

VOLUME 6, PAGES 931-1098

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF PUBLIC UTILITIES  
ENERGY FACILITIES SITING BOARD  
EFSB 14-4/DPU 14-153/14-154

EVIDENTIARY HEARING, held at the  
Department of Public Utilities, One South Station,  
Boston, Massachusetts, on Thursday, February 11,  
2016, commencing at 10:06 a.m., concerning:

NSTAR ELECTRIC COMPANY, D/B/A EVERSOURCE ENERGY

SITTING:

M. Kathryn Sedor, Esq., Hearing Officer

Siting Division:

Barbara Shapiro, Environmental Director, EFSB

Charlene de Boer, Regional Planner, EFSB

----- Reporter: Alan H. Brock, RDR, CRR -----  
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32

1 February 11, 2016 10:06 a.m.

2 P R O C E E D I N G S

3 MS. SEDOR: Let's go on the record.

4 Good morning. This is Thursday, February 11th,  
5 2016, and this is a continuation of the evidentiary  
6 hearing in EFSB 14-4/DPU 14-153/154. Today's topic  
7 is environmental impacts. We will be beginning with  
8 the Bench's cross-examination of the Eversource  
9 witnesses -- specifically, Mr. Zicko, Mr. Bergeron,  
10 and Mr. O'Malley, who is not here at the moment, but  
11 we have been told that he will be here later in the  
12 day.

13 To quickly summarize a couple of  
14 procedural matters that we discussed before we went  
15 on the record this morning: Eversource, as was  
16 requested, has found a witness to testify to the  
17 real estate transactions between the City of Boston  
18 and Eversource in connection with the selection of  
19 the East Boston proposed substation site, and his  
20 name is Stephen Carroll. How would you spell that,  
21 Ms. Keuthen?

22 MS. KEUTHEN: I believe it's  
23 C-a-r-r-o-l-l.

24 MS. SEDOR: And counsel for Eversource

1 has informed us that the earliest Mr. Carroll could  
2 be here would be March 8th and 9th. However,  
3 counsel for Channel Fish has told us that she has a  
4 jury trial, and the earliest that she could be  
5 available would be after the 15th of March.

6 So during the lunch break staff will  
7 look into its schedule and the schedule of hearing  
8 rooms here at the DPU and would ask the other  
9 parties to look at their schedules for the last two  
10 weeks of March, so that we can get that hearing date  
11 lined up.

12 Also, Eversource expects to be able to  
13 report in, perhaps later today, depending on whether  
14 one of their consultants is here a little bit later  
15 today, on an anticipated filing date for the traffic  
16 data that we're waiting for.

17 I think that's it. At this time I would  
18 remind Mr. Zicko and Mr. Bergeron that you remain  
19 under oath.

20 Oh, the one thing I did forget: Counsel  
21 for Channel Fish brought up or made the point that  
22 Mr. Carroll no longer works for Eversource but has  
23 agreed to testify. And I've asked counsel for  
24 Eversource to prepare some kind of statement

1 confirming that the position that Mr. Carroll will  
2 take when he testifies here for us is in fact the  
3 company's position with respect to the real estate  
4 matters that he'll be testifying to.

5           Again, Mr. Zicko and Mr. Bergeron, you  
6 remain under oath. At this point I will turn the  
7 questioning over to Ms. de Boer.

8           JOHN M. ZICKO AND MARC BERGERON,  
9 having previously been duly sworn, testified as  
10 follows:

11                           BENCH EXAMINATION

12 BY MS. DE BOER:

13           Q. Good morning, everybody. I'll start with a  
14 couple of general questions, and then move on to  
15 construction methods after that. But if you could  
16 please first refer to EFSB-G-1.

17           A. [BERGERON] Yes.

18           Q. Mr. Bergeron, I'm wondering if you could  
19 provide any updates you may have on the status or  
20 planned submission dates for these permits.

21           A. [BERGERON] I can. I'm just going to go  
22 through the table one by one and identify updates,  
23 if that's okay.

24           Q. Perfect. Thank you.

1           A. [BERGERON] As far as the Federal permits  
2 that are required for the project, the first one is  
3 the US EPA NPDES general permit for stormwater  
4 discharges from construction activities. There's no  
5 change in that status. We will submit that  
6 approximately one month prior to the start of  
7 construction.

8           There are no other Federal permits  
9 required for the project that have been identified  
10 since we filed this response.

11           As far as State permits go, we are in  
12 the EFSB proceeding now. There's no update to offer  
13 there.

14           As far as the Chapter 91 waterways  
15 license from Mass. DEP: As we've testified earlier,  
16 we are on hold with our Chapter 91 license  
17 application, and we will resume that based upon how  
18 these proceedings progress.

19           We are planning to submit a minor  
20 modification application to Chapter 91 in March for  
21 the transmission and distribution portion of the  
22 project.

23           We are complete at Mass. Historical  
24 Commission, with a no adverse effect.

1           Our Section 8M with the MWRA for the  
2 authority to cross within an MWRA easement: We  
3 anticipate, as a way of update, that we will be  
4 submitting an application approximately April of  
5 2016. We've been doing preapplication meetings with  
6 that agency.

7           The filing under the Massachusetts  
8 Wetlands Protection Act will be made for the  
9 project, and we anticipate filing in April 2016.  
10 All of our grants of locations -- one with the City  
11 of Everett, the City of Chelsea, and the City of  
12 Boston -- we've been having preapplication meetings  
13 with each of these municipalities, and we expect to  
14 be filing our grants of location applications in the  
15 May/June 2016 time frame.

16           Our street opening permits in Boston,  
17 Everett, and Chelsea will be submitted based upon  
18 contract award. We expect a September/October 2016  
19 time frame for filing.

20           And the Boston Water/Sewer Commission  
21 site plan approval we expect to submit in April  
22 2016. We've been having preapplication meetings  
23 with that agency as well to review our plan set.

24           Also, by way of update, we have also

1 reviewed the Williams Street portion of the project  
2 with Mass. DOT, and Mass. DOT has determined that  
3 there's no permit required for the crossing of the  
4 Tobin Bridge along this route.

5 An additional permit that has been  
6 identified would be a crossing permit for the  
7 railroad crossing at Beacham and Behan Street in  
8 Everett, and we are in process with that agency.  
9 That's the MBTA.

10 And those are the updates.

11 Q. Do you have a sense of when you're going to  
12 be working with the MBTA to get that permit?

13 A. [BERGERON] We anticipate filing formally  
14 in March.

15 Q. Thank you. If you could please refer to  
16 the project schedule provided in response to  
17 EFSB-G-2. The company estimated that the project  
18 would be in service by the end of 2018, with  
19 construction beginning in March of 2017. Is this  
20 still the company's most current estimate?

21 A. [BERGERON] Yes, it is, assuming that we  
22 can get an order here in July or August, by July or  
23 August.

24 Q. And if you weren't to receive a decision by

1 July or August, would the shift in the construction  
2 schedule be a month-to-month adjustment, or....

3 A. [BERGERON] Yes, more or less, but we also  
4 have to factor in any weather considerations during  
5 the winter season that may cause additional delay,  
6 depending upon the timing.

7 Q. Would the current schedule have  
8 accommodated that type of winter construction delay,  
9 or if you're not receiving permits in July or  
10 August, is there additional winter construction that  
11 would extend the timeline significantly?

12 A. [BERGERON] Yes, the current schedule does  
13 include some contingencies for winter weather and  
14 delays in the project due to that weather.

15 Q. Are there any other changes to the proposed  
16 schedule -- I guess there weren't any in this  
17 version. But are there any changes that we should  
18 be aware of at this time to the schedule that was  
19 attached to G-2?

20 A. [BERGERON] I don't know of any other  
21 changes.

22 Q. If you could please refer to EFSB-G-8(R1).

23 A. [BERGERON] Yes.

24 Q. I'm just wondering if there have been any

1 further concerns raised with the company since this  
2 response was filed?

3 A. [ZICK0] I know I have not been in  
4 attendance at any of those -- any subsequent  
5 meetings with any of these organizations, so I'd not  
6 be in a position to speak to that.

7 Q. Is this something that maybe  
8 Mr. O'Malley --

9 So we can reserve this question for when  
10 he's in later today.

11 MS. KEUTHEN: If I may: The company  
12 actually has prepared a supplemental response to  
13 G-8.

14 MS. DE BOER: Okay.

15 Thank you very much. Given that  
16 Mr. O'Malley is the person identified as responsible  
17 for this supplemental response, I'll hold any  
18 questions I may have on it until he arrives later  
19 today.

20 MS. KEUTHEN: Thank you.

21 Q. So with that, I'll turn to construction  
22 methods. I'm wondering if you could please describe  
23 for me the company's plans for how construction  
24 would proceed along the preferred and noticed

1 alternative routes. For example, would you start  
2 at --

3 MS. SEDOR: Before we go there, just a  
4 quick question, Ms. Keuthen: I see that this  
5 document is dated February 2nd. Did this get filed  
6 already with our office or --

7 MS. KEUTHEN: I apologize. It was  
8 prepared on February 2nd, but it was never filed.

9 MS. SEDOR: So it's being filed today.

10 MS. KEUTHEN: It is. Would you like us  
11 to also file it online?

12 MS. SEDOR: No, that's not necessary. I  
13 can make sure it gets into the record.

14 MS. KEUTHEN: Thanks.

15 MS. SEDOR: But I'll change the date to  
16 today's date.

17 Q. I'm wondering if you could please describe  
18 for me how construction would progress along the  
19 preferred and noticed alternative routes. For  
20 example, does the company plan to start at one end  
21 of the line and work its way along towards the  
22 terminal substations, or would multiple crews be  
23 working simultaneously along different portions of  
24 the route?

1           A. [ZICKO] I don't have the specifics of  
2 that. But in general the company would strive to  
3 get as many crews out there as they could -- bearing  
4 in mind the limitations of traffic management plans  
5 and other constraints that get developed.

6           Q. So when the company provided estimates of  
7 the number of workers and vehicles that would be  
8 active on the site at any one time, did that  
9 estimate account for the potential for multiple  
10 crews, or is that based on the assumption you'd  
11 start from one end and work your way across?

12          A. [ZICKO] I don't know.

13          A. [BERGERON] Mr. O'Malley could answer most  
14 of these questions. So I don't know if you want to  
15 move to a different topic, because as far as  
16 environmental impacts, Mr. Zicko and I can speak to  
17 the substation and anything at the substation at  
18 this point in time.

19                 MS. DE BOER: Can we go off the record  
20 for a second?

21                 MS. SEDOR: Yes.

22                 (Discussion off the record.)

23                 MS. SEDOR: Let's go back on the record.

24           Q. Okay, so given that Mr. O'Malley might be

1 the best person to speak to a number of the  
2 questions that I had on construction methods, I can  
3 we'll just skip ahead to land use for the time being  
4 and revisit that topic later today -- or if we're  
5 just really loving land use, we can spend lots of  
6 time there and see where we get.

7 But if you could please refer to Pages  
8 5-141 and 5-142 of the petition.

9 A. [BERGERON] Yes.

10 Q. There appears to be a discrepancy between  
11 the number of residences, et cetera, passed by the  
12 preferred and alternative routes as described in the  
13 text versus Table 5-10, and I'm wondering if the  
14 text in the table or the text -- narrative in the  
15 paragraphs is the correct summary of land uses along  
16 the two routes.

17 A. [BERGERON] What page was the Table 5-10  
18 on?

19 Q. Table 5-10 is on Page 5-142. For example,  
20 the preferred route passes by approximately six  
21 fewer residences, whereas the Table 5-10 has the  
22 preferred route passing 91 residential housing units  
23 versus 532.

24 I'd summarize to say, I was having

1 trouble comparing the text on 5-141 with the table.

2 A. [BERGERON] As part of our response to  
3 EFSB-RS-9(2), we had updated Table 4-2R. And I can  
4 confirm that, based upon additional checks since we  
5 filed the petition, the total number of housing  
6 units on our preferred route is 91 and the total  
7 number of housing units on the noticed alternative  
8 route is 532. So that should be reflected  
9 throughout. If there's a discrepancy in the text,  
10 it should be corrected to read those numbers.

11 Q. I had a similar issues on Page 5-144 in the  
12 petition, in comparison to Table 5-11. This may  
13 come in the end as a record request, just to make  
14 sure those two tables are the accurate numbers. But  
15 just to be clear, for example, the table states  
16 there are 26 individually inventoried buildings  
17 along the preferred route for the Mystic-to-East  
18 Eagle transmission line, whereas the text in the  
19 paragraph below indicates there's 28. And the same  
20 goes for the noticed alternative route, where the  
21 table says 40 and the text says 43.

22 I'm wondering if there was a distinction  
23 made in the way the table compares to the text or if  
24 in fact there should be an update to the language

1 presented by the company. ` Mr. Bergeron, I'm not  
2 sure if it's easier to answer it on the spot or if I  
3 should ask it in a record request.

4 A. [BERGERON] It would probably be easier  
5 with a record request, because I have to check a few  
6 different places. I actually have the backup. So  
7 if you could ask a record request.

8 Q. To summarize: If the company could please  
9 provide an update or ensure that the numbers  
10 presented in Tables 5-10 and 5-11 are the accurate  
11 numbers of the land uses along the preferred and  
12 noticed alternative routes, and if not, to provide  
13 any updates as appropriate.

14 MS. SEDOR: That will be RR-EFSB-36.  
15 (Record Request RR-EFSB-36.)

16 Q. If you could please refer to Page 5-145 of  
17 the petition.

18 A. [BERGERON] Yes.

19 Q. The company provided an assessment to the  
20 number of public shade trees along the preferred and  
21 noticed alternative routes. I'm wondering why the  
22 company believes it's sufficient to compare purely  
23 the number of shade trees, rather than including  
24 additional factors, such as the distance from the

1 curb and the age and condition of the trees along  
2 the routes.

3 A. [BERGERON] Typically construction can be  
4 done in such a way that we can minimize impacts to a  
5 public shade tree if we don't have to cut it down  
6 because it's in the alignment. And typically, trees  
7 that have -- are adjacent to streets already have  
8 had their root systems compromised from previous  
9 construction associated with the roadways. So what  
10 you find is that the vital root systems are not on  
11 that side of the street typically.

12 Therefore, just by judging the number  
13 along the route would be sufficient, because,  
14 regardless of what their health is or size, again,  
15 it's just a matter of making sure that when you're  
16 trenching you identify if there are any roots that  
17 go into the trench line and then modifying the  
18 construction technique there to take into account  
19 those roots in the trench line.

20 Q. Also on Page 5-145 of the petition the  
21 company stated that it does not currently have any  
22 plans to cut any public shade trees to facilitate  
23 construction along either the preferred or noticed  
24 alternative routes. Is this still the case?

1 A. [BERGERON] Yes, that is still the case.

2 Q. Does cutting include both trimming and  
3 actually cutting the trees down, or what exactly do  
4 you mean when you say "cutting"?

5 A. [BERGERON] In this case we were referring  
6 to complete removal of an individual tree.

7 Q. So does the company anticipate trimming any  
8 trees as part of the noticed -- the preferred or  
9 noticed alternative routes?

10 A. [BERGERON] At the current time we don't  
11 believe that we need to trim any trees along the  
12 route. However, again, it will be subject to review  
13 with the contractor prior to construction, and then  
14 we'll have to coordinate with the tree warden if we  
15 do have to do any trimming of any branches that may  
16 be in the way of equipment movement.

17 Q. You mentioned that tree roots along roads  
18 have typically already been damaged or restricted  
19 due to prior construction. Are tree roots likely to  
20 be damaged due to construction activities associated  
21 with the proposed lines?

22 A. [BERGERON] No, as presented in Section 5,  
23 when the contractor encounters root systems in the  
24 trench line, there are several techniques that are

1 then employed to ensure that the root systems are  
2 not damaged. For instance, there may be some  
3 different type of excavation tools used, there may  
4 be hand tools used, to separate the root system out,  
5 move them out of the way. Oftentimes they're  
6 wrapped in burlap if they don't need to be cut. And  
7 so therefore there are techniques that the  
8 contractor will employ as per coordination with the  
9 tree warden on this project.

