

In The Matter Of:

*Application from the Connecticut Light & Power Company
d/b/a Eversource Energy*

*Hearing Docket No. 466
March 1, 2016*

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1 STATE OF CONNECTICUT

2 CONNECTICUT SITING COUNCIL

3
4 Docket No. 466

5 Application from the Connecticut Light &
6 Power Company d/b/a Eversource Energy for a
7 Certificate of Environmental Compatibility and
8 Public Need for the Frost Bridge to Campville
9 115-kilovolt Electric Transmission Line Project
10 that Traverses the Municipalities of Watertown,
11 Thomaston, Litchfield, and Harwinton, which
12 Consists of (a) Construction, Maintenance and
13 Operation of a New 115-kilovolt Overhead Electric
14 Transmission Line Entirely Within Existing
15 Eversource Right-of-way and Associated Facilities
16 Extending Approximately 10.4 Miles Between
17 Eversource's Existing Frost Bridge Substation in
18 the Town of Watertown and Existing Campville
19 Substation in the Town of Harwinton; (b) Related
20 Modifications to Frost Bridge Substation and
21 Campville Substation; and (c) Reconfiguration of a
22 0.4 Mile Segment of Two Existing 115-kV Electric
23 Transmission Lines Across the Naugatuck River in
24 the Towns of Litchfield and Harwinton Within the
25 Same Existing Right-of-way as the New 115-kV
Electric Transmission Line.

Continued Public Hearing held at the
Connecticut Siting Council, 10 Franklin Square,
New Britain, Connecticut, Tuesday, March 1, 2016,
beginning at 3:31 p.m.

H e l d B e f o r e:

SENATOR JAMES J. MURPHY, JR., Vice Chairman

1 A p p e a r a n c e s :

2

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 Council Members:

4

 PHILIP T. ASHTON

5

 ROBERT HANNON, DEEP Designee

6

 LARRY LEVESQUE, PURA Designee

7

 DANIEL P. LYNCH, JR.

8

9

 Council Staff:

10

 MELANIE BACHMAN, ESQ.

11

 Executive Director and

12

 Staff Attorney

13

14

 ROBERT MERCIER

15

 Siting Analyst

16

17

 For Connecticut Light and Power Company d/b/a

18

 Eversource Energy:

19

 CARMODY TORRANCE SANDAK & HENNESSEY LLP

20

 195 Church Street

21

 New Haven, Connecticut 06509

22

 BY: ANTHONY M. FITZGERALD, ESQ.

23

24

25

1 THE VICE CHAIRMAN: Good afternoon,
2 ladies and gentlemen. This hearing is called to
3 order this Tuesday, March 1, 2016, at
4 approximately 3:30 p.m. My name is Jerry Murphy.
5 I'm the vice chairman of the Connecticut Siting
6 Council, and I will be presiding today in the
7 absence of our Chairman.

8 Other members of the Council with us
9 today are Robert Hannon, as the designee for
10 Commissioner Robert Klee of the Department of
11 Energy and Environmental Protection; Larry
12 Levesque, designee for Chairman Arthur House of
13 the Public Utilities Regulatory Authority; Philip
14 T. Ashton; and Daniel P. Lynch, Jr.

15 Members of the staff today are Melanie
16 Bachman, our acting executive director and staff
17 attorney, and Robert Mercier, our siting analyst
18 on this particular file.

19 This is an evidentiary session in
20 continuation of a public hearing held on February
21 the 23, 2016, at the Connecticut Siting Council's
22 office, Hearing Room One, 10 Franklin Square, New
23 Britain, Connecticut. It is held pursuant to the
24 provisions of Title 16 of the Connecticut General
25 Statutes and of the Uniform Administrative

1 Procedure Act upon an application from the
2 Connecticut Light and Power Company, doing
3 business as Eversource Energy, for a certificate
4 of environmental compatibility and public need for
5 the Frost Bridge to Campville 115-kilovolt
6 electric transmission line project that traverses
7 the municipalities of Watertown, Thomaston,
8 Litchfield and Harwinton, which consists of (a)
9 construction, maintenance and operation of a new
10 115-kilovolt overhead electric transmission line
11 entirely within existing Eversource right-of-way
12 and associated facilities extending approximately
13 10.4 miles between Eversource's existing Frost
14 Bridge Substation in the Town of Watertown and
15 existing Campville Substation in the Town of
16 Harwinton; (b) related modifications to Frost
17 Bridge Substation and Campville Substation; and
18 (c) reconfiguration of a 0.4 mile segment of two
19 existing 115-kilovolt electric transmission lines
20 across the Naugatuck River in the Towns of
21 Litchfield and Harwinton within the same existing
22 right-of-way as the new 115-kilovolt electric
23 transmission Line. This application was received
24 by the Council on December 23, 2015.

25 As a reminder to all, off-the-record

1 communications with members of the Council or
2 members of our staff, upon the merits of this
3 application, are prohibited by law.

4 The parties and intervenors to the
5 proceedings being held today are: The applicant
6 is Connecticut Light and Power Company d/b/a
7 Eversource Energy. It is represented by Anthony
8 M. Fitzgerald, Esquire, of Carmody Torrance Sandak
9 & Hennessey LLP. And as a party, the Office of
10 Consumer Counsel, represented by Lauren Henault
11 Bidra, Esquire.

12 We will proceed today in accordance
13 with the prepared agenda, copies of which have
14 been distributed and are on the table for anyone
15 who doesn't have one to pick one up. Also
16 available are copies of the Council's Citizens
17 Guide to Siting Council Procedures.

18 At the end of this afternoon's
19 evidentiary session, we will recess and resume
20 again at 6:30 p.m. for the public comment session.
21 This 6:30 p.m. public comment session will be
22 reserved for the public to make brief oral
23 statements into the record.

24 I wish to note that the parties and
25 intervenors, including their representatives and

1 witnesses, are not allowed to participate in the
2 public comment session. I also wish to note for
3 those who are here and for the benefit of your
4 friends and neighbors who are unable to join us
5 for the public comment session or this afternoon,
6 that you may send written statements to the
7 Council within 30 days of the date hereof, and
8 such written statements will be given the same
9 weight as if spoken at one of our hearings. If
10 necessary, party and intervenor presentations may
11 continue after the public comment session tonight,
12 if time permits.

13 A verbatim transcript will be made of
14 this hearing and deposited with the Towns of
15 Watertown, Thomaston, Litchfield, Harwinton,
16 Plymouth and the City of Waterbury Clerk's Offices
17 for the convenience of the public.

18 Is there any public official here to
19 comment at this time?

20 (No response.)

21 THE VICE CHAIRMAN: If not, in regards
22 to administrative notice, the Council added the
23 Department of Energy and Environmental
24 Protection's 2015 Endangered, Threatened and
25 Special Concern Species List for Connecticut,

1 which is set forth as Roman numeral I, Item D.43.

2 Does the applicant or any party or
3 intervenor have any objection to that item or any
4 other item on the list of administrative notice?

5 MR. FITZGERALD: No objections.

6 THE VICE CHAIRMAN: Hearing no
7 objections, they'll all be taken, as noticed.

8 We'll begin with an appearance by the
9 applicant. Attorney Fitzgerald, I believe a
10 number of your witnesses were sworn in at our
11 previous hearing. Were they all sworn in?

