DHR.
15
16
           But it's your recommended finding?
      Q
17
           (Widell) Our recommended finding is that there
      Α
18
           is an adverse effect on the Weeks State Park
19
           portion of the cultural landscape.
20
           On the Effects Table, it uses the words
      0
21
           primarily with respect to the portion of the
22
           cultural landscape comprising part of Weeks
23
           State Park.
24
      Α
           (Widell) Yes.
```

1 So would it be correct to say that not all of 0 2 the impacts or adverse effects are on Weeks State Park within the cultural landscape but 3 most of them are? 4 5 (Widell) No. The adverse effect is within Weeks Α 6 State Park which is a portion of the cultural 7 landscape. Okay. So let's look above that at your 8 Q description of the visual effects. Down, this 9 10 is the box in the middle of the page on the 11 left-hand column, and in the middle it says the 12 locations from which it, being the Project, will potentially be in view include several historic 13 14 farmsteads that are in the APE and Mount 15 Prospect in Weeks State Park just outside the 16 So is it your testimony here that while 17 you're referencing historic farmsteads having a 18 potential visual impact, it's only the adverse 19 effect to Weeks State Park that is creating an 20 adverse effect for the cultural landscape as a 21 whole? 22 Α (Widell) Yes. And I, once again, it is 23 primarily the Weeks State Park and the 24 determination whether it's an adverse effect to

1 the cultural landscape as a whole because this 2 is a very new type of resource is under the 3 Section 106 process the federal agency, in this 4 case DOE, in consultation with the DHR to 5 determine. 6 Again, in this case Weeks State Park is itself 0 7 listed as on the National Register, correct? (Widell) No. 8 Α 9 Sorry, the estate is. 0 10 Α (Widell) The estate which is about 2.9 acres and 11 is the very top of Mount Prospect, but Weeks 12 State Park is in its own right a designed 13 cultural landscape. And two years ago when we 14 submitted the Application to SEC we identified 15 Weeks State Park as a designed cultural 16 landscape and indicated at that time that it had 17 an adverse effect from the Project. 18 Okay. So just so I'm clear, the Weeks Estate is Q 19 listed, but does not have an adverse effect by 20 itself? 21 (Widell) Yes. That's correct. Α 22 And Weeks State Park has been deemed eligible Q 23 through this process, at least been recommended 24 to be eligible, and there is an adverse effect

```
1
           to Weeks State Park by itself?
 2
           (Widell) Yes.
      Α
           And that's due to, I think, what you call, maybe
 3
      0
           you don't, but there's significant views from
 4
 5
           particular viewpoints within Weeks State Park
 6
           that are of concern?
           (Widell) Yes. At the east overlook and there's
 7
      Α
           a lot of discussion about that.
 8
 9
                 So what I want to understand is your
      0
10
           distinction that this recommendation is for an
11
           adverse effect in your Effects Table for the
12
           Mount Prospect-Martin Meadow cultural landscape
13
           as a whole, but you seem to be making a
14
           distinction that perhaps only Weeks State Park
15
           individually will have an adverse impact.
16
           (Widell) Yes.
      Α
17
           And not the cultural landscape.
      Q
18
           (Widell) Yes. But as I said, this is a new form
      Α
19
           of resource in New Hampshire, and the DOE in
20
           consultation with DHR would determine that.
21
      0
           Would you agree that Weeks State Park was
22
           included in this cultural landscape as
           associated with the other features?
23
24
      Α
           (Widell) Yes.
```

