STATE OF NEW HAMPSHIRE SITE EVALUATION

October 27, 2017-1:25 p.m. 49 Donovan Street Concord, New Hampshire
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IN RE: SEC DOCKET NO. 2015-06 Joint Application of Northern Pass Transmission, LLC, and Public Service Company 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: Chrmn. Martin P. Honigberg Public Utilities Comm. (Presiding as Presiding Officer)

Cmsr. Kathryn M. Bailey Public Utilities Comm. Dir. Craig Wright, Designee Dept. of Environ. Serv. Christopher Way, Designee Dept. of Resources \& Economic Development William Oldenburg, Designee Dept. of Transportation Patricia Weathersby Public Member Rachel Dandeneau

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ALSO PRESENT FOR THE SEC:
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(Brennan, Caron, Lenehan \& Iacopino)
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(No Appearances Taken)
COURT REPORTER: Susan J. Robidas, NH LCR No. 44
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[WITNESS: O'DONNELL]

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Q. And do you also have in front of you what's been marked as Counsel for the Public Exhibit 141, which is your April 17, 2017 supplemental testimony and exhibits?
A. I do.
Q. And do you have any corrections to either of those documents?
A. I do. We made a reference in editing that we created an error on Page 10 of our November 15th report under Architectural Focus. In the final sentence we said, "and bridges (including the National Register listed H.L. Styles Bridge," which is incorrect. There's actually no bridge named that. H.L. Styles Bridges is the owner name of an historic house. So we transposed it from the many lists of items.
Q. Okay. So that's a correction on Page 10 of the report attached to Exhibit 140.
A. Paragraph 1, last sentence.
Q. Very good. With that correction, do you today adopt and swear to the testimony in both your direct prefiled testimony and your supplemental testimony?
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A. I do.
Q. All right. Thank you very much. I'd like to start by asking you some questions about the cultural landscape studies and effects tables that have been produced in this proceeding after all the testimony was filed. And just to start off, do you understand, and have you reviewed the five cultural landscape study reports that were submitted, which appear as Appellant -- Applicant's Exhibit 211? And those are the PAL studies.
A. I will have to admit that they have not been thoroughly studied. They are very lengthy. They have been skimmed. We particularly looked at Section 5 of each of the reports, which is the Recommendations.
Q. And am I correct that there are five different reports that each address a different study area within the state of New Hampshire?
A. Correct.
Q. And within each of those reports, does PAL identify discrete cultural landscape areas within the study area?
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A. They do. Discrete areas within the one-mile APE, partially within the one-mile APE, and outside of, within these broad study areas.
Q. Okay. And do you understand that those discrete areas are being characterized as "cultural landscapes" in this proceeding?
A. They are.
Q. And you agree that those are cultural landscapes?
A. The ones that have been defined do appear to be. I would not fully be able to endorse that those are the only ones present within the study areas.
Q. So let's take a look at a couple of the study areas.
A. There's a point here, the study areas were defined by DHR and the consulting parties, and then PAL conducted the work and did good research, obviously went also to the field and defined much smaller zones that they called cultural landscapes.
Q. Okay. Great. So hopefully you have something on your screen at this point?
A. I do.
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Q. So what I'm showing you now is a page out of Applicant's Exhibit 211, which is a page out of the Great North Woods Cultural Landscape Study Report. And this is APP81684. And do you see -- well, have you seen this before, this figure?
A. Yes. This is the summary showing the cultural landscapes defined within or partially within the one-mile APE.
Q. Okay. And do you recognize that the black outlined area is the study area that was reviewed in this report?
A. The study area shown in the black line, that's the Great North Woods; right?
Q. Yes. And I think you testified a moment ago that that study area was defined by DHR and others.
A. With input from consulting parties.
Q. Okay. And by "consulting parties," that's a term of art in the 106, the Section 106 process?
A. Exactly.
Q. Okay. And then, also on this figure, you see there are one, two, three, four cultural
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landscapes that have been outlined in orange; is that right?
A. Golden.
Q. Golden. I'll take that.
A. Harvey Swell Cultural Landscape, Colebrook and Stewartstown at the top; Upper Ammonoosuc River Cultural Landscape and Stark toward the middle; North Road-Lost Nation Road Cultural Landscape in Lancaster and Northumberland; and adjacent to it, the Mount Prospect-Martin Meadow Pond Cultural Landscape in Lancaster.
Q. Can you describe for the Committee your understanding of the process that takes us from this large study area which is outlined in black down to the individually identified potential cultural landscapes?
A. My understanding of the methodology laid out by the Public Archeology Lab in their work is that it starts from research and field review, and they eventually developed these definitions of what are supposed to be cohesive cultural landscapes of uniform or discernible relationships of character within the larger study area that was defined by DHR
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and the consulting parties.
Q. Okay. That gets us in this case to these four. And I'm going to show you a few more in just a second.

Okay. So you should now be seeing on your screen another page from the same document, Applicant's Exhibit 211, APP81688. And is this also showing the Great North Woods Cultural Landscape Study Area?
A. Yes.
Q. And now we see an additional four, I guess four, an additional four cultural landscapes that have been identified on this map?
A. Correct.
Q. And do you understand that these cultural
landscapes are those that have been
identified within the study area but are
outside the one-mile APE, or Area of
Potential Effect?
A. Correct.
Q. So if you were to look at the two maps together, there would be eight identified potential cultural landscapes within this study area.
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A. That is correct.
Q. Okay. And do you have -- well, what is your understanding of why these cultural landscapes on this map have been separated out from those that were shown in the prior map?
A. I think my impression from the skimming of the report is that -- reports, plural, hundreds and hundreds of pages -- is that the definition of "cultural landscapes," based on research and field study, also related to the second task, second step, which was to build more detailed reports for those cultural landscapes that were within or partially within the Area of Potential Effect. The other identified landscapes that are outside of the APE were not subject to further detailed study other than the initial research and definition process.
Q. Okay. Thank you. You should be seeing now the prior page in this report. And if you see in the middle of the page, it says "Landscapes Recommended For Future Study." Does that correspond to what you were just
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discussing, those cultural landscapes that have been identified but are outside of the APE, that PAL here is saying study those later because they're outside of the APE?
A. Correct.
Q. Okay. Do you agree with that distinction of cultural landscapes that are within or adjacent to the APE and those that are outside the APE for purposes of this review by the SEC?
A. When you're looking at the plan, you certainly see that they're outside of the APE, as determined in the Section 106 process. In our work, as we put in both our initial report and our supplemental report, we looked at bare earth viewshed mapping and found that areas considerably beyond the one-mile APE had good visibility to the line of the proposed project. So our position in the work we did was to look beyond the APE as described in the Section 106 DOE process to relate it more to the SEC rules and the New Hampshire law.
Q. Okay. Thank you. So if I could paraphrase
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then. In your opinion, these four cultural landscapes that have been identified outside of the APE remain relevant for consideration by the SEC in its review of the Project. You'd agree with that?
A. Yes.
Q. Okay. Let's take a quick look at some of the other study areas just so we have a lay of the land.

So you should now have another page from Applicant's Exhibit 211. This is a separate report within that large exhibit, and this is from the Ammonoosuc River Valley Study Area. And do you see that study area outlined in black?
A. Correct.
Q. And in this case, I believe there are two cultural landscapes that have been identified within that study area that are in or adjacent to the APE?
A. They are in the underground section. And it's the Gale, $G-A-L-E$, River Cultural Landscape and the Ham Branch River Cultural Landscape, both somewhat linear corridors,
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valley-hill relationships.
Q. Okay. Thank you.

And then flip to the other map, which is at APP81301. Again, now there are two additional cultural landscapes that were outside the APE; is that right?
A. Yes. This map shows the two that are beyond the Area of Potential Effect for the underground section, which is very narrow. And these are to the west, and it's the Sugar Hill Cultural Landscape and the Landaff Center Cultural Landscape.
Q. Okay. Thank you.

So, again, this is an additional study area for cultural landscapes, and this is from the portion of Exhibit 211 that is the Pemigewasset River Valley Study Area. Again, do you see on this figure the study area is the large area outlined in black?
A. Yes, the outline is there.
Q. And there are here two cultural landscapes identified within or adjacent to the APE?
A. Yes, the upper to the north edge of the study area is the Franconia Notch Cultural
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Landscape, and the lower is the Franklin Falls Dam and Hill Village Cultural Landscape toward the south end. And the Notch is in the underground section, and the Franklin Falls is in the overhead section.
Q. Okay. Thank you. And then if we flip ahead to the second figure, do you see here an additional, $I$ believe there are six --
A. Six.
Q. -- cultural landscapes that are identified within the study area, but outside of the APE?
A. Correct, there are six additional. And interestingly in their study, they extended slightly eastward of the original study area boundary for two of these because they found those cultural landscapes to be cohesive, I would assume.
Q. Okay. And then flipping to the Suncook River Valley Study Area, this is APP82554. This is a somewhat smaller study area; is that right?
A. Correct. This is the reduction to the cultural landscape scale, and it looks like we have two: Short Falls Cultural Landscape
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and the Buck Street-Batchelder Road Cultural Landscape, and it's in a study area that crosses the APE.
Q. And again, in this case, the cultural
landscapes that have been identified extend outside of the study area; is that right?
A. Right. One almost entirely outside, the other about half in and half out.
Q. Okay. So, between those four study areas, I think we have a total of 10 cultural
landscapes that have been identified that are within or adjacent to the one-mile APE, and 12 that are outside the one-mile APE. Does that sound right?
A. It does.
Q. Okay. And then there was one additional study area. So we'll pull that one up. And this is again part of Applicant's Exhibit 211, and it's APP81564. And this is the Deerfield Cultural Landscape Study Report, or rather, the Study Area. Do you agree?
A. Yeah. It's interesting because they changed the outer boundary color; it's now blue on this one. But it appears to be the boundary
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of their study area.
Q. Yeah. So this has a slightly different format.
A. $\mathrm{Hmm}-\mathrm{hmm}$.
Q. And within the study area which is in blue in this figure, there appear to be five areas of potential cultural landscapes being reviewed; is that accurate?
A. Right. They're reviewing them, but they haven't called any of them "cultural
landscape" in the title. So it's a differentiation from the prior mapping.
Q. And this is -- well, I don't know if it's the last page. But it's the summary
recommendations in this same Deerfield Cultural Landscape Study Report. And take a minute just to read that paragraph, and then if you could comment on what the outcome of this study area was in terms of cultural landscapes.
(Witness reviews document.)
A. They've chosen to recommend that two of the indicated mapped areas, the Corey WMA and the junction of Meeting House Hill Road, don't
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possess the qualities of cultural landscapes. And the three others, Deerfield Parade, Deerfield Center and the Pawtuckaway State Park, may be cultural landscapes, but they don't require any further study. So it appears that the Deerfield report indicates that the historic resources in Deerfield are adequately addressed and that they don't think it warrants further study.
Q. Does that conclusion make sense to you, in terms of review of cultural landscapes? And I guess what I'm asking, really, is they seem to be making a distinction between areas that have been reviewed as a district and potentially cultural landscapes more broadly. Does that seem to square with your understanding of cultural landscapes?
A. I would want to answer that at two levels. One, I think Deerfield is a community that has pervasive, historically valued resources that would fall in the New Hampshire sites law, not necessarily all on the National Register, but certainly recognized by the community. And it seems that their
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conception of cultural landscape perhaps was less focused on settlements that were more dense. Many of the others as cataloged within the PAL reports are agricultural landscapes or recreational landscapes, but they haven't really got their head around settlement landscapes. And in this case, they're looking at fairly small areas in Deerfield. It might be possible -- I mean, where I might begin would be to look at Deerfield mapping over time and see if the structure of the town, because the first level of cultural landscape study is land uses and the second is spacial organization and systems. So, parsing small pieces, you may not see the patterns that continue through time.
Q. Okay. Thank you. And I wanted to touch on the process here that was -- that has followed to identify these cultural landscapes, that's all within the Section 106 process; right?
A. Correct.
Q. Within that process -- or the Section 106
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process, by definition, looks at resources that are eligible are listed within the National Registry?
A. Correct. Exclusively.
Q. Exclusively. Okay. And so, you know, Ms. Widell, in her supplemental testimony, criticized you for using a broader APE than the Section 106 APE, where you looked out to 10 miles and she focused on 1 mile. That one-mile APE is what's used in this cultural landscape study process; is that correct?
A. Correct.
Q. And so can you comment on how the cultural landscape studies and reports here, where they're identifying cultural landscapes, how that may capture or not capture resources that you would consider relevant to the SEC process?
A. I think, again, maybe two answers. One, what the cultural landscape studies in sum, taken together, tell us is that there are more resources than were initially recorded by the Applicants and that the focus of the Applicants on individual properties, and in
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particular, architecture, led them not to pick up as many of these cohesive, larger areas.