12 MR. FITZGERALD: No, they weren't. We
13 do have one that wasn't.

14 THE VICE CHAIRMAN: Let's do that
15 first.

16 MR. FITZGERALD: Fine. Thank you. We
17 will. And just to sort of set the table, I'd like
18 to note that at the abbreviated last hearing
19 Exhibits 1, 2 and 3 were admitted. Exhibit 4,
20 which is the -- I'm sorry, the application, yes,
21 the application, Exhibit 1, was admitted with the
22 exception of Section 10.3, which is the
23 nontransmission alternative section, and the
24 report of Julia Frayer in Volume 4 on
25 nontransmission alternatives. And I spoke with

1 the executive director explaining that Ms. Frayer
2 would not be able to be here today. And since it
3 appeared probable that there would be another
4 session, she would be planning to come to that and
5 at that time that remaining piece of the
6 application could be made a full exhibit.

7 THE VICE CHAIRMAN: So this is 10.3 of
8 the application?

9 MR. FITZGERALD: 10.3 of the
10 application, and the report, which is Exhibit 4,
11 and Volume 4.

12 And then the other thing that was --
13 had a little asterisk on it from the hearing at
14 the previous session was that Exhibit 4 is the
15 direct testimony of Louise Mango and Matthew
16 Davison. And Ms. Mango sponsored that testimony,
17 but we now have Mr. Davison with us, and so he
18 could be sworn as well.

19 THE VICE CHAIRMAN: Okay. I think we
20 admitted the exhibit with her testimony alone last
21 time.

22 So you think Mr. Davison needs to be
23 sworn?

24 MR. FITZGERALD: Yes.

25 THE VICE CHAIRMAN: Rise, Mr. Davison,

1 and Attorney Bachman will swear you in.

2 M A T T H E W D A V I S O N ,

3 called as a witness, being first duly sworn

4 by Ms. Bachman, was examined and testified on

5 his oath as follows:

6 B R A D L E Y B E N T L E Y ,

7 J A S O N C A B R A L ,

8 R A Y M O N D G A G N O N ,

9 L O U I S E M A N G O ,

10 C H R I S T O P H E R S O D E R M A N ,

11 having been previously duly sworn, testified

12 further on their oaths as follows:

13 MR. FITZGERALD: If I might ask him a
14 question about the application?

15 Mr. Davison, do you have any
16 corrections or clarifications to make to the
17 application or to your prefile testimony?

18 THE WITNESS (Davison): I do. To
19 Volume 1, Section 12-4, which is Section 4 that
20 details the Thomaston H-frame line route
21 variation, page 12-11, it states that 7.8 acres of
22 clearing would be required for that variation.
23 That number should actually be approximately one
24 acre.

25 MR. FITZGERALD: Thank you. And with

1 that correction, is your prefile testimony in the
2 environmental section of the application true and
3 correct to the best of your knowledge and belief?

4 THE WITNESS (Davison): It is.

5 THE VICE CHAIRMAN: With that
6 correction, we'll admit it, as corrected.

7 MR. FITZGERALD: Thank you. I also
8 have a correction that I'd like to ask Mr. Gagnon
9 about before the cross starts, if I could?

10 THE VICE CHAIRMAN: Better to
11 straighten it out now than later.

12 MR. FITZGERALD: Mr. Gagnon, as a
13 result of your meticulous inspection of the
14 application in the last week, did you come up with
15 a couple of corrections that should be made on the
16 record?

17 THE WITNESS (Gagnon): Yes. On page
18 3-18 there are two corrections I'd like to make,
19 3-18. They're very small. The first one is on
20 the second bullet that you see there it talks
21 about the terminal structure being 60 feet. It
22 should be 68, which is the same as the drawing in
23 Volume 5.

24 And also on the third bullet it talks
25 about the Campville Substation having only one

1 lightning mast. It actually has two that are
2 being proposed. And that's the same as which is
3 in the drawing in Volume 5. That's it.

4 MR. FITZGERALD: With that, I tender
5 the panel for cross-examination.

6 THE VICE CHAIRMAN: Thank you. We'll
7 start with cross-examination by the staff.

8 Mr. Mercier?

9 CROSS-EXAMINATION

10 MR. MERCIER: Thank you.

11 Based on the field review today, I just
12 have a couple of questions based on my observation
13 of the project. I guess I'll start with the
14 section from Frost Bridge to Purgatory Junction.
15 There's an existing line there, the 1238 line on a
16 monopole. And it appears that line only occupies
17 the south position, I guess I'll call it, on the
18 monopole, and it appears that the north side is
19 not utilized. Is it possible to utilize the north
20 side of that set of structures to accommodate the
21 new line proposed in this application from Frost
22 Bridge to Purgatory Junction?

23 THE WITNESS (Bentley): Answering from
24 a transmission planning standpoint, it is
25 possible, but it's not an analyzed condition. So

1 in our transmission planning studies that we
2 performed with ISO, if we were to put that line on
3 the same structure as that, it would create a new
4 double circuit tower contingency, which has not
5 been looked at, and may cause further problems,
6 but would require an amount of study to look at
7 that.

8 MR. MERCIER: Thank you.

9 Just south of Purgatory Junction I saw
10 a few structures that appear to be -- maybe a
11 bunch of greenhouses between proposed structures
12 22 and 23. Are those -- I guess they're
13 greenhouses or other outbuildings -- in the way of
14 your project at all?

15 THE WITNESS (Cabral): We'd work with
16 the property owner and design the project around
17 those greenhouses.

18 MR. MERCIER: Thank you.

19 Now, from the section of line that's
20 proposed from Purgatory Junction all the way to
21 Campville, I understand you're going to have to do
22 additional clearing on your right-of-away to
23 accommodate the line. I believe you said about 45
24 feet. I guess that would be to the east. Is that
25 clearing and line installation to the minimum

1 clearance standards for conductors and for
2 vegetation, or is there some leeway in there?

3 You know, I don't know the standard
4 exactly, but if they call for 30 feet, are you
5 going to 45 feet for the right-of-way expansion,
6 or are you just doing it right to the minimum?

7 THE WITNESS (Cabral): It's to match
8 the Eversource standards for 115-kV lines with
9 those configurations, which in that case is a
10 delta structure with two conductors on one side of
11 the structure and one on the other.

12 MR. MERCIER: So Eversource's standard
13 might be different than, say, some other type of
14 NERC standard or something of that nature?

15 THE WITNESS (Cabral): It could be,
16 correct.

17 MR. MERCIER: The last item I had was
18 we stopped at the Campville Substation and we
19 discussed where the expansion would go. Can you
20 just repeat what the topography was like in the
21 expansion area?

22 THE WITNESS (Cabral): Sure. So the
23 expansion is approximately 90 foot to the east
24 we're extending the fence line, and the grading
25 will go beyond that. There is about 10 to 20 foot

1 to the east of the existing fence line there is
2 about a 5-foot change in elevation of the existing
3 topography there. So there will be some earth
4 removal as part of grading out that site to make
5 it the same elevation as the existing yard.

6 MR. MERCIER: Thank you.

7 THE WITNESS (Cabral): We're in the
8 process now of doing detailed civil design, and
9 the exact cut quantities and topo maps and things
10 like that would be part of the D&M plan.

11 MR. MERCIER: Let me just find my other
12 notes for a second.

13 THE WITNESS (Cabral): Sure.

14 MR. MERCIER: Now, reading through the
15 application, I just had several notes. So I'm
16 going to go basically, starting from the beginning
17 to the end, some questions I have. I guess the
18 first question begins on page 2-11. It talked
19 about the -- second paragraph, the last sentence,
20 it talked about the planned Towantic generating
21 station was not included in the forward-capacity
22 auction number 7.

23 Would the construction and operation of
24 that plant in any way -- would including this
25 plant in the needs report have any bearing on the

1 report's finding that additional transmission is
2 necessary into the northwest Connecticut subarea?

