1		STATE OF NEW HAMPSHIRE
2		PUBLIC UTILITIES COMMISSION
3		2017 - 10:04 a.m.
4	Concord,	New Hampshire 17 APR'17 PM1:34
5	RE:	DE 15-460 NORTHERN PASS TRANSMISSION, LLC:
6		Petition to Cross Public Waters in Pittsburg, Clarksville, Stark
7		DE 15-461 NORTHERN PASS TRANSMISSION, LLC:
8		Petition to Cross Land Owned by the State in Stark, Northumberland, Lancaster
9		DE 15-462 PUBLIC SERVICE COMPANY OF
10		NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY: Petition for Licenses to Construct and
11		Maintain Electric Lines over and across Public Waters in Bridgewater, Bristol
12		DE 15-463 PUBLIC SERVICE COMPANY OF
13		NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY: Petition for Licenses to Construct and
14		Maintain Electric Lines over and across Lands Owned by the State in Stark
15		
16	PRESEN:	Chairman Martin P. Honigberg, Presiding Commissioner Kathryn M. Bailey
17		Sandy Deno, Clerk
18	APPEARAN	
19		Thomas B. Getz, Esq. (McLane Marvin Bellis, Esq. (Eversource)
20		Derrick Bradstreet, Esq. (Burns Ovid Rochon, Esq. (Burns & McDonnell)
21	-	Reptg. Public Service Company of
22		New Hampshire d/b/a Eversource Energy: Christopher J. Allwarden, Esq.
23	Court	Reporter: Steven E. Patnaude, LCR No. 52
24		



1		
2	APPEARANCES:	(Continued)
3		Reptg. DRED and the Adjutant General: Liz Mulholland, Esq.
4		N.H. Attorney General's Office
5		Reptg. PUC Staff: Suzanne G. Amidon, Esq.
6		Randall Knepper, Director/Safety Div. Robert Wyatt, Asst. Dir./Safety Div.
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13					
14	ADMINISTRATIVE NOTICE TAKEN re: Staff's Recommendation dated February 27, 2017				
15	entitled "Staff's Overall Review of the Petitions for Licenses to Cross Public				
16	Waters and Lands"				
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1 PROCEEDING

CHAIRMAN HONIGBERG: We're here this morning in Dockets DE 15-460, 461, 462, and 463, which is a series of proceedings related to crossings and the licensing thereof for Northern Pass and Eversource. We're here for a hearing on the merits.

Before we do anything else, let's take appearances.

MR. GETZ: Good morning, Mr.

Chairman, Commissioner. I'm Tom Getz, from the law firm of McLane Middleton. I'm here this morning on behalf of Northern Pass

Transmission. With me is Senior Counsel for Eversource, Marvin Bellis, and we also have two attorneys from the engineering firm of Burns

McDonnell, Derrick Bradstreet and Ovid Rochon.

MR. ALLWARDEN: Good morning, Mr. Chairman. Chris Allwarden, Eversource Energy, in-house counsel.

MS. AMIDON: Suzanne Amidon, for
Commission Staff. And with me today is Randy
Knepper, the Director of the Safety Division,
and the Assistant Director of the Safety

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1
         Division, Bob Wyatt.
                   CHAIRMAN HONIGBERG: There were
 2
 3
         intervenors in this docket, were there not,
         Ms. Amidon?
 4
                   MS. AMIDON: Yes, there were.
 5
 6
                   CHAIRMAN HONIGBERG: Are we expecting
 7
         any here or do we have one here?
 8
                   MS. MULHOLLAND: Liz Mulholland, from
         Department of Justice, for DRED and the
9
10
         Adjutant General.
11
                   CHAIRMAN HONIGBERG: That answers
12
         one, one part of the question.
13
                   MS. AMIDON: And I did have a
14
         discussion with Attorney Danielle Pacik for the
15
         City of Concord. She did send a letter on
16
         Friday with a comment and concern that -- a
17
         "question" I think you would properly
18
         characterize it as, that probably should be
19
         reviewed by Mr. Knepper. But she understands
20
         that that will be addressed probably as they go
21
         through the SEC process.
22
                   CHAIRMAN HONIGBERG: All right.
23
         record reflects that Commissioner Scott is not
24
         participating in this docket. So, it's just
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1 Commissioner Bailey and me. 2 Ms. Amidon, how are we proceeding 3 this morning? 4 MS. AMIDON: Well, I have a brief 5 overview that I would like to describe how this 6 docket is different and yet the same as the 7 other crossings that the Commission considers in connection with issuing a license. 8 9 I have Mr. Knepper here, who is 10 available for questions by the Commission. Не 11 did not submit testimony. He submitted a 12 recommendation. But he's available, if you 13 would like to ask him some questions. 14 And I would request at the outset 15 that Staff's recommendation, filed on 16 February 27th, 2017, be given administrative notice in that regard. 17 18 CHAIRMAN HONIGBERG: So, we'll take 19 administrative notice of the filing of the 20 recommendation in the dockets. 21 [Administrative notice taken.] 22 MS. AMIDON: Yes. And, further, I 23 would, you know, say, on behalf of myself,