And then the second question is the process of defining a study area and then limiting the cultural landscapes within it is somewhat counterintuitive. It's what we did because of the New Hampshire law which says it could be on the National Register, but could also be resources of various types that are important to the people of New Hampshire that don't necessarily have a designation. What we used was a filter of understanding a bit more about community values through the community and community meetings and their own voices and also looking at the typical landscape of New Hampshire, which is a valley-hill-mountain setting, which is valued by the people of New Hampshire.
Q. Okay. Thank you. So I think I want to go back to the Great North Woods for a second.

So, again, we looked at this a few minutes ago, and you, I believe, commented that, though these four cultural landscapes
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identified on this figure, which is APP81688, those are outside of the one-mile APE. I believe you testified earlier that you think it would be relevant to consider those in this proceeding?
A. Correct.
Q. Okay. We're looking for something. Might take a second. Here we are.

And what I'm showing you now is an attachment to your supplemental testimony, and that's CFP Exhibit 141. And it's --
A. Sheet 1 of the North Above Ground?
Q. Yeah. I'm just going to get it for the record. It's CFP5756, very small in the bottom.

So, in this exhibit you're showing, I believe, potential visibility of the Project using a bare ground analysis; is that correct?
A. Correct.
Q. So that's discounting any vegetative screening or structural screening. We're looking just at topography.
A. That is correct.
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Q. And if we can, would you agree that this map corresponds roughly to the area that is covered by the Great North Woods?
A. It's a portion, yeah. This map covers the area of the Great North Woods Study Area for cultural landscapes.
Q. Okay.
A. The pink areas on that map were the visibility zones, quite pervasive.
Q. It's going to come back up in a minute, hopefully.

Okay. Now you're looking at both the Great North Woods Cultural Landscape figure showing the four cultural landscapes that have been identified outside of the APE and your exhibit showing potential visibility in the bare ground conditions of that same general portion of the state of New Hampshire.

Looking at these two, in your opinion, are the four cultural landscapes identified here, generally speaking, within areas that are shown in pink on the visibility map?
A. Correct. I think the one that would more
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likely than not be due to topography would be the westernmost Connecticut River landscape because it's on the opposite side of the hill from the corridor. But it's at this -- on the right-hand side in the plan, the dark red line is the corridor. You can see the Notch there.

The other thing that our map shows is the indication of all the shape files and areas from the GIS that we recorded in our report for a more diverse capture of resources.
Q. I want to turn some of the more specific review done by Ms. Widell and the Preservation Company to assess effects at these cultural landscapes. But before I go there, I want to clarify one thing.

You did not actually perform an assessment of the effects of the Project on individual cultural landscape -- or sorry -individual historic resources; is that correct?
A. Correct.
Q. Is it correct to say that you looked at the
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Project's impacts on a landscape level rather than an individual resource level?
A. That is correct.
Q. And is that how you came to your conclusion about the potential impacts of this project on cultural historic landscapes -- or resources, rather?
A. I think it's important to indicate that we looked at all the Applicant's materials. We also did specific research at DHR. We downloaded a series of maps from New Hampshire Granit, which is the GIS data base. We looked in the field. And together, mapping all of those, particularly at the town corridor level and then on the map you just showed, there's three components: The north, the center and the south. What we found is that the landscape of New Hampshire through these towns along the corridor and beyond the one-mile APE is full of resources and that those historic and cultural sites, as defined in New Hampshire law, are quite pervasive. So our opinion is that the number of resources, the density of resources, the
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visibility of resources taken together expresses a significant impact from the potential Northern Pass Project.
Q. Okay. So I'm going to take us into some of the specifics, and I'm going to ask you about the findings and methodology of Ms. Widell and the Preservation Company. But I'm going to try not to ask you about making a specific assessment of individual resources because I don't believe that is something you have done in this process.
A. And particularly in these cultural
landscapes, these were not defined until well
after we did our time in the field.
Q. Okay. So the first area I want to look at is the North Road-Lost Nation Road Cultural

Landscape. And on the screen you should see now a map of that cultural landscape. This is part of the Applicant's Exhibit 211, and it's APP81886. Do you recognize this cultural landscape that's been identified?
A. Yes.
Q. Okay. And do you see in this map that there is within the cultural landscape also an area
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that's been identified on its own as a agricultural historic district? That's the area in golden or yellow.
A. Yes. On the west, or lower left of the map, there's an area that's defined as an agricultural zone, which was pulled out in the prior work by Preservation Company.
Q. I meant to ask you before that went away, but you probably can remember it from the picture, does the Project actually pass through the middle of this cultural landscape, or at least through a portion of the cultural landscape?
A. It does.
Q. Okay. And in this area, it's an overhead portion of the Project.
A. It is.
Q. Okay. So what you should be seeing now is a page from Applicant's 196b, as in boy. And this is the first page of the Effects Evaluation done by Ms. Widell and Preservation Company for this North Road-Lost Nation Road Cultural Landscape. Have you reviewed this document before?
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A. I have. This is the summary that indicates the recommendations and definition of effect for the North Road Agricultural District, North Road and Grange Road in Lancaster.
Q. Okay. And so as part of the assessment of the effects, we had testimony from Ms. Widell that she, in collaboration with the Preservation Company, completed this form for DHR and part of the Section 106 process as a way of assessing the impact of the Project on this particular cultural landscape. Does that sound like an accurate description of what has happened?
A. That is accurate to my knowledge.
Q. And if you see at the top of the first area under Criteria of Adverse Effect, is this assessment being done here, is this guided by federal rules in the 106 process?
A. Yes. Section 106 indicates that adverse effect is judged based on loss of integrity. There are seven aspects of integrity that are listed here: Location, design, setting, materials, workmanship, feeling and association. And the impact on these seven
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aspects to integrity that would limit -degrade the integrity of the property can result in its adverse effect.
Q. Okay. And then looking down below at the form, there are eight categories listed as examples of adverse effects. And again, it cites to Section 800.5(a)(2). That's from the CFR federal rules; is that correct?
A. Yes.
Q. Okay.
A. And those are the eight that are cited in the federal rules.
Q. And so I'd like to kind of look through the evaluation for each of these and discuss with you your interpretation of how Ms. Widell and Preservation Company were applying this evaluation process under the federal rules, recognizing that you haven't done an individual assessment of this particular cultural landscape.

The first category here is the physical
destruction of or damage to all or part of the property. Am I correct that that is
essentially one type of direct impact that
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can be assessed or --
A. Yes.
Q. And that's sort of the most adverse effect possible, destroying the resource?
A. Or some part thereof that's character-defining and relates to its integrity.
Q. And here the evaluation is that, essentially, even though the transmission corridor passes through the cultural landscape, their focus isn't only on vegetation removal. And they are claiming to avoid any other direct impacts. Is that a fair assessment of what they've done?
A. That's what they say.
Q. And I'm going to look at No. 2 before we kind of talk about that process.

The second category is alteration of a property, with a lot more language that everyone can read. How is alteration of a property different from physical destruction or damage?
A. Change doesn't always degrade a character-defining feature, but alteration --
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the issue here is consistency with the Secretary of Interior's standards. So, again, the judging envelope, the criteria, is the Secretary of Interior and the standards.
Q. Okay. And so here we have two different types of potentially direct effects to the property being assessed?
A. Hmm-hmm. Correct.
Q. And the evaluation that was performed by the Applicant's consultants was that there may be some physical destruction, but there would be no alteration of the property. Does that -when you are looking at the introduction of a power or transmission line and its structures into a cultural landscape, does that distinction there make sense to you?
A. I think that under Area II, Roman II, Is, I would not have said none. I would have said the insertion of larger poles, higher, bigger, would be an alteration of the property. It goes through the middle. I mean, the way it's described, it's as if you could put the corridor in a vacuum and everything's fine and it's all the same on
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the sides, so that's okay. But the scale shift and the intensity of that relationship is quite different from what it is today.
Q. And you'd agree that there is an existing power line or transmission line within that corridor, in that cultural landscape today.
A. Correct.
Q. But I hear that you're saying the proposed project would be an intensification of that intrusion into the cultural landscape?
A. It's intensifying the size and scale of the power transmission corridor.
Q. Okay. So, skipping down, I think the removal of property from its historic location probably doesn't make sense within the context of cultural landscapes.

So the next area is the change of character of the property's use or physical features within the property setting that contributes to historic features.

Can you describe what kinds of things that category is trying to capture?
A. Absolutely. The federal standards, when you look at the practice of cultural landscapes,
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identifies "character" by using a set of character-defining features that then are, in the terminology of the National Register, called "contributing features." So, frequently in this work they've said the current transmission corridor is "non-contributing." The "contributing features" would be the open fields, the patterns of land uses, the relationship of land uses to visual organization. Often these cultural landscapes in an agricultural component have quite broad panoramas, down to natural systems, vegetation, circulation, topography related to geomorphology, which PAL has handled very well in their reports, and then down to buildings, structures and small-scale elements. So, all of that list that $I$ just stated is the character-defining features that are considered when you look at the issue of integrity and those seven aspects of integrity.
Q. And here the Applicant's consultants have looked at, in their report and evaluation section, that there will be no change in use
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in the hay fields and pasture within the transmission right-of-way on either side of North Road. Does that capture the full breadth of what's covered by this example of adverse, in your opinion?
A. I don't believe so.
Q. What other kinds of -- make sure $I$ use the right term -- what other kinds of "contributing features" would be relevant in reviewing this example of adverse effects?
A. Well, $I$ just gave you the list, so I'll state it slightly differently. Hay fields and pasture are land uses. Within this area of the North Road Agricultural District and the North Road and Grange Road, there are more land uses than just those two. There's residential land uses, there's some likely commercial land uses along the road frontage, there are possibly forested lands that are recreational or productive lands for forest harvest. So that's just the first category, land use. Then you would drop down and indicate the visual relationships and space, moving on to topography, vegetation,
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circulation, all the elements. What they're saying is two aspects of land use remain around the electrical transmission right-of-way. So it's a partial answer.
Q. Okay. So I'm hearing that, in your opinion, they haven't fully assessed, at least in the description here, the other uses of the property that would be covered by this category in the effects evaluation.
A. I actually said that they haven't covered all the character-defining features that make the property historically important.
Q. Okay. Thank you for correcting me.

The next category down is Roman $V$, which is introduction of visual atmospheric or audible elements that diminish the integrity of the property's significant historic features. And that one seems a little more understandable to a layperson. Is that essentially how a proposed project will impact -- in this case we're focused on visual -- but the visual setting of the landscape?
A. Correct.
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Q. And when the term "setting" is used in this historic resources context under the federal rules, help me understand where the setting is. Is it the area around the resource? Is it the area the resource is in? Is it adjacent? I think that's been a little unclear through this proceeding so far.
A. When they're talking about large properties, the federal guidance indicates that the setting can be both within and beyond. When we're talking about an individual historic property, setting is almost always used as the area directly adjacent and beyond. So, because of the scale, they make it a little more muddy, a little less clear, and indicate that it can be both within and beyond.
Q. Okay. Is that, in part, because when you're in a cultural landscape, you can be looking at other parts of the cultural landscape that might be part of the setting as opposed to just looking beyond the resource?
A. Exactly. It's foreground, mid-ground and background. And in New Hampshire, you're often in a river valley, on a hillside
looking at a mountain, and you see layered depth of landscape, which is the setting.
Q. And in this case, for this cultural
landscape, the Applicants have indicated that there will be the introduction of visual elements that diminish the integrity of the setting and views. And they go on to ultimately conclude, because of those visual elements that have been introduced, that there will be an adverse effect to this cultural landscape. Do you agree with that statement?
A. I do agree.
Q. All right. But in the final box here under Recommended Finding, it seems to be qualified, that that finding of adverse effect is qualified, but only with respect to the part of the cultural landscape comprising the North Road Agricultural Historic District. And so, if you recall, that was a subset of the cultural landscape itself that had been previously identified as being an eligible resource.
A. Right.
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Q. Do you agree with that type of limitation, that there can be an adverse effect to a portion of the cultural landscape, but not to the landscape itself?
A. I do not agree.
Q. Can you comment on how you assess a cultural landscape, in terms of it's component parts? And I understand that cultural landscapes are, in part, made up of a number of character-defining features that are related to each other in some way that show the history. That's my very layman's approach. But if there are character-defining features that may be impacted, at what point does that -- do you need more than one? Does it have to be big? When does it become an impact to the entire cultural landscape?
A. The normal approach to assessment is the change to character-defining features and its relationship to the seven aspects of integrity. In this work, they're essentially saying that it changes the visual. It changes the setting. Setting is one of those aspects of integrity. Location: Not
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changed. Design: A change, a new element added, a different material, a different scale. Setting: Scale relationships altered; person in field next to small tower, next to big tower, scale relationship. Materials: New, bigger poles, trellis or monopole. I'm not sure which occur here. Workmanship: New element added. Feeling is squashy, but that's what it is. It's about, you know, how does this place feel now with this change. I would suggest that there is a change in feeling related to the insertion of these very large power poles and their wires, and the association may now be more toward the agriculture or more toward the visual or more toward the experience of the larger landscape, where with these big elements in, those are pervasive. Those start to make it a double experience. You see this big power line and you're near it and you see the view to the river or the view to the mountains.