```
1
           So the cultural landscape couldn't be chopped up
      0
 2
           to exclude Weeks State Park, could it?
 3
      Α
           (Widell) What do you mean by chopped up? Are
           there other --
 4
 5
      0
           I can rephrase.
 6
           -- other properties that are significant,
      Α
           clearly the estate which is listed on the
 7
 8
           National Register as an individual property
 9
           that's listed. Then I would, once again, go
10
          back to the original Application to the SEC
11
           where I believe, and I can give you precisely
12
           the different properties that were identified.
13
           Their significance and integrity was assessed
14
           and whether there would be an adverse effect
15
           from the Project was done for at least five or
           six of those properties individually.
16
                                                  So those
17
           homesteads that are talked about that are
18
           related to Weeks Heritage had been evaluated two
19
           years ago in our assessment form as was, as we
20
           stated, individually the Weeks State Park.
                                                        So
21
           in many ways we did look at a number of
22
           contributing elements to the cultural landscape
23
           over two years ago.
           And I understand that. But in this case, PAL
24
      0
```

1 has identified this entire landscape as a 2 cultural landscape, correct? (Widell) Yes. 3 Α And if I understand what you're saying, it's 4 0 5 unclear to you given that this is sort of a new 6 thing for New Hampshire whether the whole landscape as identified will have an adverse 7 effect or whether it could be limited only to 8 9 the subset of the landscape which is Weeks State 10 Park. 11 Α (Widell) No. I wouldn't use the words unclear. 12 I think because it is a new resource type that 13 it is incumbent upon the federal agency and the 14 DHR to participate in determining how to apply the guidance in that guidance document that I 15 16 indicated to you. We believe we have applied it 17 to determine the effect on this particular 18 cultural landscape in a thorough and responsible 19 way. 20 And your conclusion was an adverse effect. 0 21 (Widell) For that portion of the cultural Α 22 landscape, yes. 23 Well, we're talking around in circles, I think, 0 24 but we'll leave it there.

1 Maybe we can come at it from a different 2 If Weeks State Park is a component of angle. 3 the larger cultural landscape, and there's an 4 adverse impact to Weeks State Park, does the 106 5 process view those as two separate resources 6 even though they overlap to some extent? other words, you're reviewing or assessing 7 effects to both Weeks State Park individually 8 9 and to the cultural landscape which includes 10 Weeks State Park. 11 Α (Widell) The Weeks State Park would be 12 considered an important contributing element to 13 the cultural landscape. 14 And so if there's an adverse effect that 0 15 diminishes its significance, would that also 16 diminish the significance of the entire cultural 17 landscape? Or its integrity maybe is a better 18 word. (Widell) It diminishes the significance of that 19 Α 20 particular contributing element. 21 If you diminish the significance of multiple 0 contributing elements, does it diminish the 22 23 significance of the entire cultural landscape? 24 (Widell) Yes. It would. Α

1 Is that then, can that be reduced to if it 0 2 diminishes the significance of one contributing element does that diminish the significance of 3 the entire cultural landscape? 4 5 (Widell) Not necessarily. Α 6 Okay. Let's turn to the North Road Lost Nation 0 7 Road Cultural Landscape. If you could flip Again, this is Figure 2-1 from, I think 8 9 we're now in Volume 3 of the Great North Woods 10 Cultural Landscape Study which is part of 11 Applicant's Exhibit 211. And this map shows the 12 outline of the cultural landscape for North 13 Road/Lost Nation Road, and in particular in the 14 yellow or orange-ish color it highlights the North Road Agricultural Historic District which 15 16 is a portion of the North Road Lost Nation Road 17 cultural landscape; is that correct? 18 (Widell) Yes. Α 19 Again, we're going to have the same kind of 0 20 dilemma of understanding the relationship 21 between the North Road Agricultural Historic 22 District and the broader North Road Lost Nation 23 Road cultural landscape as we did with Weeks 24 State Park. Because North Road Agricultural

1 Historic District has been determined eliqible 2 previously? (Widell) Yes, it has. 3 Α And am I correct that the adverse effects that 4 0 5 you've found for this cultural landscape are 6 primarily limited to the North Road Agricultural Historic District? 7 8 Α (Widell) Yes. 9 So similar to the last one, we have adverse 0 10 effects to one portion of the cultural 11 landscape, and in this case rather than saying 12 it's primarily, you say but only with respect to 13 part of the cultural landscape. You seem to be 14 making a more, a stronger statement in this 15 cultural landscape that the adverse effects are 16 only to one of the components of the landscape 17 rather than to the landscape as a whole. 18 (Widell) Yes, and that's probably because the Α 19 Grange Village and Lost Nation portions of the 20 cultural landscape have basically no visual 21 relationship whatsoever with the Project. 22 Q I believe for the Mount Prospect-Martin Meadow 23 Pond Cultural Landscape, you made the same 24 statement.

1 Α (Widell) Yes, there was. But there is some 2 visual relationship with some other portions of 3 the Mount Prospect-Martin Meadow Cultural 4 Landscape. 5 Okay. Can you just put up 83135? Again, this 0 6 is the Effects Table as part of Applicant's 196 B for the North Road/Lost Nation Road Cultural 7 8 Landscape. 9 I think the discussion we had about the 10 Mount Prospect-Martin Meadow Pond Landscape would apply similarly here, correct? 11 This 12 adverse impact to the North Road Agricultural Historic District is an adverse impact to one of 13 14 the components of the larger cultural landscape, 15 but you are making a determination that the 16 adverse effect should be limited to the Historic 17 District. 18 (Widell) Yes. Α 19 Then so if that's the case, should the cultural 0 20 landscape not be considered a separate resource? 21 (Widell) No. Α 22 If it is its own historic and cultural resource, Q 23 and there's an adverse effect to a large 24 component of that landscape, isn't there an

1 adverse effect to the cultural landscape as a 2 whole? (Widell) As I indicated, this is a new form of 3 Α resource for consideration in New Hampshire and 4 5 the federal agency in consultation with the DHR 6 needs to determine that based on the quidance that they have provided, and once again, an 7 indication that the North Road agricultural 8 9 Historic District was identified over two years 10 ago and submitted as part of the Application to 11 the SEC, and it was indicated at that time that 12 we believed that it would be an adverse effect 13 visually caused by the Northern Pass Project. 14 But we don't know yet what DOE and what DHR's Q final determination will be on the cultural 15 16 landscape as a whole in that respect? 17 (Widell) No, we do not. Α 18 Let's skip ahead to the Upper Ammonoosuc River Q 19 Cultural Landscape. In this case, again, this 20 is Map or Figure 2-1, which is Volume 4 I think 21 we're in now of the Great North Woods Cultural 22 Landscape Study, and this shows the outline of 23 the Upper Ammonoosuc River Cultural Landscape 24 which kind of stretches from the western part of