3 THE WITNESS (Bentley): So ISO New
4 England did an analysis of the Towantic plant and
5 confirmed that Towantic would not effect the needs
6 or the solutions for the Greater Hartford Central
7 Connecticut Study, which includes this project
8 that we're talking about today. And that was in a
9 December PAC presentation, Planning Advisory
10 Committee presentation they made, so it's
11 available at the ISO New England web site.

12 MR. MERCIER: Did you say when that
13 presentation was made? I missed that.

14 THE WITNESS (Bentley): December --
15 it's on my laptop, but it's a December
16 presentation of 2015.

17 MR. MERCIER: Thank you.

18 Go to page 4-2. And it basically --
19 the third bullet regarding sensitive environmental
20 and cultural areas. This says, "Identify and mark
21 areas to be avoided." So I'm just wondering who
22 maintains at Eversource a list of these areas, and
23 who actually delineates them in the field?

24 THE WITNESS (Cabral): So these areas
25 are going to be identified in our D&M plan for the

1 project, and it will be in our contractor scope to
2 flag or mark off these areas prior to commencing
3 any work. And Eversource's environmental
4 consultant will confirm that that's taken place
5 prior to allowing work to start.

6 MR. MERCIER: Is the consultant
7 determining whether it's sensitive or not?

8 THE WITNESS (Cabral): No, that's
9 happening during this upfront phase of the
10 project. So the wetland delineations, the vernal
11 pool delineations, have already taken place, and
12 the archeological investigations are still
13 underway.

14 MR. MERCIER: Now on page 4-3, it
15 mentions that temporary roads would be
16 constructed, timber mats or gravel. I'm just
17 trying to determine what would be the determining
18 factor, whether it's the timber mats or the
19 gravel, what would be the factor there?

20 THE WITNESS (Cabral): We are proposing
21 timber mats typically for our wetland crossings.
22 There are other places where a contractor may
23 determine that timber mats could be used in
24 uplands as well, for example, agricultural fields
25 or just other areas where the subsurface

1 conditions are soft that will make it as
2 advantageous to use gravel. So in uplands it's
3 really a contractor means and methods of whatever
4 they can most easily construct the project with.

5 MR. MERCIER: For any temporary gravel
6 roads how is that material removed? Do you put
7 down, say, like a matting material then gravel on
8 top?

9 THE WITNESS (Cabral): We typically put
10 down a geotextile fabric that helps develop that
11 barrier between the two. That's not necessarily
12 needed. You can remove roads and just restore
13 some topsoil without putting the geotextile fabric
14 down.

15 MR. MERCIER: Once you pull up the
16 gravel, once you're finished with it for the
17 project, what do you do with it, is it reclaimed
18 or reused elsewhere on the project?

19 THE WITNESS (Cabral): If it's early on
20 in the project, it could be reclaimed and used on
21 another portion of the project. If not, the
22 contractor that Eversource uses will be
23 responsible to properly dispose of that, whether
24 that means it's another project or brought to a
25 site that can accommodate that type of material.

1 MR. MERCIER: Thank you.

2 On page 4-11 there is discussion at the
3 top of the page regarding retaining shrub species
4 outside the conductor zones. I'm just wondering
5 if there's areas of invasives in the shrub layer
6 that's not to be removed because it's not
7 necessary, but would Eversource go in and actually
8 remove the invasive portion?

9 THE WITNESS (Cabral): Matt, do you
10 want to answer that?

11 THE WITNESS (Davison): Eversource
12 currently has a veg maintenance program in which
13 they do address invasive species, so it's sort of
14 an ongoing thing.

15 MR. MERCIER: So for this particular
16 project, if shrub clearing is not needed outside
17 the conductor zones, that area will just remain in
18 place and then cycle with the regular maintenance
19 schedule?

20 THE WITNESS (Davison): Yes.

21 MR. MERCIER: On page 4-14, there was a
22 discussion about right-of-way access roads. It's
23 stated that many access roads are already in
24 place.

25 On the next page 4-15, it talks about

1 the grade of the road -- excuse me, on page 14 at
2 the top it talks about the grade of the road
3 optimally should be 10 percent or less. But the
4 existing access roads under the power lines are at
5 a steeper grade. Would there be construction on
6 that existing access road to lessen the grade to
7 10 percent? Say if it was 15 percent out in the
8 field today, would there be some type of
9 construction on that road to lessen the grade?

10 THE WITNESS (Cabral): Typically the
11 existing access roads that are out there are there
12 for the maintenance of the line, and they have
13 very similar requirements for grade. So typically
14 I would not expect there could be an area where
15 there's significantly more than 10 percent, that
16 we can do some slight modifications, that could
17 exist in the project. And, once again, that level
18 of detail, configuration of the roads, would be
19 part of the D&M process.

20 MR. FITZGERALD: We've got a supplement
21 to one of your earlier questions, if you'd like?

22 MR. MERCIER: Sure. Thank you.

23 THE WITNESS (Bentley): Thank you.

24 Back to the question on the CPV Towantic and the
25 presentation, I did find it. It was from November

1 17, 2015. And I'll read it. On page 4 of the
2 presentation I'll read the bullet that ISO wrote.
3 "An ISO analysis of the GHCC study area with the
4 inclusion of CPV Towantic and Wallingford 6 and 7,
5 showed no significant changes and therefore a
6 needs reassessment will not be undertaken for the
7 GHCC study area."

8 MR. MERCIER: Thank you.

9 THE WITNESS (Bentley): Yes.

10 MR. MERCIER: My last question right
11 now has to deal with, I guess, the DEEP comments
12 in regards to a field review they conducted. They
13 saw a structure 89 marked in that field, but it
14 wasn't on any of your map sheets. Would there be
15 a structure 89?

16 THE WITNESS (Cabral): There's not a
17 planning structure 89 for the project. The stakes
18 that it might have saw in the field were some
19 preliminary staking early on in the project. And
20 as we went through the detailed design process
21 that also includes constructability review, we
22 have shifted structures, and in two cases we've
23 actually removed structures. There's another case
24 that was also brought up in the same letter about
25 another structure missing further south. I'll

1 give you that structure number in a second. So
2 right now the proposed project does not include a
3 structure 89.

4 MR. MERCIER: I'm looking at the map
5 sheet you have right in front of you. It's number
6 32. Just west of 88 there's a large work pad that
7 extends onto the next sheet actually up to
8 structure 3176, 3233. Is that a potential pole
9 pad?

10 THE WITNESS (Cabral): That's correct.
11 It's a potential pole pad.

12 MR. MERCIER: Thank you.

13 THE WITNESS (Cabral): The other thing
14 to note on that to help provide a little bit of
15 clarity is that these are our initial preliminary
16 structure numbers. Once the design is finalized,
17 then we'll get new numbers that will go into
18 Eversource's system for structure numbers. So
19 these are preliminary structure numbers for the
20 design phase of the project. The other structure
21 that gets skipped is there's no structure 12. We
22 go from structure 11 to 13.

23 MR. MERCIER: Thank you.

24 THE VICE CHAIRMAN: Thank you,
25 Mr. Mercier.

1 Council cross-examination. We'll start
2 with Mr. Ashton.

3 MR. ASHTON: Thank you, Mr. Chairman.
4 I'm having a little problem, so if you can't hear
5 me, then yell and let me know, but I'll do my very
6 best.

7 I want to start down at the Frost
8 Bridge Substation and inquire about some of the
9 landscaping. As you come in that station, the
10 landscaping is sparse. Is it the applicant's
11 proposal to do a good landscaping job with this
12 docket?