So I would suggest that there are more impacts to integrity than as stated in this finding.
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Q. Okay. And you just walked through, if I understand, the seven --
A. Aspects of integrity.
Q. Are those seven aspects of integrity addressed in the evaluation that's shown on this document?
A. There is no summary in the document that says integrity impacts are as follows. They've simply used the structure from the Section 106, 800 -- sorry, don't know the exact citation. So there isn't a paragraph at the end that says integrity remains or integrity has been altered, which is what the bar is in the 106 process, the alteration of integrity.
Q. So you were just talking about the effects of a larger transmission structure within a cultural landscape. And just as an example, this is the photo sim at the end of the effects table here for the North Road-Lost Nation Road Cultural Landscape. Is this the type of change to a cultural landscape that you're talking about when you went through each of those -- well, you went through seven. It didn't affect all seven. But this
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is the kind of thing you're talking about?
A. Five.
Q. Five out of seven? Okay.
A. So, to me, this simulation is well done. Appears to be accurate to the scale of the new poles. Shows the visual dominance and the importance of these poles. Landscapes are moved through. You're going to see this from many vantages, and it will be consistent and pervasive throughout.
Q. I'd like to turn to another one of the cultural landscapes just to get a different perspective.

Now we're going to look at the Upper Ammonoosuc River Cultural Landscape.
A. In Stark and Dummer.
Q. And just to orient us, this is Figure 21 out of the Great North Woods Cultural Landscape Study Report. I couldn't tell you which volume, but it's APP81950. And do you see here outlined in black the cultural landscape that's been identified as the Upper Ammonoosuc River Cultural Landscape?
A. Correct. This is within the larger study
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area of the Great North Woods.
Q. Right. And in this case, do you see that there are a few subsets of this -- maybe "subsets" is the wrong word -- but there are discrete areas that have been identified as historic districts within the cultural landscape?
A. There is. In the gold color they're indicating that they're historic districts. And the other colors they appear to be indicating land uses: The stripe is conservation land; the green is forest, public forest.
Q. Okay. And would I be correct in stating that, while there may be individual pieces of this cultural landscape that are -- that have significance and integrity as historic resources on their own, that the cultural landscape is something more than the sum of those individual components?
A. Correct. The relationship of these individual district areas I think is indicating that they were previously identified. And the further study
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commissioned, directed by DHR and the consulting parties, dug deeper into the research and the history and indicated that each of these prior identified resources related directly to their adjacencies, which made them a contiguous cultural landscape.
Q. And would you say that -- let's take the Percy Summer Club, for example, which is the area around Christine Lake. Would you say that that district is itself a cultural landscape?
A. We actually use the term in cultural
landscape studies of "component." It's not actually used in this work, to the extent that I'm aware. And because that particular area was developed together and developed with a recreational focus and has a consistency of architecture and is directed toward the views and access to the lake within a context of wooded slopes and more level ground, it has its own qualities and could be a component within the cultural landscape. We are using that kind of definition daily in our office with a larger
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cultural landscape and specific components that exhibit their character in a unique way.
Q. Okay. And would I also be correct, to the extent $I$ was correct a minute ago, but am I also correct that the cultural landscape encompasses more than just districts within it, components that are historic districts, or individual structures, but looks beyond those sort of discrete physical components?
A. I would suggest that they're usually linked by the historical evolution and the character that exists today.
Q. Okay. And you mentioned also that there are forest areas that are identified here within the cultural landscape. Are those also components of the cultural landscape?
A. Probably not. I haven't actually been on the ground there to study this. But I would say it may be that the actual summer club, Percy, is sitting within hills around it and relates all the way up to the -- as far as can be seen from the club, so that the facing slopes and the valley that the club sits in and its lake is one component, and then the hill
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dropping to the other side and heading east may be the next.

So I can't actually clearly indicate that I agree with the boundary of this cultural landscape. I might judge it somewhat differently. I think particularly where it necks down to be a very small connectivity, I would look carefully at that if I went to the field.

So I think the basic point is the elements of a cultural landscape that make up its character-defining features are layered, relate to the history, relate to continuity, and express themselves individually as places.
Q. Okay. Thank you.

So you should be seeing now a different map of this same Upper Ammonoosuc River Cultural Landscape. And this now is a portion of Applicant's Exhibit 196b. And I just wanted to confirm the location of the Project through the cultural landscape. Do you see the line in purple that's going down through --
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A. Top to bottom.
Q. Okay. And it's more or less bisecting the cultural landscape?
A. Correct.
Q. And this is an overhead portion of the Project?
A. Correct.
Q. Okay. Again, the Applicant's consultants performed an evaluation of this cultural landscape, or the impacts or effects to this cultural landscape, and that's summarized in this table; correct?
A. It is.
Q. And so we've already gone through the categories, but $I$ just want to touch on $a$ couple of these examples for this cultural landscape.

Again, for Category 2, alteration of the property, we see an evaluation of "none." And I believe you testified that you would characterize an alteration when there's a project, a transmission corridor -- or transmission line and structures being introduced into a cultural landscape.
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A. Yes. It's a change. It's not simply the replacement of the line as it exists.
Q. Correct. And then, here again, the focus by the Applicants is on visual impacts. And you see that explanation in Roman V. And they seem to be qualifying that there are only very limited views in the cultural landscape.
A. And they characterize it as "limited" by topography, vegetation and distance. Given the overlay of the corridor through this district, $I$ don't think there's much distance. I would also suggest that in their reasoning, not in the table per se, but they're usually looking at points. The cultural landscape is an area that you move through, that you experience parts of, all of. So it's a false judgment to say it's only important when I'm sitting on the porch of this building or it's only important when I'm in Christine Lake. It is a pervasive element in the landscape that you will see from various advantages.
Q. And that relates to the finding here where their recommended finding again is of an
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adverse effect. But it is qualified once more as, "but primarily with respect to Ammonoosuc River Crossing/North Side Road, and including view from Route 110/Stark Road towards the Project, and center of cultural landscape." Does that distinction make sense to you in the context of a review or evaluating the effects on a cultural landscape?
A. It's a minimization of the effect by siting three or four locations where they believe it's viewed from. My position is you're walking in the landscape, you can view it from many places, and that that characterization is a false minimization of the impact and the view. I know "minimize" and "mitigate" are used in other ways in these proceedings, so maybe I should strike that word and use something else. Dilution.
Q. Okay. Ms. Widell and I had a kind of circular discussion I think about this distinction between impacts to a particular point, or part of a cultural landscape, and impacts to the entire landscape. And part of
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her -- and this was just --
MR. ASLIN: And for the record, this is part of the Day 40 discussion in the afternoon. And I could find the page number if needed.

BY MR. ASLIN:
Q. But part of her discussion with me was a statement that the cultural landscape evaluation is a new or innovative thing in New Hampshire, and it's difficult for -- it was at least difficult for her to be able to distinguish between impacts to a portion of the cultural landscape and impacts to the entirety of the cultural landscape.

Do you agree that this cultural
landscape assessment is a new or innovative process within the world of historic resources?
A. No, it's not. I think New Hampshire, particularly DHR, has not been able to do thorough, contextual studies throughout the state or thorough inventories due to staffing and funding limitations over many decades.

So, in terms of where states are in their
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required work of inventory and context, they are not very far in New Hampshire. Other states are considerably farther because their departments of historic resources are better funded or better staffed.

And then the second answer is within the practice, my work since 1983 has been focused on cultural landscapes. And World

Heritage -- UNESCO World Heritage Centre added cultural landscapes as a listable inscription category for World Heritage in 1992. So, a pretty long time ago these things were at the point where they could be listed and inscribed. In 1984 and '85, as the head of the American Society of Landscape Architects, Historic Preservation Committee, we sat down with the Park Service and talked about the approach to writing good cultural landscape nominations, good cultural landscape documentation, started the process of moving to the Historic American Landscape Survey. So these things have been in play for, I would say, 30-plus years in our country.
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Q. So if $I$ understand that, it's a relatively new process to go through in New Hampshire based on the amount of background information that's available, but it's a concept that has been around for quite some time in the field.
A. Correct.

MR. ASLIN: Mr. Chairman, this might be a good time for a break if you want.

CHAIRMAN HONIGBERG: Okay.
We'll break for 10 minutes.
(Recess was taken at 2:33 p.m.
and the hearing resumed at 2:51 p.m.)
CHAIRMAN HONIGBERG: Mr. Aslin, you may proceed.

MR. ASLIN: Thank you, Mr.
Chairman.
BY MR. ASLIN:
Q. Ms. O'Donnell, we've looked at a couple different cultural landscapes in the effects tables, and we've gone through, I guess it's eight if you count other examples of adverse effects, sort of the criteria that are being evaluated. And you've identified a number of different concerns about the way -- or maybe
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"concern" isn't the right word -- but disagreements with the way the Applicant's consultants have reviewed these landscapes. You have, I understand, looked at the effects tables for all or most of the resources that were assessed by the Applicants; is that correct?
A. Those within and adjacent, yeah. There were -- I'm pretty sure there were 10.
Q. Yes. And we're not going to go through all of them because -- well, I'm going to ask: Would you have similar concerns or disagreements with the way the Applicant's consultants have reviewed those other cultural landscapes?
A. The style of response from the Applicant to each of the 10 isn't parallel. The same issues arise throughout -- the in, out and how close and how big and the no adverse effect or adverse effect -- but essentially indicating that there is little negative influence of the line on these big cultural landscapes is the conclusion, and I disagree.
Q. Okay. Thank you. So we've looked at a
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couple that are above-ground portions of the Project. I want to touch on one that's an underground section of the Project because that has some slightly different issues. So we're going to look at the Gale River Cultural Landscape.
A. This is the Ham Branch?
Q. No, that's the wrong exhibit. So we'll try again. I apologize for my bad handwriting.

Okay. So this is a figure from
Applicant's Exhibit 211 in the section of the -- oh, let's see. This is the

Pemigewasset River Valley Cultural Landscape Study Area report. And this is the specific area that's been identified as the Gale River Cultural Landscape; is that correct?
A. Correct.
Q. And so here again, we see the outline in black of the cultural landscape itself. And this is an area that's stretching between portions of Sugar Hill and Franconia. And I don't believe it's shown on this map, but do you understand that this is an underground portion of the Project?
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A. Yes.
Q. Okay.
A. With a limited area of potential effect assigned of 20 feet off either side of the road.
Q. Yeah. So in the 106 process, I think you're referring to the direct APE -- direct effect to APE for underground portions of the Project, and that went out to 20 feet from the edge of pavement; is that correct? Do you understand that?
A. Correct, with a variable width on the road itself.
Q. Correct. The roads vary in width, but the 20 feet extends from the edge of the pavement on both sides.

Okay. And just to orient the big picture here, this is the same form that's used for all the effects tables. And again, this is a page from Applicant's Exhibit 196b. And in this particular case, the finding was no adverse effect; is that correct?
A. Correct.
Q. And for the underground portion, we see a
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discussion in the first box related to physical destruction that has to do with vibration and other temporary construction impacts. Do you see that?
A. I do.
Q. Do you agree that vibration impacts can be a direct effect to historic resources?
A. They certainly can.
Q. They might indeed cause physical destruction or damage?
A. They can.
Q. Could they also cause alteration of a property, or is it really focused on damage and destruction?
A. Well, 1 think in this box, in this response, it's about damage. But I do think
alteration. When historic features are disassembled and reassembled, there is a loss of integrity unless it's carefully done and carefully managed and, actually, usually quite expensive. So, if, for example, there were roadside features like stone walls and they said not to worry, we're going to pick this thing up and rebuild it, the photo
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before and after may find substantial differences rather than exact duplications. So, yeah, I mean, if features are damaged, altered, disassembled and reassembled, they can wind up in an altered state going forward.
Q. Okay. And you mentioned the disassembly and reassembly of a feature. In what context would that occur when dealing with historic resources?
A. Well, stone walls are a good example because they're usually dry-laid and they have a limited foundation. But they're laid with traditional means and methods and craft, often by hand. So --
Q. But in what circumstances --
A. -- if that's within 20 feet of the roadside, it may be needing to be moved and replaced if the excavation is required within that zone.
Q. Okay. I see. So if the Project needs to go through a location where a feature like a stone wall exists, one option would be to disassemble it, set it aside and then reassemble it after the Project has passed
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by?
A. It is an option. It's not desirable. I think the question you asked was would there be a potential alteration, and I was giving an example of a potential alteration.
Q. Okay. Thank you. I just wanted to make sure I understood.