10 Q. If you could please refer to EFSB-LU-9.  
11 The company described some of the mitigation  
12 measures it would employ with respect to public  
13 shade trees.

14 A. [BERGERON] Yes.

15 Q. One of the measures the company described  
16 to protect public shade trees would be to repair or  
17 replace trees and vegetation in a manner approved by  
18 the tree warden at the company's expense. Could you  
19 please describe for me what period of time the  
20 company's repair-or-replace commitment would cover?

21 A. [BERGERON] The exact time is worked out  
22 with the tree warden, and as per the City's  
23 ordinance. Typically, my experience on similar  
24 projects, the replacement of any trees that end up

1 being cut or their repair is done upon the  
2 restoration phase of the project, immediately  
3 following the final paving stage in the project.

4 Q. And is the City responsible for maintaining  
5 the trees after -- in the event that the company was  
6 to replace some of them?

7 A. [BERGERON] Yes, again, dependent upon the  
8 individual agreement with the City. In some  
9 instances the company has just provided money to  
10 replace the trees and the City will actually  
11 coordinate replacement of the trees if that is what  
12 the tree warden and typically the Department of  
13 Public Works wants.

14 But following the company's commitment  
15 to replace the trees or repair them, unless there is  
16 a certain time frame in the agreement for them to  
17 come back and maintain and monitor the health of  
18 that tree, it then becomes the responsibility of the  
19 City to maintain the health of the tree.

20 Q. Thank you. On Pages -- or on Page 5-224 of  
21 the petition the company stated that there are no  
22 permanent impacts to Article 97 lands associated  
23 with the project. I'm wondering if there are any  
24 temporary impacts to Article 97 lands?

1           A. [BERGERON] No. This project, as far as we  
2 understand it, is not located on any lands that are  
3 subject to Article 97 review.

4           Q. Could you please refer to EFSB-LU-5.

5           A. [BERGERON] Yes.

6           Q. The company stated that with regard to the  
7 American Legion playground and recreation area and  
8 the Condor urban wild, project impacts would be  
9 temporary and limited to parking restrictions during  
10 construction. The company also stated that once the  
11 preliminary construction sequencing schedule was  
12 developed, it would meet with the City of Boston to  
13 discuss potential impacts to the area. Could you  
14 please tell me what the status of the company's  
15 preliminary construction sequence schedule is?

16          A. [BERGERON] I unfortunately can't speak to  
17 that. That would be a question Mr. O'Malley will  
18 have to answer.

19          Q. I'll take a crack at this one, although  
20 this could be in Mr. O'Malley's area of  
21 responsibility as well. But in response to  
22 EFSB-LU-12, the company stated that it had not  
23 identified any planned or possible staging and  
24 laydown areas for the project. Would anyone on the

1 panel be able to speak to those at this time?

2 A. [BERGERON] I can actually respond to that.  
3 I was assigned this response, and I worked with  
4 Mr. O'Malley directly to prepare it. Again, as  
5 stated in our response, the company hasn't  
6 identified any staging areas or laydown areas at  
7 this time, and we'll work with the contractor to  
8 identify those later in the process.

9 Q. Is that the case for both the lines and the  
10 substation, or is there enough space within the  
11 substation site to accommodate laydown areas as  
12 well?

13 A. [ZICKO] That would apply to the substation  
14 as well.

15 Q. Is it likely that you'll be looking at a  
16 laydown area outside of the DPW parcel or --

17 A. [ZICKO] I don't know. Certainly the DPW  
18 parcel would be the logical choice. Whether it's  
19 available or not I think is a matter that  
20 Mr. O'Malley would have to speak to.

21 Q. With that, I'll transition to some  
22 questions on the visual impacts of the proposed  
23 project. If you'd please refer to EFSB-V-3.

24 A. [BERGERON] Okay.

1 Q. The company stated that it plans to meet  
2 with the City of Boston to consult on the design of  
3 the proposed screening wall for the East Eagle  
4 Street substation. Could you please provide an  
5 update on the status of this consultation. I  
6 believe the company testified previously that there  
7 was a December 14th meeting with the City on this  
8 subject. Mr. Zicko, I'm really hoping you were  
9 there?

10 A. [ZICKO] I do recall that testimony. I  
11 also recall that on December 14th I had another  
12 commitment and couldn't be at that meeting. So I  
13 unfortunately cannot speak to what occurred there.

14 Q. Maybe more to the point: Do you have a  
15 sense at this point what the wall will look like?

16 A. [ZICKO] I think that's continuing to  
17 evolve. We're certainly continuing to flesh out the  
18 details on that. We do in a very short time frame  
19 expect to have the next iteration of that design.

20 Q. Can you be a bit more specific of what  
21 "short iteration" means to you?

22 A. [ZICKO] If I may.

23 The company expects to be in a position  
24 to file that in advance of next Thursday's hearing.

1 Q. And by that you mean the visualizations  
2 requested in response to EFSB-V-9 as well as Ms.  
3 Shapiro's prior record -- or expansion to that  
4 particular information request?

5 A. [ZICKO] What I have seen are the most  
6 recent plans for the architectural screening. I  
7 don't recall if those contain the other photosims or  
8 the renderings as well.

9 Q. So at least the first stage of  
10 visualizations would be in advance of the 18th of  
11 February. Do you have an estimate of when the full  
12 package of simulations might be available?

13 A. [ZICKO] I don't.

14 Q. Thank you. Will you please refer to  
15 EFSB-V-10.

16 A. [BERGERON] Yes.

17 Q. The attachment to this response shows the  
18 trees the company would remove as part of the  
19 project. Are these all of the trees that currently  
20 line the substation property, or would some of the  
21 existing vegetative screen remain?

22 A. [BERGERON] These are all of the trees that  
23 are on the company's property on the property line,  
24 and which would need to be cut to facilitate the

1 construction.

2           There may be an additional tree on  
3 Channel Fish's side, which may not be cut. However,  
4 as you can see from this visual, there's  
5 approximately 35 trees that need to be cut, so the  
6 majority of the existing screen will be removed.

7           Q. It might be helpful if we could refer to  
8 Attachment 2 to EFSB-RS-19. I think this attachment  
9 shows a number of the trees along that same portion  
10 of the parcel.

11           A. [BERGERON] Okay.

12           Q. Am I correct to understand that there may  
13 be additional trees that were within the white area  
14 that's the substation property on this diagram? Or  
15 is it the same 35-ish trees that are going to be  
16 removed that actually appear to be more on the  
17 City's portion of the DPW parcel rather than the  
18 area that's owned by Eversource?

19           A. [BERGERON] The figure that was prepared  
20 for V-10, I believe you were just referring to, that  
21 showed the 35 trees that were to be cut -- the trees  
22 were located by a survey. I don't know how these  
23 trees were located on Figure RS-19(2), if they were  
24 located by survey or not. Based upon my experience

1 at the site, I would say that the 35 trees that we  
2 have shown in Figure V-10 are the same trees that  
3 are shown on the City's parcel here.

4 We also provided some photos -- I forget  
5 which response it was -- that show this side of the  
6 site, and that may be helpful for getting a sense of  
7 the size of the trees and the diameter of the trees  
8 and the size of the canopy as well. The majority of  
9 the trees towards Chelsea Creek are smaller in  
10 height, you'll see, with the larger trees being  
11 further to the front of the station.

12 I also want to point out that on  
13 RS-19(2) it's my understanding that the trees that  
14 are shown on the City of Boston parcel, the small  
15 piece of land between the substation and the Channel  
16 Fish property, are labeled as proposed new trees.

17 Q. Can you direct me to where that labeling  
18 would be on the figure?

19 A. [BERGERON] I don't see a label on that.  
20 It was just my understanding that this is a  
21 presentation of proposed features versus existing  
22 features. So it's assumed that these are going to  
23 be new trees to be planted as part of that plan.

24 Q. Would the company have specific

1 requirements for the type and size of tree that  
2 would be -- or that the City would be able to plant  
3 at that location?

4 A. [ZICK0] Yes. That would be worked out  
5 with the company's vegetation management group.  
6 Typically, on a facility like this, where everything  
7 enters and leaves underground and there's no exposed  
8 live equipment in there -- it's all in cabinets or  
9 containers -- there would be some opportunities that  
10 we might not be able to avail ourselves of if, say,  
11 the station had all overhead lines and air-insulated  
12 bus in it.

13 So while the details haven't been worked  
14 out, yes, there will be some constraints; but again,  
15 there's some opportunities to do some other things  
16 here as well.

17 Q. So the existing trees aren't necessarily  
18 being removed because they pose a safety hazard or a  
19 fault hazard to the station. It's that they're  
20 physically within the substation site and can't  
21 remain in order to accommodate substation equipment.

22 A. [ZICK0] Some of them are, yes.

23 Q. And the ones that aren't?

24 A. [ZICK0] You know, I haven't -- I haven't

1 looked at them with regard to hazard to electrical  
2 equipment.

3 Q. Mr. Bergeron, your testimony is that the  
4 trees are all located within company property,  
5 potentially one on Channel Fish property, but none  
6 on the remaining City DPW parcel that would be  
7 removed?

8 A. [BERGERON] I can't confirm how many  
9 additional trees that are on the Channel Fish  
10 property, on the other side of the property line.  
11 But again, I can confirm that, as shown in Figure  
12 V-10, the 35 trees that were surveyed need to be cut  
13 to facilitate construction of the substation.

14 Q. Have you discussed with Channel Fish the  
15 potential for removing trees on their property?

16 A. [BERGERON] I haven't personally been  
17 involved in any discussions with Channel Fish.

18 Q. Has the company approached Channel Fish in  
19 this regard?

20 A. [ZICKO] I don't know. I know as a company  
21 employee I have not been involved in any discussions  
22 with Channel Fish on that subject.

23 Q. What's the company's typical practice when  
24 it's looking to remove trees on property outside of

1 its ownership?

2 A. [ZICKO] Of course it's approach the  
3 property owner, is the first step. And then they  
4 would need to enter into a set of negotiations. And  
5 what the outcome of those negotiations would be I  
6 think would be different for every circumstance.

7 But in general, it would certainly  
8 involve negotiations with the property owner.

9 Q. And what if that property owner isn't  
10 interested in having its trees removed?

11 A. [ZICKO] I don't know. I'm not sure that  
12 we've ever really run into that.

13 Q. Thank you. If you could please refer to  
14 EFSB-V-5.

15 A. [BERGERON] Yes.

16 Q. The company stated that no landscaping was  
17 planned in association with this project. I'm  
18 wondering if there are any other Eversource-owned  
19 substations where the company has not planted any  
20 vegetation as part of project development.

21 A. [ZICKO] Well, certainly the downtown  
22 stations, where -- we testified as to those  
23 locations last Friday -- last Thursday, I'm sorry --  
24 where we were right on top of the sidewalk and there

1 was just no room for vegetation. So those would be  
2 one example.

3 Some of the smaller stations out in the  
4 suburbs that are on larger pieces of property and  
5 perhaps buried in the trees, we don't intentionally  
6 plant landscaping there, because, you know, there's  
7 already a natural screening.

8 And then, of course, as I mentioned  
9 earlier, you know, stations that have all the lines  
10 entering and leaving overhead would not be  
11 candidates for landscaping -- or extensive  
12 landscaping.

13 Q. Given that the plan presented by the City  
14 shows potential future vegetation to be planted  
15 alongside of the substation, has the company  
16 considered -- is this an opportunity for investing  
17 in some landscaping to improve the visual screening  
18 of the site?

19 A. [BERGERON] I can add that, as part of our  
20 Chapter 91 license process, the Boston Harbor  
21 Association sent in a letter, a comment letter,  
22 identifying that they would like to be involved and  
23 would like the company to consider some landscaping  
24 at this facility. And as part of that the

1 company -- I wasn't part of them -- but has had  
2 meetings with the Boston Harbor Association. And my  
3 understanding from speaking with the rest of the  
4 project team is that there may ultimately be some  
5 landscaping around the station, based upon continued  
6 conversations with the City and the Boston Harbor  
7 Association, as the plan progresses.

8 Q. So there may be the potential for the  
9 company to plant some vegetation on City property  
10 along that eastern side of the substation boundary?

11 A. [BERGERON] Again, I haven't been involved  
12 in those conversations. Perhaps Mr. O'Malley might  
13 be able to provide an update as to where they're  
14 heading with the City of Boston.

15 I just want to add that one of the  
16 constraining factors at the station with doing a  
17 detailed landscaping plan is the lack of space. As  
18 we testified previously, the station site is  
19 relatively confined and almost completely built out.  
20 So we'll have to continue discussions to see if  
21 there is any opportunity on any available  
22 company-owned land to do any landscaping and/or,  
23 through negotiations with the City, any landscaping  
24 on their property.

1 Q. Has the company proposed landscaping on  
2 City-owned or non-company-owned property for other  
3 substations?

4 A. [ZICK0] For substations I'm not aware that  
5 they have.

6 Q. Would potentially the Woburn substation be  
7 a place where the company is proposing -- I'm  
8 wondering if potentially the Woburn substation might  
9 be an example of a case where the company is  
10 proposing landscaping on land owned by the City  
11 rather than the company.

12 A. [ZICK0] Yes, and in answering that  
13 question, I was thinking in the realm of, you know,  
14 facilities already built, not facilities proposed.  
15 But yes, you're absolutely correct.

16 Q. I think I'd like to make a record request,  
17 for an update from the company on its plans  
18 regarding landscaping in association with the  
19 proposed East Eagle Street substation site,  
20 including the discussions it's been having with the  
21 City of Boston and the Boston Harbor Association,  
22 and any landscaping plans that it has developed to  
23 this time.

24 MS. SEDOR: That will be RR-EFSB-37.

1 (Record Request RR-EFSB-37.)

2 Q. Also in response to EFSB-V-5, the company  
3 stated that the proposed screening wall would  
4 surround the north, south, and west sides of the  
5 East Eagle Street substation. I'm wondering what  
6 the company's plans are for fencing or walling on  
7 the east side of the substation.

8 A. [ZICK0] Excuse me one second.

9 We've proposed a nonconductive fence  
10 between 10 and 12 feet high on that side.

11 Q. Would you be able to estimate how much it  
12 would cost the company to continue the architectural  
13 screening around all sides of the substation, rather  
14 than just the north, south, and west sides?

15 A. [ZICK0] If it were done on, say, a dollar  
16 per linear foot of wall, yes, I think that's  
17 something we could do.

18 Q. I'd like to make a record request for that,  
19 for how much it would cost the company to continue  
20 the architectural screening around all sides of the  
21 proposed East Eagle Street substation.

22 MS. SEDOR: That will be RR-EFSB-38.

23 (Record Request RR-EFSB-38.)

24 Q. If you could please refer to EFSB-V-6. The

1 company indicated that no shielding masks are  
2 included in the East Eagle Street substation design,  
3 and I'm wondering if you could please explain to me  
4 why shielding masks aren't necessary in this case.

5 A. [ZICK0] Yeah. The shielding masks would  
6 be required to shield exposed equipment that's not  
7 grounded from lightning strikes.

8 In this case we have the control  
9 building, which will be a grounded object; the  
10 metal-clad switchgear and the gas-insulated  
11 switchgear, which will be grounded objects, don't  
12 need any shielding.

13 The only item where there is exposed  
14 115-kV -- that is, it's not in a grounded enclosure  
15 or container -- are the air terminals of the  
16 transformer, and those will be -- the screening or  
17 the shielding for those would be provided by the  
18 shield wall -- the screening wall, and the  
19 protective mesh that we had talked about to keep the  
20 soccer balls out will provide direct-stroke  
21 shielding for that area.

22 Q. And by the screening wall, you mean the  
23 architectural screening around the outside of the  
24 substation?

1           A. [ZICK0] Correct -- specifically around the  
2 transformers, because that has the only features  
3 that need to be shielded.

4           Q. Could you please describe for me a little  
5 bit more what the mesh screen you just described  
6 would look like and where it would be attached in  
7 the substation?