```
1
           Dummer over to Stark along Route 110.
                                                   Is that
 2
           right?
 3
      Α
           (Widell) Yes.
           In this case, the cultural landscape
 4
      0
 5
           incorporates five specific identified Historic
 6
           Districts?
 7
      Α
           (Widell) Yes.
           Those are listed here on the map and also
 8
      Q
 9
           discussed in your Effects Table. In this case
10
           you also found an adverse effect for this
11
           cultural landscape; is that correct?
12
      Α
           (Widell) Yes.
           And this case was a little different because you
13
      0
14
           say in the middle of, so we're on Applicant's
15
           Exhibit 196 B, and it's the Effects Table for
16
           the Upper Ammonoosuc River Cultural Landscape,
17
           and on page 2 you have your chart, and in the
18
           middle you state for visual impacts that
19
           although there will be views of the Project from
20
           certain locations in the cultural landscape,
21
           they will be limited by topography, vegetation
22
           and distance. But then you go on to find an
23
           adverse effect due to visual impacts, and it
24
           says primarily with respect to the Ammonoosuc
```

```
1
           River crossing Northside Road and including a
 2
           view from Route 110/Stark Road toward the
 3
           Project in the center of the cultural landscape;
           is that correct?
 4
 5
           (Widell) Yes.
      Α
 6
           So in this case there are only a couple
      0
           locations with prominent views of the Project?
 7
           (Widell) Yes.
 8
      Α
 9
           But those views were significant enough to cause
      0
10
           an adverse effect to the entire cultural
11
           landscape?
12
           (Widell) No. Once again it is primarily in
      Α
13
           those areas.
14
           Are those two areas individually historic
      0
15
           resources?
           (Widell) The Northside Road District was
16
      Α
17
           identified over two years ago by Preservation
18
           Company and myself as a Historic District, and
19
           was included in the Application to the SEC as an
           adverse effect. DHR determined that the
20
21
           property was not significant enough to have its
           own inventory form completed but did want it
22
23
           included, and it was included in the cultural
24
           landscape. So it is a contributing element as
```

1 part of the cultural landscape. The other 2 parcel has no historic properties on it. It is an open field. 3 Okay. So we have one open field that's not 4 0 5 historic property, and we have one historic 6 district that lacked significance by itself. (Widell) In the estimation of DHR, yes. 7 Α Okay. And the visual impact to those two 8 Q 9 portions of the cultural landscape which are not 10 by themselves historic resources was significant 11 enough to have an adverse effect here, but your 12 opinion or your testimony is that that adverse 13 effect doesn't apply to the entire cultural 14 landscape. 15 Α (Widell) Once again, it is a new resource and 16 the Department of Energy and the New Hampshire 17 Division of Historic Resources will deliberate 18 on our findings and information. 19 So we'll find out later from them. 0 20 If you carve out these two locations from the cultural landscape, am I correct to say that 21 22 you couldn't have an adverse effect because they 23 are not individually historic resources? 24 (Widell) Let me make sure I understand. Α If you

1		took, say, parcel 41115 and it were not part of
2		an identified resource such as a cultural
3		landscape, could you find it individually
4		eligible for the National Register and then
5		therefore have an adverse effect? No. You
6		could not.
7	Q	Right. Because in the parlance of the Section
8		106 process, you cannot have an adverse effect
9		unless there's a resource that's been identified
10		as eligible, correct?
11	A	(Widell) That's correct.
12	Q	And these are not, these two locations or areas
13		are not, have not been identified as eligible
14		resources.
15	А	(Widell) That's correct.
16	Q	Okay. So jumping to the next cultural
17		landscape, this is Harvey Swell Cultural
18		Landscape, and we're looking at Figure 2-1 from
19		Volume 5 of the Great North Woods Cultural
20		Landscape Study Report which is part of
21		Applicant's Exhibit 211. And this map shows the
22		outline of the Harvey Swell landscape which is
23		primarily except for the very northern tip in
24		Colebrook; is that correct?