And so in this case, you'll see in that top box that the Applicants, or the consultants are stating that direct effects to these features will be avoided by project design. So am I correct that, as far as the Applicants' proposal, they're not proposing to do any removal and restoration of historic resources or features?
A. Well, they make two statements. They say we're going to avoid, and if we disturb we're going to restore. So there's actually two statements in that paragraph.
Q. And the second one is in relationship to vibration.
A. No. It just says any disturbed area will be restored to pre-construction condition. So that's a blanket kind of statement.
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Q. So the potential is at least recognized by the Applicants here within this form.
A. Correct.
Q. Fair enough.

With regard to vibration effects, in your experience, is 20 feet -- the 20-foot APE here, is that sufficient to capture resources that might be impacted by vibration effects?
A. Historic construction techniques, foundations and so forth, are often more fragile than more modern construction, or not. But in my experience, there is a bigger realm of monitoring and attention required than 20 feet. We added in our supplemental testimony -- I don't have it in my hand, but maybe Megan can give you the page number -that there's one source that's looking at a 500-foot monitoring envelope for significant ground disturbance, vibration impact, blasting, drilling. There are other guidance sources that indicate 150 feet. I do not know of any source that is limited to something like 20 feet.
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Q. Okay. So I'm going to show you in a second the New Hampshire DOT standard specifications for vibration monitoring. But before I do that, $I$ want to follow up on what you just said.

If 20 feet is an inadequate distance of concern for vibration effects to historic resources or features, how would the Applicant or the SEC or anyone know of the existence of such features outside of the 20 feet APE if that's what's been studied in this process?
A. The inventory thus far does not give them a good capture of anything beyond the 20 -foot APE that was determined. So, under the Programmatic Agreement, there's a line -there's a paragraph or a section on new discoveries. But that's -- I would suggest that that's a during-construction process which doesn't offer pre-planning and protection for historic resources that are adjacent.
Q. Okay. So let's take a look at the DOT standard.
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Okay. You should be seeing now what's been marked as Counsel for the Public Exhibit 49, and it is Section 211 of the New Hampshire DOT's standard specifications, and it's the 2016 version of those specifications which you can see in the bottom right corner. And this section is about vibration monitoring.

And if you look at Section 3.4 here, which is the following page, CFP 13489, do you see where it specifies that pre-construction condition surveys should be done within 100 feet of anticipated sources of constructed-related vibrations?
A. You misspoke. It's 150.
Q. Oh, I'm sorry. What did I say?
A. A hundred. Must be Friday afternoon.
Q. It must be Friday afternoon.

Okay. So, does this -- having looked at this, would that confirm to you that in New Hampshire, for standard construction monitoring, New Hampshire DOT recommends looking out at least 150 feet?
A. Before construction. Correct. That is what
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the specification indicates.
Q. And based on what you said a few minutes ago, am I correct that, given the lack of review of historic -- or maybe I -- the lack of identification --
A. Inventory.
Q. -- or inventory, thank you, of historic resources or features outside of the 20 -foot APE, if there were a feature 100 feet away or 150 feet --
A. Or 22 feet.
Q. -- or 22, the Applicant may not be aware of it?
A. Correct.
Q. And that hasn't been captured by the 106 process at this point.
A. It has not yet been captured. I know that the intervenors, particularly from some of the underground sections -- and I know this because we reviewed it to develop our report -- have indicated, for example, that their Main Street is narrow, that 20 feet off just barely misses most of their historic structures and that they have concerns. So I
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think this state guidance on vibration monitoring is a good specification. And specifications are basically industry standards. And this is 2016, so it's up to date.
Q. Now, if the Applicant's contractors on the ground are following the specification and they're looking out 150 feet, are they likely to be able to identify historic features that may need special care or attention?
A. If they did a proper inventory, yes.
Q. An inventory of historic features --
A. Correct.
Q. -- not just a regular construction survey? If you can answer that?
A. And this one even says swimming pools and mobile homes. So, you know, it is a blanket description of structures, which includes walls which might be nearby. I know that some of the town residents have brought up wells, which of course ground vibration can alter your water availability. So these are issues for vibration monitoring.
Q. Okay. Thank you.
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Okay. I'm showing you a page out of the effects evaluation or the effects table for the Gale River Cultural Landscape. And this being an underground portion of the Project, the consultants here have inventoried or made a list of those historic features that are in or near the direct $A P E ;$ so, in or near the 20 feet from pavement. And in this case, I want you to take a look at the middle photo or item. And it's talking about mature trees. Can mature trees be a character-defining feature of a cultural landscape?
A. Absolutely.
Q. And would impacts to those trees diminish the integrity of the cultural landscape?
A. It would.
Q. So at least in this instance we have one example, and I would posit there are others, of mature trees that are a character-defining feature very close to the edge of the roadway. Would you agree with that?
A. I do. In fact, each of these images shows sizable trees. "Mature" is a soft term. But
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once a tree is 25 years old, it starts to get considerable scale. A pine's life span is about 80 to 100 years. So they become important features in the landscape.
Q. And from a historic resources perspective, in terms of assessing the effects on cultural landscapes, would it be important for the Applicant to avoid impacts to these kinds of character-defining features?
A. The answer is yes. I grew up in Buffalo at the time when we lost the elms, and the character of the city completely changed. So if these particular corridors were denuded of their large trees, there would be no scale relationships between vegetation. There would be more "urban heat island effect," but there would also be a big character shift. The architecture wouldn't have its related vegetation and scale.
Q. Okay. Thank you. And we were just talking about trees. Would that same issue be true for any character-defining feature within the vicinity of the roadway where the Project is going to be buried?
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A. You would speak to each one in its preservation or protection differently. But the third image shows and notes, I believe, a field stone wall, random, looks hand-built; so, another such feature close to the road.
Q. And again, things that would need to be avoided in terms of reducing or avoiding adverse effects to the cultural landscape as a whole.
A. Correct.
Q. I want to turn to the Programmatic Agreement which was executed by the Applicant and DOE and DHR and some others this summer. It's Applicant's Exhibit 204. There's been a fair bit of discussion about this document in the record.

Would you agree that within the 106 process this document more or less governs the interaction of the parties, the Section 106 parties, as they move through that 106 process?
A. Right. Section 106 is a consultation process, and the consulting parties work together toward resolution.
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Q. So there is a --
A. It's not an SEC process.
Q. Right. And I want to focus on the portion of this document that appears at Roman $V$, called "Resolution of Adverse Effects." And we're going to go to APP68691.

And so do you see Section V, Resolution of Adverse Effects?
A. I do.
Q. And would it be fair to say that this is a section of the Programmatic Agreement that deals with the handling of adverse effects that are going to be -- that haven't been avoided or minimized through the 106 process?
A. It establishes a process.
Q. Okay. So I want to take a look at section, or Paragraph C, I guess. And it says if historic properties will be adversely affected by the proposed project, DOE will direct NPT to prepare and implement an HPTP that addresses the direct and indirect cumulative and reasonably foreseeable adverse effects of the proposed project on historic properties in the $A P E$, and it goes on.
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Is this type of a -- well, do you know what "HPTP," what that stands for?
A. It's a historic preservation -- do they use treatment as the "T"? Historic properties treatment plan. "Treatment" is the word that's used in preservation. Sounds like medical or something. But it's the word that's used in preservation to indicate an intervention on behalf of the historic elements, character-defining features that is intended to protect and preserve. So the definition of the word "treatment" is protect and preserve.
Q. And having -- let me start with this. You're familiar with this Programmatic Agreement?
A. I have read it.
Q. Okay. Is it your understanding that the HPTP is a plan essentially for how to address or treat historic features that are impacted by the Project?
A. It's not entirely clear to me that the HPTP is that. This Programmatic Agreement has three headings that indicate what's in the HPTP, and they're called: Monitoring Plan,
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Unanticipated Discovery Plan and a Training Plan.
Q. And you're looking --
A. At the next pages directly after this one, 28 and 29, monitoring, unanticipated discovery and training. That, to me, doesn't say determine if there's an adverse effect, figure out how to avoid it, figure out how to preserve and protect the element that's going to be impacted. That's not what this is saying.
Q. Okay.
A. This is saying train the people, monitor the unanticipated discovery.
Q. And so in this context --
A. It's a framework.
Q. It's a framework. And are you aware of
whether an HPTP has been created at this time for this project?
A. My understanding is this is the guidance in order to create such a plan, but that plan has not yet been created. I may be wrong.
Q. Well, I would agree that I haven't seen it
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y
either. So --
A. I haven't seen it.
Q. And as a sort of direct corollary to that, the monitoring plan, unanticipated discovery plan, and the training plan that are part of the HPTP are also not yet part of the record in this proceeding.
A. Correct.
Q. This Programmatic Agreement, and the HPTP more specifically, are part of the 106 process and, therefore, limited to the one-mile APE in that process; correct?
A. [No verbal response]
Q. So, to the extent that the HPTP will address how to treat adverse impacts to historic properties, will it address those impacts to any historic properties outside the APE?
A. No.
Q. And in your review of this section, the Resolution of Adverse Effects section, and the sort of definition or explanation of what the HPTP will cover, do you see any discussion of specific mitigation practices or activities for individual resources that
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are adversely impacted?
A. No. I think it's interesting, too, because the Section 106 process establishes four strategies for mitigation: Avoid, minimize, mitigate, compensate. I don't actually even see that here, that there's actually a four-step process. And the first and best is avoidance of the impact.
Q. And would I be correct that avoidance would, in most cases, happen before you got to the level of mitigation under an HPTP?
A. Yes. I think that your avoidance would happen with an adequate inventory and then an adequate monitoring plan. I still think it's important in any project to have an unanticipated discovery plan, so you know what you do when you find things you didn't think were there. But you also have other state laws, like if you encounter human remains and if you encounter archeological sites. So you have other controls on these elements. Except that this is a 106 process; it's not a New Hampshire law-based process.
Q. Now, in Ms. Widell's supplemental testimony,
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and also in her testimony before the Committee, she's urged or suggested that the Committee should rely on this Programmatic Agreement and the 106 process to resolve any adverse effects, and essentially to govern the mitigation process of adverse effects to historic resources.

Based on your understanding of what's in the Programmatic Agreement and your understanding of the Section 106 process in general, do you agree that that is an appropriate way for the Committee to rely on or to address mitigation of adverse impacts in this SEC process?
A. No.
Q. Why not?
A. This is a framework, and it's a consultation process. And it indicates watchdog and monitoring roles from consulting parties, as well as the DOE, and then gives the daily-work monitoring and efforts directly to the Applicant. So, essentially, the Applicant is being tasked with reporting out on any findings. It's very, in my opinion,
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high risk that, first of all; you don't know everything. And second of all, the Applicant has indicated that there's less than a dozen adverse impacts on this entire 192-mile corridor to historic and cultural resources. And then thirdly, we have these very small distances off the corridor for the whole underground section with adjacent resources unknown. So I think you could list a whole series of unknowns that this Programmatic Agreement isn't helping you get closure on. So I'm not sure -- I would not feel it's an effective safety net in the way that it's currently stated.
Q. And looking at the 106 process more broadly, is it correct -- well, let me ask you.