8           A. [ZICK0] It would not be visible because it  
9 would be on the top of the enclosure over the  
10 transformers. So unless you were, you know, well  
11 back from the substation or perhaps in one of the  
12 frequent planes that flies over that area, you would  
13 not see it at all.

14                        But basically, it will just be some kind  
15 of a perforated sheet, to allow air through. And  
16 again, really the reason we're proposing it is the  
17 proximity to the soccer field. If somebody were to  
18 somehow lob a soccer ball up there, whether  
19 intentionally or otherwise, it wouldn't go down into  
20 the transformers, it would just roll back onto the  
21 area from whence it came.

22           Q. So it's attached to this architectural  
23 wall, then, so that balls would roll -- if they were  
24 to land on top, they would roll outside of the

1 substation fence line?

2 A. [ZICK0] Yeah, it's attached to the top, to  
3 the part that would ordinarily be open to the sky,  
4 as opposed to the sides.

5 Q. You'd mentioned it wouldn't be visible. I  
6 think some of the renderings we've seen show views  
7 from second or third floors of residences across the  
8 streets from the substation that appear to have a  
9 view down into substation equipment. Would those  
10 individuals be likely to be able to see the mesh  
11 screen?

12 A. [ZICK0] They could potentially see it. I  
13 haven't, you know, done kind of a study as to how  
14 far back or how high up you'd have to be. But I  
15 think I did mention that you'd have to be well back  
16 from the substation. I never defined what "well  
17 back" is.

18 Q. To be clear: When the company provides the  
19 updated visual renderings of the substation, is it  
20 intending to include the planned mesh screen as part  
21 of those visualizations?

22 A. [ZICK0] Yes.

23 Q. Thank you.

24 BY MS. SHAPIRO:

1 Q. If you could turn to the petition at  
2 Appendix 5-2, that I believe has -- shows where the  
3 architectural walls will be and the enclosures. I'm  
4 now specifically looking at either 10 or 11.

5 Can you tell me, when you look at 10 or  
6 11, or even 12 and 13, is the elevated control  
7 house, is that flush against the walls, or is there  
8 space in between the walls -- between the control  
9 house and the fire protection walls and the  
10 architectural wrapping?

11 A. [ZICKO] So it's difficult to tell from  
12 this, but it appears that on -- and I'm looking at  
13 Slide 11, Appendix 5-2. But it does appear that  
14 there is some space between the wall of the building  
15 and the screen wall outside of it.

16 Q. And since I think Mr. Zicko was talking  
17 about the soccer ball issue, and that's also why  
18 you're putting the screening above the transformers,  
19 is there any -- the proposed soccer field -- if it's  
20 built, is there any danger or potential of balls  
21 going in between where those walls are? Not that --  
22 between where the elevated control house is and the  
23 wall?

24 A. [ZICKO] There could be. The

1 distinguishing features are that there is, A, no  
2 exposed live equipment in there, and B, it's a much  
3 smaller target than the opening over the  
4 transformers.

5 Q. So if there were soccer balls to go in  
6 there, there's no effect on the substation  
7 equipment?

8 A. [ZICKO] No.

9 Q. Thank you.

10 BY MS. SEDOR:

11 Q. I just wanted to follow up a little bit on  
12 the trees. You said that you'll be working very  
13 closely with the tree wardens. Did you mean the  
14 tree warden in each of the three cities?

15 A. [BERGERON] That's correct.

16 Q. And have you confirmed that there is a tree  
17 warden in each of those three cities?

18 A. [BERGERON] My experience is that each city  
19 has to have at least a designee, so in some cases  
20 the Department of Public Works director will serve  
21 as the tree warden if they don't have a specific  
22 position, full-time tree warden.

23 Q. So if we were to include a condition in the  
24 decision requiring you to do this consultation with

1 the tree warden, perhaps we should word it with the  
2 tree warden or the designee?

3 A. [BERGERON] Yes. Typically, when we apply  
4 for our grants of location and our street opening  
5 permits is where the tree warden or the individual  
6 acting as a tree warden gets involved with the  
7 review process. And that's the point in the project  
8 where we have a good understanding of exactly what  
9 trees could be affected. There's a contractor on  
10 board who can understand if there is in fact any  
11 trimming of a branch here or there that we may not  
12 have considered because of equipment clearance  
13 issues. So that would be an appropriate language,  
14 to say "tree warden or designee." But I just want  
15 for the record to assure you that that's something  
16 that typically takes place during the process.

17 Q. And typically do they ask you for the tree  
18 information, or is it up to you to volunteer the  
19 tree information?

20 A. [BERGERON] Typically what happens is,  
21 we'll walk the project route with that designee and  
22 talk about the construction and what the plans are  
23 for any trimming. And oftentimes the tree warden  
24 will make additional requests, in some instances

1 will ask the company to trim additional branches  
2 that have been a problem with other utilities in the  
3 area.

4           So typically it involves a field visit.  
5 Also, there's a hearing process as far as trimming  
6 or cutting any public shade trees, where each tree,  
7 a sign is posted near the individual tree. There's  
8 an ad placed in the paper to notify the public of  
9 the tree hearing. There's an actual process where  
10 we go in front of, typically it's a board of  
11 selectmen meeting where they have that proceeding.  
12 And we have a hearing. The public can have input,  
13 and we're actually issued a formal permit to cut the  
14 trees.

15           Q. That's true in each of those three cities?

16           A. [BERGERON] Yes, it's a state regulation,  
17 public shade tree law.

18           Q. Thanks. The other question I had was about  
19 the trees on private property. It's interesting to  
20 me, two parts of the tree-cutting on private  
21 property are of interest to me. One, you said that  
22 the trees currently on the proposed substation site  
23 are not -- don't need to be cut because of  
24 interference with overhead lines, which is usually

1 why we see them needing to be cut down: This time  
2 that's not the reason. It's not for operation of  
3 those lines; it's only for construction; right?

4 So I'm wondering, or what I would like  
5 to know is: Was there any specific effort made by  
6 Eversource to look at a different way to approach  
7 construction or reconfigure construction access to  
8 preserve those trees? Or did you just say, "This is  
9 how we always construct, and it's handy for us to  
10 get these trees out of the way"? Was any particular  
11 effort made to save these trees?

12 A. [BERGERON] If I can just have a moment to  
13 go off the record and confer with Mr. Zicko.

14 Q. Sure.

15 (Discussion off the record.)

16 MS. SEDOR: Okay.

17 A. [ZICKO] Those trees that are within the  
18 fence line of the substation, those are obviously  
19 going to need to come down and come out.

20 But as far as those that are outside of  
21 the --

22 Q. Wait, let's back up. Why is it so obvious  
23 that they need to come down?

24 A. [ZICKO] We don't grow -- maybe it's not

1 obvious. We don't grow trees in our substations,  
2 within the fence line. I don't recall ever seeing  
3 one where we have had that case. And I've also been  
4 in stations of other utilities as well, and I don't  
5 know of any places where that's done.

6 Q. And that's a safety measure?

7 A. [ZICK0] That's safety and access.

8 As far as trees outside the fence line,  
9 they would -- certainly in the station we don't have  
10 any overhead lines coming in and out, so there will  
11 be no interference with that.

12 As I had testified earlier today, the  
13 station has no air-insulated bus in it for the trees  
14 to hit, with the exception of the small piece of  
15 air-insulated bus inside the transformer  
16 compartment, and those will be enclosed by walls all  
17 the way up to the top.

18 The trees on the east side of the  
19 station we would have to evaluate to see if they --  
20 even though they wouldn't fall in and strike live  
21 equipment, obviously we don't want huge branches  
22 falling on equipment that's grounded, because we  
23 don't want the equipment to get crushed and damaged.  
24 If there were an opportunity to trim a tree and keep

1 a tree, to keep it from -- you know, to save from  
2 cutting it down, we would do that.

3           Again, I think as the project progresses  
4 and the layout progresses, we'll be in a better  
5 position to define that, whether we'd be able to,  
6 you know, keep versus cut. It could also be that  
7 there's a tree that's outside the fence line that  
8 maybe doesn't fit in with the proposed new  
9 landscaping that's going to go out there as well.  
10 That would be another indication to remove the tree,  
11 but in which case that would be replaced with, you  
12 know, something else.

13           Q. Thank you.

14 BY MS. DE BOER:

15           Q. Mr. Zicko, still on the mesh screening  
16 that's proposed: On Appendix 5-2, those same Slides  
17 10 or 11 that Ms. Shapiro had directed you to:  
18 There's some metal truss frames for lateral support  
19 and lightning protection identified. Are these  
20 still part of the plan, or now that the mesh is  
21 proposed, have adjustments been made to that metal  
22 trussing?

23           A. [ZICKO] No. Well, you would still need to  
24 provide lateral stability to those walls. So I

1 would envision that there will be something up  
2 there. I don't envision the mesh providing that  
3 lateral stability. But just as a point of  
4 discussion: The mesh would go over where that  
5 framing is shown.

6 Q. And is that framing flat or raised? I  
7 believe some of the visualizations in the  
8 petition -- Figure 5-20, for example -- show it  
9 designed more like a roof design rather than a  
10 parallel or flat across the top of the transformers.

11 A. [ZICK0] Some of the early discussions we  
12 had had with the BRA showed it as a, like a roof  
13 that you'd find on a house -- you know, relatively  
14 steeply pitched. The City of Boston had talked  
15 about showing it flat. Right now, with the addition  
16 of the mesh, we'll have a slight pitch back toward  
17 the soccer field, but it's not going to be a steep,  
18 severe pitch like you'd find on, say, an old New  
19 England house.

20 Q. So flatter than what was shown in 5-20 but  
21 slightly steeper than shown in Appendix 5-2. Is  
22 that fair?

23 A. [ZICK0] Somewhere in the middle, yes.

24 Q. Thank you.

1 JOHN M. ZICKO, MARC BERGERON, AND  
2 MICHAEL W. O'MALLEY,  
3 having been duly sworn, testified as follows:

4 BENCH EXAMINATION

5 BY MS. DE BOER:

6 Q. Good morning.

7 A. [O'MALLEY] Sorry I'm late. Dentist  
8 appointment, so nothing worse can happen today.

9 MS. SEDOR: Good morning. Let the  
10 record note that Mr. O'Malley has joined the witness  
11 panel. Mr. O'Malley, I just remind you that you  
12 remain under oath. Thank you for joining us.

13 Q. Mr. O'Malley, I'm probably going to lob one  
14 question at you right away on visual. Before you  
15 arrived, we'd been discussing the company's plans  
16 for this proposed screening wall around the East  
17 Eagle substation. My understanding was that there  
18 was a meeting between the company and the City of  
19 Boston on December 14th to discuss this particular  
20 screening wall.

21 A. [O'MALLEY] Okay.

22 Q. I'm wondering if you could provide an  
23 update on that consultation and the City's desires  
24 with regards to that structure.

1           A. [O'MALLEY] I believe at that meeting -- it  
2 may have been Dave Carlson from BRA. The concern  
3 that the City had -- they were concerned about  
4 reviewing it. Wait, are we talking about the  
5 facilities, Public Facilities meeting, with Maureen  
6 Anderson?

7           Q. I confess, I'm not sure that prior  
8 testimony got into the details of who was met with,  
9 but that the company had recently, as recently as  
10 December 14th, undertaken some additional  
11 consultations with the City of Boston regarding the  
12 proposed screening wall.

13          A. [O'MALLEY] Yeah, I believe that was with  
14 Public Facilities. Maureen Anderson is the  
15 director, or she's one of -- the project manager or  
16 something of that nature. And what they wanted to  
17 know was what our screen wall -- you know, general  
18 appearance of it. We gave them some of the draft  
19 plans we had at the time, which I believe are the  
20 same ones that are in the petition here.

21                        Their concern was, you know, what's it  
22 going to look like, because they have other plans  
23 for the rest of the parcel, ballfields and DPU  
24 facilities or whatever -- I know -- the draft plans

1 that they gave us at that time.

2 So they were just concerned about, you  
3 know, the general appearance of it. As a matter of  
4 fact, I spoke with Maureen Anderson this morning,  
5 and I asked her the status of their programming for  
6 that entire site. And they continue to go through  
7 the programming process with their consultants, and  
8 that will lead to final design, which will lead to  
9 final construction. But that construction is  
10 probably several years out.

11 Q. Did the City express a preference for any  
12 particular design for the screening wall?

13 A. [O'MALLEY] No, I don't recall. We gave  
14 them an example -- you know, the draft of what we  
15 thought -- the direction we were heading.

16 Q. And they appeared to be happy or unhappy  
17 with that proposed direction, in your opinion?

18 A. [O'MALLEY] I wouldn't say they were  
19 unhappy.

20 Q. But you wouldn't say they were happy,  
21 either?

22 A. [O'MALLEY] They weren't unhappy.

23 Q. Thank you.

24 BY MS. SHAPIRO:

1 Q. Mr. O'Malley, when you said you spoke with  
2 Ms. Anderson this morning, was there any more  
3 specificity about when they're going to finalize  
4 their design plans or if the plans that we have in  
5 RS-19 are the final plans, and when construction  
6 might occur?

7 A. [O'MALLEY] RS-19, did you say?

8 Q. Uh-huh. I believe it's RS-19(2).

9 A. [O'MALLEY] He's pulling it out. I just  
10 want to make sure that we're referencing the same  
11 plan.

12 This is the plan that shows, let's say,  
13 a soccer field, an East Boston police station, looks  
14 like EMS and DPW with the salt shed. And on the  
15 corner, on the right-hand corner, is the proposed  
16 substation area.

17 That is the one that we mentioned this  
18 morning. This is the one that the City had provided  
19 us previously. And per my discussion with Maureen  
20 Anderson this morning, this is still their  
21 preliminary proposed layout. I believe they had a  
22 public meeting with the East Eagle Association  
23 several months ago where they also socialized this  
24 layout. And per my discussion this morning, this is

1 what they are still using as their proposed plan.  
2 It may change based on their programming  
3 requirements.

4           When I spoke with her today, it seemed  
5 like the programming may take another six or eight  
6 months; she wasn't sure. Design would probably take  
7 another year. And then, you know, after that they  
8 would go for construction.

9           Q. And again, still based on the January 5th,  
10 2011 plan; and that's the plan that they disseminate  
11 when they go out to public meetings, et cetera?

12           A. [O'MALLEY] I believe -- I haven't been at  
13 the public meetings when they've been there, but  
14 I've been informed that that was passed out at the  
15 East Eagle Hill Association meeting. And again,  
16 this is the one they provided us, and my discussion  
17 with her today is it hasn't changed.

18           Q. Thank you.

19 BY MS. DE BOER:

20           Q. Mr. O'Malley, before you joined us this  
21 morning, we'd begun a bit of a discussion on  
22 construction methods, and they felt a number of the  
23 questions might be better directed towards you. So  
24 at this time I'd like to turn back to that topic.

1 I'm wondering if you could please describe for me  
2 the company's plans for how construction would  
3 progress along the preferred and noticed alternative  
4 routes. For example, would you start at one end of  
5 the line and work your way towards the terminal  
6 substations, or would you be having multiple crews  
7 working simultaneously along different portions of  
8 the route?

9 A. [O'MALLEY] The intent would be to be  
10 having multiple crews. You know, right now, in our  
11 preliminary planning we've primarily been in a  
12 design mode, planning mode, not necessarily detailed  
13 construction sequencing or scheduling. That will  
14 come along and be further developed. Primarily once  
15 we get a contractor on board, we will set program  
16 terms as to, you know, the start dates and the  
17 completion dates.

18 What we'd look to for the contractor is  
19 to provide the necessary crew sizes and also crew  
20 members to complete the construction within the  
21 required time frame. As we go along, you know, one  
22 of the requirements of construction, whether it's  
23 where we can work, certain days, certain hours, that  
24 will also be discussions that will be continued have

1 with the communities, the East Boston, Chelsea,  
2 Everett -- you know, reaching out to abutters to  
3 understand what their specific needs may be. You  
4 know, we understand the requirement for access and,  
5 you know, making sure people have access to their  
6 businesses and properties and homes, whatever the  
7 case may be.