13 THE WITNESS (Cabral): Ray, you want to
14 address that?

15 MR. ASHTON: Mr. Gagnon I think knows
16 what I'm talking about.

17 THE WITNESS (Gagnon): Yes, I do. And
18 we will address that as part of the D&M plan, but
19 yes, certainly we can look at it.

20 MR. ASHTON: There are two trees to the
21 right of the entrance that surprise me. One looks
22 like a chokecherry, and I can't figure out what
23 the other one is. And they're fairly good size.
24 They're fairly close to the fence. And I wonder
25 if there's any thought that's been given to

1 removing those as a danger and replacing them in
2 some fashion?

3 THE WITNESS (Gagnon): I know that back
4 when we were doing some hazard fence installations
5 back then, those were looked at for removal. They
6 hadn't been removed, but that's something that we
7 can look at. I'll work with our veg management
8 people.

9 MR. ASHTON: Okay. I hate to see a
10 grown man cry.

11 The underground connection from the
12 substation to the first structure I find not
13 remarkable at all. I would like to ask what are
14 the current carrying capabilities that have been
15 assigned to the various conductors that are used?
16 There's one very interesting conductor here. It's
17 a bundled 2/0 copper, which goes back to probably
18 the 1920s. And when the line was built about 1957
19 or so, rather than take it down, it was put up --
20 they were bundled. And that was evident today as
21 you just looked overhead and you can see a very
22 light line. That's equivalent of a 4/0 copper
23 conductor carrying capability, if I remember
24 right, which is 96 MVA. Is that right?

25 THE WITNESS (Gagnon): Approximately

1 correct, yes.

2 MR. ASHTON: Now that you've guessed
3 what my numbers are, I want you to tell me what
4 temperature and wind rating that number --

5 MR. FITZGERALD: Mr. Soderman has been
6 sworn.

7 THE WITNESS (Soderman): Copper
8 conductors are rated for a maximum operating
9 temperature, continuous operating temperature of
10 133 degrees Celsius or 266 degrees Fahrenheit.
11 And the assumed wind speed for all overhead
12 conductors is 3 feet per second.

13 MR. ASHTON: Just for the record, why
14 are temperature and wind velocity important?

15 THE WITNESS (Soderman): Well, the wind
16 is what takes the heat off of the conductor, so
17 the faster the wind you assume, the more you
18 assume it's going to take off of the wire and
19 allow it to put more heat through current. So
20 wires are going to heat up, and I squared R loss
21 is only losses. So the more wind -- the faster
22 the wind is, the more heat you're taking off.

23 THE VICE CHAIRMAN: You used the term
24 "I squared R." That's the square of the current
25 times the resistance of the conductor?

1 THE WITNESS (Soderman): That's
2 correct.

3 MR. ASHTON: And that's something that
4 engineers just love to dabble with. And the
5 reason that there is such concern for it, is it
6 not correct, is that we don't want to anneal the
7 conductors. By "annealing," I mean we soften the
8 conductor and it loses its strength so that the
9 temperature and wind affecting the annealing,
10 affecting the strength, all go hand in glove. And
11 this is pretty universally adopted; is it not?

12 THE WITNESS (Soderman): That is
13 correct.

14 MR. ASHTON: Now, I must admit I was
15 tickled when I saw a 2/O conductor being replaced
16 just because it was very unusual back when I had
17 hair and bundle conductors were used, but there
18 are other conductors that are involved here. And
19 what conductors are they, and what are their
20 ampacity ratings, if you remember off hand?

21 THE WITNESS (Soderman): The proposed
22 conductor is 1590 kcmil ACSS.

23 MR. ASHTON: Kcmil is a term of art
24 technically to determine the size of the
25 conductor?

1 THE WITNESS (Soderman): That is
2 correct. It represents 1000 circular mils.

3 MR. ASHTON: Okay. What's a circular
4 mil?

5 THE WITNESS (Soderman): Well, a
6 circular mil represents an area of basically a
7 circle that has 1/1000 of an inch in diameter.

8 MR. ASHTON: And that refers to a
9 circle being part of a conductor?

10 THE WITNESS (Soderman): That's
11 correct.

12 MR. ASHTON: And what was the 1590
13 again?

14 THE WITNESS (Soderman): 1590 ACSS
15 Falcon, which is a stranding of 54 over 19, 54
16 strands of aluminum and 19 strands of steel. And
17 that is aluminum conductor steel supported.

18 MR. ASHTON: Okay. There is mention of
19 1272, I believe, also. What --

20 THE WITNESS (Soderman): The existing
21 1238 and 1921 lines both take advantage of 1272
22 kcmil ACSR, which is aluminum conductor steel
23 reinforced, with strandings of 45 over 7, so 45
24 strands of aluminum to 7 strands of steel.

25 MR. ASHTON: So the jargon that we're

1 using reflects the different constituent
2 subconductors, if I might, that have been used or
3 proposed to be used?

4 THE WITNESS (Soderman): That's
5 correct.

6 MR. ASHTON: One of the things that
7 troubles me a little bit here is that this is a
8 very unusual right-of-way between the two terminal
9 points in that the width varies all over the lot.
10 There's a 400-foot right-of-way, which is owned by
11 Eversource, actually owned by CL&P or Rocky River
12 Realty, as the case may be. And that was for a
13 project that tied capacity in Connecticut and
14 Massachusetts and goes back into the '20s, so it
15 was a long long time ago. And then there's a
16 250-foot-wide easement right-of-way that's tacked
17 onto the end of it. And then there's -- I know
18 there's probably some other odd stuff in there
19 too.

20 You would agree, I'm sure, that what
21 this Council and the company want to do is
22 maximize the utilization or the ability to utilize
23 such rights-of-way. But one thing that's not
24 mentioned here other than the fact that it exists
25 is a 345-kV line, a 345,000 volt line, that goes

1 north from Frost Bridge. And what happens at the
2 end of it?

3 THE WITNESS (Soderman): That line
4 originally was part of the first, as Councilman
5 Ashton is aware, was the first 345-kV line in New
6 England that connected the Southington Substation
7 to the New York State line. The line presently
8 connects Frost Bridge Substation to the Long
9 Mountain Substation which was constructed later
10 on.

11 MR. ASHTON: Long Mountain is over in
12 New Milford, Connecticut?

13 THE WITNESS (Soderman): Yes.

14 MR. ASHTON: This Council has received
15 word informally that there will be two power
16 plants proposed over in New York State, roughly
17 1,000 megawatts each, which is a pretty big power
18 plant. Wouldn't that suggest that there could be
19 some more 345 on this right-of-way?

20 THE WITNESS (Soderman): To be
21 perfectly honest, you're getting into a little bit
22 of a planning world, so you're getting a little
23 out of my bailiwick.

24 So Brad, perhaps you can speak to that?

25 THE WITNESS (Bentley): Without getting

1 into specifics, in general, the more power plants
2 you have in the right-of-way, I would agree with
3 you, the more potential there would be for the
4 need of additional transmission infrastructure to
5 interconnect those power plants and deliver power
6 throughout New England and New York.

7 MR. ASHTON: Okay. And would it be
8 fair to say that where the line turns west from
9 this right-of-way to -- what's the junction up in
10 Torrington? Help me out.

11 THE WITNESS (Soderman): Weingart
12 Junction.

13 MR. ASHTON: -- and then onto North
14 Bloomfield, would that be a wild and ridiculous
15 configuration to build a ring -- complete the ring
16 of 345 around the metropolitan Hartford area?
17 Would you say that's reasonable?

18 Well, let me ask you this then. Has
19 that kind of consideration been examined in this
20 docket? I'll look to you first.