Staff does not intend to cross-examine

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1
         Mr. Knepper, because we doesn't have prefiled
         testimony. I believe that's the same for
 2
 3
         Northern Pass and Eversource, but I'll let
         their attorneys address that issue. And I'm
 4
 5
         uncertain as to whether Ms. Mulholland has any
 6
         questions for Mr. Knepper.
 7
                   CHAIRMAN HONIGBERG: Does anyone --
         is anyone going to have questions for Mr.
 8
9
         Knepper, other than Commissioner Bailey and
10
         myself?
11
                   MR. GETZ: No, Mr. Chairman. We have
12
         no comments or questions about the
13
         recommendation.
14
                   MR. ALLWARDEN: No questions, Mr.
15
         Chairman.
16
                   MS. MULHOLLAND: No questions, Mr.
17
         Chairman.
18
                   CHAIRMAN HONIGBERG: All right.
19
         Ms. Amidon, why don't you lay out how this, as
20
         you said, is different and yet the same from
21
         other crossings.
22
                   MS. AMIDON:
                                Thank you. This is
23
         before the Commission pursuant to RSA 371:17,
24
         which states "whenever it is necessary in order
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to meet the reasonable requirements of service to the public, that any utility should construct cables, poles, wires or other fixtures [to cross] over, under or across any public waters or public land, the utility shall file a written notification with the Commission for a license to construct and maintain such cable, conduit or wires and fixtures."

This is why Northern Pass and

Eversource has have filed the petition. The

Joint Petitioners are asking for that

permission.

Pursuant to RSA 371:20, the

Commission shall hear all parties interested in the licenses and the crossings, regarding whether the crossing as proposed could "be exercised without substantially affecting the public right in said waters or lands." It further provides that, if all parties are in agreement regarding the crossing, the

Commission may issue the license without a hearing. And that is typically the way the

Commission resolves these issues. It issues a license, and issues an order nisi, to allow for

the public to be heard regarding whether there will be any interference in the public enjoyment of the waters or land.

But Mr. Knepper knows this,

typically, the request for a license involves

the crossing, say, of a river, from Point A to

Point B. It's a single crossing. The Safety

Division reviews those crossings. And I

believe Mr. Knepper is ready to answer any

questions about what goes into such reviews.

But, typically, they look at whether the utility has the right to cross that land or water; whether the crossing, as designed, would interfere with the rights of the public; whether a modification to the design would obviate the interference with the public right; whether the crossing comports with the National Electric Safety Code; and whether the utility has sought all other licenses and permits required for the construction of the crossing. Sometimes, for example, the Department of Environmental Services needs to issue a permit to -- an easement for wetland, or there may be some other peculiar aspect of the location

where the crossing is anticipated that requires some additional permit or some license of other sort.

So, these -- and that list of issues,

I would say, is not a complete list of all the
aspects that the Safety Commission [Division?]
looks at, because they also look at, for
example, whether it is a new crossing, whether
the Commission has previously granted a license
to cross at that particular area or an area
located near it, and other issues which may be
peculiar to that particular crossing.

In this case, the proposed licenses are for crossings in connection with the construction of the Northern Pass Project. The Northern Pass Project extends about 192 miles, from the border of New Hampshire with Canada to Deerfield, New Hampshire. There are almost 70 crossings proposed in these four dockets before you today, and each one of those crossings was subject to the same review by the Safety Division. Because of the size of the Northern Pass Project, the number of crossings, and the public interest, the Commission issued an Order

of Notice indicating that it intended, in this particular instance, with these four dockets, to conduct the normal review, but to hear public comment, as may be offered, on whether proposed crossing interferes with the public's rights in the waters and public lands.

In addition to this proactive protection of the public right to be heard in this proceeding, the Commission also directed Northern Pass and Eversource to notify each town where a proposed crossing is located. Further, following Staff's filing of its recommendation on February 27th, 2017, the Commission offered the opportunity for parties to provide comment on that recommendation. And, to my understanding, we have received written comment from the City of Concord, I think it was last Friday, concerning a crossing related to the Soucook River, which may or may not be something that Mr. Knepper can comment on.

We have no witnesses in this case,

per se. There's no prefiled testimony. I have

Randy Knepper, the Director of the Safety

Division, who directed and participated actively in the crossing review available for questions. And the Petitioners have available Derrick Bradstreet, who worked on the preparation and design of the proposed crossings, if you have any questions for them.

Because there is no prefiled

testimony, I do not expect that any

cross-examination of these witnesses will occur

following the Commission's inquiry. I notice

that there's no members of the public here.