8 You know, and the other thing: This  
9 type of construction, it's primarily utility  
10 construction that goes on every day in every town  
11 all over the place. This isn't anything dramatic.  
12 I'll minimize it by saying we're digging a hole and  
13 throwing a pipe in it. There's more to that, you  
14 know.

15 But it's typical utility construction  
16 that goes on every day. The contractors that we  
17 normally hire are required to demonstrate that  
18 they've done this work before. They need to  
19 demonstrate in their proposals and bids that, you  
20 know, first of all, it's cost-effective, they  
21 understand the work, they know how to schedule the  
22 work, they understand that there will be limits,  
23 whether it's on days or hours; and also the  
24 cooperation and coordination that will be required

1 with abutters, Towns, and everyone else along the  
2 route.

3 Did I answer the question sufficiently?

4 Q. Yes. Thank you.

5 A. [O'MALLEY] Okay.

6 Q. With regards to the actual crew showup  
7 locations and parking, I believe you mentioned that  
8 once you actually have a consultant in place you'll  
9 be establishing more details for that. Do you have  
10 an expectation of where those might be at this time,  
11 or....

12 A. [O'MALLEY] So for the construction crews,  
13 my expectation, and I know what we plan on putting  
14 into any type of bid document, is that construction  
15 activities, primarily construction workers, they  
16 can't impact the local parking. The construction  
17 company, whoever the contractor, will need to  
18 provide some sort of requirement for their workers  
19 to park off-site, at perhaps a mobilization location  
20 or a yard for the contractor, where they can work  
21 out of there and take pickup trucks or whatever --  
22 you know, throw a bunch of workers into pickup  
23 trucks to each particular site they may be at.

24 But the expectation and the requirement

1 is going to be that you just can't park on city  
2 streets because there are businesses there, there  
3 are residents there, and we don't want to impact  
4 those communities and those abutters.

5 Q. Would there be similar requirements for  
6 laydown areas for --

7 A. [O'MALLEY] Yeah. The contractors will --  
8 they'll be required to get their own laydown yards.  
9 So we're not going to have miles of pipe sitting in  
10 the street. They're going to have to stockpile and,  
11 you know, locate their equipment at a yard that they  
12 rent or own or somehow procure specifically for the  
13 project.

14 Q. Would the company -- with regards to the  
15 East Eagle substation, would you expect that the  
16 laydown areas would likely be within that broader  
17 DPW parcel?

18 A. [O'MALLEY] I've had discussions with this  
19 with my own team, and I've mentioned, when we  
20 develop the contract documents for this project, and  
21 specifically the East Eagle station, that I am out  
22 of the real estate business and the contractor will  
23 need to provide their own space for laydown, for  
24 office area, because the site itself is very

1 congested. We only have what's inside the fence.  
2 The easement area is not for parking; it's not for  
3 trailers; it's not for storage of materials --  
4 because it's an active roadway that we share with  
5 DPW.

6 So they're going to have to get their  
7 own facilities, whether it is at the DPW larger  
8 piece of property, which I would encourage them to  
9 maybe start talking to the DPW about that, or some  
10 other local area land that, you know, they can  
11 procure or already have ownership of.

12 Q. Thank you.

13 A. [O'MALLEY] And again, that would be for  
14 the parking, too. For the workers that are working  
15 there? We'll put restrictions for -- you know,  
16 there's no parking at the site, except when I visit.  
17 And, you know, the parking on the street is for the  
18 residents, and wherever they have their laydown area  
19 or mobilization area, they're going to have to  
20 provide parking for their own workers.

21 Q. Thank you. If you could please refer to  
22 EFSB-CM-2, Attachment 1, which is the detailed line  
23 layouts that the company provided.

24 A. [O'MALLEY] CM-2(1), did you say -- dash-2?

1 Q. EFSB-CM-2(1).

2 A. [O'MALLEY] All the drawings.

3 Q. I have a very small question on the  
4 drawings. But I'm looking to make sure I understand  
5 the legend appropriately on this. Referring to any  
6 one of the drawings -- for example, 302.

7 I understand the bold dashed line on the  
8 top portion of this figure is the existing grade,  
9 but I wasn't as clear on what the bold dashed line  
10 on the lower portion of the figure was and didn't  
11 see it listed in the legend.

12 A. [O'MALLEY] 302. Here I am. So the bold  
13 dashed line at the top of the page you mentioned --

14 Q. I understand that one is labeled Existing  
15 Grade.

16 A. [O'MALLEY] At the profile side, yes.

17 Q. But looking from the above view of the  
18 street, there's a bold dashed line that runs along  
19 this as well, that I wasn't as clear what that  
20 referred to.

21 A. [O'MALLEY] On the plan view, yes.

22 WITNESS O'MALLEY: Can we go off the  
23 record just to reveal the drawing map?

24 MS. SEDOR: Yes.

1 (Discussion off the record.)

2 MS. SEDOR: Let's go back on the record.

3 A. [O'MALLEY] Reviewing that bottom hash line  
4 on the plan view: I believe it may be the City  
5 property line. I'm not sure. I think we ought to  
6 take a record request on that.

7 Q. If you could.

8 A. [O'MALLEY] Just to confirm that.

9 Q. To confirm the nature of the bold dashed  
10 line included in EFSB-CM-2, Attachment 1.

11 A. [O'MALLEY] Yes.

12 MS. SEDOR: That will be RR-EFSB-39.

13 Q. And to be very clear, the bold dashed line  
14 in the lower portion of the figure, not the bold  
15 dashed line labeled Existing Grade included on the  
16 top portion of the figures.

17 (Record Request RR-EFSB-39.)

18 MS. SEDOR: It's 11:30, so why don't  
19 we -- it's a little after 11:30. Why don't we come  
20 back at 10 until 12:00. Off the record.

21 (Recess taken.)

22 MS. SEDOR: Let's go back on the record.  
23 Mr. Bergeron?

24 A. [BERGERON] Thank you. I would just like

1 to clarify: This morning, when I updated the permit  
2 table and requirements, I think it's important to  
3 note that when the company obtains street opening  
4 permits from the City of Boston, it's not one  
5 comprehensive permit for all of the streets they're  
6 applying for. Typically the City of Boston releases  
7 various street segments on a case-by-case basis,  
8 depending upon what's going on in the streets at  
9 that time in coordination with the company. In some  
10 instances they may even dictate the number of crews  
11 that can work in the street at that time.

12 So I'd just like to point out that there  
13 will be multiple streets and multiple locations, as  
14 coordinated by the City. I thought it was important  
15 to point that out because it does speak to the  
16 construction methods in some instances the company  
17 may be able to employ in the City of Boston in  
18 particular. Thank you.

19 MS. SEDOR: Thank you. Ms. de Boer?

20 BY MS. DE BOER:

21 Q. If you could please refer to EFSB-CM-4.

22 A. [BERGERON] Yes.

23 Q. The company stated that the impacts  
24 associated with manholes should be similar to other

1 construction-related impacts, with the only variable  
2 being duration. Are there any unique impacts  
3 associated with cable splicing?

4 A. [O'MALLEY] For the cable splicing,  
5 typically -- and John, you can help me out if I  
6 misstate something -- we would have a vehicle parked  
7 over the manhole openings during the splicing period  
8 and while the workers would be down in the manhole  
9 doing actual splice. So there would be, you know,  
10 localized traffic control around those specific  
11 locations.

12 Q. The company stated that precast concrete  
13 manholes would be used in the installation process.  
14 Are there any areas along the preferred or noticed  
15 alternative routes where precast manholes might not  
16 be used due to existing utility density?

17 A. [O'MALLEY] None have been identified. For  
18 any manhole location, you know, the size of the  
19 manhole is basically the same. So if there was a  
20 location where there was unusual density where a  
21 manhole was going to be installed, we would have to  
22 review potentially relocating some of the utilities  
23 at that spot or potentially relocating the manhole  
24 into an area that was clear enough where we could

1 put that manhole.

2 Q. With regards to the type of fill to be used  
3 within the excavated trench, the company stated that  
4 after conduit installation the trench would be  
5 backfilled with either thermal sand and/or thermal  
6 concrete mix. How is the final decision on the type  
7 of fill to be used made? Would it be up to the  
8 contractor to decide?

9 A. [O'MALLEY] No, it would be in the final  
10 design. And I believe that, you know, typically  
11 we'll put --

12 You know, the duct bank itself is  
13 concrete. Around it we would place the backfill,  
14 some thermal sand, and that helps dissipate the  
15 heat. And we will also, depending upon where we  
16 are, you know, put some fluidized thermal backfill,  
17 which is a sort of a concrete-type material, above  
18 it just to protect the duct bank, and then we'd put  
19 the pavement over that.

20 Q. Thank you. Could you please refer to  
21 EFSB-CM-6. I'd also like to direct your attention  
22 to Pages 4-5 and 4-6 of the petition.

23 A. [O'MALLEY] Uh-huh.

24 Q. The company stated that the project would

1 require four 8-inch HDPE conduits, two 4-inch PVC  
2 conduits, and two 2-inch PVC conduits; is that  
3 correct?

4 A. [O'MALLEY] Four 8-inch, two 4-inch, and  
5 two 2-inch? That's correct.

6 Q. How many conduits are there in the Chelsea  
7 Creek Crossing and the Eastern Avenue duct bank,  
8 respectively?

9 A. [BERGERON] Could we just go off the record  
10 to consult?

11 Q. The pages in the petition are referenced.

12 So is the description on Page 4-5 and  
13 4-6 an accurate representation of the number of  
14 conduits associated with the Chelsea Creek Crossing  
15 and the Eastern Avenue duct bank?

16 A. [O'MALLEY] Yes, it would be.

17 Q. How do these existing conduits align with  
18 the needs for the project as described in EFSB-CM-6?

19 A. [O'MALLEY] How do the needs -- I don't  
20 understand the question.

21 Q. I'm seeing a total of eight conduits  
22 required for the project --

23 A. [O'MALLEY] I understand now.

24 Q. -- and I don't see there being that many

1 available on the Chelsea Creek Crossing or the  
2 Eastern Avenue duct bank, as described in the  
3 petition.

4 A. [O'MALLEY] The duct bank associated with  
5 this, as it states, there are four 8-inch conduits,  
6 and those are for the XLPE cables and one is a  
7 spare. The two 4-inch are relaying and  
8 communication cables. And the two 2-inch is for  
9 grounding, and the second one may be used for a  
10 temperature monitoring system.

11 So is your question, going under the  
12 Chelsea Creek, how does that align with coming out  
13 of the East Eagle location, going under the creek,  
14 and then exiting on the other side?

15 Q. If I can direct your attention to Paragraph  
16 2 under Section 4.2.2.1. The company states the  
17 Chelsea Creek Crossing consists of seven 8-inch  
18 high-density polyethylene conduits, and I believe I  
19 understand you require a total of eight conduits for  
20 the project. Are you sacrificing the spare conduit,  
21 for example, in this location to accommodate the  
22 facilities? Or how exactly does it work, given the  
23 number of conduits the company has said it required  
24 for the project.

1           A. [ZICK0] Referring to the next-to-the-last  
2 sentence of that paragraph: It says, "The project  
3 will occupy six of the seven available conduits in  
4 the duct bank" with, you know, three conduits for  
5 each line. So that would leave one spare for the  
6 two circuits. So it does line up.

7           Q. I confess to still being confused given in  
8 CM-6 you said you needed a total of eight and here  
9 you only have a total of seven. So how does it work  
10 to get across the crossing?

11          A. [ZICK0] So in the petition we talk about  
12 the duct bank that we propose to install, and that  
13 does, as you say, you know, account for three active  
14 and one spare duct bank that are going to contain  
15 the -- I'm sorry, one spare conduit that are going  
16 to contain the XLPE cables.

17                   When you cross the creek, for the active  
18 conductors -- for the active cables we're going to  
19 need three conduits going over, three conduits  
20 coming back. So that takes up six. There's seven.  
21 That would leave you one spare. So you would have  
22 one spare between Mystic and the Chelsea Creek  
23 Crossing, and you'd have one spare that would be  
24 shared among the two -- between the two circuits,

1 potentially, if you ever needed to use it, across  
2 the Chelsea Creek.

3 Q. So are there additional conduits that  
4 aren't described that would be of a 4-inch and  
5 2-inch size, the PVC conduits -- the one you  
6 mentioned for temperature monitoring and  
7 communications?

8 A. [O'MALLEY] In the duct bank itself? In  
9 the duct bank?

10 Q. Are those facilities in addition to the  
11 seven conduits described in Section 4.2.2.1?

12 A. [O'MALLEY] Under the Chelsea Creek?

13 Q. Correct.

14 A. [O'MALLEY] No. No, in the duct bank  
15 itself is where you'd have the four 2-inch PVC  
16 conduits, and they may go in a common conduit that  
17 is already under the Chelsea Creek Crossing. It's  
18 not like they would have to be -- one would only be  
19 in one and one would be at the other one.

20 Q. So to summarize: The company's testimony  
21 is there's sufficient existing conduits across the  
22 Chelsea Creek --

23 A. [O'MALLEY] Yes.

24 Q. -- to accommodate the project.

1 A. [O'MALLEY] Yes.

2 Q. And that's all the active transmission line  
3 components as well as the communications and  
4 temperature monitoring equipment.

5 A. [O'MALLEY] Yes.

6 Q. Thank you. If you could please refer to  
7 EFSB-CM-13. The company stated that if during  
8 construction unforeseen utilities are encountered  
9 and the construction teams cannot build an  
10 alternative trench solution in the field, other  
11 options, including the relocation of existing  
12 utilities, or methods such as horizontal directional  
13 drilling, would be considered. The company further  
14 stated that these options would be reviewed and  
15 approved by company engineers prior to construction.

16 Does the company believe that Siting  
17 Board review would also be required in the event  
18 that an alternative construction method such as HDD  
19 is determined to be necessary by the company during  
20 project construction?

21 A. [O'MALLEY] I don't believe so.

22 Q. Do you believe that there are differences  
23 in the environmental impacts associated with an  
24 HDD-type construction, as opposed to the

1 open-trench-type construction proposed by the  
2 company?

3 A. [O'MALLEY] I wouldn't think so. I don't  
4 know if everyone understands HDD-type construction,  
5 horizontal directional drilling. And in my  
6 experience, basically what occurs there is, there's  
7 an entrance trench, if you want to call it, and then  
8 there's an exit. And let's say that you need to go  
9 from here to here -- because there's all sorts of  
10 utilities or whatever may be in the way.

11 Essentially, you would drive a pipe  
12 under, from one opening over to the other opening.  
13 So probably, if you think of it, there would be less  
14 environmental impact because you're opening two  
15 areas as opposed to a longer area.

16 Q. Would the noise or other construction  
17 impacts associated, such as length of time in front  
18 of a particular abutter, be different when you're  
19 using an HDD technology rather than open-trench  
20 methods?

21 A. [O'MALLEY] It may be, depending upon how  
22 far you have to go. You know, HDD is typically used  
23 for long stretches, because, you know, it makes more  
24 economical sense that way, as opposed to trying to

1 go 20 feet.

2 So depending upon, you know, what's  
3 encountered will also, you know, dictate how long  
4 you need to be there to do whatever you need to do.

5 Q. In your experience, has the company  
6 typically made the choice on its own in the field to  
7 pursue an HDD-type approach, rather than open  
8 trench, if it's encountered high utility density?

9 A. [O'MALLEY] When you say made a decision on  
10 its own --

11 Q. The way you described in this information  
12 request response, where the company's engineers  
13 would review it and decide but no further Siting  
14 Board review would be required. Have you  
15 experienced such a circumstance?

16 A. [O'MALLEY] I don't have experience with  
17 that.

18 MS. KEUTHEN: I think some of these  
19 questions might be sort of a legal nature, that  
20 Mr. O'Malley might not be the best person to testify  
21 on on behalf of the company.

22 Q. With regard --

23 A. [O'MALLEY] You mentioned about  
24 encountering unknown items where we may require HDD.

1 I just wanted to point out that along the route we  
2 have done historical data collection of utilities in  
3 the area; and accordingly, we have routed our  
4 facilities to minimize any relocations or any  
5 disruptions or any -- of any of those facilities.