21 THE WITNESS (Bentley): Sure. At a
22 very high level, conceptual level, when the
23 planners go and look at the range of alternatives
24 to start, I believe there are some considerations
25 of that. But when we get into narrowing of those

1 solutions, a lot of those come off the table. But
2 what we try to do in planning, we try to take the
3 longer-term considerations into the short-term
4 solutions. So that if we're going to do
5 something, we're planning for any potential future
6 expansion to the best we can.

7 MR. ASHTON: Okay. I hope we do that.

8 THE WITNESS (Bentley): Yes, we still
9 do that.

10 MR. ASHTON: I look over my shoulder a
11 little bit too here.

12 What is the driver of the expansion at
13 115 here, is it local load at Campville
14 Substation, for example?

15 THE WITNESS (Bentley): So I'll start
16 at the high level for why this project is needed.
17 The Northwest Connecticut area is a load pocket,
18 so it's generation deficient. So it relies on
19 power being transferred into the load pocket. And
20 there's only a certain number of sources that
21 currently go into a load pocket. And when we look
22 at contingencies where we take either a line or
23 two lines out of service, two sources out of the
24 area, we find that the remaining line is over --
25 and there's also voltage violations that go along

1 with that as well.

2 So we start with the basic need of if
3 we don't have enough sources, what's the most
4 likely answer. We should bring another source
5 into the load pocket, which is basically the
6 genesis of the Frost Bridge to Campville line
7 coming into Campville.

8 MR. ASHTON: Campville serves areas to
9 the west at 27 kV; is that correct?

10 THE WITNESS (Bentley): I believe so,
11 but you're going into the distribution side.

12 MR. ASHTON: Does it get up to service
13 the Torrington area?

14 THE WITNESS (Bentley): Subject to
15 check, I believe so.

16 MR. ASHTON: I'm not looking for
17 details. So you have Torrington, and you've got
18 lines to the west, Goshen area. And what about to
19 the east, does it serve load to the east?

20 THE WITNESS (Bentley): If I had to
21 guess, there's probably some load served in
22 Harwinton.

23 MR. ASHTON: That's your job. So we've
24 got Harwinton, Goshen area and north. And what
25 have we got to the south, anything?

1 (No response.)

2 MR. ASHTON: All right, three out of
3 four is not too bad. The point being that these
4 are suburban areas where the load is growing for
5 CL&P. Is that not reasonable?

6 THE WITNESS (Bentley): Yes. As we
7 said in our latest forecast and load resources, we
8 still see the peak load growing.

9 MR. ASHTON: The one area where I have
10 a little trouble is I looked at the drawings that
11 were handed out, sheets up through 2 through 7,
12 and I got a feeling that the spacing is varying
13 here. And I want to be sure -- and I'm going to
14 ask you a simple yes or no question. I want to be
15 sure that the new 115, coupled with the old 115
16 that you're going to leave in place, optimizes the
17 use of the right-of-way. In other words, we don't
18 put up -- have the old 115 and then 100 foot of
19 space and then a new 115, and then more space to
20 the 345 because is it not correct that spacing for
21 the 115 can be as low as 25 feet?

22 THE WITNESS (Bentley): I'll have to
23 leave that to the line engineer for the yes or no
24 answer.

25 THE WITNESS (Soderman): So, north of

1 Purgatory Junction and from Frost Bridge over to
2 Purgatory Junction and north of Purgatory
3 Junction, there still remains enough right-of-way
4 to accommodate a future 345 kV transmission line.

5 MR. ASHTON: And could that future 345
6 be installed without tearing down and replacing a
7 115?

8 THE WITNESS (Soderman): Yes.

9 MR. ASHTON: Okay. I get worried about
10 that.

11 I made a note that in one section of
12 the right-of-way that the new pole will be the --
13 the nearest phase will be 28 feet. This is where
14 you've got a 90-foot pole, 45 feet between the
15 center line of the pole, and then knocked off 13
16 feet for clearance for the conductor. Is that
17 reasonable?

18 THE WITNESS (Soderman): On the new
19 steel pole from roughly center line actually to
20 the conductor attachment would actually be
21 approximately 10 feet, not 13 feet, on the new
22 steel pole.

23 MR. ASHTON: Okay. So we can bring it
24 down 10 feet?

25 THE WITNESS (Soderman): That's

1 correct. And on the existing laminate pole it's
2 also roughly about 10 feet from the center line of
3 the pole.

4 MR. ASHTON: Can I make a suggestion
5 that before the final plan is filed for approval
6 with the Council that a careful look be made of
7 spacing so that we can minimize the spacing and
8 optimize the availability of the right-of-way for
9 other purposes?

10 THE WITNESS (Soderman): We can
11 definitely take a look at that.

12 MR. ASHTON: I don't want to do it
13 here, but you get my point.

14 THE WITNESS (Soderman): Yes.

15 MR. ASHTON: Up at the I guess it's the
16 Naugatuck River where we have a 1272 span, that's
17 Naugatuck River?

18 THE WITNESS (Soderman): (Nodding head
19 in the affirmative.)

20 MR. ASHTON: Is the railroad there
21 active? There's a railroad which parallels the
22 river, correct?

23 THE WITNESS (Cabral): It is active for
24 tours. It's active for Heritage-type tours.

25 MR. ASHTON: The reason I ask is there

1 was a hell of a big log across the tracks. Active
2 railroads don't normally put logs --

3 THE WITNESS (Cabral): It's not active
4 this time of year. I think it's active from the
5 springtime through the fall.

6 MR. ASHTON: I will concede the fact
7 that if it is active -- and they look in
8 reasonable condition other than that nice fat
9 log -- the state by policy today ain't going to
10 give up railroad right-of-way and let others have
11 it for development. They want to make sure that
12 right-of-way stays intact. The thing that is
13 bothering me a little bit there is that I don't
14 know what is governing the height of the
15 structures on either side. What is the driving
16 force that puts you at 155 foot height more or
17 less up there? Is it the railroad, or is it the
18 river, or --

19 THE WITNESS (Soderman): It actually
20 appears, based on a preliminary plan and profile,
21 that it's clearance to the Valley Road.

22 MR. ASHTON: The road then?

23 THE WITNESS (Soderman): Yes. And it's
24 at the long span, about 1,400 plus feet -- or
25 excuse me, 1,900 plus feet.

1 MR. ASHTON: If you go to ACSS
2 conductor and pull it up, make sure your tension
3 is high, can't that height of the structure be
4 reduced?

5 THE WITNESS (Soderman): Well, we --

6 MR. ASHTON: It appears to be the same
7 as what exists today.

8 THE WITNESS (Soderman): Approximately.
9 The problem with pulling the ACSS tighter is that
10 because of the fact that you lost the strength
11 because the aluminum strands are annealed, you
12 don't have that available RPS.

13 MR. ASHTON: I don't know how you got
14 what you're proposing. Insofar as there's an
15 opportunity to knock down the height of that
16 conductor, I would urge you it be looked at
17 carefully. And I would urge that even the
18 placement of the structures be looked at as a way
19 of helping reduce the structure height because
20 you've got a changed ball game now. I'd make that
21 request for the D&M.

22 THE WITNESS (Soderman): Yes.

23 MR. ASHTON: Mr. Chairman, it's a good
24 thing I'm sick, otherwise -- that's it for now.
25 Thank you very much.

1 THE VICE CHAIRMAN: Thank you, Mr.
2 Ashton.

3 Mr. Hannon?

4 MR. HANNON: Thank you, Mr. Chairman.
5 I do have some questions.

6 On page 4-30 of I believe it's Volume
7 1, in the third paragraph you talk about, if
8 possible, vegetation removal near streams and
9 trying to maintain a 20-foot-wide riparian zone
10 for habitat enhancement, shading, bank
11 stabilization and erosion sedimentation control.
12 Is your word "shading" similar to "thermal"
13 because I'm more concerned about what some of the
14 thermal impacts could be on water bodies. So I'm
15 just trying to make sure that you're using
16 "shading" where I might use "thermal."