What's your understanding of the extent to which those resources that have an adverse effect, the extent to which that adverse effect will actually be mitigated through the 106 process?
A. In my opinion, the 106 process is not a good mitigator once you've gone to construction. I think, in general, a Programmatic Agreement
[WITNESS: O'DONNELL]
is based on good work in advance of the intervention. And the good work in advance means that your knowledge is very high and your level of assurance in the work that you've done is quite complete.
Q. Are there instances within the 106 process where an adverse impact may have been identified and the mitigation that's identified for that adverse impact doesn't actually avoid the adverse impact in any way?
A. Yes.
Q. Can you give me an example?
A. Well, in our work at St. Elizabeth's Hospital, which is being rehabilitated and reused as the Homeland Security headquarters under the General Services Administration -this is in Washington, D.C. -- we developed a detailed plan of the cultural landscape as shaped and the guidance to all the people who intervened, all the design teams and all the contractors, to be able to account for all of the character-defining features that we had mapped and described in their work. So the pre-work was the template for their next
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steps, and the capture was as complete as we could make it. It was very complete. So, in this case, some of the impacts from the build-out of Homeland Security were more than simply replacing and reusing historic buildings, replacing new buildings, altering the overall setting. And the determination was that documentation, Historic American Buildings Survey, Historic American Landscape -- the HALS, the Historic American Landscape Survey work we carried out, and a public education program would be considered mitigation. So, not a physical. The impact was not avoided. It was well designed, integrated as best as possible. But further mitigation was requested and required that aided public education through documentation.
Q. So, in that case, the impact happened.
A. Correct.
Q. But the mitigation was to create a record of the resource for future education?
A. And then to interpret that actively to the public with tours and so forth.
Q. But if I'm understanding you, the mitigation
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wasn't to lessen the impact in any way to the actual physical resource.
A. They had already done their best with the design to fit it in, but it had an impact.
Q. So in the context of this project, where there are going to be -- or where there would be adverse impacts to historic resources if the Project is constructed, the 106 process wouldn't necessarily --
A. Avoid.
Q. -- minimize or avoid those, and the end result might be simply to document that there used to be a nice, historic feature here.
A. That's possible.
Q. Okay. Ms. Widell, in her supplemental testimony, also criticized your report -- or rather, your suggestion about -- back up and try this again.

Ms. Widell criticized your critique of her report as having not adequately identified minimization and mitigation of the Project. And she states in her supplemental testimony --
A. This is Day 40 or Day 41?
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[WITNESS: O'DONNELL]
Q. No, this is her testimony.
A. Right. Okay.
Q. She states on Page 10 of her supplemental testimony, at Line 26 , in response to your critique about inadequate minimization and avoidance, she says, "The Project has substantially avoided impacts and minimized effects to historic resources by locating 99.5 miles of the line in existing
transmission rights-of-way (ROW), most of which have existed for 50 to 75 years. Further, placing 60.5 miles of the line underground has meant that the Project has eliminated visual effects over long distances and large area historic properties."

In your opinion, is co-locating the
Project in an existing right-of-way -- well, first, is that a type of minimization?
A. Yes.
Q. In your opinion, is it an effective or adequate minimization?
A. If the materials, visuals and scale were similar to what's already in the corridor, I would say it would be quite a good
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minimization. But with the size, scale and pervasive quality of these new elements of the electric transmission line, it makes a very strong shift in scale because the new lines are generally or often above the highest trees, which make them much more broadly visible.
Q. And so when Ms. Widell touts this co-location as sort of "look at all the minimization we've done," acknowledging that that is a benefit, that it's better than the alternative, is it your opinion, then, that it's not enough to avoid adverse impacts to historic resources?
A. My opinion is that simply locating this new, larger electrical transmission system within the current right-of-way is not a sufficient mitigation.

MR. ASLIN: Thank you, Mr.
Chairman. Ms. O'Donnell is available for cross-examination.

CHAIRMAN HONIGBERG: Let's go off the record for a minute.

CROSS-EXAMINATION
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[WITNESS: O'DONNELL]

BY MS. BOEPPLE:
Q. Good afternoon. Excuse me. I have a cold. But I think I can get through this pretty quickly and my voice will stay with me. Beth Boepple for the Forest Society.

So, Ms. O'Donnell, most of my questions have to do with documents that have come in subsequent to you filing your supplemental prefiled testimony.

Would you agree that, with respect to the cultural landscape reports and any analysis that's been done by the Applicant, that is all subsequent to your prefiled testimony? That's all come in subsequent to your --
A. Oh, yes. All of the cultural landscape studies and their assessments are post-prefiled testimony and supplemental.
Q. Okay. Now, I know Mr. Aslin discussed the cultural landscape reports with you, but I don't believe he asked you whether you can opine, based on your field work and extensive experience with cultural landscapes, why the Applicant would have focused on 11 cultural
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landscapes and not more than that. Can you opine on that, based on your experience?
A. Well, we had the opportunity in the development of our report to do a quick field review. We didn't actually do the kind of studies that we're often doing for cultural landscapes to define them, to review their historic research, to consult primary source documents. So I think that I would be overstepping if I were to say that I know a lot about the cultural landscape of New Hampshire. I think my sense is that there are many sites, historic sites and resources that are relevant to the lives of the people of New Hampshire that are categorized potentially as cultural landscapes. The simplest definition of a cultural landscape is the combined works of humanity and nature.

Most of the forests in New Hampshire are tended, replanted or volunteer third cut, fourth cut, whatever. We don't have any virgin. The human hand is here pretty much everywhere. So I would say, in the broadest definitional sense, these are cultural
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landscapes.
Q. Well, with respect to my question which had to do with why there were only 11 as opposed to more, in your experience, $I$ believe in your direct testimony you recommended a 10-mile APE, which would have been a 20 -mile corridor. Now that the Applicant has reviewed and done a determination of cultural landscapes, is it possible that had they used a broader APE from the beginning, that they might have identified additional cultural landscapes?
A. I'm not sure $I$ would want to state that from their position. I think from our position, looking at the 20-mile, the 10 to each side, we found many landscapes of cultural value not necessarily listed or listable, but hundreds and thousands of acres of conservation lands in current use or in private conservation. Clearly a societal value here. Many recreation areas. But in addition, lots of small town centers and other features that are culturally valuable. Pretty pervasive $I$ would say. Our mapping
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showed that.
Q. Okay.
A. Would they have found more? Depends on what criteria they used for their studies.
Q. But certainly if you extend from a 1-mile APE to a 10-mile APE, you're likely to discover a lot more.
A. Yes. And in their studies, just so we're
absolutely factual, the study boundaries were well beyond the APE. They chose a valley and river system, various typologies, and they actually did say, "look at these, look at our Great North Woods, not just one mile beyond our corridor." And interestingly, in every one of their five studies, they found -- they defined cultural landscapes partially within or within, as well as outside of the one-mile APE. So, in fact, their findings answer your earlier question: Are there cultural landscapes beyond the one-mile APE? Even in these studies directed on behalf of this project by DHR and the consulting parties, the findings are beyond the APE.
Q. Thank you. Now I'd like to ask you, in
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addition to the cultural landscape reports and the historic properties effects tables and the Programmatic Agreement, did you see other materials related to cultural
landscapes that have come in subsequent to your prefiled testimony -- for example, the letter dated August 25 th that was filed, that was directed -- a letter sent from the New Hampshire Division of Historical Resources to the Subcommittee?
A. I have that letter.
Q. Okay.
A. It's directed to the Subcommittee, and it's dated October 25th. You have a question about it?
Q. Yes, I do. So you are familiar with this. You've seen it.
A. I read it.
Q. Okay. Thank you.

MS. BOEPPLE: Dawn, can I have the ELMO, please?

MR. IACOPINO: Ms. Boepple, can you confirm the date on the letters?

MS. BOEPPLE: 25 August 2017.
\{SEC 2015-06\}[Day 53 AFTERNOON Session ONLY]\{10-27-17\} MR. IACOPINO: Thank you.
A. Subject: Northern Pass Transmission, LLC and Public Service of New Hampshire, $d / b / a$ Eversource Energy, Docket No. 2015-06.

BY MS. BOEPPLE:
Q. That's the same letter that was also submitted as SPNF Exhibit 223, Bates numbers SPNHF 07235 through 07256.

I've put up on the screen the second page of the letter, and I'd like to direct your attention to the section with the heading Cultural Landscapes. Are you familiar with that paragraph?
A. Yes.
Q. Okay. And would you agree that that's basically a definition of cultural landscapes that DHR considers a definition for cultural landscapes?
A. There is a quotation. The sentence does cite the National Park Service as the source. I believe that it's from Cultural Resource Management Guidelines of the National Park Service, MPS28.
Q. So are you familiar with that definition?
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A. Yeah.
Q. And would you agree with that definition of cultural landscapes?
A. Oh, I do. Sure. It's MPS. It's one of the foundations of the work we do.
Q. And would you agree that DHR's letter, having read it, also talks about using that definition in the Section 106 process?
A. They do talk about that.
Q. Okay. And do you also see the highlighted section at the bottom of the second paragraph of that section of the letter where it says "potentially eligible National Register cultural landscapes of varying size and significance are proposed"?
A. Yes, I do see that.
Q. And I believe earlier you were testifying under Mr. Aslin's questioning about historic resources and definitions under New Hampshire law.
A. $\mathrm{Hmm}-\mathrm{hmm}$.
Q. And would you also agree that New Hampshire's definition is broader than resources that are eligible for the listing on the National
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Register?
A. It is.
Q. Okay. Thank you.
A. It is broader.
Q. How broad?
A. Well, it's interesting. In the introduction to our report of 15 November, we cited the SEC rules and definitions and New Hampshire Historic Preservation law, which actually both of which were foundational to the approach we took. We were often, if not always, working on National Register properties, national landmarks, heritage areas that have already been designated. But when you read the New Hampshire guidance, legal guidance, and the rules of the SEC, the language broadens the capture of resource types and it broadens the values. So the issue here is that the values as stated, and I think I've said it several times today, value to the people of New Hampshire is clearly indicated.

The other thing that's in New Hampshire law as it indicates is that the heritage
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values include their social and economic and educational values and that those values are important to the people of New Hampshire and its economics and its fruitfulness going forward and its roots, broadly stated. I am not using the terms in the law. But this definition led us to look beyond the simple 106 process of saying it's got to be on the Register or eligible for.

I think our understanding of our study of those documents led us to look at the actions of society. And those actions included conserving land. Most of the conservation lands are not NR-eligible or NR-listed, but it's clearly a widespread societal value.
Q. So why is that important? Why is that an important distinction?
A. Because the Applicants have considered history and culture, in terms of its resources, as those that are NR-eligible and listable -- listed or eligible. So, if we narrow our capture of historic and cultural value of place to only those that go on the
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National Register, we're not really looking at the society, its economic values, its roots, its meanings. And your laws in New Hampshire appear to re-focus in a broader way what those resources are.
Q. And is that a similar problem with the Programmatic Agreement?
A. Absolutely, because the Programmatic Agreement views historic and cultural resources as only those that are listed on the National Register or eligible for the National Register.
Q. So, therefore, by its very definition, would it be fair to say that the Programmatic Agreement is not designed to protect anything beyond that?
A. The Programmatic Agreement aligns to Section 106. It doesn't align to the SEC rules or the laws of the state of New Hampshire.
Q. Okay. Thank you.

MS. BOEPPLE: No other
questions.
CHAIRMAN HONIGBERG: Ms. Percy.
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[WITNESS: O'DONNELL]

BY MS. PERCY:
Q. Good afternoon, members of the Committee and Ms. O'Donnell. My name is Susan Percy. I am an intervenor for the Percy Summer Club, representing a fairly small group of people who have camps on Christine Lake, and the spokesperson for the combined Dummer, Stark, Northumberland Group. And I also like to think that I represent the public because the public has access through the Percy Summer Club to all the Nash Stream Forest, the Kauffmann Forest, the Percy Forest and Christine Lake. So I think I play multiple roles.

So, with that said, I just have a couple of questions, and partly because I have not been able to read the cultural landscape report that was done on the Upper Ammonoosuc area in its entirety, as I think you said you haven't as well.
A. Yeah. Let me just correct that I think they called all these "studies."
Q. Studies?
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CROSS-EXAMINATION

called all these "studies."
[WITNESS: O'DONNELL]
A. They call them "cultural landscape studies" and "study areas." I may be wrong, but a "cultural landscape report" is a bit of a pejorative term because the Federal Government, through the National Parks Service, says what the content of those reports is supposed to be.
Q. Just for my purposes, can you tell me, typically in a study, would there be contact with the community at large that either lives in the area or has greater familiarity of that area?
A. Depends.
Q. And what would it be dependent upon?
A. It depends on the scoping and the purpose of the Project.
Q. So if we think about this project with Northern Pass using the right-of-way all the way through Dummer, Stark, Northumberland, would you think that this -- and looking at cultural landscapes within this area, would you think that that would warrant some public comments and participation from the study group?
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[WITNESS: O'DONNELL]
A. I wouldn't want to offer an opinion on it. I know that in our work, 85,90 percent of the time there are public engagement, community engagement components.
Q. Okay. Great. Thank you.