6 Right now we do not -- we have not  
7 identified any locations where HDD is required. And  
8 as the project progresses, I think as we all know,  
9 we may, you know, encounter unknown stuff, and we'll  
10 just have to react to it and do the best engineered  
11 solution.

12 Q. Thank you. With regard to the East Eagle-  
13 to-Chelsea portion of the proposed transmission  
14 project, the majority of the preferred route would  
15 utilize the existing Eastern Avenue duct bank; is  
16 that correct?

17 A. [O'MALLEY] East Eagle to Chelsea? That is  
18 correct.

19 Q. And the noticed alternative route would  
20 require the installation of new duct bank between  
21 the Chelsea Creek Crossing and the Chelsea  
22 substation; correct?

23 A. [O'MALLEY] That is correct. It would be a  
24 different route.

1 Q. Why did the company's comparison of the  
2 environmental impacts associated with the preferred  
3 and noticed alternative routes treat the  
4 environmental impacts of the Eastern Avenue duct  
5 bank as attributable to the East Eagle-to-Chelsea  
6 line, given that work has been completed already?

7 A. [BERGERON] We wanted to show that the  
8 company performed an analysis to show that that  
9 would be the best route, so we did the analysis as  
10 if there wasn't a route there currently. And then  
11 when we described the impacts in Section 5, I  
12 believe we accounted for the fact that there was a  
13 facility there, and so therefore the majority of the  
14 work associated with that project would be  
15 associated with work at the existing manhole  
16 locations.

17 Q. So maybe we can refer to Section 5.3.3 of  
18 the petition. Mr. Bergeron, is this here you're  
19 saying where the environmental-impacts comparison  
20 takes into consideration the fact that the Eastern  
21 Avenue duct bank can be constructed already?

22 A. [BERGERON] In this discussion we still  
23 follow through with the analysis as far as the  
24 number of houses, of businesses along each of the

1 routes that we looked at for the Mystic -- I'm  
2 sorry, for the East Boston-to-Chelsea line. And  
3 then when we talk about mitigation, we tried to work  
4 in the concept that there already is a duct bank  
5 there, and that work will occur only at the manhole  
6 locations along the East Eagle-to-Chelsea route.

7 But in Section 5 we still carry forward  
8 the analysis and the numbers comparing the two as if  
9 there was not a line built -- again, trying to show  
10 that this particular route, if there was a duct bank  
11 there, would be the preferable route for this type  
12 of facility.

13 Q. Looking forward, though, with respect to  
14 the actual impacts to abutters that one would expect  
15 if that line was to be constructed, is it correct to  
16 say that the majority of the impacts described in  
17 Section 5 are water under the bridge at this point,  
18 given that the line is --

19 A. [BERGERON] Yes, that's fair to say.

20 Q. -- given that the conduit has already been  
21 constructed?

22 Mr. Bergeron, if I was to ask you to  
23 provide an update of the impacts that one would  
24 expect from the East Eagle-Chelsea transmission

1 line, would it be easiest for you to do that  
2 verbally now or in the form of a record request, to  
3 update Section 5.3.3?

4 A. [BERGERON] I think it would be better  
5 served as a record request, where I can take a look  
6 at all of the different categories and provide a  
7 detailed analysis on the actual impacts.

8 Q. I would appreciate that. So a record  
9 request to provide an updated comparison of the  
10 environmental impacts between the preferred and  
11 noticed alternative routes for the East Eagle-to-  
12 Chelsea transmission line, given that the Eastern  
13 Ave. duct bank construction has been completed and  
14 this version would not attribute those construction  
15 impacts to the project.

16 A. [BERGERON] Just to be clear: As I'm doing  
17 that, what I would do is, I would take into account  
18 all of the sections of duct bank that have already  
19 been constructed and the manholes and subtract out  
20 all of those abutters and residences along that  
21 particular route and only focus on the areas where  
22 equipment is going to be set up for cable pulling  
23 and splicing. Is that what you want me to do?

24 Q. Yes.

1 A. [BERGERON] Okay.

2 Q. Or any other environmental impacts that may  
3 still be required to implement the project --

4 A. [BERGERON] Okay.

5 Q. -- whether they be splicing or otherwise.

6 A. [BERGERON] I understand. Thank you.

7 MS. SEDOR: That will be RR-EFSB-40.

8 (Record Request RR-EFSB-40.)

9 Q. Could you please refer to EFSB-CM-4, 1, as  
10 well as to EFSB-N0-5, Attachment 1 and R1. I  
11 believe R1 was actually attached to EFSB N0-17, if  
12 that helps in the end.

13 A. [O'MALLEY] What was the N0-1 you  
14 mentioned?

15 Q. EFSB-N0-5, Attachment 1, and R1. It's the  
16 diagram showing the location of manholes near  
17 sensitive receptors.

18 For the preferred route, these  
19 attachments show one residence within 18 feet of a  
20 proposed manhole location and four sensitive  
21 receptors located within 140 feet of a proposed  
22 manhole location; is that correct?

23 A. [BERGERON] Is this for the Mystic-to-East  
24 Eagle route or Chelsea-to-East Eagle?

1 Q. For both, I believe. The one residence is  
2 within 50 feet of the Mystic-to-East Eagle route,  
3 whereas I believe all of the sensitive receptors  
4 were on the East Eagle-to-Chelsea portion of the  
5 project.

6 Maybe we can just focus on the  
7 residential abutter first, and that will narrow the  
8 number of attachments to be referenced.

9 A. [O'MALLEY] And that would be the abutter  
10 on Robin Street, I believe?

11 Q. Correct.

12 A. [O'MALLEY] EFSB-CM-4?

13 Q. That's the one.

14 A. [O'MALLEY] Yes.

15 Q. I'm wondering if any specific outreach has  
16 been made to the individuals living in this  
17 residence or if any is planned.

18 A. [O'MALLEY] None that I'm aware of has been  
19 specifically made, other than the notifications for  
20 the 300-foot abutters that is required. And, you  
21 know, right now I can't say we've planned to meet  
22 with those folks; but as the project goes along,  
23 it's something we could obviously do just to let  
24 them know. There will be additional notifications

1 as we go along, also.

2 Q. The company indicated that cable splicing  
3 activities could lead to extended workdays, up to 12  
4 hours in length, potentially continuing into  
5 nighttime hours. Does the company anticipate a need  
6 for extended work hours and nighttime construction  
7 at this particular manhole location?

8 A. [O'MALLEY] I would say we're not that far  
9 along in the planning process to determine whether  
10 this specific one would. But that's something we  
11 could take into consideration in our planning, that  
12 since it is within 50 feet of an abutter, if at all  
13 possible, we would try not to do that.

14 Q. If you did end up needing to have to do  
15 extended hours or nighttime construction at this  
16 location, how would you mitigate the impacts to this  
17 particular residential abutter?

18 A. [O'MALLEY] I would say if we're doing  
19 nighttime work, it would more than likely be a  
20 requirement of -- this would be Everett, I  
21 believe -- to only work in this location at  
22 nighttime. So if that's the case, we'd have to  
23 notify the abutter that we would be working in the  
24 area at whatever hours Everett would have us work

1 there.

2 For any mitigation, we would attempt  
3 to -- we'll use the optimum machinery, the quietest  
4 machinery that we can, provide any noise reduction  
5 that we can.

6 Q. If 12-hour workdays are required for cable  
7 splicing, what time of day would these extended  
8 hours typically start at? So when does the 12-hour  
9 clock begin?

10 A. [O'MALLEY] Well, typical work hours would  
11 start at 7:00 a.m., so 7:00 a.m. to 7:00 p.m.,  
12 typically -- and again, based on any specific  
13 requirements that the Towns may have, dictating when  
14 we can and when we can't do work. It may impact  
15 those hours, also.

16 Q. Thank you. Okay, turning to the four  
17 sensitive receptors: Could you please tell me which  
18 of these sensitive receptors are located next to  
19 manholes that have already been constructed, versus  
20 those that are located next to manholes that would  
21 need to be constructed for purposes of the project?

22 A. [BERGERON] I'm referring to Attachment  
23 EFSB-N0-5(1), that shows the manhole locations along  
24 the existing Eastern Ave. duct bank project and the

1 preferred route to the Chelsea substation from the  
2 East Eagle substation.

3           You'll note on Page 1 of 3, on Willow  
4 Street, just after the creek crossing, just north of  
5 the creek crossing, there's a park within 33 feet of  
6 a proposed manhole -- or an existing manhole;  
7 sorry -- and the Boys & Girls Club, which their  
8 building is three feet off of the street, off the  
9 edge of the existing manhole location there.

10           I believe those are the only two  
11 sensitive receptors along that route.

12           Q. I think there's a small sliver on the  
13 left-hand side of that circle, which is labeled as a  
14 mosque; is that correct?

15           A. [BERGERON] Which page are you referring  
16 to?

17           Q. Page 1 of 3, the same manhole location I  
18 was just referencing.

19           A. [BERGERON] Oh, yes, I'm sorry. I didn't  
20 see that. There's a mosque there that is 14 feet  
21 from the -- it's actually 14 feet from the edge of  
22 the existing duct bank.

23           I'm sorry, I'm misreading the map  
24 because of the lines on it. It's 140 feet from the

1 existing manhole location.

2 Q. So those three sensitive receptors are all  
3 located next to or near to an existing manhole  
4 location.

5 A. [BERGERON] Correct.

6 Q. Are you aware of any specific outreach that  
7 was made to these sensitive receptors before that  
8 construction work was undertaken?

9 A. [BERGERON] I wasn't involved with that  
10 project. I can't speak to that. I don't know if  
11 anybody else at the company can.

12 A. [ZICKO] Nor was I.

13 Q. I'd be interested in understanding the  
14 company's decision on how to locate the existing  
15 duct bank along Willow Street, particularly 3 feet  
16 away from a Boys & Girls Club, and any approvals  
17 that were required to consider the environmental  
18 impacts associated with that particular manhole  
19 location.

20 Sorry, I meant the choice of the manhole  
21 location, not the duct bank, in that question. So  
22 no one here was a participant in that particular  
23 project; is that correct?

24 A. [ZICKO] I was not.

1 A. [BERGERON] I was not.

2 A. [O'MALLEY] I was not.

3 Q. So I'd like to make a record request,  
4 please, for information on what noise mitigation was  
5 used at this particular manhole location during the  
6 construction of the existing duct bank and whether  
7 or not the company has received any complaints from  
8 these sensitive receptors with regards to that work.

9 MS. SEDOR: That will be RR-EFSB-41.

10 (Record Request RR-EFSB-41.)

11 Q. Mr. Bergeron, maybe you could explain what  
12 new impacts would be expected to take place at these  
13 locations as a result of the East Eagle-to-Chelsea  
14 project.

15 A. [BERGERON] I'll be detailing them in the  
16 record request. But my general understanding is  
17 that it would be impacts associated with cable  
18 splicing and pulling operations.

19 Q. Given the 3-foot distance between the -- or  
20 between the existing manhole and the Boys & Girls  
21 Club, would the use of noise barriers at this  
22 location be practicable?

23 A. [O'MALLEY] It would, you know -- I don't  
24 actually know where that manhole is. But I think

1 what we'd have to do is go out and review exactly  
2 where in that street it is. If it's 3 feet away  
3 from the Boys & Girls Club, my question in my own  
4 mind, is it 3 foot away from the property line, is  
5 it 3 feet away from the sidewalk? But I'd have to  
6 review the area to see what would be practical  
7 for -- if noise barriers were used, just to make  
8 sure we're not blocking access to the Boys & Girls  
9 Club or impeding access across the sidewalk.

10 A. [BERGERON] It would seem for this type of  
11 land use and for this type of facility, where the  
12 Boys & Girls Club is active in the day, after school  
13 and before school and during some evening hours, I  
14 think the company could look at completing that work  
15 in that manhole location in nighttime hours, when  
16 that facility is not in use and it wouldn't impact  
17 the use or the enjoyment of that facility.

18 Q. I think I'd like to make a record request  
19 for the company's review of the practical mitigation  
20 measures that could be implemented at this  
21 location -- whether that includes a recommendation  
22 for nighttime construction or noise barriers, et  
23 cetera.

24 A. [O'MALLEY] Uh-huh.

1 MS. SEDOR: That will be RR-EFSB-42.

2 (Record Request RR-EFSB-42.)

3 Q. There's one additional sensitive receptor  
4 that I think was identified in EFSB-N0-5(R1). If we  
5 could refer to that one as well, please. It's  
6 labeled as a courthouse?

7 A. [BERGERON] I'm just trying to find my  
8 revised figure. I apologize for the delay.

9 Thank you. I've located that figure.  
10 Yes, that sensitive receptor is along the  
11 Mystic-to-East Eagle preferred route, and it does  
12 indicate that there's a proposed construction  
13 installation of a manhole within Williams Street,  
14 just to the east of the Tobin Bridge crossing; and  
15 there is a courthouse facility located within 78  
16 feet of the proposed manhole location.

17 Q. Did the company consider moving this  
18 particular manhole location away from this sensitive  
19 receptor?

20 A. [BERGERON] No, not to my knowledge. This  
21 particular location has not been looked at to move  
22 because of the location of that sensitive receptor.

23 Q. Is this another location where the company  
24 would propose nighttime construction activities as a

1 potential mitigation measure for limiting impacts to  
2 the use of the courthouse?

3 A. [O'MALLEY] It could be.

4 Q. Do you know what the other neighboring  
5 abutters are? I'm assuming they're not residential,  
6 based on the scope of the question, but it would be  
7 worth confirming that for the record.

8 A. [BERGERON] Subject to check, I believe the  
9 buildings across the street are all commercial  
10 businesses.

11 Q. I'd like to ask a record request with  
12 regard to this particular sensitive abutter as well,  
13 for the company's position on the most appropriate  
14 ways to limit or mitigate impacts to the courthouse  
15 facilities if the project was approved.

16 MS. SEDOR: That will be RR-EFSB-43.

17 (Record Request RR-EFSB-43.)

18 Q. Mr. O'Malley, I believe you testified  
19 previously that there's been some additional manhole  
20 locations proposed in East Boston, after you exit  
21 the Chelsea Creek Crossing and before entering the  
22 East Eagle Street substation; is that correct?

23 A. [O'MALLEY] There are some distribution  
24 manholes in the easement area, right in front of the

1 substation.

2 Q. But not any new manhole locations proposed  
3 in association with the transmission lines?

4 A. [O'MALLEY] That is correct.

5 Q. If you could please refer to EFSB-N0-5,  
6 still. The company stated it wasn't possible to  
7 identify the number of sensitive receptors within  
8 150 feet of manhole locations along the noticed  
9 alternative route; is that correct?

10 A. [BERGERON] That's correct.

11 Q. What level of detail does the company have  
12 regarding the location of manholes along the noticed  
13 alternative route?

14 A. [BERGERON] We have completed field  
15 reconnaissance along that route, and we have every  
16 sensitive receptor that's a direct abutter to that  
17 route. I believe there was a response that had  
18 asked to compare out to 300 feet in some cases, and  
19 so we used GIS to try to identify additional land  
20 uses further away than direct abutters.

21 Q. Do you have a sense of how many manhole  
22 locations would be required along the noticed  
23 alternative route versus the preferred route? I  
24 apologize; this may have been provided as an

1 information request. I don't recall.

2 A. [BERGERON] I can provide that general  
3 number. As stated in one of our responses, the same  
4 level of design wasn't done on the noticed  
5 alternative, so we don't have the actual proposed  
6 manhole locations. But in general manholes are  
7 typically spaced out every 1700 linear feet on a  
8 project of this type, so I can do the math on the  
9 length and come back to you after the break and  
10 provide an approximate number of manholes that may  
11 be expected in the noticed alternative.

12 Q. That would be great. I'm interested in the  
13 company's position of whether you'd expect a greater  
14 or equal amount of impacts from manhole construction  
15 between the preferred and the noticed alternative  
16 route. I understand that there's more sensitive  
17 receptors along the noticed alternative route; I  
18 don't know if that leads to a greater likelihood of  
19 impacts or not. But maybe when you're doing a rough  
20 estimate of the number of manholes, you can consider  
21 that as well.