17 THE WITNESS (Soderman): Louise, do you
18 want to address that one?

19 THE WITNESS (Mango): I think we're
20 talking about the same thing. I mean, we
21 recognize that the maintenance of shading like a
22 cover that overhangs a stream is important for
23 fish and other things that live in the stream. So
24 to the extent that we can, we would, for example,
25 if we need an access road across the stream and

1 the stream was otherwise characterized by shrubby
2 vegetation, we would not clear that shrubby
3 vegetation except at the access road.

4 The same is true is if we had to take
5 trees down, we would try to take those trees down
6 and keep the understory. Sometimes that's not
7 possible, but on this project there's actually a
8 lot of streams that we'll be scanning. I don't
9 think we're going to be down along the Naugatuck
10 River, for example.

11 So I think we are talking about the
12 same thing. And we just talk about shading, and
13 you're talking thermal.

14 MR. HANNON: I just want to make sure
15 we're pretty much on the same page. Thank you.

16 On page 4-31 in the first bullet you
17 say, "Where feasible in areas proximate to vernal
18 pools." If there is a report coming out of the
19 Natural Diversity Database Program that says
20 cutting shouldn't be done during certain times of
21 the year, I'm assuming that you would adhere to
22 that planning. So that it's not so much feasible
23 in terms of we try to work within that envelope,
24 and if we can't, we won't, I'm assuming that
25 because of some of the species that have been

1 found in the area, you may pretty much strictly
2 adhere to what the Natural Diversity Database
3 folks would say?

4 THE WITNESS (Davison): I think for
5 that particular bullet it doesn't necessarily
6 pertain to state-listed species. It's more of the
7 amphibians that would typically be migrating into
8 a vernal pool. And the state hasn't imposed any
9 restrictions on us for tree clearing for the
10 state-listed species. But if we have
11 opportunities to schedule tree clearing to avoid
12 periods of time when things will be migrating in
13 the vernal pool, we incorporate that into the BMPs
14 and the development and management plan.

15 MR. HANNON: Thank you.

16 Page 4-35 dealing with the foundations.
17 A number of the poles look like they are very
18 close to the wetlands. So I know that you've
19 tried to pull them out of the wetland area. But
20 having been involved with construction work for a
21 number of years, typically when you're pouring
22 concrete pads there tends to be excess concrete.
23 Any plans on what's going to be done with that
24 excess concrete? I would hate to see them pouring
25 a pad outside the wetland and then dump the

1 balance of their load in the wetland. So I'm just
2 wondering if there's any control on that?

3 THE WITNESS (Cabral): So any excess
4 concrete would be disposed of upland, a good
5 distance away from the wetland. Our wetlands will
6 be flagged and marked clearly so people know not
7 to do exactly what you're talking about there. We
8 will have some monitors keep an eye on that as
9 well. So any discharge of excess concrete will
10 happen upland and then be removed within a short
11 period of time.

12 MR. HANNON: Okay. Thank you. I don't
13 know if this is anything that you can do. But on
14 page 5-18 you do talk about some of the decoy
15 pools. Is there anything that can be done as far
16 as grading for when the project is pretty much
17 completed to try to minimize some of those decoy
18 pools?

19 THE WITNESS (Davison): We
20 considered -- actually we had talked earlier in
21 the project about filling in the decoy pools. The
22 issue there is that then you enter into the whole
23 issue of it's a fill in a wetland. So we don't
24 have any plans to remove decoy pools for that
25 reason.

1 MR. HANNON: I was just curious. On
2 the erosion sedimentation control plan, and this
3 is sort of general throughout the application --
4 I'm specifically looking at page 6-3 -- you talk
5 about the inspections and maintaining your erosion
6 sedimentation control measures, but one of the
7 things I didn't see, which could possibly be in
8 the D&M plan, is that I don't see any reference to
9 going back out and inspecting the erosion
10 sedimentation control measures after significant
11 storms just to make sure that everything is in
12 place and it is still working, and if it's not
13 working it's repaired.

14 THE WITNESS (Cabral): That is part of
15 our plan is after any major storm we do an
16 inspection of all EMS controls on the project.

17 MR. HANNON: I just didn't see it.
18 Okay. That's fine.

19 THE WITNESS (Mango): Just to clarify
20 that, the project would prepare a storm water
21 pollution control plan pursuant to the DEEP's
22 general permit for that construction activity.
23 And one of the requirements there is you need to
24 do stormwater turbidity monitoring after major
25 rain events. That's in your current permit. So

1 that is something that would be done. And we have
2 a whole procedure for implementing it. It's been
3 done on projects like the interstate reliability
4 project most recently.

5 MR. HANNON: So what you're saying then
6 is it's tied in more with having to get the
7 general permit from DEEP rather than specifically
8 put in here. So I'm trying to make sure that the
9 ground is covered in that respect.

10 THE WITNESS (Mango): Yes. And I
11 think, as Jason and others have said, as we
12 proceed with the project design we put all that,
13 you know, the more detailed information in the D&M
14 plan. And more specifically we found recently
15 that erosion control information is prepared for
16 DEEP anyway, and we typically prepare a totally
17 separate plan and reference that plan as part of
18 the D&M, so all that details what you really don't
19 want to get into at this stage of the project, you
20 know, about the inspection, frequency and stuff
21 like that.

22 MR. HANNON: That's fine. I just
23 wanted to make sure that it's covered as part of
24 the project.

25 THE WITNESS (Davison): I think the

1 reissued storm water permit requires inspections
2 after a quarter inch of rain.

3 MR. HANNON: Okay. I have no other
4 questions. The few questions I had earlier had
5 already been answered like missing pole number 12
6 so --

7 THE VICE CHAIRMAN: Thank you.

8 Mr. Levesque?

9 MR. LEVESQUE: On the Veterans Memorial
10 Park in Watertown the ball field is close to your
11 right-of-way. Was that an area of EMF concern,
12 and what did you find out or report?

13 THE WITNESS (Soderman): Actually in
14 Volume 1 in Section 7 we actually included a
15 measurement at that baseball field on the
16 right-of-way side of the dugout, so not even kind
17 of in the playing area. It's towards the edge of
18 the cleared area where the measurement occurred.
19 And at that location this project, there's almost
20 no change whatsoever, and you are almost at
21 background levels of both magnetic field. And we
22 measured no electric field because of the
23 shielding with the trees that you have.

24 MR. LEVESQUE: Okay. So even in the
25 farthest out infield this has its left field close

1 to your right-of-way, that's okay too?

2 THE WITNESS (Soderman): That's
3 correct. On table 7-2 in the application the
4 measurement showed 1 milligauss for the spot
5 measurement of the magnetic field.

6 MR. FITZGERALD: That's the measurement
7 of what's there. What did you do to predict what
8 will be there after the land is built, and what's
9 the explanation for the remarkable answer you got?

10 THE WITNESS (Soderman): So when we did
11 some calculations based off of an average annual
12 load on the system, we noted that the existing
13 condition was 2.99 milligauss, and after the
14 proposed project it was 3.05 milligauss. So a
15 change of less than .1 milligauss. So at that
16 point it was determined to not take any additional
17 measures because the changes really are relatively
18 minor.