```
1
      Α
           (Widell) Yes.
 2
           And the primary land use here is agricultural
      Q
           land?
 3
           (Widell) Yes, it is.
 4
      Α
 5
           Depicted in green. And this cultural landscape
      0
 6
           is a rural landscape showing the history of
 7
           agricultural --
           (Widell) Definitely, yes.
 8
      Α
           So that is, the primary significance is for
 9
      0
10
           agricultural history, I guess you'd say?
11
           I'm sorry. I didn't hear an answer.
12
           (Widell) Yes.
      Α
13
      0
           Just for the record. I saw you nod.
14
               And in this case, would you agree that most
15
           of the landscape is outside the APE?
16
           (Widell) Yes. Most of it is outside of the APE.
      Α
17
           And this section is an aboveground section of
      Q
18
           the Project, correct?
19
           (Widell) Yes.
                          There is. There is a small
      Α
20
           portion that is in close proximity that is
21
           underground, but --
22
      Q
           But outside?
23
      Α
           (Widell) Yes.
           So in your effects assessment, the only box that
24
      0
```

```
1
           you filled in was the one relating to visual and
 2
           atmospheric or audible elements?
           (Widell) Yes.
 3
      Α
           And your finding was that there's some views but
 4
      0
 5
           they're limited in nature due to topography,
 6
           vegetation and distance and will not diminish
 7
           the property setting or landscape, correct?
           (Widell) Yes. There's more specifics elsewhere
 8
      Α
 9
           in the Effects Table, but that is an excellent
10
           summary.
11
      Q
           It was your summary, right?
12
      Α
           (Widell) Yes.
13
      0
           Indeed, here on page 5 you speak with viewshed
14
          mapping to show that there's not a lot of views.
15
           But what I want to draw your attention to is the
16
           second sentence at the top, in the top
17
           paragraph, where you say, "However, based on 3-D
18
           modeling there will likely not be views of the
19
           Project from the primary publicly accessible
20
           locations in this area along Bear Rock Road."
21
                Is it important to your assessment that
           there be public accessible locations for views?
22
23
      Α
           (Widell) No. It's possible to find adverse
24
           effects in areas that are not public.
```

```
1
           Okay. But here you're saying that their views
      0
 2
           are screened for the primarily public accessible
           locations.
 3
 4
      Α
           (Widell) Yes.
 5
           Is that a part of your assessment for finding no
      0
 6
           adverse effect for this cultural landscape?
           (Widell) It was for this cultural landscape,
 7
      Α
 8
           yes.
 9
           The lack of publicly accessible views was part
      0
           of your consideration?
10
11
      Α
           (Widell) You'll see that we, although we did 3-D
12
           modeling for the fields that are in the area
           that extends northward in this cultural
13
14
           landscape and are closest to the APE so those
15
           are not public, but we considered them as well.
16
           Okay. So this comment doesn't restrict or
      Q
17
           doesn't, the fact that there's not public
18
           accessible views didn't determine the outcome of
19
           this assessment?
20
           (Widell) That's correct.
      Α
21
           Okay. Just a comment that you included in the
      0
22
          description.
23
               Just for reference, you included the
24
           viewshed mapping in a number of these Effects
```

Tables, but I'll show this particular one. 1 2 APE is at the top there, the dotted purple line, 3 and your assessment is that while there are large areas of potential views, the 3-D modeling 4 5 found that those would be screened? 6 (Widell) Yes and no. The area closest to the Α 7 area that's within the area of potential effect, the northmost portion of the cultural landscape, 8 9 the aboveground portion of the Project will be 10 in a forested area. There may be as stated 11 elsewhere in the Effects Table possible views of 12 the very top portions of the structures, but 13 what we found was most of this visibility was 14 coming from three miles away where the Project 15 goes up Sugar Hill in that area. The topography 16 actually slopes downward and then back upwards. 17 So when we say topography in this location, 18 truly that is part of why the visibility is less 19 than it might immediately appear to be. 20 Thank you. Let's round out the review 0 Okav. here, and go to the Suncook River Valley Study 21 22 Area which was the fourth of 5. We're going to 23 skip over Deerfield because there was no cultural landscapes identified there. 24