Any member of the public who would be here,

obviously, would be heard regarding the issue

before the Commission, which is whether the

crossings interfere with the public use of the

land or waters. But, seeing no one here today,

I believe that this hearing will go rather

quickly, and just concern Mr. Knepper's

description of the review of the projects.

Do you have any questions?

CHAIRMAN HONIGBERG: No. I think

you've refreshed everyone's memory, Ms. Amidon,
as to why we're here.

As you say, normally, with crossings,

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1
         we issue the order and invite comment. And, if
 2
         there's any challenge to the granting of the
 3
         license, it gets resolved after the issuance of
 4
         the order, which is not effective until any
 5
         comments, any objections are resolved.
 6
                   Here, we decided to do it in such a
 7
         way that we'd be able to issue a final order,
         having given the public an opportunity to be
 8
                 That's about right, isn't it?
9
         heard.
10
                   MS. AMIDON: Yes.
11
                   CHAIRMAN HONIGBERG: All right.
                                                     Mr.
12
         Knepper, you can probably stay where you are.
13
         Unless someone feels strongly that we need to
14
         put Mr. Knepper under oath?
15
                   MR. GETZ: No, Mr. Chairman.
16
                   CHAIRMAN HONIGBERG: I didn't think
17
         so.
18
                    I guess I'd like to hear about the
19
         City of Concord's letter, which is stamped in
20
         here at 3:59 p.m. on Friday. And the first
21
         time I saw it was when I walked in the room
22
         this morning. So, what can you tell us about
23
         the City of Concord's letter and its concerns?
24
                   MR. KNEPPER:
                                  Yes.
                                        This came in,
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emailed to us last, I guess, Friday. I didn't quite answer their question right off, because we were kind of in storm mode, as I told them, and we were shifting gears and priorities. So, now that we're back to hearing mode, we can kind of address it.

The issue that they have a concern is that there's a steep slope at -- this is at the Soucook River crossing that goes between Concord and Pembroke, and on the Concord side of the Soucook or the western side of the Soucook River. And there is a -- and they're afraid that the new structures could compromise, I guess, some erosion of the bluff, it kind of drops down.

So, I did respond to her and say that we had been to that site. It was one of those sites that we had gone to. And I concur, it is a steep slope. There are existing structures there now, which are on the slope right now. And they're proposed to be further away from the river or to be further back.

And, so, what I told the City of Concord was I think it's really more of a

concern for the SEC, does it involve this, because it is the span that does cross the Soucook River. But we could help them formulate a question that they could propose to the SEC, if they wanted to.

But it really -- I don't think it's an issue. It will not affect the clearances over the river. They actually have structures that are in place now, that are actually closer on the steep slope. So, I'm not really sure exactly, without having, I don't know, a lengthy or at least a conversation with the City of Concord, what they're actually looking for. You know, do they want those structures 15 feet further back? Would 20 feet be sufficient? Those kind of things. And then we could help them to see if it really affects the span and those kind of things.

So, I think it's something that could easily be worked through with the parties, but that was my suggestion.

CHAIRMAN HONIGBERG: What's your understanding of how this would get presented to or considered by the SEC?

1 MR. KNEPPER: It would probably be a 2 question that would be proposed to the SEC in 3 the environmental review aspect of it, because they're talking -- I'm assuming the concern is 4 5 erosion. So, you know, erosion can be handled in many ways. But, until I kind of flesh out 6 7 what the real issue is, I'm not sure, I don't think it will further exacerbate anything, but 8 9 I need to understand what their concern is, 10 just the one sentence. 11 CHAIRMAN HONIGBERG: Have you spoken 12 with Attorney Pacik or anybody from the City 13 about this? 14 MR. KNEPPER: Not since I had a quick 15 one-line email back to the person on Friday. 16 MR. GETZ: Mr. Chairman, if I may? 17 CHAIRMAN HONIGBERG: Mr. Getz. 18 MR. GETZ: I had a couple of email 19 exchanges with Ms. Pacik before she filed this 20 letter on Friday. I think, ultimately, it's a 21 jurisdictional question with the location of 22 the new structures, whether, you know, 23 initially, the question was "Is that a PUC or

24

an SEC issue?"

1 The City of Concord has raised, in 2 its testimony in the SEC proceeding, through 3 members of its conservation committee, a number of issues, one of which pointed to the Soucook 4 5 River crossing and the location of the new 6 structures. 7 And, in their letter on Friday, they say that they're not taking a position in this 8 9 case on the crossings, but they do have a 10 concern that they want to explore in the SEC 11 proceeding. 12 CMSR. BAILEY: Mr. Knepper, do you 13 have Map 23 handy? 14 MR. KNEPPER: Yes. 15 CMSR. BAILEY: And are the poles that 16 the City of Concord is concerned about on the 17 far left-hand side of the page, on the north 18 side of the Soucook River? 19 MR. KNEPPER: Yes. CMSR. BAILEY: And, if you look at 20 21 the -- at the scale map or the indication, can 22 you approximate how far from the edge of the 23 river those poles are?