22 A. [BERGERON] Sure. I think that might --  
23 not to give myself more record requests, but that  
24 might be best served -- I could actually take a look

1 at the mapping and present a more accurate  
2 assessment of that, rather than doing an off-the-  
3 cuff review.

4 Q. That would work for me.

5 MS. DE BOER: Should I restate it for  
6 the record?

7 MS. SEDOR: Sure, that would be great.

8 Q. So a record request for the company to  
9 provide its opinion on whether or not the impacts  
10 associated -- let me rephrase -- a comparison of the  
11 impacts associated with manhole construction between  
12 the preferred and the noticed alternative routes.

13 MS. SEDOR: And that will be RR-EFSB-44.

14 (Record Request RR-EFSB-44.)

15 BY MS. SHAPIRO:

16 Q. And I believe we'll get into some more of  
17 this in the traffic area, but with regard to the  
18 placement of manholes -- I believe Mr. Bergeron just  
19 testified it's approximately 1700 linear feet  
20 between manholes. Did you take into consideration  
21 specifically looking at Beacham and Williams Street,  
22 where driveways were located, before you identified  
23 the location of the manholes?

24 WITNESS BERGERON: Could we have a

1 moment to go off the record and confer with the  
2 engineer?

3 MS. SEDOR: Yes.

4 (Discussion off the record.)

5 MS. SEDOR: Let's go back on the record.

6 A. [O'MALLEY] Conferring with our engineer:  
7 It appears that, you know, the location of manholes  
8 do not appear to be directly in front of specific  
9 entrances, curb cuts, whatnot, what you call them.  
10 So that was taken into consideration.

11 A. [BERGERON] Specifically to that section of  
12 roadway that you mentioned: That was a  
13 consideration. And if you look at the plans  
14 submitted as part of N0-5 for that route, there  
15 aren't any manhole locations located in any -- in  
16 front of any driveways in that section of the route.  
17 And that's the Williams and Beacham Street area.

18 Q. And is that also -- do you take into  
19 account how far away you are from an intersection  
20 when you locate manholes?

21 A. [O'MALLEY] Yes, we try not to locate  
22 within intersections, just because of the traffic  
23 concerns -- bearing in mind that there are  
24 cable-length requirements, also, that sort of

1 dictate where you can -- how far you can go or how  
2 short you prefer to go.

3 Q. And with regard to those cable-length  
4 requirements, Mr. Bergeron stated it's approximately  
5 1700 square feet -- 1700 linear feet. How much of a  
6 variation is acceptable from an engineering  
7 standpoint?

8 A. [BERGERON] I'm not an underground  
9 engineer, so I couldn't respond to that.

10 A. [ZICKO] I don't typically do underground  
11 transmission line engineering. But we do have large  
12 cable pulls within our substations, and generally  
13 one of the constraints is how much cable can you get  
14 on a reel and how big does that reel become and  
15 where do you park it and how do you get it there.  
16 That's one of the constraints.

17 Another constraint on the distance  
18 between manholes -- and this is true of pulling any  
19 cable -- and that's the amount of tension that  
20 you're allowed to pull on the cable with before you  
21 damage it; and then as the cable goes around bends,  
22 if it goes around an inside bend, you're going to  
23 pull the cable into the corner of the wall and  
24 you're going to put pressure on the insulation of

1 the cable. That's so-called sidewall pressure --  
2 that you can rack up as another limitation.

3 So basically it's how much cable can you  
4 get on the reel so you can get the reel to the site;  
5 what the absolute -- what the pulling tension is on  
6 the cable, how hard are you allowed to pull on it  
7 versus how hard would you need to pull on it; and  
8 then finally, it's the number of bends between the  
9 two manholes that would dictate it.

10 So generally, all other things being  
11 equal, you can get, you know, greater separation on  
12 a straight run, as opposed to a run with a lot of  
13 bends in it.

14 Q. So is there an amount of length that would  
15 be recommended or that would be the maximum that you  
16 could vary from the 1700-foot average?

17 A. [ZICK0] It would have to be looked at on a  
18 segment-by-segment basis.

19 Q. Thank you. So in looking -- I'm looking at  
20 EFSB-CM-4, which has the location of the proposed  
21 manholes along the preferred route. And so it's  
22 your testimony earlier, the panel's testimony, that  
23 none of those manholes are located near or within  
24 driveways? Or is it within and not near, or is it

1 near and not within?

2 A. [O'MALLEY] Well, it doesn't appear that  
3 any of them are within a driveway, if we call the  
4 driveway within the curb cuts.

5 Q. Are they near driveways?

6 A. [O'MALLEY] I would say they may be near a  
7 driveway, depending upon how close you want to  
8 define "near." But yes.

9 Q. And is there a particular engineering  
10 constraint or guideline that the company uses when  
11 they propose where a manhole's going to be located,  
12 like how far away from an intersection or how far  
13 away from a driveway?

14 A. [O'MALLEY] I'm not aware of a defined one.  
15 But again, what we try to do is locate manholes such  
16 that it's within the, let's call it, allowable cable  
17 length, as Mr. Zicko was just talking about. And  
18 also, the intent is not to put them in front of a  
19 driveway to block access or anything like that.

20 Q. Thank you.

21 BY MS. DE BOER:

22 Q. Could you please turn to EFSB-CM-10. In  
23 this response the company identified two potential  
24 projects -- sorry, two construction projects -- that

1 may impact this particular project, the first being  
2 the Beacham Street reconstruction and the second  
3 being the proposed Wynn Casino, both of which are  
4 located in Everett; is that correct?

5 A. [O'MALLEY] That would be correct.

6 Q. With regards to the Beacham Street  
7 reconstruction, the company stated that it has  
8 discussed the project with Everett officials. Could  
9 you please summarize these discussions and any  
10 coordination that was planned between the company  
11 and the City of Everett.

12 A. [O'MALLEY] Yes, we've met with  
13 representatives from the City of Everett -- and I'm  
14 looking at G-8 here, which sort of summarizes some  
15 of these meetings. And in the discussions with the  
16 City of Everett, their concerns were regarding  
17 traffic, and in specific to their Beacham Street  
18 reconstruction project.

19 My last recollection is they were in the  
20 process of either obtaining approvals or I believe  
21 funding for the project. And at the time that we  
22 had spoken with them last, they had not received,  
23 let's call it, the approval for it -- or, like I  
24 said, it may have been the funding.

1                   We had talked about coordination, and  
2 they really didn't have a timeline at that time  
3 because it was based on getting the approvals. So  
4 they couldn't say, "Oh, we're going to start in 2016  
5 or 2019." So there was no timeline specific on  
6 Beacham Street.

7           Q. You may have said it and I missed it: And  
8 when was that last discussion with the City?

9           A. [O'MALLEY] I'm looking at a discussion we  
10 had with them on 12/8/2015.

11          Q. The funding or approval you were  
12 discussing, is that City approval or State approval?

13          A. [O'MALLEY] I'm not sure if they were going  
14 for State funding. I don't believe it was City  
15 funding, but I don't have clarity on that, either.

16          Q. Given that it has been a couple of months  
17 since you last spoke to Everett about their  
18 potential schedule, I'd like to make a record  
19 request, for the company to inquire of the City of  
20 Everett if they have a schedule for the  
21 reconstruction of Beacham Street at this time.

22          A. [O'MALLEY] Certainly.

23          Q. And if so, to please provide such a  
24 schedule.

1 MS. SEDOR: That will be RR-EFSB-45.

2 Q. And do you have a sense of what portion of  
3 Beacham Street is included within the scope of that  
4 reconstruction?

5 A. [O'MALLEY] No.

6 Q. Can I add that on to the record request,  
7 please.

8 (Record Request RR-EFSB-45.)

9 Q. With regards to the Wynn Casino, in  
10 response to EFSB-G-16, the company provided meeting  
11 minutes from its October 30th, 2015 meeting with  
12 Wynn representatives. The minutes state that  
13 Eversource and Wynn representatives agreed that, and  
14 I quote, "Schedules permitting, it would make sense  
15 for Eversource to install the proposed underground  
16 electrical duct prior to or during Wynn's street  
17 work," end quote. Is that your --

18 A. [O'MALLEY] Correct.

19 Q. Could you please provide an update on any  
20 efforts the company and/or Wynn have taken to  
21 further this agreement?

22 A. [O'MALLEY] Yeah, I've reached out to Wynn  
23 several times, because last time we had met or  
24 discussed, they were proposing a monthly meeting

1 for -- really for their project, and to include us,  
2 because we're going to touch each other on Alford,  
3 Robin, and Dexter Streets. And those meetings  
4 have -- they have not set up a meeting on that.  
5 They were in the process of getting a consultant on  
6 board so they could further on develop their plans  
7 for what they need to do.

8 But my understanding is that they need  
9 to reconstruct Dexter and Robin Street, full-depth  
10 reconstruction. And depending upon, you know,  
11 outcomes of our proceedings and when they plan on  
12 doing their work, which at a time they did not have  
13 a schedule, who went first would be a matter of  
14 timing and coordination.

15 Q. Referring to the meeting notes provided in  
16 G-16, Attachment 1: There's a bullet stating that  
17 Chris Gordon stated that Wynn's Alford, Dexter, and  
18 Robin Street engineering and permitting would occur  
19 in 2015 and 2016, with construction slated to  
20 commence in 2017. Is that your understanding of  
21 their current schedule?

22 A. [O'MALLEY] No. At this meeting that's  
23 what their -- their thoughts on their -- their  
24 preliminary thoughts on when this would occur. I do

1 not have definitive clarification as to if those are  
2 the exact dates that they will be proceeding on.

3 Q. Have you been able to schedule a meeting  
4 with them going forward to discuss this?

5 A. [O'MALLEY] I've made several attempts. I  
6 haven't been successful as of yet.

7 Q. Given the construction schedule provided by  
8 the company in this proceeding, which I believe said  
9 March of 2017 is the beginning of construction, do  
10 you see there being a successful alignment between  
11 the company and Wynn's construction efforts, you  
12 know, as you've agreed to with each other?

13 A. [O'MALLEY] I believe there's still an  
14 opportunity to coordinate those activities, that  
15 reconstruction.

16 Q. And it's your understanding that it's  
17 likely the company would proceed with its  
18 construction first, followed by Wynn?

19 A. [O'MALLEY] We could -- again, depending  
20 upon outcomes of proceedings and approvals, not only  
21 on our project, but also on their project. It would  
22 make sense for additional coordination with them,  
23 which we continue to do.

24 Q. So two hypothetical scenarios -- one where

1 the company proceeds first: In that case would it  
2 be up to Wynn to ensure quality streets post-both-  
3 project construction?

4 A. [O'MALLEY] Yes, if we proceeded first, we  
5 would install our duct banks, and that portion of  
6 the roadway we would reconstruct and, you know,  
7 repave the surface. If they were to follow us,  
8 there would be, my understanding of their work is a  
9 full-depth reconstruction of the street, which  
10 basically goes down 2 to 3 feet -- takes out the old  
11 roadbed, puts a new roadbed in, and then  
12 reconstructs the entire street, including pavement.

13 Q. The other alternative, where Wynn proceeds  
14 first and the company follows: Could you please  
15 elaborate on that scenario as well?

16 A. [O'MALLEY] If Wynn proceeded first and  
17 they reconstructed the street, we would then go in,  
18 again, excavate for our duct bank, install our  
19 facilities, backfill, and then repave. Typically,  
20 we would mill and pave where we were, or half the  
21 street, which would give a continuous, you know,  
22 matching of what they've already done, and with the  
23 new pavement that we would put down for the  
24 mill-and-paving.

1 BY MS. SHAPIRO:

2 Q. So really, the only -- if it went one way,  
3 where the company went first --

4 A. [O'MALLEY] Yes.

5 Q. -- is there any reason that Wynn -- because  
6 really they're just reconstructing the road; they're  
7 making the road better. Right?

8 A. [O'MALLEY] Yes.

9 Q. And they're just paying for it. It's not  
10 like people from Wynn Casino are out there digging  
11 themselves. So if they provided money to the  
12 company, you could -- if the company went first and  
13 installed their ductwork, you could either have the  
14 company's contractors or Wynn contractors just  
15 coming in and preparing the roadway in the manner  
16 that Wynn has proposed for that roadway to be, and  
17 having it being paid by Wynn. Right? Or a  
18 combination of the two?

19 A. [O'MALLEY] I'll try to explain it, not  
20 differently, but so that -- maybe explain it a  
21 little clearer.

22 When we install our duct bank -- and  
23 let's assume, just for argument's sake, that the  
24 road is 25 feet wide. When we put our duct bank in,

1 we're going to excavate a trench, you know, let's  
2 say 6 feet wide, put our facilities in it, backfill.  
3 We would repave to the surface, and then we would  
4 mill and repave. And the milling process is  
5 basically grinding off about an inch and a half of  
6 pavement and then putting a new top coat on it, to  
7 make it a nice, flat surface. So again, we're  
8 taking out this much of the roadway, approximately 6  
9 feet.

10 What the Wynn folks, my understanding,  
11 are required to do is to reconstruct the entire  
12 street, curb line to curb line. And what they will  
13 need to do there is a full-depth reconstruction  
14 consists of removing the top 2 to 3 feet of roadway,  
15 including the roadway bed.

16 Now, they may have to relocate some  
17 drainage lines. They may consolidate all the  
18 existing utilities to sort of straighten them all  
19 out, or whatever the case may be. But we'll be  
20 lower than that anyways. Our facilities will be a  
21 little bit lower than that. But they will have to  
22 come back and reconstruct the entire street, put all  
23 the base gravel in, the base pavement, and the  
24 finish coats of the pavement.

1           So it's really two separate operations.  
2 And to reconstruct the street full-depth  
3 reconstruction, Eversource -- we're not road  
4 builders, so we wouldn't propose that, you know, we  
5 take on the road-building operations, and I don't  
6 propose that Wynn Casino, who will hire a  
7 contractor, would take on the installation of our  
8 duct bank, either.

9           Q. I wasn't proposing that, either, because  
10 that makes no sense. I guess what I'm asking is:  
11 Once the road is open and you finish putting in your  
12 duct bank, what would be a reason that then Wynn  
13 would not just come in and, while the road's open,  
14 do their reconstruction of the road. I guess I  
15 don't know why the road would have to be opened  
16 again. Like you would have to close, mill it, do  
17 some paving, and then a month later somebody  
18 would -- Wynn would come and reopen the road and  
19 basically take out what you'd just done and then  
20 reconstruct the road.

21           A. [O'MALLEY] Okay, I see now. When,  
22 w-h-e-n, we install our duct bank, we're really only  
23 going to be on a portion of the roadway, so the  
24 traffic will still flow. They're going to have to

1 shut down the whole street potentially, or they may  
2 do half, one side or the other side.

3 But if I'm understanding correctly, your  
4 question may lead to why would they -- why would we  
5 do our work and why would they come back a month  
6 later and remove that 6-foot-wide trench that we've  
7 just reconstructed?

8 It may be coordination of schedules.  
9 You know, I don't see, from my perspective, that it  
10 would be that much of a difference for Wynn to  
11 reconstruct the whole roadway. I understand that  
12 it's an impact twice to the roadway. That is why  
13 we've talked with them about potentially  
14 coordination. When they have the roadway open, we  
15 can get on one side, do what we need to do, and then  
16 they can finish off the rest of the roadway.

17 Q. And they're only coming, it's Alford to  
18 Dexter to Robin Streets and then ending -- or Wynn's  
19 proposal ends at Robin and Beacham?

20 A. [O'MALLEY] My understanding of their  
21 requirement is, Dexter and Robin will be full-depth  
22 reconstruction, and this was gleaned from  
23 discussions with them. The exact extent of the work  
24 on Alford, I don't believe they were clear on that,

1 if it would be a full-depth reconstruction or just a  
2 mill-and-pave or moving some islands or whatever it  
3 might be. But on Dexter and Robin they indicated  
4 full-depth reconstruction.

5 Q. Okay. Thank you.

6 MS. SEDOR: It looks like the plan is,  
7 we're essentially done with construction, so I have  
8 just two quick little questions, and then we'll  
9 break and go to lunch.