19 MR. FITZGERALD: And why were the
20 changes so small?

21 THE WITNESS (Soderman): Mostly because
22 the dominant source in the corridor is actually
23 the existing 352, which is the 345-kV transmission
24 line. That line actually has more current on it
25 than any of the 115s, or at least would be

1 anticipated.

2 MR. LEVESQUE: So even the closer
3 existing 115 has less?

4 THE WITNESS (Soderman): That's
5 correct.

6 MR. LEVESQUE: And then I had a few
7 questions or comments on the Department of Energy
8 and Environmental Protection comments. They are
9 dated February 29. I realize you probably didn't
10 have an opportunity to amend your application if
11 you needed to respond to any of these. But since
12 we're here, whoever has it in front of them. I
13 think we gave them to you, if you didn't get them
14 directly from DEEP.

15 On page 2 near the bottom it said
16 miscellaneous corrections, and it refers to what
17 Mr. Ashton said about active rail line.

18 THE WITNESS (Cabral): That's correct.
19 It was incorrectly listed as an inactive railroad
20 on page 1-6 of Volume 1. It is an active
21 railroad.

22 MR. LEVESQUE: And you'll just make
23 sure as far as safety of workmen, employees or
24 whatever work you're doing that you'll warn them?

25 THE WITNESS (Cabral): Absolutely.

1 We'll have to get a permit from Connecticut DOT
2 for the crossing of that railroad, and that's a
3 process that we should be submitting to them
4 within the next few weeks.

5 MR. LEVESQUE: Thank you.

6 Then on page 5 of that report at the
7 top paragraph they make a suggestion or a comment
8 where you propose to remove the lattice tower and
9 add two monopole towers. He makes the suggestion
10 that for one of the lines you'll utilize the
11 existing lattice towers?

12 THE WITNESS (Soderman): We can take a
13 look at that and review that in close detail to
14 see if there's enough strength if we have enough
15 room in the right-of-way.

16 MR. LEVESQUE: Okay.

17 MR. FITZGERALD: Can you just elaborate
18 on that point? What is it you have to look at and
19 what would be -- what occurs to you as the
20 potential advantages and disadvantages of doing it
21 that way?

22 THE WITNESS (Soderman): Well, I mean,
23 the obvious advantage would be reduced
24 construction footprint and reduced construction
25 time. So one of the things that we would take a

1 look at is whether we can -- you know, do we have
2 to remove the arms or any other members on the
3 tower when we separate off one of those circuits
4 while still maintaining the spacing to the new
5 proposed circuit so as to kind of not eat up the
6 right-of-way today, you know, save it for the
7 future potential use. And then should we remove
8 any of those members to make clearance for this
9 new transmission circuit, are there any
10 deleterious effects on the structure itself.

11 MR. LEVESQUE: I'll leave it to your
12 judgement to report on it and Mr. Ashton question
13 you on it.

14 And then for any towers that are
15 removed from the project, would the foundations
16 for them be removed?

17 THE WITNESS (Cabral): The foundations
18 would be removed to below grade and then covered
19 with soil and seeded. We wouldn't remove the
20 entire foundation.

21 MR. LEVESQUE: Or it depends on the
22 individual circumstances?

23 THE WITNESS (Cabral): Correct. If
24 there was a certain request, but standard protocol
25 would be to remove it to a certain distance below

1 grade, cover it with soil and seed it, versus
2 trying to go through all the disturbance it would
3 take to remove the entire foundation.

4 MR. LEVESQUE: Thank you very much.
5 That takes care of my questions.

6 THE VICE CHAIRMAN: Mr. Lynch?

7 MR. LYNCH: As usual, Phil has already
8 asked all my engineering and loading questions. I
9 do have -- if I missed it in any of the legends or
10 the application, I didn't really notice any areas
11 for layout for construction during the period. Is
12 that going to be on Eversource property, or will
13 that be off site?

14 THE WITNESS (Cabral): So at each
15 structure site there is a work pad, and that's on
16 the Volume 5, 100 scale maps versus the 400 scale
17 maps that you're looking at.

18 MR. LYNCH: Okay.

19 THE WITNESS (Cabral): And there you
20 can see that there's a work pad for each
21 structure. So that would be a unique storage area
22 for each structure. There will also be a material
23 yard, potentially multiple material yards, where
24 the material will be delivered to before it's
25 brought to each structure site. Potential

1 locations are included in Volume 1, but that's
2 something we want our construction contractor to
3 select. So it will be something that we'll submit
4 as either part of the D&M plan or as a follow-up
5 consultation with the Council.

6 MR. LYNCH: I just missed it. So thank
7 you.

8 THE WITNESS (Cabral): No problem.

9 MR. LYNCH: And as we did our field
10 review this afternoon -- this is like an aside
11 question -- I noticed that in some of the homes
12 that we passed there were ATVs and dirt bikes in
13 the yard. When you complete post construction I'm
14 talking about how big -- does that become a
15 problem for people getting on the site using the
16 ATVs and the dirt bikes?

17 THE WITNESS (Cabral): Obviously
18 Eversource's protocol is not to encourage that.
19 It does happen at times. One of the things that
20 Eversource tries to do in these projects is when
21 we install a road off a public street, we will put
22 up a gate to help deter people coming down that
23 corridor, but if they want to get around it they
24 will.

25 MR. LYNCH: I just wonder how big a

1 problem, if it is a problem at all.

2 (Off the record discussion.)

3 THE WITNESS (Cabral): I mean, this
4 particular corridor, you saw the terrain, it's
5 pretty difficult, but in general in the right
6 corridor it can be a problem.

7 MR. LYNCH: Because I also saw a lot of
8 no trespassing signs and trails, and I think
9 they're an open invitation for these people too.

10 Now that Phil has asked all my
11 questions, Mr. Chairman, I'm all set. Thank you.

12 THE VICE CHAIRMAN: Thank you, Mr.
13 Lynch.

14 Any other questions?

15 MR. HANNON: I do have some. I'd just
16 like to follow up on the conversation about the
17 lattice towers. How old are they?

18 THE WITNESS (Soderman): So the lattice
19 tower at the Naugatuck River Crossing is circa
20 1971.

21 MR. HANNON: What is the general
22 expected life expectancy of something like that?

23 THE WITNESS (Soderman): The book life
24 is about 40 years, but we have lattice towers that
25 have survived for 80 or so years, some in good

1 shape, some not so good shape, but we've had
2 lattice towers go well beyond 60 years.

3 MR. HANNON: Part of the reason I'm
4 asking is because if they're 40, 45 years old now,
5 if they do stay up, what are we looking at as far
6 as possibly having to go back in ten years or
7 something and remove them? And what kind of a
8 problem would that be if that were in fact the
9 case?

10 THE WITNESS (Soderman): We can
11 evaluate the condition, you know, of the towers.
12 Our initial plan was to replace them, so we really
13 didn't focus on the existing condition, but we can
14 take a look at the existing condition of those
15 lattice towers and report to the Council.

16 MR. HANNON: If the line is going to be
17 there for 60, 70 years, but the towers are only
18 going to be there for another 25, what would you
19 have to do then to go back and change them out?
20 So that was kind of where I was going with it.
21 Thank you.

22 THE WITNESS (Cabral): Just to follow
23 up on that, it is more efficient obviously to do
24 the work now than it is later with having the
25 construction crews there and the access road

1 upgrades there and all the heavy equipment. You
2 need to build a transmission line there now versus
3 having to remobilize that, like you said, in a
4 future period to do the work.

5 THE VICE CHAIRMAN: Mr. Mercier.

6 MR. MERCIER: Yes. I just had a few
7 more questions on -- we just talked about the life
8 span of the lattice. But at the field review
9 today it was mentioned that there was laminate
10 towers out on the existing right-of-way. Are
11 those still used on a wide-spread basis in
12 Eversource's installation methods?