MR. KNEPPER: Probably over 400 feet.

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1
                   CMSR. BAILEY: That's what it looks
 2
         like to me. So, is it your -- well, a couple
 3
         questions. The existing poles are not shown on
 4
         this, are they?
 5
                   MR. KNEPPER: Yes. There's existing
 6
         and proposed that are shown on here.
 7
                   CMSR. BAILEY: Okay. Can you show me
         which ones are existing?
 8
9
                   MR. KNEPPER: So, if you were to look
10
         at, on the -- if we were to kind of go from
11
         left to right, the first thing you should know
12
         is, on the very far left is a gas line that
13
         crosses that same river, that's to right
14
         outside of the right-of-way. Then, you see a
15
         red dash line, that's to indicate the
16
         right-of-way. Then, the next thing that you
17
         see is the 318 34 and a half kV circuit. That
         circuit now crosses the Soucook -- or "Soucook"
18
19
         River, I call it "Soucook".
20
                   CHAIRMAN HONIGBERG: Let's go off the
21
         record for a minute.
22
                         [Brief off-the-record discussion
23
                        ensued.]
24
                   CHAIRMAN HONIGBERG: We can go back
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on the record. Sorry about that.

MR. KNEPPER: So, that proposed

318 -- the 318 line is proposed to be stopped

and discontinued. So, it's no longer going to

go over the Soucook River.

CMSR. BAILEY: But that pole exists there today?

MR. KNEPPER: The pole exists there now. And where they're going to stop it, it's going to be further up the bluff, or to the north. So, I think it would not be worse than what it is now. I would think it would be better.

The next line is the proposed P-145 line, which is being relocated.

Then, you'll see -- the next one you'll see is the blue line, which is the proposed 3132 Northern Pass line, which is a 345 kV line. And it is back up on the -- you know, from where the existing, you can kind of -- you probably can't see it, but where the existing structure is that holds the P-145 line, where the Northern Pass line is going to go in its place, its structure is further