10 BY MS. SEDOR:

11 Q. What I wanted to ask you, Mr. O'Malley, is:  
12 I'd like you to describe for me a day of  
13 construction. And what I'm trying to get at is, I'm  
14 trying to understand -- let's say a residence or a  
15 business -- just pick a random street; let's say  
16 Williams Street.

17 When you're done on a Tuesday with your  
18 work at a particular location on Williams Street and  
19 you leave at the end of that day, I want to  
20 understand what that picture looks like.

21 So first of all, on an average Tuesday,  
22 when you're doing construction for the transmission  
23 lines, how far will you have come during that  
24 workday? Let's assume it's an eight-hour workday.

1           A. [O'MALLEY] When you say how long -- how  
2 much progress or what would be done during that day?

3           Q. Yes, what's the average length of progress.

4           A. [O'MALLEY] So let's assume for the average  
5 day we've already sawcut the pavement, so that's  
6 been done another day. So on the average day we'd  
7 go in there, set up our traffic management. We  
8 would start breaking up the pavement, hauling the  
9 pavement away. We may get 50, 100, 200 feet.  
10 Breaking up the pavement is, you know, typically an  
11 easier operation.

12                       Then we could begin excavating. And  
13 again, depending upon the density of utilities in  
14 that area, the excavation may go faster on some days  
15 than other days, because as you excavate down and  
16 you potentially may have to hand-dig around some of  
17 these utilities to protect them -- and as the trench  
18 goes along, you would either put shoring or trench  
19 boxes in there to protect it from, you know, closing  
20 in either during the day or overnight.

21                       And let's assume we had other trench  
22 work further on up or further on back. In that area  
23 we could be setting up or installing the base course  
24 for, you know, gravel underneath the duct bank, you

1 know, compacting that so it's nice and solid base.

2 We would also be installing the conduits  
3 on the racks and also any form work that would be  
4 required when we place the concrete. If we were  
5 placing concrete that day, we would, you know, get  
6 as much as we could in any one particular area,  
7 depending upon how much we already have already  
8 prepared for that.

9 At the end of that day, after placing  
10 the concrete, we would again put road plates over  
11 the surface, reopen the roads. And even in areas  
12 where the duct bank hadn't been placed and we have  
13 an open excavation or we're partially excavated,  
14 again we would have road plates at the end of the  
15 day and the roadway would be reopened to full  
16 traffic.

17 Q. Okay. So no matter how much trench is  
18 open, at the end of the day you put road plates over  
19 all open trench.

20 A. [O'MALLEY] That is correct.

21 Q. And does that make the road able to be  
22 traveled as if there were no construction going on?

23 A. [O'MALLEY] Certainly.

24 Q. So big trucks, small cars, all sorts of

1 vehicles can then travel that road.

2 A. [O'MALLEY] That is correct.

3 Q. And what about equipment? It's been my  
4 experience, doing these kinds of cases in  
5 particular, that often very large equipment may be  
6 left there at the end of the day, so that even if  
7 there are road plates, vehicular movement may be  
8 interfered with to some extent. What's your  
9 experience on the question of leaving equipment on  
10 site?

11 A. [O'MALLEY] Well, every contractor would,  
12 of course, prefer to leave it where he's going to  
13 start it up the next day, you know, start his work.  
14 I would recommend that, you know -- I would  
15 recommend that we require them to remove equipment  
16 from the roadway area, to open up all possible  
17 lanes, so we don't impede any traffic.

18 Q. Is that feasible?

19 A. [O'MALLEY] Sure.

20 Q. And where would they put it, if they can't  
21 leave it as they would prefer, in the roadway?

22 A. [O'MALLEY] Again, they would have to bring  
23 it back to their laydown area, their storage yard,  
24 or whatever the case may be.

1 Q. And how would they know that they need to  
2 do that?

3 A. [O'MALLEY] It would be part of their  
4 contract.

5 A. [BERGERON] If I could just offer a little  
6 bit more, because you're asking to help understand  
7 construction. I was involved, and still am, with  
8 the Salem cable project, which is a National Grid  
9 project, representing the petition, and we're also  
10 doing the construction oversight. And again, it was  
11 another urban project, and there were a lot of  
12 sensitive receptors and different land uses, tourist  
13 attractions. There was some concern during  
14 construction.

15 So when we went and got our grant of  
16 locations and street-opening permits, we worked with  
17 the City to identify what could be left on certain  
18 streets, what couldn't be left on certain streets.  
19 And then where we had an instance where we were  
20 installing manholes and you couldn't move a large  
21 piece of equipment after work hours, such as a  
22 crane, because there was a couple of days where that  
23 crane had to be there, we would then have additional  
24 site-specific traffic-control plans that would be

1 put together for that particular situation, so  
2 either have detours, which are the last resort of  
3 closing the street down, and/or having a workaround  
4 for that.

5 And again, depending upon what had to  
6 happen in that area as far as traffic went, in some  
7 instances a small closure was suitable, in other  
8 instances it wasn't and we had to make room and the  
9 equipment had to be moved, which would result in a  
10 little bit longer construction, but the roadway was  
11 still available as needed.

12 Q. That's helpful. And how did that happen?  
13 Did the company think up that process? Or how did  
14 that process of meeting with the City to confirm, it  
15 sounds like on an individual-location-by-location  
16 basis, what you were going to do about the big  
17 equipment that needed to be moved or couldn't be  
18 moved or whatever the situation was? How did that  
19 come into being?

20 A. [BERGERON] There is a formal process of  
21 that, and it's the grant-of-location process, and  
22 then the street-opening permits. It's a two-phase  
23 project, where the grant of location typically is  
24 the company applying for rights to be within the

1 street for the entire length of the project, and  
2 then, as per the case of Boston, they're not unique,  
3 in that they will issue street-opening permits. The  
4 company can then not work in that street until it's  
5 released through a street-opening permit.

6 So it's in that street-opening permit  
7 process, where we're working with typically the  
8 director of public works or the local City engineer,  
9 to actually say, now we're going to move into this  
10 phase, this street, we need a street-opening permit  
11 for that, and as you look ahead, you want to be  
12 there in three or four weeks -- or whatever the  
13 process dictates. Sometimes it's a longer lead time  
14 because of the process.

15 You then have those specific  
16 conversations. And during the street-opening  
17 permit, more specific traffic-control plans are put  
18 together to address what's going on at that  
19 particular point in time, before the City releases  
20 the contractor to work in the streets.

21 And that's how the Salem project has  
22 been going. We discussed phasing as part of the  
23 grant of location with the City, and they asked us  
24 to move around to different places. And then in

1 addition to that phasing and sequencing, whenever we  
2 were ready to get to those streets, we had to get a  
3 street-opening permit, and then we would revisit  
4 with what was going on at the time and provide the  
5 appropriate specific control plans as part of the  
6 street-opening permit, to get released to work in  
7 that street.

8 Q. A couple of quick followup questions. One,  
9 I know Salem was an intervenor in that case. Was  
10 that experience typical, or was that sort of special  
11 because Salem played a very active and very -- very  
12 active role and very closely supervised the whole  
13 process?

14 A. [BERGERON] I used Salem as an example.  
15 But that is not unique to that project. It is  
16 typical for all projects, where you have a grant of  
17 location and then you work into your street-opening  
18 permit. And that dialogue takes place in every  
19 instance in all municipalities.

20 Q. Explain to me, if you would, the difference  
21 between the grant of location and the street-opening  
22 permit.

23 A. [BERGERON] I'm not a lawyer, but having  
24 been involved with both processes: The grant of

1 location is the company's application to the City to  
2 be able to put these facilities in that street, in a  
3 certain route -- we'll call it a certain  
4 alignment -- within the city, to use those  
5 particular streets for the preferred route in these  
6 instances.

7 The street-opening permit -- once they  
8 get that grant of location, that's the authority  
9 from the City -- typically it's either the board of  
10 selectman or the city council who have the authority  
11 to grant that location, the rights to be there.

12 Q. How broad is that, typically? Would you go  
13 in and ask for a grant of location for the entire  
14 route?

15 A. [BERGERON] Yes. The grant of location is  
16 for the entire route. And then the street-opening  
17 permits, depending upon the nature of the project  
18 and the municipality, is either piecemealed or  
19 they'll just grant, if it's a small section of  
20 roadway, one street-opening permit for what they  
21 granted a location for.

22 Again, our experience in projects that  
23 are this length, in this type of urban setting,  
24 along these types of streets -- we have a couple of

1 others that are ongoing right now. One is  
2 associated with the Station 99 project in South  
3 Boston; the other is Station 315 in Brighton.

4 Individual street permits are released  
5 for individual sections of roadway.

6 Q. So that might be a few streets? Or what's  
7 the typical scope of a street-opening permit?

8 A. [BERGERON] It depends upon the phasing  
9 that the company is allowed to have with the City or  
10 agrees to with the City. I wanted to point out, the  
11 distinction earlier of why street-opening permits  
12 are multiple is because the company can't always  
13 control where they want to be when on a project of  
14 this nature. It's largely dictated by the City,  
15 which is as it should be.

16 Sometimes it's multiple streets.  
17 Sometimes, if it's an area that is of particular  
18 concern to the City or has particular issues with  
19 traffic, they'll release very small sections for us  
20 to work in.

21 Q. That's very helpful. The last question I  
22 have relates to that in some ways, and it may be  
23 Mr. O'Malley who can answer this. This issue came  
24 up in a different case, and you may or may not have

1 been part of the discussion that I believe was  
2 companywide after the issue came up in another case.

3 And what it pertains to is: We are one  
4 of the many agencies that the company needs to get  
5 permits from for its projects. And like many of  
6 those other agencies, our decisions often have  
7 conditions in them; right?

8 And it has happened in the past that  
9 there has been some difficulty in transferring those  
10 conditions on the piece of paper that is the Siting  
11 Board approval to the contractors in the field who  
12 are doing the actual project work.

13 And Mr. O'Malley, I would just like to  
14 ask you: How is that going to work for this  
15 project? Let's say that the Siting Board approves  
16 the project, and one of the conditions is, I don't  
17 know, that all trees need to be identified and  
18 written down on a yellow piece of paper. How are  
19 you going to ensure that the guys or women out in  
20 the field write down the names of all the trees on  
21 the yellow piece of paper, especially given that you  
22 have thousands of other conditions to comply with?

23 MS. KEUTHEN: Before Mr. O'Malley  
24 answers that question: I think, as you were

1 referencing, the company has been involved in a  
2 similar situation in another recent proceeding. In  
3 order for the company to be consistent with the way  
4 it's responded in the past to that, perhaps it would  
5 be best if the company took that as a record  
6 request, so that it could be consistent with its --

7 MS. SEDOR: That's fine. That will be  
8 RR-EFSB-46.

9 (Record Request RR-EFSB-46.)

10 MS. SEDOR: It's 25 after 1:00, so why  
11 don't we be back here at 2:30. Off the record.

12 (Recess for lunch.)

13 MS. SEDOR: Let's go back on the record.  
14 It's my understanding that Mr. O'Malley has a  
15 clarification that he'd like to make.

16 A. [O'MALLEY] After further review during the  
17 break, the question was asked are there any manholes  
18 located in front of a driveway. And we re-reviewed  
19 the EFSB-CM-4, and I believe it's Sheet No. 3. We  
20 do have one location that appears to be in front of  
21 a driveway. And I believe the property, it's just  
22 east of the Tobin Bridge, one block over, between  
23 Chestnut and Broadway on Williams Street. And I  
24 believe that may be the courthouse driveway.

1           So what we can do there is, we can  
2 relook at that location. If any potential of  
3 relocating a manhole -- and again, I want to  
4 emphasize that, you know, manhole locations are  
5 really dictated by utility density, and also in  
6 coordination with, you know, Cities and Towns, as to  
7 where it's optimal to place these structures. So I  
8 just wanted to clarify that for the record.

9 BY MS. DE BOER:

10           Q. Thank you. I have one final question on  
11 land use, and then I'm going to transition to noise  
12 impacts.

13           Mr. O'Malley, before you joined this  
14 morning, we were discussing a little bit about  
15 potential impacts to the American Legion playground  
16 and recreational area and the Condor Street urban  
17 wild and the potential impacts related to parking  
18 during construction.

19           The company had stated that once the  
20 preliminary construction sequencing schedule was  
21 developed, it would meet with the City of Boston to  
22 discuss potential impacts to this area. Could you  
23 please provide an update on the company's  
24 preliminary construction sequencing schedule?

1           A. [O'MALLEY] Well, there is no -- we haven't  
2 further developed the construction sequencing  
3 schedule because when we get a contractor on board,  
4 that's one of the things that we'll work with the  
5 contractor. They'll develop a schedule in  
6 cooperation and coordination with us, if there are  
7 any conditions that need to be met or any specific  
8 requirements regarding schedule. And at that time,  
9 after a schedule is developed, we would meet with  
10 the City of Boston to apprise them of what the  
11 schedule will be and determine if there will be any  
12 impacts on that area.

13           Q. Are you aware of any time of year where  
14 parking restrictions in the vicinity of the American  
15 Legion playground and the recreational area would be  
16 especially impacted? Is there a seasonality to  
17 that?

18           A. [O'MALLEY] To the park?

19           Q. Yeah, to parking impacts in the area. Is  
20 it worse there in the summer than it would be in the  
21 winter or....

22           A. [O'MALLEY] I'm not aware of any. I'm not  
23 aware of any.

24           Q. If you could please refer to EFSB-N0-2.

1           A. [BERGERON] Yes.

2           Q. Could you please summarize the company's  
3 understanding of the construction-related noise  
4 levels permitted in the Cities of Boston, Chelsea,  
5 and Everett, in accordance with their respective  
6 noise bylaws?

7           A. [BERGERON] I can. With respect to the  
8 City of Boston, it's our understanding that the City  
9 of Boston has a code -- it's Chapter 16 -- that sets  
10 standards for what is termed "unreasonable noise."  
11 However, there's an additional regulation. The Air  
12 Pollution Control Commission of the City of Boston  
13 has adopted regulations that set noise limits. So  
14 although there is a code that deals with  
15 unreasonable noise, the Air Pollution Control  
16 Commission regulations distinguish amongst the  
17 specific noise restrictions, and the company will  
18 need to comply with those regulations.

19          Q. So is it that the APCC noise limits trump  
20 the other City of Boston noise requirements, or are  
21 there portions of both you'll need to comply with?

22          A. [BERGERON] There's portions of both. The  
23 regulations actually apply to more specific levels  
24 that are deemed unreasonable noise and that are not

1 allowed associated with different activities in  
2 various zoning districts. So in essence, the APCC  
3 regulations enhance the code.

4 The City of Chelsea has a noise code as  
5 well in their ordinances. And they identify the  
6 regulation of construction hours through a permit  
7 process.

8 The City of Everett also has a noise  
9 ordinance, which, similar to Chelsea, identifies  
10 acceptable construction work hours, does not set any  
11 specific noise level, and does not have a permit  
12 procedure or process.

13 I'd be happy to speak to specific  
14 standards as we talk about the work, if you want to  
15 ask more questions related to that.

16 Q. I think it would be helpful for me to  
17 understand for each of the three Cities what the  
18 company's position is with the hours of construction  
19 that are permitted in that City and what the  
20 limitation is or the maximum construction-related  
21 noise that would be permitted under those bylaws is.

22 A. [BERGERON] So getting back to the City of  
23 Boston: The project site is in a waterfront  
24 manufacturing district and adjacent to a 3F

1 residential district and open-space recreation and  
2 open-space urban wild. And that distinction is  
3 important because that then sets the standard the  
4 company has to comply with.

5 And those zoning designations really  
6 just apply to the substation project itself, because  
7 these regulations differentiate between a  
8 construction site and typical street construction.

9 So with regard to the substation site  
10 itself -- and if you'd just bear with me for a  
11 moment while I turn to those regulations.

12 WITNESS BERGERON: Let's go off the  
13 record while I locate that.

14 MS. SEDOR: Off the record.

15 (Discussion off the record.)