```
1
               The Suncook River Valley Study area ran
 2
           through Epsom, Pembroke and Allenstown along the
           Suncook River; is that correct?
 3
 4
      Α
           (Widell) Yes.
 5
           That's shown on Figure 5-1 here from the Suncook
      0
 6
           River Valley Study Area Report.
 7
      Α
           (Widell) Um-hum.
           And there are two separate cultural landscapes
 8
      Q
 9
           identified as in or adjacent to the APE.
10
           Falls Cultural Landscape and the Buck Street
11
           Batchelder Road Cultural Landscape, right?
12
      Α
           (Widell) Yes.
           So now I'm showing figure or I guess it's a map
13
      0
14
           from the Effects Table in Applicant's Exhibit
           196 B for the Short Falls Cultural Landscape.
15
           And it shows the outline of the cultural
16
17
           landscape, and you can see Suncook River
18
           squirming around in the middle there.
19
               The actual Effects Table, in this case for
           Short Falls Cultural Landscape, the
20
21
           determination was a recommended finding of "no
22
           adverse effect, correct?
23
      Α
           (Widell) And you just moved the map. I think
24
           that map is very important and conveys one of
```

1 the important reasons why, and that is that only 2 1.8 acres of the entire cultural landscape is even in the area of potential effect, and the 3 portions completely around it are forested. 4 5 there is no potential for any visual effect to 6 the cultural landscape or obviously direct effects either. 7 You state here in the Effects Table that there 8 Q 9 are no views of the Project from the cultural 10 landscape within the one-mile Project APE, and, 11 therefore, the Project will not introduce individual elements that will diminish the 12 13 setting or landscape. 14 Did you consider the visibility of the Project outside of the APE? 15 16 (Widell) We certainly looked at the viewshed Α 17 mapping for the cultural landscape. 18 Okay. But in this Effects Table you don't Q 19 actually discuss that. If you skip to page 4. 20 The last statement here with regard to 21 visibility simply says because the Project will 22 not be within view in the one-mile APE for indirect effects in the Short Falls Cultural 23

Landscape, there will be no effect on the

24

1 cultural landscape. 2 (Widell) If you look further in this Effects Α 3 Tables, I'm sure you would see that the viewshed 4 mapping, both that of T.J. Boyle and DeWan were 5 included as well. 6 Yes, but you don't describe them in this part of 0 the Effects Table. You just come to the 7 conclusion because there's no view in the APE, 8 9 there's no visual impact or adverse effect? 10 Α (Widell) You asked me if we considered the viewshed mapping, and we absolutely did. 11 12 Okay. Would you agree then that to the extent 0 there are views outside of the APE that they 13 14 could, it is possible for views from outside the 15 APE to diminish the significance of a cultural 16 landscape? (Widell) Yes. Definitely. I think Weeks State 17 Α 18 Park is an excellent example of that. The Weeks 19 State Park and the Weeks Estate are a quarter of a mile outside of the area are of potential 20 21 effects. So I think consistently we have 22 considered that. 23 Okay. Then the last cultural landscape that was 0 24 identified as the Buck Street-Batchelder Road

1 Cultural Landscape which is shown in this map 2 which is part of the Effects Table. Page 6. Do 3 you see that? I'm trying to find my copy of it. 4 Α 5 And this cultural landscape is located within 0 6 Pembroke and about oh, I don't know, a quarter-ish, a third maybe is within the APE? 7 (Widell) I believe it's 28 percent. 8 Α 9 Okay. That sounds like a quarter to a third. 0 10 Again, in this case you found no adverse effect because of the limited views within the cultural 11 12 landscape, correct? 13 Α (Widell) Yes. Not, that's not the only reason. 14 I think also there's discussion of Route 28 and 15 the fact that it was placed into the landscape in the 1950s and is not considered a 16 17 contributing element. There's also new 18 construction in the area that already affects, 19 modern intrusion already affects the views 20 within portions of the cultural landscape that 21 are in the area of potential effect. 22 Q But despite those modern intrusions, there's 23 still enough significance and integrity for the 24 cultural landscape to be identified and assessed

```
1
           in this case?
 2
           (Widell) Yes.
      Α
 3
                  I want to just take a quick look at one
      0
           Okay.
           of the contributing features here which is the
 4
 5
           Montminy Farm and Country Store which there is a
 6
           photo simulation for which is page 19.
               As I understand it, at the time you filed
 7
           your Direct Testimony with the Application you
 8
 9
           had originally identified this as a potential
10
           historic resource.
11
      Α
           (Widell) Yes.
12
           And at that time also deemed that there was an
      0
           adverse effect to that resource?
13
14
           (Widell) Yes, we did.
      Α
15
      0
           And at some point subsequently I assume DHR
16
           determined that it was not significant?
17
           (Widell) Yes. They did not indicate they wanted
      Α
18
           an inventory form for that so none was done, but
19
           it is included in the cultural landscape.
20
                 It's one of the contributing resources or
      0
           Yes.
21
           features of the cultural landscape?
22
      Α
           (Widell) Which it is mentioned, yes, within the
23
           boundary.
24
           And you found initially that there is a
      0
```

```
1
           significant effect or an adverse effect to that
 2
           resource or this property, let's call it, but
 3
           that effect is not significant enough in your
           opinion to create an adverse effect to the
 4
 5
           entirety of this cultural landscape; is that
 6
           fair?
           (Widell) Or even a portion of it. Yes.
 7
      Α
                                                     Large
           landscapes may have a greater ability than small
 8
           properties to absorb change. I think this is an
 9
10
           example of that.
11
      Q
           This portion of the line is not only visible
12
           from this corner, is it?
13
      Α
           (Widell) No. It is visible throughout this
14
           particular property.
15
      0
           But is it limited to that property, the
16
           visibility?
17
           (Widell) It is, we did an assessment of
      Α
18
           Batchelder Farm. I would have to refresh my
19
           memory on its visibility from that particular
20
          property.
21
           Would you agree that in contrast to the Upper
      0
22
           Ammonoosuc River Cultural Landscape where there
23
           was a significant visual impact to a feature
24
           that was not individually eligible, this is a
```