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1
         north.
                 So, --
                   CHAIRMAN HONIGBERG: Just for the
 2
 3
         record, according to this map, north is
 4
         pointing to the left. So, that would be east,
 5
         would it not?
                   MR. KNEPPER: Well, north is north.
 6
 7
                   CHAIRMAN HONIGBERG: Well, as I'm
         looking at the map, what you just described was
 8
9
         up on the map, further toward the top, which
10
         would be east on this map.
11
                   MR. KNEPPER: Well, if you rotate the
12
         map, yes. But north is north.
13
                   CHAIRMAN HONIGBERG: Well, let's be
14
                 I mean, maybe we need to make sure
15
         you're looking at the same map we're looking
16
         at.
17
                   MR. KNEPPER: I am looking at the
18
         same map you're looking at.
19
                   CMSR. BAILEY: And the existing pole
20
         is north, and so that means it's to the left of
21
         the page?
22
                                  To the left of the
                   MR. KNEPPER:
23
         page.
24
                   CHAIRMAN HONIGBERG:
                                         So, it's not on
```

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1
         this map.
                   CMSR. BAILEY: Because we're on the
 2
 3
         right -- we're at the very edge of the --
 4
                   CHAIRMAN HONIGBERG: We're right at
 5
         the edge.
 6
                   MR. KNEPPER: The existing pole is
 7
         shown as a green DOT, and the proposed pole, it
         would be to the left of that even further.
 8
9
                   CHAIRMAN HONIGBERG: On the map?
10
                   MR. KNEPPER: It's not shown on the
11
         map. It would be right on the edge.
12
                   CMSR. BAILEY: So, the new pole isn't
         on the map? It's not in this picture?
13
14
                   MR. KNEPPER: Exactly.
15
                   CMSR. BAILEY: Oh. All right. So,
16
         all of these poles that are in the picture are
17
         existing today?
18
                   MR. KNEPPER: If they're --
19
                   CMSR. BAILEY: Well, no, because
20
         there are only three lines.
21
                   MR. KNEPPER: If they're in green,
22
         with the yellow, they are what's existing.
23
                    If it helps, I can introduce a new
24
         exhibit that you guys won't have to squint at
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1
         that we made a blow-up of this area, if that
 2
         would help you?
 3
                   CMSR. BAILEY: That would be
 4
         wonderful.
 5
                   MR. KNEPPER: I have six. So, if
 6
         people can share, would that be working --
 7
         would that work?
 8
                   CHAIRMAN HONIGBERG: Sure.
9
                   MR. KNEPPER: Okay.
                   MS. AMIDON: I don't even know if it
10
11
         needs to be an exhibit.
12
                   CHAIRMAN HONIGBERG: No. I agree
13
         with you, Ms. Amidon. This is not an exhibit.
14
         This is in the nature of a chock or a
15
         demonstration piece.
16
                   MS. AMIDON: It's a visual aid.
17
                   MR. KNEPPER: A visual aid.
18
                   MS. AMIDON: A blow-up of what you
19
         already have.
20
                   CMSR. BAILEY: How did you know I
21
         would have questions about this, Mr. Knepper?
22
                   MR. KNEPPER: Great minds think
23
         alike.
24
                         [Mr. Knepper distributing
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documents.]

MR. KNEPPER: So, if you orientate this — if you orientate this with the north pointing north, so we're kind of looking at a portrait mode, like this [indicating], versus a landscape mode, like that [indicating]. We're looking at it like this [indicating]. You can see these red squares that are there. Those are the proposed structures, okay? The green circles, with the yellow, those are the existing, okay?

Now, you got to be -- this is what we took out in the field. And, so, one of the caveats to this, though, is, when we were taking measurements in the field, it depends on where the satellites are in the sky and what the accuracy of our field measurements are.

So, I do want to say that we could be off by ten or so feet, up to ten or so feet from where we were. But it gives you an indication that the new structures are going to be further to the north than they are toward the river.

So, --

{DE 15-460/15-461/15-462/15-463} {04-03-17}

CMSR. BAILEY:

So, they're going to

take out four existing poles?

MR. KNEPPER: Well, like on the 3118 line [318 line?] is going to stop where it says "318-150, "150" means the structure number, that's where it stops. It's going to come down, it's going to stop. I'm not sure why Eversource is doing that, maybe they can answer that question, but it's no longer going to cross the river. We asked that in discovery and that was their response.

The proposed structure of P-145, its structure doesn't even show on where we have it blown up because -- well, it does. It's a little bit to the right from where we were, which means you can see where my measurements are off by about ten feet, because I'm kind of eyeing it where I think it's going to be in the field, and then we're trying to gather information from our survey at the time.

And you can see where the proposed 3132 structure, Number 159, is going to be, and where the proposed C189-32 structure is.

So, and you can see, if you look at it, you can see the actual shadows of the cross

structures, they're kind of like in black right below it. So, you'll see where we put a square box in front of those, because that's where the sun and the angles hitting it, and so you see that shadow behind it, and that's kind of where the center of it is.

So, you've got to remember, when we're plotting these at a certain scale, we're really kind of getting down to the nitty and gritty.

And, so, at the end of the day, I think I proposed to the City of Concord is we could help them propose a -- or, pose a question to the SEC that might alleviate it or help whatever their issue is.

CHAIRMAN HONIGBERG: And, just to be clear, it wouldn't be a question posed "to the SEC". The SEC is not -- doesn't answer questions at an SEC proceeding. It would be to the witnesses who are testifying about the environmental issues, any witness who might be coming from Department of Environmental Services or the witnesses from the Applicant, --

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1
                   MR. KNEPPER: Correct.
                   CHAIRMAN HONIGBERG: -- or the
 2
         witnesses who are from various intervenors
 3
         about environmental issues.
 4
                   MR. KNEPPER: Yes. I don't mean "to
 5
 6
         the SEC", but I mean "within the SEC hearing".
 7
                   CMSR. BAILEY: Okay. And, if
 8
         these -- if the installation of these new poles
9
         were expected to cause erosion, wouldn't that
         be dealt with in the DES Wetlands Permit?
10
11
                   MR. KNEPPER: Yes.
12
                   CMSR. BAILEY: Okay. Can the
13
         Applicant, Northern Pass or Eversource, does
14
         anybody here know if the existing poles will be
15
         removed?
16
                   MR. GETZ: I think Mr. Bradstreet can
17
         address that.
18
                   CMSR. BAILEY: Thank you.
19
                   MR. BRADSTREET: So, yes. So, the
20
         existing structures, and I'm just going to kind
21
         of move from the exhibit that was provided, --
22
                   CMSR. BAILEY: Okay.
23
                   MR. BRADSTREET: -- from left to
24
         right. So, the "318-52 Existing" will be
```

1 removed and relocated as "318-150 Proposed". And, then, "P145-76 Existing" will be removed 2 3 and relocated to "P145-73 Proposed". And, then, "C189-32 Existing" will be removed and 4 5 relocated to "C189-32 Proposed". And, then, 6 "3132-159" is just a new proposed structure. 7 It's not replacing anything. CMSR. BAILEY: Okay. So, the 8 9 existing poles are going to be gone? 10 MR. BRADSTREET: Removed and 11 relocated. 12 CMSR. BAILEY: Okay. All right. So, 13 Mr. Knepper, assuming that DES takes care of 14 any wetlands concerns, there is no impact on 15 the public's right to use the water, in your 16 opinion, in this location, correct? 17 MR. KNEPPER: I don't. I quess my 18 question would be is, if the Applicant said, 19 you know, "if it pleases you, we move them back 20 20 feet, the structures, just to whatever your 21 concern is for erosion, that increases -- we 22 could look at it and say that increases the 23 span, and then we could see if the sag 24 clearances make a difference." And we could

help that and say "We don't think so, from our end, from the PUC." And maybe that would help them to assuage their concerns.