So I see in your report that you reference RSA 227-C, that clearly establishes the importance of the environmental assets of New Hampshire; is that correct?
A. Yeah. What page are we on?
Q. Three. Page 3 of your report. I didn't bring my pages.
A. Absolutely.
Q. And in this RSA it was determined that it is critical, and I quote here, "to engage in a comprehensive program of historic preservation to promote the use and conservation of such property for the education, inspiration, pleasure and enrichment of... New Hampshire citizens [sic]." Is that correct?
A. You're very close to an exact quote. You flipped citizen, but it's all good.
Q. Oh, thank you. Citizens of -- oh, well,
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[WITNESS: O'DONNELL]
whatever.
Would you agree that this statement of public policy in the public interest is particularly important to citizens in the North Country, where large areas are either undeveloped or conserved through efforts of private and public partnerships?
A. I would suggest that this statement is relevant to everyone in the state of New Hampshire. And I think that the resources in the north are special, but it's not irrelevant to those in other areas.
Q. Thank you. Well, this one's a little harder to sort of put in that context, because do you believe that the newly offered cultural landscape reports -- studies adequately address this conservation and protected views in the North Country?
A. I haven't had the opportunity to study the history and evolution of the North Country landscape the way they did in the study. The methodology of the Public Archeology Lab looks quite sound. Their history looks quite thorough. I think the report -- the study
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work itself is quite good. I'm not completely clear on their methodology for keeping certain properties in and other properties taken out. So I think I would need to know more to be able to comment on the boundaries of the cultural landscapes as defined. But I think one of the things that these studies point out is that there's more -- there are more resources with more value than were originally included in the Applicant's materials.
Q. Thank you.

Just going to your point about the boundaries. In looking at -- I know the Counsel for the Public brought up the map of the Stark area with Christine Lake outlined. And in the boundary, the Nash Stream Forest and the Kauffmann Forest are left out. So the boundary line is drawn simply around Christine Lake and extends out to the east and the west, but it doesn't extend north and south. Did you think that -- I'm sorry. It extends south. It doesn't extend north, so it leaves out a good chunk of the Nash Stream
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Forest.
Do you think that that's an appropriate boundary to leave out an area that has hiking trails all the way through the forest and is used by the public?
A. Again, $I$ think if we look at the boundary of each of these cultural landscapes, my impression is that they follow property lines. I think they look like parcel boundaries that turn east, west, drop north-south, head east-west again, go up, come over. So they may have looked at historic land ownership and brought that forward.

I was recently in a mountainous area where we were talking about boundaries, shall remain unnamed because it was a confidential mission about world heritage. And we talked about the reasons why we should go up the valleys and along the ridges and include the landscapes facing the core resource area. Another way of considering it, that's a visual way. Doesn't follow a property boundary. It follows geography. Another way
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of considering it would be a land use approach. If you used a land use approach, you would likely connect to those properties that were interconnected. So if the trails of the adjacent Kauffmann Forest connected to Christine Lake and the Percy Summer Camp, you would look carefully at those connections. So when you're looking at recreation areas, you look at access and you look at circulation and you look at perception. So I think we have different ways of defining boundaries. It appears to me that the cultural landscape studies as presented followed property boundaries rather than use or geographic boundaries.
Q. Oh, great. Thank you.

Just one more question on that. The Percy Summer Club was established in the late 1880s, and the trails to the Percy Peaks and to Devil's Slide and other areas that connected to the town of Stark were established in the late 1888s. Would that have historic significance --
A. Yes.
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[WITNESS: O'DONNELL]
Q. -- to the Nash Stream Forest, because those trails clearly go into the Nash Stream Forest?
A. I think the trails have significance as establishing a continuity of historical use.
Q. Great. Thank you.

Are you aware that the entire lake itself, Christine Lake, is protected from development forever?
A. Yeah, I was aware there was a conservation easement on Christine Lake.
Q. And that also all around the lake, it's over -- I mean, it's many thousands of acres that are now protected. Do you think that's significant in the North Country?
A. I think that that, along with all the other protected acreage in the North Country, is very significant in terms of an action that expresses the values of people.
Q. So do you believe that simply using an existing corridor, without regard for the cultural landscape and protected areas, is a sound argument for the construction of the proposed project?
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A. No.
Q. Thank you. Can you tell me why not?
A. Why is it not a sound argument? Well, the issue with this particular upgrade is its scale and intensity, I would say. So, even going through a wooded landscape, you will continually encounter this very large utility corridor. And that corridor is going to be considerably more noticeable in the North Country because much of it rises above the height of surrounding trees. So I think it's a big shift. I think it's a big difference because it's big.
Q. It is big.

The other question $I$ have on that is I believe you mentioned that the cumulative impact of seeing the transmission corridor is something that we haven't paid as much -that the Applicant did not pay close enough attention to. And can you explain that a little bit more?

MR. NEEDLEMAN: Objection. It's
just asking to repeat testimony in the record.
CHAIRMAN HONIGBERG: Ms. Percy,
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this is --
MS . PERCY: New.
CHAIRMAN HONIGBERG: -- this is literally what they said. MS. PERCY: Right. Thank you. So my last two questions are actually repeats as well, so I'm not going to ask them. Thank you very much.
A. You're welcome.

CHAIRMAN HONIGBERG: Mr.
Kimball.
CROSS-EXAMINATION
BY MR. KIMBALL:
Q. (Kimball) Ms. O'Donnell, Kenneth Kimball from the Appalachian Mountain Club. And I just have a few questions here since most of my other questions have already been asked.

In your prefiled testimony, you stated that your conclusions were prepared without the benefits of three studies currently underway as part of the U.S. Department of Energy Section 106 process. Did this include the identification of specific cultural landscapes that were just submitted by the
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Applicant as Exhibits 196 and 211?
A. Yes.
Q. And are there others still pending?
A. Not that $I$ know of.
Q. Understanding that the Section 106 is a consultation process and not the same as the SEC rules, in your prefiled and supplemental prefiled testimony you describe groups of resources -- that is, registered historic features, protected and recreation lands, scenic roads, trails, graveyards and so forth. You then summarize these in your initial report town by town. Your report did not appear to identify specific cultural
landscapes with respect to geographic boundaries. Could you please clarify, at least conceptually, what you consider to be cultural landscapes under the New Hampshire SEC rules and how that differs from the proposed cultural landscape districts with specific boundaries that the Applicant just submitted to New Hampshire DHR under the Section 106 process?
A. So your question is related to defining
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A. Not that I know of.
Q. Understanding that the Section 106 is a
[WITNESS: O'DONNELL]
cultural landscapes first, and then, second, what does that mean in relationship to those cultural landscapes defined in the current studies --
Q. Correct.
A. -- that have been recently received?
Q. That is correct.
A. So, in our report, because we were not asked to define cultural landscapes, we looked at the typology of elements that make up the landscape of New Hampshire, adding those that we felt were defined through the actions of the people beyond those simply listed on the National Register, which you just enumerated saying graveyard, cemeteries, conservation lands, recreation lands and so forth. Those are in our testimony. So we didn't define those as cultural landscapes in the global sense. We indicated that these were landscapes that had cultural imprints and that, because of the status that they were in, as developed for the uses that they were being used for, they had a cultural value apart from saying they're cultural landscapes
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individually or they worked together as a group. We simply said all these typologies have cultural value. So that's unlike the brief that these studies had, because the studies were specifically defined to look at a study area -- the Ammonoosuc, the Great North Woods, et cetera -- as defined by DHR and the consulting parties. And the outcome of that is directed by those definitions, including the federal definition of cultural landscape.

Now, we just went through a question on how you establish boundaries, so I don't think I should repeat that. But I think that the studies are well founded. I already stated earlier this afternoon that I am not convinced that if we looked at the same data and the same history we would find the exact same cultural landscapes or their boundaries. We would be unlikely, in fact, to use a parcel boundary kind of edge because it's a legal, invisible edge. It doesn't relate to the geomorphology or cultural use of a place. So, are they adequate? I would say they're
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[WITNESS: O'DONNELL]
very good and they've added to the record of what the resources are that are out there.
Q. Let me just follow up with what I think is the last question $I$ have here.

You touched on, I think it was in the response you just gave as well as to Ms. Percy, that the cultural landscape districts that were submitted under Exhibits 196 and 211 may have some deficiencies relative to the boundaries because they seem to have followed parcels. The follow-up question I would have is: Is it your assessment and understanding -- and you've had minimal time to review those cultural landscapes -- but do you believe that there's other cultural
landscape districts, just using the process that they used, that should also be considered for further studies?
A. I would think that there are very likely. And that's based not on my review of their studies but on the mapping we did and presented in our supplemental testimony and in our original testimony.
Q. And I realize you said you hadn't had time to
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really study this area in great depth. But are there any other areas you could at least generically suggest at this point?
A. I don't think I'd like to speculate on those areas.
Q. All right. That's all the questions I have. Thank you.

CHAIRMAN HONIGBERG: Are any of the other intervenors in a position to go? We've got Muni Groups. I've got Ms. Bradbury and I think Ms. Crane are the others I see in the room who could go. Ms. Pacik?

MS. PACIK: Yes, I'm ready to go. Thank you. We just need the Apple TV, please.

CROSS-EXAMINATION
BY MS. PACIK:
Q. Good afternoon. My name is Danielle Pacik. I'm sitting over here. I'm the attorney for the City of Concord, and I am also the spokesperson for Municipal Group 3 South. And I just have a few questions for you.

I'd like to start by looking at the
letter that Attorney Boepple referenced
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earlier, which is the letter from New Hampshire DHR, dated August 25th, 2017. I had it as previously marked as Counsel for the Public Exhibit 443. I think she also had a separate exhibit number for SPNF. Oh, I think it was also SPNF 143. Oh, my apologies. Counsel for the Public 143. I don't think we're up to 443 yet.

All right. So what I'm showing you is Page 12 of that exhibit. And on it you can see the five different study areas that were analyzed for the Section 106 process; is that correct?
A. Yeah, I do see those.
Q. Starting out with the Great North Woods, which is the northern section of the proposed project, and then it goes down to the Ammonoosuc River Valley Study Area and then southerly to the Pemigewasset River Valley Study Area, and then there's an area between Franklin and Concord where there is no study area. Do you see that?
A. Yes.
Q. And my question is: Why wasn't that region
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the 106 process; right?
A. It is.
Q. Okay. So in terms of the lack of study area between Franklin and Concord, does that mean that there are no cultural landscapes in that area relevant for the Site Evaluation Committee's review?
A. No, I wouldn't draw that conclusion.
Q. Okay.
A. That there are no cultural landscapes? No, I think that there are quite likely cultural landscapes within Franklin and Concord.
Q. Okay. So if there are likely cultural landscapes and they haven't been studied, then would it be fair to say that the Site Evaluation Committee does not, as of this date, have that relevant information before it?
A. I would answer by saying that the combined work of the Applicants, including the original work by Preservation Company and its assessment, and these studies, do not actually capture a high percentage of the historic cultural resources that we mapped
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and presented in our study. So we think that there's a lot of capture that's missing in the work of the Applicant.

MS. PACIK: Okay. I have no further questions. Thank you.

CHAIRMAN HONIGBERG: Ms.
Bradbury. Oh, I'm sorry, there was somebody else. Ms. Bradbury, wait.

Mr. Whitley, you have questions, too?

MR. WHItLEY: Yes, I do, Mr.
Chair, just a few.
CROSS-EXAMINATION
BY MR. WHITLEY:
Q. Good afternoon, Ms. O'Donnell. My name is Steven Whitley. I'm counsel to several communities along the route: Deerfield, Pembroke, New Hampton, Littleton, and the Water and Sewer Department of the Town of Ashland. And I just have a couple of quick questions to go over.

Earlier this morning you had a conversation with Mr. Aslin, and you were talking about avoidance, minimization and
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mitigation. Do you recall that conversation?
A. I do. It was this afternoon.
Q. Yeah, you're right, this afternoon. Thank you.

And I want to turn your attention to your supplemental testimony. And this is Counsel for the Public 141. And we're on Pages 8 and 9. Do you see that on the screen?
A. I do.
Q. And just to follow up on what Mr. Aslin was discussing and the comment that you make here about the Applicants, that if they had begun the Project with the intent of avoiding historic sites and cultural landscapes, there would have been a different project design. And I'm wondering what you meant by "different" design in terms of a mitigation proposal.
A. As a cultural resource specialist, I see a project that, in my opinion, has unreasonable adverse effects, as I've stated in my testimony. My issue is that the scale of it and the extent of it will really radically
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alter the landscape of New Hampshire. So if I were working on a design team, which is where I am most often working, on a design team, I would have started with how do we retain the qualities and character of New Hampshire, and I wouldn't have proposed a project of this type. The project that would have been proposed would have been one that would have avoided more impacts. So if you begin with avoiding impacts rather than developing the project that you can build and then mitigate it, you wind up with a different project.
Q. Right. And I understand that's your testimony here. But I think my question was a little more specific, in that $I$ wasn't clear if you had a specific alternative design in mind or if your opinion was just as generic as you just stated.
A. Well, I think the SEC can only look at the Project that the Applicants bring before them, which is where my commentary came from.