```
1
           similar situation, but in your opinion it's not
 2
           a significant enough impact to create an adverse
           effect for the cultural landscape or this
 3
           portion of the cultural landscape?
 4
 5
           (Widell) Yes.
      Α
 6
           Okay. All right. So we have identified ten
      0
 7
           cultural landscapes and you've found three of
           those to have an adverse effect. And two of
 8
 9
           those adverse effects you've indicated are
10
           limited to subportions of the cultural
11
           landscape; is that fair?
12
      Α
           (Widell) Yes. I think all three of them
13
           actually are a portion of the cultural
14
           landscape, yes. Primarily, yes.
15
      0
           There were, so there are ten that were assessed
                  There were other cultural landscapes
16
           here.
17
           identified for future study that were not
18
           assessed?
19
           (Widell) Yes.
      Α
20
           And those were not assessed because they were
      0
21
           outside of the APE?
22
      Α
           (Widell) Yes.
23
          And we're going to look quickly at a portion of
      0
24
           the Great North Woods Study Area or Study Report
```

```
1
           which is part of the Applicant's Exhibit 211.
 2
           This is Figure 5-2 on page 73 and it's showing
 3
           the four potential cultural landscapes that are
           outside of the APE; is that correct?
 4
 5
           (Widell) Yes.
      Α
 6
           Would you agree with me based on this map that
      0
 7
           all four of those cultural landscapes are within
           3 to 5 miles of the Project?
 8
 9
           (Widell) I don't know. There is not a --
      Α
           Well, there's a scale at the bottom.
10
      0
11
      Α
           (Widell) It appears that they might be.
12
           And would you agree that there's a potential for
      0
13
           some visibility of the Project from within those
14
           cultural landscapes?
15
      Α
           (Widell) No. Not that would have an adverse
16
           effect to a historic property.
17
           And what's the basis for that statement?
      Q
18
           (Widell) The area of potential effect that's
      Α
19
           been established was established for this
20
           particular undertaking in 2013 by the Department
21
           of Energy in consultation with the Division of
          Historic RESOURCES, and that's on one mile
22
23
           either side of the Project.
24
           But you testified earlier that some views
      0
```

```
1
          outside of the APE can be significant and can
 2
          have an adverse effect such as the Weeks State
 3
          Park.
           (Widell) We were directed specifically in the
 4
      Α
 5
          discussion of the APE by DHR in the
 6
          identification process to look at properties
          that are just immediately adjacent, may be
 7
          connected to other resources within the area of
 8
          potential effect and Weeks State Park certainly
 9
10
          fulfills that in our judgment.
11
      Q
          I understand that. That wasn't quite what my
12
          question was. I didn't ask if you should have
          studied these other cultural landscapes. I
13
14
          simply asked if there is the potential for
15
          visibility of the Project from the cultural
16
          landscapes, and --
17
           (Widell) I'm not, I can't tell you precisely
      Α
18
                  It would depend on topography and all
19
          sorts of things. I cannot amend --
20
          So you don't know is the answer.
      0
21
          I do not know.
      Α
22
          Fair enough. If you were to look at the map
      Q
23
          that I'm showing you which is part of the Final
24
          EIS which is Applicant's Exhibit 205, I believe
```

```
1
           it's from one of the technical reports actually,
 2
           this map shows areas of potential visibility of
           the Project, correct?
 3
           (Widell) It says Cumulative Scenic Impact.
 4
      Α
 5
           Okay. I'll represent that that means potential
      0
 6
           visibility for the purpose of this discussion at
           least.
 7
               Are you able to identify areas where the
 8
 9
           cultural landscapes that we just talked about,
10
           the four that were outside of the APE are
11
           located?
12
      Α
           (Widell) No. Not really.
13
      0
           Okay. Would you agree, do you see Lancaster
14
           there in the middle of the page?
15
      Α
           (Widell) Yes.
           And off to the left of Lancaster is the
16
      Q
17
           Connecticut River? Did you see that?
18
           the border of the state?
19
           (Widell) Yes.
      Α
20
           And do you recall that the Connecticut River
      0
21
           Valley Cultural Landscape or maybe it's just the
22
           Connecticut River Cultural Landscape is in that
23
           vicinity to the west of Lancaster along the
24
           Connecticut River?
```

1 Α (Widell) Honestly, I'd have to compare the two 2 I'm sorry. maps. I will leave it here just to say that, we 3 Q Okay. don't need to do a full comparison, but based 4 5 on, if you accept my statement that that is the 6 location of the Connecticut River Cultural 7 Landscape, would you agree that there are shades of purple in that area? 8 (Widell) There are shades of purple in a portion 9 Α 10 of this map on the left-hand side of the map 11 which is the Connecticut River. 12 Fair enough. And you have not assessed 0 13 potential impacts to those other cultural 14 landscapes because you weren't directed to because they're outside of the APE, correct? 15 16 (Widell) No. In evaluating cultural resources, Α 17 under those Section 106 process, you are always 18 looking at properties that are on or eligible 19 for the National Register within the established 20 APE for the undertaking, yes. 21 And because these four cultural landscapes are 0 22 outside of that APE, you were not required to 23 assess effects in them, in those cultural 24 landscapes, correct?

1 Α (Widell) No. That's not true. We absolutely 2 assessed the effects of the portions of those 3 cultural landscapes that were within the APE and immediately adjacent to. 4 5 Yes, I think we're talking past each other. 0 6 Α Okay. I'm talking about the four cultural landscapes 7 Q that were outside of the APE that were 8 9 recommended for future study. 10 (Widell) I'm sorry. I misunderstood your Α 11 question. That's okay. 12 0 13 Α (Widell) So you are asking me whether you would 14 evaluate the four cultural landscapes that are outside of the APE for adverse effects from this 15 16 Project? No. 17 You weren't required to do that because they're Q 18 outside of the APE, correct? 19 (Widell) It doesn't have to do with requirement. Α 20 It is not, in my professional experience you 21 would not do that as part of the evaluation of 22 effects on historic resources that might be 23 affected by this Project. 24 0 I believe that is a yes more or less so we'll