13 THE WITNESS (Soderman): We typically
14 don't use that for new construction. We found
15 that light duty steel, number one, is less
16 expensive and obviously more durable. So it's not
17 our preferred construction type to take advantage
18 of.

19 MR. MERCIER: I'm just curious of the
20 life span of those. I thought I saw one that had
21 some rot on the surface of it.

22 THE WITNESS (Soderman): It's possible.
23 You can envision the laminates to be -- they tend
24 to last about as much as the natural wood pole
25 structures do. They used to bow more, but we're

1 finding it's about the same.

2 MR. MERCIER: Is that 50 years or so or
3 less?

4 THE WITNESS (Soderman): Yes, about
5 that.

6 MR. MERCIER: Thank you.

7 Getting back to the application, a
8 couple of questions. It's on page 4-12, and it
9 talked at the very top of the page, it said,
10 "During vegetation removal, timber mats or
11 equivalent may be used to provide a stable base."
12 Is the equivalent the gravel, as we discussed
13 earlier, or some other material that you may use?

14 THE WITNESS (Cabral): No, that would
15 be the actual clearing equipment, so the equipment
16 that the contractor would use to cut the trees.
17 So what we're saying there is that timber mats or
18 equivalent will be used for that equipment to
19 traverse that wetland to do the clearing.

20 MR. MERCIER: I'm trying to figure out
21 what other material is used besides the timber
22 mats.

23 THE WITNESS (Cabral): Okay. So
24 there's other types of matting out there other
25 than timber matting. There's synthetic matting,

1 other matting that's out there. So that's just
2 giving our contractor some flexibility, not
3 necessarily to use the timber material.

4 MR. MERCIER: So it's the contractors,
5 whatever they have in their yard is acceptable to
6 Eversource?

7 THE WITNESS (Cabral): Yes.

8 THE WITNESS (Davison): I would
9 anticipate during clearing some of the forestry
10 operators may use something like corduroy, which
11 is sort of commonly used in forestry operations.
12 So just smaller pieces of wood that they lay out
13 in front of them that operates like a timber mat,
14 but it's more improved.

15 MR. MERCIER: Thank you.

16 I just have one more on the pulling
17 operations. On page 4-19 of the application it
18 talked a little bit about the pulling operation.
19 Once the work pad is established and pulling
20 equipment is set into place, how long does that
21 activity last? Is it a day, a few hours?

22 THE WITNESS (Cabral): To construct the
23 actual pull site, or to set up the equipment?

24 MR. MERCIER: Once the equipment is in
25 place and the work pad is in place and you're

1 ready to go and start the pulling operation, how
2 long does the actual pulling last?

3 THE WITNESS (Cabral): So the pulling
4 typically lasts for a typical pole one full day of
5 actual pulling of the conductor. Depending on
6 weather conditions, it could go up to two days.
7 Now, once again, that's just the pulling phase.
8 Once the conductor is in there, it still has to be
9 tensioned and clipped into the structure and
10 things of that nature. So it's just the actual
11 pulling of the wire from the reels into the
12 structures.

13 MR. MERCIER: I guess my question
14 related to that is that pulling operation, whether
15 it's in there for a day or a day and a half, is
16 that an excessively noisy operation or just a
17 general construction noise? I mean, is there a
18 loud banging or some type of --

19 THE WITNESS (Cabral): There is not any
20 loud banging. It's standard construction noise.

21 MR. MERCIER: Thank you.

22 And on page 10-6, it talked about
23 alternatives of the project. There were some
24 values thrown in there for wetland impact. I
25 think this was in the fourth paragraph down. It

1 said the North Bloomfield to Canton line would
2 impact approximately 13 acres of wetlands. Is
3 that temporary effects, permanent effects or both?

4 THE WITNESS (Mango): In the analysis
5 that we did it was just we didn't distinguish
6 temporary or permanent. Traditionally most of
7 those impacts would be temporary because, as is
8 Eversource's policy, they would try to design
9 anything, any overhead lines to minimize impacts
10 to wetlands. So proportionally it would probably
11 be the same as some other of Eversource's
12 projects, so probably less than a couple of acres
13 of permanent impacts, you know, depending on the
14 actual configuration of the wetlands along that
15 right-of-way.

16 MR. MERCIER: In the following sentence
17 where it talks about the approximately 2.2 acres
18 of wetlands for this project, is it safe to assume
19 that that information now has been updated in
20 Interrogatory 11 where you had all the values
21 presented for each wetland?

22 THE WITNESS (Davison): I think for the
23 purposes of this analysis here that is in Section
24 10, we used desktop layers, so we were comparing
25 essentially apples to apples. So in both cases we

1 were using basically desktop layers of the
2 wetlands so we can make an accurate comparison.

3 MR. MERCIER: So the interrogatory is
4 more indepth?

5 THE WITNESS (Davison): Yes. That
6 information is based on actual field delineation.

7 MR. MERCIER: Thank you. I have no
8 other questions.

9 THE VICE CHAIRMAN: Any of the members
10 of the Council have any questions before we
11 recess?

12 (No response.)

13 THE VICE CHAIRMAN: This Council
14 therefore will recess until 6:30 p.m., at which
15 time when we commence it will be for the public to
16 comment in that session to the Connecticut Siting
17 Council. And we'll start at 6:30. With that, I
18 guess we're adjourned.

19 (Whereupon, the witnesses were excused
20 and the above proceedings adjourned at 4:44 p.m.)

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CERTIFICATE

I hereby certify that the foregoing 57 pages are a complete and accurate computer-aided transcription of my original stenotype notes taken of the Continued Council Meeting in Re: DOCKET NO. 466, APPLICATION FROM THE CONNECTICUT LIGHT AND POWER COMPANY D/B/A EVERSOURCE ENERGY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE FROST BRIDGE TO CAMPVILLE 115-KILOVOLT ELECTRIC TRANSMISSION LINE PROJECT THAT TRAVERSES THE MUNICIPALITIES OF WATERTOWN, THOMASTON, LITCHFIELD AND HARWINTON, WHICH CONSISTS OF (A) CONSTRUCTION, MAINTENANCE AND OPERATION OF A NEW 115-KILOVOLT OVERHEAD ELECTRIC TRANSMISSION LINE ENTIRELY WITHIN EXISTING EVERSOURCE RIGHT-OF-WAY AND ASSOCIATED FACILITIES EXTENDING APPROXIMATELY 10.4 MILES BETWEEN EVERSOURCE'S EXISTING FROST BRIDGE SUBSTATION IN THE TOWN OF WATERTOWN AND EXISTING CAMPVILLE SUBSTATION IN THE TOWN OF HARWINTON; (B) RELATED MODIFICATIONS TO FROST BRIDGE SUBSTATION AND CAMPVILLE SUBSTATION; AND (C) RECONFIGURATION OF A 0.4 MILE SEGMENT OF TWO EXISTING 115-KILOVOLT ELECTRIC TRANSMISSION LINES ACROSS THE NAUGATUCK RIVER IN THE TOWNS OF LITCHFIELD AND HARWINTON WITHIN THE SAME EXISTING RIGHT-OF-WAY AS THE NEW 115-KILOVOLT ELECTRIC TRANSMISSION LINE, which was held before SENATOR JAMES J. MURPHY, JR., Vice Chairman, at the Northfield Volunteer Fire Department, 12 Knife Shop Road, Litchfield, Connecticut, Tuesday, March 1, 2016.

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Lisa L. Warner, L.S.R., 061

Court Reporter

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