We've done work in places where power poles have been an issue, historic districts
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in particular, and often finding a way to route them in less visible areas. Keeping them low and putting more portions of them underground solves the problems more effectively and impacts fewer resources. I think it would be overly speculative to say I had some design in mind. Certainly the mitigation of undergrounding through the northern forests, particularly the national forest, has been a very important modification to the Project to limit its adverse impacts.
Q. Thank you. Now I want to turn to a different topic, and I want to talk about some testimony that was provided by Mr. DeWan and Mr. Varney during the hearings and how they relate to orderly development. But first I just wanted to do a little background here. I'm going to put up just for your benefit... this is from your Exhibit B of your prefiled testimony. And this is Counsel for the Public 140, Exhibit B, and we're looking at Pages 115 and 116. Do you see that there on the screen?
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A. I do.
Q. So here you rendered an opinion on orderly development, stating the Project would result in an unreasonable adverse impact. Do I have that right?
A. Yeah.
Q. And in making that determination, it was your opinion that the visibility of the Project near historic sites and cultural landscapes is what rendered the Project unreasonably adverse. Again, is that basically correct?
A. Yeah, I specifically stated that "affecting the experience of historic sites and cultural landscapes was contrary to the long-adopted planning in the vast majority of the host towns."
Q. Okay. I want to put up now some testimony from the earlier proceedings. And this is from Day 32 in the afternoon. And this --
A. Which I haven't seen before.
Q. Yeah. So, thank you. You have not seen this before, so I'm putting it up for you now.

And I've highlighted a portion here.
And you see there that Mr. DeWan
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testified that he did not offer an opinion on orderly development in this proceeding; correct?
A. Yes. "You weren't analyzing orderly development?" is the question. And he said, "That is not our area of expertise."
Q. Could you speak into the microphone, please?
A. The text indicates that he wasn't analyzing orderly development.
Q. And is it your understanding that his review was limited to what he considered to be scenic resources under the SEC rules?
A. Yes.
Q. I now want to put up some testimony with

Mr. Varney. And let me just ask you, have you seen any of the transcripts of Mr .

Varney's appearance?
A. I have not reviewed them.
Q. Okay. So I put up now, this is Day 37 , the afternoon session, and this is Page 20.

MR. WhItLey: And just for the record, let me just go back and say the prior testimony that I put up from Day 32 was Pages 110 to 111.
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BY MR. WHITLEY:
Q. But now back to Mr. Varney's testimony here. Do you see there that Mr. Varney testified that as part of his expert opinion on orderly development, he did not do any sort of visual assessment as part of that opinion?
A. Right.
Q. Okay. So as you sit here today, Ms. O'Donnell, based on what you've seen in the record to date, do you believe that the Applicants have adequately analyzed how visibility of the Project will impact orderly development as it relates to your stated goals of preserving and protecting historic sites and cultural landscapes?
A. Can you restate? You've got, like, four factors at work there.
Q. Yeah, $I$ can say it again.

As you sit here today, based on what you've seen to date, do you believe that the Applicants have adequately analyzed how visibility of the Project will impact orderly development as it relates to the goals of preserving and protecting historic sites and
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cultural landscapes?
MR. NEEDLEMAN: Objection.
Calls for generic testimony and things that are already in the record.

CHAIRMAN HONIGBERG: Mr.
Whitley.
MR. WHITLEY: I'm asking Ms.
O'Donnell to respond to some testimony that was provided by the Applicant's experts previously in the proceeding.

MR. NEEDLEMAN: I don't think it's a response to the testimony at all.

CHAIRMAN HONIGBERG: Yeah, that question was not. I mean, if you want to ask a question along the lines of "anything that you've heard or read or seen changed your opinion," which is clearly stated in her own report, you can ask that. I think we all know what the answer is. But I mean, if you want to tie it to something that you were just asking about, that's fine. But the question you asked was a request to restate her existing conclusion, I think, or her prefiled conclusion.
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BY MR. WHITLEY:
Q. Ms. O'Donnell, based on the portions of transcripts that I've shown you, does that change at all the opinion you provided earlier in your prefiled testimony?
A. No.
Q. Okay. Have you seen anything in the supplemental testimony that you reviewed that would change your opinion?
A. No.

MR. WHITLEY: I've got nothing further. Thank you.

CHAIRMAN HONIGBERG:
Ms. Fillmore, do you have
anything?
MS. FILLMORE: Nothing.
CHAIRMAN HONIGBERG: Okay. Now, Ms. Bradbury.

MS. PACIK: Just as a point of order, can I --

CHAIRMAN HONIGBERG: Yes, Ms.
Pacik.
MS. PACIK: I apologize for
interrupting. But just in terms of the
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objections, I understood that Attorney Walker would be examining this witness, and I understood that Attorney Needleman would be objecting on issues for friendly cross witnesses. But where this is Counsel for the Public's witnesses, I'm wondering why Attorney Walker is not objecting.

MR. NEEDLEMAN: Well, I think this is precisely the issue that I've tried to cover with I think six different attorneys and then reported to Mr. Iacopino, which is I was going to handle procedural objections, notwithstanding whether $I$ was examining witnesses or not.

CHAIRMAN HONIGBERG: Ms. Pacik, is this a significant issue?

MS. PACIK: I do think it's a problem. I mean, I think we all need to play by the same rules at some point. And I was under the impression that this was for the intervenors, not Counsel for the Public.

CHAIRMAN HONIGBERG: I don't have any understanding about this. Is there some understanding that this arrangement that
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you all talked about didn't apply to the friendly cross of Counsel for the Public's witnesses?

MR. NEEDLEMAN: Certainly not from my perspective. And as I've said before, just because these are Counsel for the Public witnesses doesn't mean cross can't be friendly if it's not, for example, trying to tease out things that are already in the record or are consistent with issues where the parties agree.

CHAIRMAN HONIGBERG: Yeah, it was clearly friendly cross, Ms. Pacik. So if the rule was friendly cross, then that's the rule. Are you prejudiced in some way by what's going on?

MS. PACIK: I'm just trying to get a point of order and clarification on that. I think that's a fair question to be asking. And, you know, just --

CHAIRMAN HONIGBERG: Are you satisfied with the response?

MS. PACIK: Yeah, I just wanted clarification on this. Thank you.

CHAIRMAN HONIGBERG: Okay. Ms.
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Bradbury .
MS. BRADBURY: Thank you, Mr. Chairman.

CROSS-EXAMINATION
BY MS. BRADBURY:
Q. Ms. O'Donnell, I am Jo Anne Bradbury, and I live in Deerfield. I do have a few questions in respect of Counsel for the Public's Exhibit 464.

MS. BRADBURY: So, Jeanne, if you'd just hand those out. When we put those up on ELMO, there's a glare, and there's such a shiny thing, I got a copy for everybody.

BY MS. BRADBURY:
Q. This is Counsel for the Public Exhibit 464. It is a map of historic sites in Deerfield that was created as part of Deerfield's 250th anniversary celebration last year. So, would you take a look at the map on there.
A. I've seen this map before.
Q. Oh, good. Okay. We've heard testimony that the Northern Pass historic expert witnesses did not reach out to local historical societies in an effort to locate historic
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sites in New Hampshire. Would you agree that such a resource would have been useful in her evaluation of historic sites?
A. Any inventory is useful. This one being a town-based one would have been helpful, certainly.
Q. And do you agree that Ms. Widell's focus on the number of historic sites in New Hampshire was limited?
A. I don't believe that. I think that they did a very good capture of sites of architectural value, but that was their nearly exclusive lens.
Q. Understood. So they were --
A. And they had a lot of sites. I mean, they were up toward 1200 and something. So what they inventoried was architecture, often not relevant to setting. There were a few bridges, one or two agricultural districts. But it was quite focused on architecture. I would not say that it was limited. I think it was big, but focused.
Q. Okay. But if you were considering all of the possible historic sites in the entire state
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where they're locally known and cherished and not considered, then that would be a factor that would have been helpful?
A. That's a larger universe, yes.
Q. Yeah. Okay. Thanks.
A. So if you were considering all the historic sites and elements that were valuable historic sites, let's leave it at that, that were valuable to the communities of New Hampshire, you would have a much more dense map.
Q. Thank you. Okay. So we'll just keep that map handy for a second, Counsel for the Public 464.

Now, our next exhibit, we'll mark this Deerfield Abutter Exhibit No. 154.

MS. BRADBURY: Jeanne, you're going to put the atlas up.

BY MS. BRADBURY:
Q. This is the New Hampshire Atlas and Gazetteer, Pages 28 and 29, and that's beautiful, scenic, historic Deerfield.

MS. BRADBURY: Jeanne, can you
get that better situated on there so that it
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shows more? And if not, we can cut it. Oops, too small.
A. She's got it. It's okay.

BY MS. BRADBURY:
Q. Can you see the roads, the road names on there?
A. Maybe not the names.
Q. Yeah, okay. We're going to cut it.
(Discussion off the record)
Q. Okay. So I'm going to ask you to clarify something in your prefiled testimony where you note that the proposed project corridor essentially bisects the town of Deerfield, running south of and parallel to Mount

Delight Road and Nottingham Road. We'd like to get a little clarification of that, and that's the purpose of this exhibit.

The town of Deerfield is highlighted in yellow, and the existing right-of-way where Northern Pass towers and lines are proposed to be built is also highlighted in yellow.

Can you see that?
A. Yes.
Q. Okay. So the existing right-of-way crosses
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the following roads, and I'd like you to see if you can see these roads as we go through. Mount Delight Road at the Allenstown-Deerfield line. Got it?
A. Right.
Q. Far left. Thurston Pond Road?
A. Right.
Q. Haynes Road?
A. Yeah, I see that.
Q. Lang Road?
A. Following. Go ahead.
Q. Church Street, which I believe is -- it was formerly known as Old Center Road, and on this atlas it's listed and Old Center Road.
A. I see that.
Q. North Road, which was also known as, and still is known as Route 43.
A. Right.
Q. Mountain Road.
A. Yup.
Q. The area just south of Deerfield Parade --
A. Right.
Q. -- and Nottingham Road.
A. Right.
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Q. And do you see where the right-of-way leaves Deerfield after Cate Road?
A. Right.
Q. Okay. All right. Good.

Now, would you please take a look at those very same roads which are marked on -MS. BRADBURY: And Jeanne, we're going to need this map back up, counsel for the Public Exhibit 464, which is the map of Deerfield's historic sites.

BY MS. BRADBURY:
Q. And you'll see on there to the left at the Allenstown-Deerfield line, Mount Delight Road -- the same roads. Thurston Pond Road, that's not -- they didn't write Thurston Pond in. It's the light gray mark that heads into Thurston Pond from Mount Delight.
A. I see that.
Q. Okay. Church Street again. North Road, that's also 43.
A. Right.
Q. Mountain Road, the area just south of Deerfield Parade, and Nottingham Road, and then it crosses right out, same town, right
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out after Cate Road.
So you can see from looking at where the power lines cross on the atlas and looking at the historic map that there is a significant number of historic sites along the proposed route in Deerfield.
A. As mapped on your map.
Q. Yes.
A. Yup.
Q. Do you agree that, given the size, scale and nature of the proposed project, it will have an unreasonable adverse effect on historic sites throughout Deerfield?

MR. NEEDLEMAN: Objection. This calls for reiteration of testimony, generic testimony.

CHAIRMAN HONIGBERG: Ms.
Bradbury.
MS. BRADBURY: Well, we would
like to bring the general, generic testimony down to the level of the specific because it has an impact on the people who live and the tourists who come to see the historic sites in Deerfield. So we're trying to just give it
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life as showing what it's doing to these historic sites. And Ms. O'Donnell's testimony was generic --

CHAIRMAN HONIGBERG: Her
testimony was generic as contemplated by Counsel for the Public.

MS. BRADBURY: Well, can I just add? I do believe that it's quite helpful. And we've already looked at it. But the point is to bring up full and true disclosure of the facts, obviously. And we think that these questions are doing that.

CHAIRMAN HONIGBERG: Overruled.
You can answer.
A. Okay. Your map shows a density of specific sites in Deerfield that you have mapped as historically important. Most of these are buildings. I would suggest to you there are more resources out there that are not buildings. And I would suggest to any community that they should be active in their own inventory process and continue the work that they've got as a foundation and build on it. And I would suggest to you, further,
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that there is a considerable density of historic resources, those shown and those not yet inventoried in Deerfield.
Q. Thank you. And I'd like now to show you, there is at least one -- there are a number Of mill sites on here as well, and I'd like to show you the mill, the historic mill at Thurston Pond Dam, the stone work.