CHAIRMAN HONIGBERG: Do you know or can you look up what the sag clearance as proposed is?

MR. KNEPPER: Yes, we can.

CHAIRMAN HONIGBERG: And my memory, from your spreadsheets in your report, was that there were very few that were even close to the tolerances that you allow, as I recall.

MR. KNEPPER: So, if we were to look at Bates Page 122, of the Recommendation Number 4, they're all stamped together, because they all went together, of our recommendation from February of this year, you'll see that the Soucook River is listed as "4-23", and our calculation came out with the 61-foot clearance over the river. The clearance shown by Northern Pass was "59". So, you know, a 2-foot difference, we thought they were pretty good in our modeling versus their modeling. And, that the clearance required by the NESC is 34.7, so there's plenty of room to be able to sag even

1 So, you know, that's over the river. 2 But, in this case, we'd probably want 3 to just go back and make sure we look at 4 whatever the sag is right at that point of the 5 land of which their concerned. 6 CHAIRMAN HONIGBERG: Mr. Knepper, 7 look at the sag for the 189, the 189-32. think that looks like a clearance of 35? 8 9 MR. KNEPPER: Thirty-five (35) is 10 what we calculated, and "30.1" is what's 11 required in that one. 12 CHAIRMAN HONIGBERG: There's actually 13 not a lot of room there. 14 MR. KNEPPER: That's correct. 15 CHAIRMAN HONIGBERG: All right. 16 none of that affects what we're doing here 17 today, really. This is just a matter, if, 18 after the SEC process, there's a conclusion 19 that, for other reasons, those poles should be 20 moved a little bit, it might cause someone to 21 have to go back and recalculate these and make 22 sure that everything is still within the 23 accepted ranges, right? 24 I mean, I guess I MR. KNEPPER: Yes.

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         was just trying to reach out to Concord as an
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         assistance that, if they had a concern, we
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         would try to use our expertise to, along with
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         the participant, to see if, you know, if
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         there's any fine-tuning that can be done.
                   CHAIRMAN HONIGBERG: I think
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         everybody appreciates that.
                   CMSR. BAILEY: Okay. So, thank you.
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         That was very helpful.
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                   Actually, while we're on that table
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         on Page 122, could you just explain on the
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         record what you did to verify the clearances
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         and what the words "adequate", "excellent", and
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         "good" mean?
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                   MR. KNEPPER: Yes. So, if you take
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         Page 122, and you refer to Bates Page 013,
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         those words "Adequate", "Excellent", and "Good"
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         are kind of -- tried to be explained in
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         Page 13, Bates Page 013. So, I would wait for
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         you to get to that point.
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                   CMSR. BAILEY: We're there.
                   MR. KNEPPER: So, basically, we
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         looked to see if -- you know, we ran a model
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         that wasn't as sophisticated as the model used
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by Northern Pass, and they had more ability to look at things. We looked at it a little bit more simplified. And, when you do that, the assumptions come out slightly different.

There's a lot of inputs that have to go in.

And, so, any time we came within three feet of what our calculation was and theirs, and a lot of them came out to be within one foot or two, we considered that an "excellent" verification. Meaning, we're kind of taking it from two different approaches, two different softwares, and we're coming to virtually similar results. And we deem that as "excellent". And you can see that there were six of those on land crossings, seven is on rail, and twenty-five on water crossings, if you look at that. And we put the actual locations and the map numbers on that.

We had other ones that came within four to six feet, and we thought that was very — it wasn't within one or two feet, we thought it was acceptable and "good". And there was seven of those over land, one of those over rail, and four over water. And the locations

and specifics of where those are are listed.

And, then, we got those that were within six to fifteen feet, and we consider that "acceptable". And on Page -- and then there was four of those, and they were 1-3, 1-4, 3-17, and 4-20. So, why did we consider it "acceptable"? So, if we went through one of those, if you went through, I don't know, let's pick 3-17. That's on Bates Page 106. And I'll wait till people get there.