```
1
           leave it there.
 2
           (Widell) Okay.
      Α
 3
           With your Supplemental Testimony which I believe
      0
           is Applicant's Exhibit 95, you had an Attachment
 4
 5
           2 which was this chart and this was your list of
 6
           adverse effects, correct?
 7
      Α
           (Widell) Yes, and in my beginning remarks I
           indicated that I had added one.
 8
 9
           Correct. And is the added adverse effect the
      0
10
           Upper Ammonoosuc Cultural Landscape?
           (Widell) Yes, it is.
11
      Α
12
           You added that one. You did not add the North
      0
13
           Road-Lost Nation Road Cultural Landscape
14
           because, as I understand it, your position is
15
           the only adverse effect is the portion of that
16
           cultural landscape which is the North Road and
17
           Grange Historic District which is listed here
18
           already, right?
19
           (Widell) It's already on my list of adverse
      Α
20
           effects, yes.
21
           And that's based, and you don't include the
      0
22
          broader cultural landscape as an additional
23
           adverse effect because you've limited your
24
           recommendation to just the portion that's
```

1 already on your chart. 2 (Widell) Yes. I do not believe there is an Α 3 adverse effect to that portion of that cultural 4 landscape. 5 And the same thing would go to the Mount 0 6 Prospect-Martin Meadow Pond Cultural Landscape 7 which you have incorporated the portion of that landscape that has the adverse effect here as 8 9 Weeks State Park? 10 Α (Widell) Yes. 11 Q And that's why you've gone from 6 to 7 instead 12 of 6 to 9 adverse effects? 13 Α (Widell) Yes. I believe that I've already 14 included that and both of those properties have been on the list of adverse effects for over two 15 16 years. Or two years, approximately. 17 And I'm assuming, although I don't think you've Q 18 stated it yet, that the addition of the cultural 19 landscapes to your assessment and the adverse 20 effects that you've found don't change your overall opinion of no unreasonable adverse 21 22 effect from the Project? 23 (Widell) Yes. That is correct. Α 24 And am I correct that Department of Energy and 0

```
Division of Historic Resources are still
 1
 2
           reviewing these study recommendations and
           Effects Tables?
 3
 4
      Α
           (Widell) Yes.
 5
           And we don't yet have a final determination of
      0
 6
           either eligibility or adverse effects on those
 7
           cultural landscapes, correct?
           (Widell) Yes.
 8
      Α
 9
           And I think when you submitted the Effects
      0
10
           Tables for the cultural landscapes, you also
           submitted additional 42 Effects Tables at that
11
12
           time.
                  Were those resources that were within the
13
           cultural landscapes or was that a broader set of
14
           Effects Tables?
                         They were a broader set of Effects
15
      Α
           (Widell) No.
16
                    They were a number of different Effects
           Tables.
17
           Tables that were requested by DHR to be
18
           completed.
                       They varied from properties that
19
           were outside of the APE to properties that were
20
           in the underground portion of the Project.
21
           Properties that were only significant because of
22
           their engineering or architecture significance,
23
           and, therefore, would not be affected by the
24
           Project visually. Those are just some examples,
```