MS. BRADBURY: And that would be -- Jeanne, would you put up Deerfield Abutter 77.

BY MS. BRADBURY:
Q. That's the historic Thurston Pond Dam looking at the stone work from underneath. Okay. That's on the historic --
A. This is an existing photo?
Q. Yes, this was taken in April of this year.
A. Okay.
Q. And this is -- that dam is located on the historic map as No. 69.

MS. BRADBURY: Jeanne, would you put up Deerfield Abutter 79.

BY MS. BRADBURY:
Q. This is the mill stone found at this mill
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site that we've just put up.
MS. BRADBURY: And finally, can we put up, Jeanne, Deerfield Abutter 76.

BY MS. BRADBURY:
Q. This is the view from historic Thurston Pond Dam in Deerfield, which is No. 69 on the historic map we gave you.

Do you see the top of the existing tower for the 115 kV line that's been circled?
A. Yes, I do.
Q. Okay. You can just barely see it. If I hadn't pointed it out to you, would you have been able to tell me that there was something intruding there?
A. No, because of the height of the trees and the topography.
Q. Right. Okay. So the existing --
A. It's relatively integrated as it exists.
Q. Thank you.

The Applicant has informed us that
existing towers in this area are 75 feet tall. And the August 2017 project maps show that the new towers will range across this vista from 130 feet in height to 140 feet in
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height. So that's roughly 55 feet to 65 feet taller than the one that you see there that's circled. So the towers and lines, the new, higher towers and lines, will be clearly visible at that height; correct?
A. Given the perspective that you're showing from the view, I believe the south shore of Thurston Pond here looking north, because the line runs north of Thurston.
Q. Yes, from the dam, standing on the dam. That photo was taking standing -- that we put up earlier, that photo was taken standing on the dam.
A. Yes, $I$ would suggest that if they did a simulation of the heights here, you would see them against the sky.
Q. Okay. Do you agree that very visible 130- to 140-feet-tall towers above the tree line running across the vista, less than half a mile away from this historic dam site, would create an unreasonable adverse effect in this popular location?

MR. NEEDLEMAN: Objection. This
is all old information that should have and
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could have been evaluated.
CHAIRMAN HONIGBERG: Ms.
Bradbury.
MS. BRADBURY: Well, the project maps from August couldn't have been evaluated prior to her prefiled testimony. And there was no photo simulation provided by the Applicant.

CHAIRMAN HONIGBERG: What are you talking about in August?

MS. BRADBURY: Oh, well, let me just put this up.

CHAIRMAN HONIGBERG: You're
talking about new construction maps?
MS. BRADBURY: Yeah, construction maps.

CHAIRMAN HONIGBERG: Is there something different in those maps about what was going to be in this location?

MS. BRADBURY: Well, I assume so because they filed a new set of them that included this.

Jeanne, can we put that up? I think you'll see the date on there is August of 2017. That's Thurston Pond.
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CHAIRMAN HONIGBERG: My
understanding is they filed an entire new set of maps in August.

MS. BRADBURY: Yeah, and I don't have all of them.

CHAIRMAN HONIGBERG: And I could be wrong, but my understanding is that they don't show any changes in this area.

Mr. Needleman, are there changes in this area?

MR. NEEDLEMAN: I believe there's one small change in Deerfield that resulted from a request from Ms. Bradbury of the construction panel to move one structure away from a vernal pool. Other than that, I don't think there are any changes in Deerfield. MS. BRADBURY: We're not talking about the vernal pool here.

CHAIRMAN HONIGBERG: I didn't think so. And if there's been no opinion from this witness about this visual impact prior to now, you're not going to elicit it at this stage. So $I$ guess the objection is sustained. MS. BRADBURY: Okay. Moving on.
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Well, could I ask that as a hypothetical question?

CHAIRMAN HONIGBERG: Give it a whirl.

BY MS. BRADBURY:
Q. If you could see the towers and lines from the dam, hypothetically, from a historic site, would you consider that an adverse impact to a historic site?

MR. NEEDLEMAN: Same objection.
CHAIRMAN HONIGBERG: Yeah, that's a very generic question as asked. And I think her entire testimony is about that very topic: If you can see towers from historic sites, what's the effect. Now, it's hundreds and hundreds of pages, but that's in large measure what this witness's testimony is about. MS. BRADBURY: Right. And we're simply trying to bring it down into a very hard look at a very beautiful place, that it takes it beyond the general and into a specific site. CHAIRMAN HONIGBERG: And you've been given some leeway on that, but you've now gotten too granular and gone into an area that
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if Counsel for the Public and the witness chose not to go, we're not going to go there right now.

MS. BRADBURY: All right. Okay.
BY MS. BRADBURY:
Q. All right. So, next question. Would multiple views of a transmission project upon approach to a rural historic district create an impact to the overall integrity of the district?

MR. NEEDLEMAN: Same objection. CHAIRMAN HONIGBERG: And that's again -- Ms. Bradbury, that sounds like her report, her testimony.

MS. BRADBURY: Well, on Page 12
of Ms. Widell's supplemental testimony, we looked at her response to Mr . Newman's testimony regarding the Project effects on Nottingham Road Rural Historic District, and she only spoke of views within the district. And we would like to get this witness's opinion of approaching public view impacts within, as well as outside the district.

CHAIRMAN HONIGBERG: Is there
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> something that Ms. Widell said that was new or that was said here that you want this witness to respond to?

MS. BRADBURY: I'm sorry? Yeah, in her supplemental testimony.

CHAIRMAN HONIGBERG: And what did Ms. Widell say?

MS. BRADBURY: She spoke only of views within a district, not outside the district.

CHAIRMAN HONIGBERG: You're telling -- you're describing -- I don't even know if you're paraphrasing. What did she say? What is it you want this witness to respond to? Let's find out if it's something that is an appropriate area for you ask about. I don't know what she said.

MS. BRADBURY: What Ms. Widell
said?
CHAIRMAN HONIGBERG: What did
Ms. Widell say?
MS. BRADBURY: Okay. We don't
have it handy. Yeah, maybe we do.
This is Ms. Widell's
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supplemental testimony, Page 12, Lines 18 to 25. And this is in response to Mr . Newman, the Deerfield Abutters' historic expert, and his testimony regarding project effects on Nottingham Road Rural Historic District. And she's considering only the views within the district. And we would like an opinion of approaching the district from outside the district.
A. Okay. I've read --

CHAIRMAN HONIGBERG: Wait, wait just a moment.

WITNESS O'DONNELL: Sure.
MR. NEEDLEMAN: Well, I'd just
like to understand the specific question.
CHAIRMAN HONIGBERG: Yeah, I
don't think we've got a question.
WITNESS O'DONNELL: We don't.
BY MS. BRADBURY:
Q. The question is: Would multiple views of a transmission line project on approach to a rural historic district create an impact to the overall integrity of the district?

CHAIRMAN HONIGBERG: Okay. The
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[WITNESS: O'DONNELL]

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adverse effects are deemed unreasonable, how is the Applicant held accountable in memorializing efforts to avoid the adverse effects?

MR. NEEDLEMAN: Objection.
Same --
WITNESS O'DONNELL: Generic question.

CHAIRMAN HONIGBERG: This is very efficient. The witness is lodging her own objection to the questions. This is great.

WITNESS O'DONNELL: Sorry. I got it.

CHAIRMAN HONIGBERG: Ms.
Bradbury, what we'd like you to do is focus on things that have happened, witnesses' testimony, documents that have been presented in the course of this proceeding that are new. And if you want her to react to or respond to them, that's what we're trying to do here.

MS. BRADBURY: Understood. One second.
(Pause)
MS. BRADBURY: I should have
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noted these questions pertain to the Programmatic Agreement.

BY MS. BRADBURY:
Q. So in respect to adverse effects on a historic resource that's been identified, and they are considered unreasonable, how does the Applicant -- how is the Applicant held accountable for keeping a record, memorializing efforts made to avoid them, the adverse effects?

CHAIRMAN HONIGBERG: Do you understand the question?

WITNESS O'DONNELL: Yeah. I think the question actually misinterprets the Programmatic Agreement.

BY MS. BRADBURY:
Q. All right. In your experience, at what time would discussions of avoidance, minimization or mitigation be held with affected parties for a project of this scale?

MR. NEEDLEMAN: Objection. MS. BRADBURY: This relates to the Programmatic Agreement. All of these next two questions relate to that.
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|  | CHAIRMAN HONIGBERG: How exactly |
|  | do they relate to the Programmatic Agreement? |
|  | MS. BRADBURY: The Programmatic |
|  | Agreement deals with these issues of avoidance, |
|  | minimization or mitigation. And the question |
|  | is when do you have those discussions with |
|  | affected parties -- |
|  | CHAIRMAN HONIGBERG: How does - |
|  | MS. BRADBURY: In her experience |
| 10 | as an expert -- |
| 11 | CHAIRMAN HONIGBERG: So is the |
| 12 | question how does the Programmatic Agreement |
| 13 | work to make things happen? Is that what |
| 14 | you're trying to get at? |
| 15 | MS. BRADBURY: Specifically, |
| 16 | when they are involving the affected parties |
| 17 | for a project of this scale. |
| 18 | CHAIRMAN HONIGBERG: I'm not |
| 19 | sure I understand what you're asking. |
| 20 | Ms. O'Donnell, do you |
| 21 | understand what Ms. Bradbury is asking? |
| 22 | WITNESS O'DONNELL: I think |
| 23 | she's asking about the function of the |
|  |  |

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impacts. The Programmatic Agreement, as it stands, it establishes a process. It doesn't actually establish methods or schedules.

BY MS. BRADBURY:
Q. Okay. Thank you.

And who's the final arbiter of determining if avoidance effects are sufficiently rigorous?
A. All those that participate and are signators of the Programmatic Agreement. And it's under the Section 106 guidance.
Q. Right. And is that a negotiation that takes place among all of the affected parties?
A. It's specifically called a "consultation," which means often dialogue and meeting and resolution.
Q. Well, what if it couldn't be resolved? What if some people feel that the avoidance efforts simply aren't sufficient? In your experience, has that ever happened that they could not resolve, that one party felt that their avoidance efforts were enough and another party thought that they were not?
A. I don't have experience in that case.
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Q. No?
A. No.
Q. Okay. Now, you did state that the Programmatic Agreement may not be a sufficient safety net for the SEC. Would you share that same view in respect to private property owners who have National Register-eligible properties?
A. The question as stated engages the statement that I made about the SEC safety net, and then your final phrase was for National Register-eligible properties.
Q. Right.
A. I think that the eligible properties and those that are listed are actually, usually well treated and included in Programmatic Agreements. Those historic and cultural sites and resources that are not listed or eligible are less likely, fairly unlikely to be treated effectively under a Programmatic Agreement through Section 106 because Section 106 applies to registered, listed and eligible properties.

MS. BRADBURY: Okay. All right.
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That's all I have. Thank you very much.
CHAIRMAN HONIGBERG: Ms. Crane, are you good to take 10, 15 minutes, or do you want to wait?

MS. CRANE: You've had experience with me last on a Friday now twice. I really don't think you want to ask me again for last, end of day on Friday.

CHAIRMAN HONIGBERG: I'm not going to misinterpret that.

MS. CRANE: Oh, please do. CHAIRMAN HONIGBERG: No, I think there's enough people who are going to need to question the witness when we resume next Thursday, right, that we'll have you go on Thursday. There's a few other intervenor groups that have to go then.

MS. CRANE: That's fine with me.
CHAIRMAN HONIGBERG: All right.
Is there anything else we need to do before we adjourn for the day?

Ah, yeah, I think there's a decent chance that next Thursday we probably won't start until 10. Commissioner Bailey
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[WITNESS: O'DONNELL]
and I are probably going to have to do a hearing at the PUC starting at 8:00. So, with that, we will adjourn.
(Whereupon the Day 53 Afternoon Session was adjourned at 4:49 p.m., with the Day 54 hearing to resume on November 2, 2017 commencing at 9:00 a.m.)
[WITNESS: O'DONNELL]

CERTIFICATE
I, Susan J. Robidas, a Licensed Shorthand Court Reporter and Notary Public of the State of New Hampshire, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of these proceedings taken at the place and on the date hereinbefore set forth, to the best of my skill and ability under the conditions present at the time.

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

Susan J. Robidas, LCR/RPR Licensed Shorthand Court Reporter Registered Professional Reporter N.H. LCR No. 44 (RSA 310-A:173)
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