The differences between ours and Eversource, this is for the All1 115 kV circuit going under the Pemigewasset, in Bristol, the differences was 50 feet was calculated by Staff, Eversource calculated 65. So, that's a 15-foot difference. So, it fits into this bucket between six to fifteen feet. But, if you look at the NESC requirement for that, at that location, it's "30.1". And, so, what Staff did was, we said, if you take 30.1, and you multiply -- if we were off by 50 percent, even though this table here says "25 percent", it's actually, if you use the word "50 percent" in all locations, you would come up with the

same results. That the 30 times one and a half, that's 45 feet. Since both our numbers, "50 feet" and "65", are greater than that 45, it probably was not worth pursuing to determine why our differences were there, since both of us are more than 50 percent more than what the clearance requirement is.

CMSR. BAILEY: Okay.

MR. KNEPPER: So, we considered that "adequate". And, if we ever came out with more than 15 feet, we kind of came in and said "we've got to kind of figure out why and why these models are so far different." And we just — the results came out that none came out that way.

CMSR. BAILEY: Thank you?

MR. KNEPPER: So, overall, we were pretty pleased with our efforts in trying to do this. A lot of it was based on the information that was given, and then, you know, going through and verifying.

CMSR. BAILEY: The detail in this analysis is to be commended. It's very well done, it's very well organized. And I thank

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you for that. Do you have any estimate of how many hours this endeavor took?

MR. KNEPPER: Yes. I think we spent over 2,300 hours. And we assessed, I believe, 443 to NPT and Eversource. So, I guess we wanted to make sure that this Commission could have the confidence in that we looked at these things, that there shouldn't be any -- there's a lot of issues with the Northern Pass and Eversource. It gets a lot of people's emotions involved. We just wanted to look at it in an objective manner, look at every data point, look at every crossing, look at every number, look at every span that we could have, and try to give confidence that we think that these, at least when it comes to the rivers and land crossings, that, you know, whether you should be able to issue a license with margin to spare and a lot of comfort.

CHAIRMAN HONIGBERG: I know it's in the Recommendation, but I'd like you to repeat it on the record here, what the story is with the handful that turn out not to be jurisdictional. The crossings that were in the

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filing, but did not -- do not end up needing licenses.

I guess the two aspects of my
question are "why do they not need licenses?"
And "what is their status?" Does anyone have
the ability to require a license, if we don't?

MR. KNEPPER: So, of the 67 that were in the Petition, Staff found 61 of them would require licenses. So, that means there were six that didn't. And the question became "well, why didn't those six make it?" And, so, the six were because three of them, I believe, were the Ham Branch, up in Easton. They didn't hit the official, I don't know, state "public waters" definition or the list that we use particularly by DES. And if you probably were to go to those, they would be very, very small and minor crossings. So, they're not even -some of these, like when you go out to them in the field, you can virtually hop across or step across. So, it's not much of a crossing. this Commission and the Staff in the past have always kind of, you know, where do we break it down? Are we down to the last tributary? Are

1 we down to the last brook? Are we down to the 2 last stream? 3 And, so, we kind of have a cut-off of where we think public waters are. And those 4 5 did not meet those definitions. CMSR. BAILEY: And "public waters" is 6 7 defined by DES on their list that you use? MR. KNEPPER: Yes. And the DES, 8 9 within the list, refers to the statutes within state government. 10 11 CHAIRMAN HONIGBERG: And, so, what is 12 the status of those crossings? Anybody can do 13 anything over those bodies of water, such as 14 they are? 15

MR. KNEPPER: Well, it just means that a license is not required from here. I still think it's still part of the overall Northern Pass Project. It's still going to — there's still going to be engineering requirements that they're going to try to maintain, and they're still going to have safe and reliable service that they're going to have to try to prove.

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I just think that it wasn't worth the

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         detail of doing a thorough review on those.
         And, so, there's no reason for -- our
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         recommendation is there's no reason for you to
         issue a license.
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                   CMSR. BAILEY: You said "three were
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         at the Ham Branch". Where were the other
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         three?
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                   MR. KNEPPER: If we go to Bates Page
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         035, we kind of grayed them out. Two were for
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         the Lamprey River, in Deerfield; three were at
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         Easton; and one was for the Gordon Pond Brook
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         crossing, in Woodstock.
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                   CMSR. BAILEY: Thanks.
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                   CHAIRMAN HONIGBERG: All right. Does
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         anyone else have anything they want to offer
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         up? Mr. Getz? Ms. Mulholland? Mr. Allwarden?
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                   MR. GETZ: Nothing, Mr. Chairman.
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                   MR. ALLWARDEN: Nothing, Mr.
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         Chairman.
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                   MS. MULHOLLAND: No thank you.
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                   CHAIRMAN HONIGBERG: All right.
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         Ms. Amidon, anything else you want to, or Mr.
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         Knepper?
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                   MS. AMIDON: Well, Mr. Knepper did,
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1 in response to Commissioner Bailey's question about the time and effort that went into it, he 2 3 did describe a summary of the activities that 4 the Safety Commission [Division?] did. And I 5 think it would be good for the record for him 6 to just review all of those activities and all 7 of the work that they did in connection with these 67 crossings. 8 So, I'd like him to have a chance to 9 10 give you that information for the record. 11 CHAIRMAN HONIGBERG: Mr. Knepper. 12 MR. KNEPPER: The Safety Division, 13 although we're not the Commission, --14 CHAIRMAN HONIGBERG: Much as you 15 would like to be, I know. 16 MR. KNEPPER: Not a job that I am 17 looking forward to, no. We did do -- I just 18 kind of want to go through a quick process. You can read through all the Bates and the 19 20 review, I think. 21 But we relied, of what we did in our 22 overview, we relied basically on the submittals 23 of the four Petitions given to us, and we