```
1
           and there were some other in there, but I'm just
 2
           giving you kind of a --
 3
           Sure. Similar to the cultural landscape Effects
      0
           Tables, those additional 42 Effects Tables have
 4
 5
           not yet been assessed by DOE and DHR; is that
 6
           correct?
 7
      Α
           (Widell) They have not.
           So we don't have a final determination on those,
 8
      Q
 9
           either those 42 or the 10 cultural landscapes?
10
           (Widell) Yes. That's correct.
      Α
11
      Q
           And it is possible that in reviewing the Effects
12
           Tables and other study materials that DOE and
           DHR could find additional adverse effects beyond
13
14
           those that you've recommended?
15
      Α
           (Widell) It is possible.
16
           And so sitting here today, the Committee nor the
      Q
17
           Applicant does not have the final understanding
18
           of the complete number of adverse effects that
19
           may be caused by the Project.
20
           (Widell) No. I don't agree with that.
      Α
                                                    Τ
21
           believe that we have had an excellent idea of
22
           the extent of the adverse effects of this
23
           Project even as early as a couple of years ago.
24
           As I have indicated in my testimony today, the
```

1 adverse effects that have been found throughout 2 the study of these cultural landscapes in the area of potential effect were identified at the 3 time of the submission of the SEC Application, 4 5 and in my Original Testimony I referenced them, 6 and, again, in the Supplemental and with my testimony today. I believe we have a really 7 thorough understanding of the historic 8 9 properties, probably better than any other 10 Project before because this is such an 11 innovative way of looking at resources that we 12 know the extent of the Project, the properties 13 are going to be affected and what those effects 14 are going to be. But, again, we don't have a final determination 15 0 16 from DOE or DHR on the number of the Effects 17 Tables and the potential adverse effects? 18 (Widell) We don't have a final, but we have an Α 19 outstanding process identified in the 20 Programmatic Agreement to move forward, an 21 inclusive one that will include the consulting 22 parties and other federal agencies to finalize 23 that, and I believe we have an excellent 24 understanding of the historic resources that

1 will be affected by this Project. 2 And you believe that despite not having the Q 3 final engineering of the Project in hand and not knowing precisely where effects might occur to 4 5 resources within the APE for underground 6 sections? (Widell) Yes. Absolutely. It is my experience 7 Α in transportation projects and other underground 8 9 situations that those decisions can be made 10 during the time when the Project is moving 11 forward and in the design and engineering. Yes. 12 I'm very confident of that. And that would be after a decision by the SEC? 13 0 14 (Widell) I don't know the timing for that. Α 15 0 Do you know the timing for -- well, we went over 16 this earlier. There are a number of things in 17 the Programmatic Agreement, different plans that 18 have not been completed, and the adverse effects 19 have not been finalized so we can't reach the 20 mitigation finalization yet either. And that's 21 likely, would you agree, not to occur until 22 after this proceeding is completed? 23 Α (Widell) No. I don't know the timing. But the 24 process of using Programmatic Agreement in my

1 professional experience is a very excellent and 2 inclusive one where the mitigation for adverse 3 effects on historic properties that cannot be avoided or minimized can be done in a way that 4 5 is specific to the resource that's being 6 affected, can be specific to the state where it's occurring, and can be inclusive, and that's 7 what the Programmatic Agreement makes very clear 8 9 in its section on Resolution of Effects that the 10 consulting parties will be part of that discussion. 11 12 And that's part of the 106 process that is 0 13 separate from the SEC's review. Can you state 14 that it's likely -- I'll turn the question around from before. Is it likely that all the 15 16 required plans and final adverse effects will be 17 determined so that mitigation can be considered 18 prior to the conclusion of this proceeding at 19 the SEC? 20 Α (Widell) I don't know the timing of the 21 conclusion of this proceeding for the SEC, but I 22 know that it has been often the case that SEC 23 has used a Programmatic Agreement --24 Yes, you've testified to that before. 0

```
1
           -- a Memorandum of Agreement as a tool for
      Α
 2
           completing those things, especially mitigation,
 3
           that are not completed before their decision,
           and I think the document that we have is an
 4
 5
           excellent one that we should be confident in
 6
           because it is in my experience one that has been
 7
           successful again and again in caring for
           historic properties which is the goal of all of
 8
 9
           this, the SEC considerations, as well as the
10
           Section 106 considerations in a Project of this
11
           size for the state of New Hampshire.
12
          But you'd agree that the Programmatic Agreement
      0
13
           itself doesn't set forth specific mitigation
14
           elements for any particular Project, correct?
15
      Α
           (Widell) Yes.
16
           That comes later.
      Q
17
           (Widell) Yes.
      Α
18
           Okay. Thank you very much. Hold on one second.
      Q
           Thank you. I'm finished.
19
20
      Α
           (Widell) Thank you.
21
               PRESIDING OFFICER HONIGBERG: Off the
22
           record.
                   (Discussion off the record)
23
24
               PRESIDING OFFICER HONIGBERG:
                                              So we will
```

{WITNESS PANEL: WIDELL, BUNKER}

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1
           adjourn for the day and resume Thursday at 9
 2
           o'clock.
                 (Hearing adjourned at 5:21 p.m.)
 3
 4
 5
 6
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 9
10
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14
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16
17
18
19
20
21
22
23
24
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 $\{SEC\ 2015-06\}\ [Day\ 40/Afternoon\ Session\ ONLY]\ \{09-26-17\}$

1

CERTIFICATE

9 10

11

12 13

14

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I, Cynthia Foster, Registered Professional Reporter and Licensed Court Reporter, duly authorized to practice Shorthand Court Reporting in the State of New Hampshire, hereby certify that the foregoing pages are a true and accurate transcription of my stenographic notes of the hearing for use in the matter indicated on the title sheet, as to which a transcript was duly ordered;

I further certify that I am neither attorney nor counsel for, nor related to or employed by any of the parties to the action in which this transcript was produced, 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.

Dated at West Lebanon, New Hampshire, this 8th day of October, 2017.

Cynthia Foster, LCR

{SEC 2015-06} [Day 40/Afternoon Session ONLY]