sought clarifications where it was required by

conducting two technical sessions, and we had seven discovery requests.

I would say that we exercised and devoted as much verification and review of the data submitted for any water, land and rail crossings that I've ever done within the 12 years I've been at the PUC. And I would venture to say, probably compared to any other historical review that's been conducted here. So, our goal was to -- we wanted to confidently state that we conducted a thorough review, and I can say that today I believe we have.

We supplemented the information contained in the Petition with cross references to as much information from the SEC submittals, ForwardNH website, the docket 15-464, which describes a lot of Bates pages, county deeds, tax map, lot numbers, so that, if there was any intervenors that had concerns, we could all talk the same language without having to know what -- so that we could know and identify the geographic area that we were talking to, no matter how you approached it and what kind of common language we did. So, if Eversource or

NPT used a line list, and other people used different parcel numbers, we wanted to kind of get past all that. That was a significant undertaking.

And, then, we analyzed each crossing using commercial modeling software, which I talked about for these inclined spans over each of those three types of crossings. This allowed us to make the judgments that we referred to earlier as to the clearances anticipated using a different model than used by the Applicants. We can say the majority of the results, that the clearances required came within a foot or two of each other, which was clearly acceptable, given the numerous inputs assumptions, and algorithms used in the different modeling between NPT's consultants and those used by Staff.

We spent a large amount of time created those 24 different maps from GIS information. And I think that we wanted to -- that gave more clarity and context to the areas that were being crossed than just what showed up on the Applicants'. You know, you can only

get so much with a line. You want to see if you're close to woods, you want to see if you're close to the rivers, you want to kind of see if you're close to structures, other utilities. So, we thought that that was very important.

We reached out to the three agencies, the Adjutant General, DRED, and DOT, to get on the record for the Commission here to see what their concerns were. There was one minor comment from DRED, that they just wanted to make sure that NPT and Eversource coordinating with the local office and maintain access at all times during construction.

we made substantial efforts to understand the changes of the land and water crossings that occurred over time. Because, when you redo these reviews, the chronological history is important as to the necessity of those licenses. So, in doing so, we researched previous licenses for those crossings and placed that information on those three attachments on Bates Pages 023 to 024. We also found seven locations that we believe require

licenses that are outside of this Northern Pass
Project. But, in doing our review, are at the
same location adjacent or parallel to the lines
that are being applied for.

And we also make great efforts to match the GIS information, parcel information, crossing information supplied with those known. And, if we found any discrepancies, we utilized physical surveys that were conducted by DRED. And, so, we thank DRED for their cooperation for the forests and the state parks that were crossed.

And, like I said before, we spent over 2,300 hours. And I think it was a very -- we had a good team. We used over five or six members of the Safety Division. And Suzanne participated and gave us some legal guidance. And I think we did a pretty good job. And I thank the Applicants and all the intervenors. We tried to vet out any issue that came up.

CHAIRMAN HONIGBERG: All right.

Well, thank you, Mr. Knepper, thank you,

Mr. Wyatt, Ms. Amidon, and certainly convey our
thanks to the rest of the Safety Division.

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                    If there's nothing else, then I
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         think -- yes, Commissioner Bailey.
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                   CMSR. BAILEY: Does Eversource have
         plans to request licenses for the seven that
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         were uncovered that do not have a license? Or
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         do you disagree with that?
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                   MR. ALLWARDEN: I have to discuss
         that with the Engineering Division. But we
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         will look at those. And there was a question
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         whether some of those were already licensed or
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         not. So, we'll look back at that question.
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         And, if we find a license, we will certainly
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         bring them to the attention of Randy and his
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                Otherwise, we will be filing a petition
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         in the normal course, as soon as we can get the
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         engineering data together.
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                   CMSR. BAILEY: Thank you.
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                   MR. ALLWARDEN: You're welcome.
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                   CHAIRMAN HONIGBERG: All right.
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         Then, if there's nothing else now?
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                         [No verbal response.]
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                    CHAIRMAN HONIGBERG: We will adjourn.
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         Thank you all.
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     (Whereupon the hearing was adjourned at 10:51 a.m.)
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