16 MS. SEDOR: Let's go back on the record.

17 A. [BERGERON] So to continue: In the City of  
18 Boston there are two different levels of noise  
19 regulations or situations that we have to deal with.  
20 One is, as per Section 3.1, it's restrictions on  
21 noise emitted from construction sites. And as  
22 you'll see, in that section, if you refer to a copy  
23 of these regulations which were presented in  
24 EFSB-N0-19(1), the project is located -- the

1 substation portion of the project in Boston is  
2 located in an industrial area. So the upper limit  
3 of noise the company would have to comply with would  
4 be the 85 dBa. And that would be at the lot line of  
5 the affected property.

6 With regard to the construction of the  
7 duct bank itself, Section 3.3 would be the section  
8 of that ordinance that would pertain to that  
9 activity. And the standard there would be a noise  
10 level exceeding 86 dBa at a distance of 50 feet from  
11 the construction device.

12 As I stated previously, just to follow  
13 up: The other two communities do not have any  
14 levels that the company has to pertain to.

15 With regard to hours, the City of Boston  
16 identifies work on the construction site and in the  
17 street between the hours of 7:00 a.m. and 6:00 p.m.  
18 Monday through Saturday. And that's actually from  
19 Chapter 16, Section 26.4. So the APCC regulations  
20 don't actually include hours, and that's where you  
21 have to go back to the code, to find the allowable  
22 hours.

23 BY MS. SHAPIRO:

24 Q. I'm sorry, did you just say -- were you

1 referencing for the Boston code 16-26? Point 4?

2 A. [BERGERON] Point 4.

3 Q. And did you say Saturdays?

4 A. [BERGERON] Let me double-check. I have a  
5 copy of that as well. I made some notes. I may  
6 have written it down incorrectly.

7 Q. I believe that's EFSB-N0-2(1), and it's  
8 Page 2 of 5.

9 A. [BERGERON] Yes, thank you for the  
10 clarification. Upon review of that, Section 16-26.4  
11 states between the hours of 7:00 a.m. and 6:00 p.m.  
12 on weekdays.

13 Again, I will note that work would be  
14 allowed outside of those hours with a permit from  
15 the Commissioner of Inspectional Services  
16 Department.

17 With regards to hours in Everett,  
18 Section 6 identifies that construction can proceed  
19 between 7:00 a.m. and 9:00 p.m. weekdays.

20 And City of Chelsea qualifies the  
21 regulation of construction hours to be 7:00 a.m. to  
22 6:00 p.m. Monday through Friday and 8:00 a.m. to  
23 4:00 p.m. on Saturdays.

24 BY MS. DE BOER:

1 Q. Were there Saturday and Sunday construction  
2 hours allowed in Everett as well?

3 A. [BERGERON] No, that just specified  
4 weekdays. You could -- actually, there was no  
5 permit procedure or process in Everett.

6 Actually, upon further review of Section  
7 6 of the Everett city charter and ordinance, it  
8 doesn't actually specify days of the week. It just  
9 specifies between the hours of 9:00 -- it specifies  
10 construction work is allowed other than between the  
11 hours of 9:00 p.m. and 7:00 a.m. So it just  
12 provides a time frame for restriction of  
13 construction activities.

14 Q. So if construction was -- if the company  
15 was proposing construction outside of the hours --  
16 excuse me, within the hours of 9:00 p.m. to 7:00  
17 a.m. in the City of Everett, what process would it  
18 go about to get permission to do so, given there  
19 isn't a permitting process described in the bylaw?

20 A. [BERGERON] The company would seek to find  
21 whoever the code compliance officer was for this  
22 particular ordinance, which department was  
23 responsible, and it would set a meeting to discuss  
24 the need to construct outside of those hours with

1 that particular municipal agent, and then would work  
2 to review the details of where that work is and,  
3 again, if there are any mitigation measures that  
4 would need to be imposed or abutters notified and  
5 communicated with regarding that particular  
6 activity.

7 Q. And through that consultation would the  
8 company expect to be granted permission to undertake  
9 such work?

10 A. [BERGERON] I would think yes. Again, I  
11 haven't personally been on a construction project in  
12 Everett; but in other communities with a similar  
13 situation, there's no particular permit process. As  
14 long as you're communicating with the enforcement  
15 officer of that particular ordinance, that would be  
16 the process by which to work out that agreement.

17 Q. And has anyone from the company sought to  
18 confirm with Everett that the lack of specificity of  
19 specific days in which this permit -- has anyone  
20 from the company sought to confirm with  
21 representatives from the City of Everett that, even  
22 though weekdays versus weekends are not specifically  
23 referenced as part of the exclusion time for  
24 construction of 9:00 p.m. to 7:00 a.m., that it

1 really does apply seven days a week?

2 A. [O'MALLEY] In our discussions with  
3 Everett -- and we've met with Everett Town  
4 officials, different departments -- we haven't  
5 broached that subject to date.

6 Q. And if you could please confirm the  
7 construction hours the company is proposing as part  
8 of this project. I believe in EFSB-N0-14 the  
9 company clarified that it's proposing a six-day-per-  
10 week construction schedule, rather than the five-  
11 day-per-week construction schedule described in the  
12 petition. Is that correct?

13 A. [O'MALLEY] Yeah, the response to N0-14  
14 mentions that there is a discrepancy in two parts of  
15 the petition regarding the company's proposed  
16 workday. And it further states, "To clarify, the  
17 company is proposing to work six days a week."

18 Q. So does this mean that the company's  
19 proposing a construction schedule of Monday through  
20 Saturday from 7:00 a.m. until 6:00 p.m. or later  
21 when daylight permits?

22 A. [O'MALLEY] It would be typically Monday  
23 through Saturday; that would be correct.

24 Q. And when you say "typically," does that

1 mean the company is envisioning some Sundays, or is  
2 that just a more general statement about your  
3 general practices?

4 A. [O'MALLEY] Not planning, but any  
5 operations that may be required not to be stopped or  
6 halted for any reason, or if it's a request of  
7 perhaps a community or a town to work a Sunday, we  
8 may do that. But we don't envision working Sundays  
9 on a standard basis.

10 Q. Does the company have any specific  
11 construction activities it would intend to perform  
12 on Saturdays versus other days of the week, or is  
13 Saturday construction envisioned to be business as  
14 usual, same as the other days?

15 A. [O'MALLEY] More than likely the same  
16 construction activities would take place on a  
17 Saturday as it would Monday through Friday.

18 Q. And is that the case for both the new lines  
19 and the substation, or is the substation work of a  
20 slightly different nature?

21 A. [O'MALLEY] Well, the substation work is  
22 slightly different. The transmission line, of  
23 course, is excavation in the street, you know, duct  
24 banks, that type of work, whereas the substation is

1 a self-contained worksite, and anything that goes on  
2 there really doesn't flow out into the public space.  
3 And, you know, what goes on in the substation may be  
4 excavations, foundations, you know, erecting steel.

5 Q. But you're not planning to have specific  
6 low-noise or other type of work at the substation  
7 reserved for Saturdays versus other days of the  
8 week?

9 A. [O'MALLEY] No, no.

10 Q. Thank you. And in order to perform  
11 construction activities in Boston on Saturdays, the  
12 company would be seeking a waiver; is that correct?

13 A. [O'MALLEY] Yeah, I believe you have to  
14 fill out an application, and I believe there's  
15 actually a payment for -- to the ISD, Inspectional  
16 Services Department, in order to work on a Saturday.

17 Q. Thank you. Would it be a similar process  
18 if the company were required to perform nighttime  
19 construction in the Cities of Boston or Chelsea? I  
20 know, Mr. Bergeron, you've already described the  
21 process if it was required in Everett.

22 A. [BERGERON] There is no process in Everett,  
23 but yes.

24 Yes, it would be a similar situation:

1 The company would apply for a permit approval from  
2 both of the communities of Boston and Chelsea to do  
3 nighttime work.

4 Q. So in the case of Everett, if you wanted to  
5 perform nighttime work, it would be those  
6 conversations with the appropriate authority of the  
7 City?

8 A. [BERGERON] Yes.

9 Q. Thank you. Could you please refer to  
10 EFSB-N0-1.

11 A. [BERGERON] Okay.

12 Q. So I confess to being a bit confused about  
13 the company's response to this particular IR. In  
14 Part A the company stated that it's not planning to  
15 require extended workdays to complete the project  
16 but that, given the potential for weather,  
17 obstructions, or other factors, extended workdays  
18 may be required, for which it estimated 30 days. Is  
19 that correct?

20 A. [O'MALLEY] That's correct.

21 Q. But in the response to Part B of this IR  
22 and in response to N0-4 and elsewhere on the record,  
23 the company stated that extended workdays would be  
24 required for transformer vacuum filling, and

1 identified five days, and cable splicing, four to  
2 five days per manhole. Is that correct?

3 A. [O'MALLEY] In Response B?

4 Q. Yes.

5 A. [O'MALLEY] You are correct on the  
6 transformer filling. That was an oversight on our  
7 part. Once that starts, it cannot be stopped, and  
8 it does require approximately five days.

9 And then you mentioned on splicing?

10 Q. Yeah, I believe in response to N0-4.

11 A. [O'MALLEY] N0-4 could be an extended day.  
12 For the splicing of this type of cable, it doesn't  
13 necessarily have to be a continuous operation, as  
14 with other types of cable splicing.

15 You know, optimally you want to get as  
16 many hours out of the day that you can. If the  
17 restriction is eight hours or ten hours, whatever  
18 the case may be, then that's what it would be.

19 Q. So did the company consider the transformer  
20 vacuum filling and cable splicing activities when it  
21 prepared its 30-day estimate for the extended  
22 workdays?

23 A. [O'MALLEY] The five days on the vacuum  
24 filling was included. The other days was a general

1 estimation based on probable weather that may occur  
2 over the life of the construction, to maintain  
3 schedule.

4 Q. So am I understanding you correctly, the  
5 30-day estimate included vacuum filling activities,  
6 the five days for that, but did not include the  
7 cable splicing extended workdays?

8 A. [O'MALLEY] No, we did not include the  
9 potential for extended cable workdays in that 30  
10 days.

11 Q. Knowing how many manholes are proposed, is  
12 it possible for the company to estimate roughly how  
13 many additional extended work days would likely be  
14 required to complete the project?

15 A. [O'MALLEY] I believe there are nine  
16 manholes, I believe.

17 You know, right now, based on the  
18 schedule, I would be comfortable with that 30 days.  
19 Again, once we get further into the detailed  
20 construction scheduling and logistics, I don't  
21 currently see that being revised. But I'd like to  
22 revisit that at a later time, you know, if we think  
23 that we would need something. But, you know, for  
24 right now, the 30 days, I'm comfortable with that.

1 Q. And with regard to the transformer vacuum  
2 filling: Is it five 24-hour days per transformer,  
3 or would this work be completed simultaneously for  
4 the two transformers proposed?

5 A. [ZICK0] We would fill the transformers one  
6 at a time, or evacuate them and then fill them one  
7 at a time. And the operation would require up to  
8 five days per transformer.

9 Q. Thank you. Please refer to EFSB-N0-15 and  
10 to Page 2-2 of Appendix 5-3.

11 A. [BERGERON] Yes.

12 Q. In response to EFSB-N0-15, the company  
13 provided a table summarizing typical construction  
14 sound levels associated with underground  
15 transmission line construction. A number of the  
16 construction activities are expected to produce  
17 sound levels in excess of 100 dBa at the closest  
18 abutter; is that correct?

19 A. [BERGERON] Yes, given the proximity to a  
20 couple of the abutters, as indicated on Table  
21 N0-15-1, in that response, trench excavation and  
22 duct bank installation could exceed 100 dBa at the  
23 closest abutter along the Mystic-to-East Eagle line;  
24 and again, the cable-pulling and splicing/testing at

1 the manhole location only could exceed 100 dBa along  
2 the Chelsea-to-East Eagle line at the closest  
3 abutter.

4 Q. I'm sorry, did you say only at the  
5 Chelsea-to-East Eagle line?

6 A. [BERGERON] No, I provided the example of  
7 the two examples.

8 Q. Sorry. I apologize. I see that there.

9 Okay. On Page 2-2 of Appendix 5-3 the  
10 company stated that sound-pressure levels of 100 dBa  
11 would be considered very loud or comparable to an  
12 outdoor environment sound of a jet fly-over at 1,000  
13 feet. Is that correct?

14 A. [BERGERON] Could you repeat that, please?

15 Q. Looking at Table 2-1 in Appendix 5-3, the  
16 company provided some comparisons of sound-pressure  
17 levels with common sound sources.

18 A. [BERGERON] Yes.

19 Q. And I believe this table presents the sound  
20 level of 100 dBa as comparable to a jet fly-over at  
21 100 feet. Is that correct?

22 A. [BERGERON] No, actually the Table 2  
23 provides that at between 100 and 110 dBa it would be  
24 comparable to a power mower or a motorcycle at 25

1 feet and an auto horn at 10 feet or a crowd sound at  
2 a football game. All of the sound levels, the  
3 potential maximum at the closest abutter, presented  
4 on Table 15-1, are all below the 110 dBa.

5 I just want to add: There's a third  
6 occurrence, where Table 15-1 notes that the maximum  
7 sound potential at the closest abutter during final  
8 pavement and restoration along both lines could  
9 exceed 100 but be less than 110 dBa.

10 Q. Thank you. Given the maximum sound levels  
11 reported in response to N0-15, how is the company  
12 going to ensure compliance with the Boston APCC  
13 limits you described of 85 and 86 dBa? Or would a  
14 waiver be sought for that as well?

15 A. [BERGERON] Based upon some of the ongoing  
16 construction that the company has in the city,  
17 typically the waiver is only sought for the work  
18 hours. These sound levels that are presented,  
19 again, are approximate, and they're based upon  
20 documented standards.

21 The company has found that the noise  
22 levels that are actually associated with some of  
23 this equipment tend to be somewhat lower and  
24 typically don't seek a permit when the company goes

1 in and works with the ISD in getting permits for  
2 this project. Typically the ISD only regulates the  
3 hours. And again, if there is a complaint regarding  
4 noise, the company would then deal with it at the  
5 time. Based upon the, I believe, two current active  
6 construction projects that I know of, anyways, that  
7 I had referenced before, in similar types of  
8 settings work hours are the only thing that are  
9 regulated in the City of Boston and there have been  
10 no noise complaints.

11 And again, these noise levels are not  
12 prolonged noise levels; they're just points in time  
13 where equipment is running for a short period of  
14 time that it couldn't exceed.

15 So I think for the most part the company  
16 has found that they haven't had any complaints on  
17 similar projects in the City of Boston.

18 Q. Would another way of saying that be the  
19 City's 85-decibel and 86-decibel limits are not a  
20 strict cap on the company's construction activities?

21 A. [BERGERON] The regulatory threshold that  
22 the company does consider -- again, what we've found  
23 is that the discernible difference between the 85  
24 and the 100 doesn't warrant any complaints from

1 abutters. The company's mindful of the noise  
2 consideration. But, again, these are ranges, and  
3 they're instantaneous sound levels. So for the most  
4 part the prolonged noise over the course of the  
5 construction project has tended to be below that  
6 noise level.

7 Q. And is it your understanding that the  
8 City's regulations are focused on prolonged  
9 construction noise levels having the peaking  
10 amounts?

11 A. [BERGERON] Yes. They tend to be focused  
12 on high levels of noise for long durations of time.

13 Q. And that's based on your past experience  
14 with projects under construction in the City of  
15 Boston?

16 A. [BERGERON] That's correct.

17 Q. Has the company undertaken any recent  
18 measurements of actual sound output from the types  
19 of construction activities described in response to  
20 NO-15?

21 WITNESS BERGERON: Could I have one  
22 moment to go off the record and confer with counsel,  
23 please?

24 MS. SEDOR: Yes.

1 (Discussion off the record.)

2 MS. SEDOR: Back on the record, please.

3 A. [BERGERON] Thank you. Could you just  
4 repeat the question, please?

5 Q. I'm wondering whether the company has  
6 undertaken any actual measurements of the sound  
7 levels associated with underground-transmission-line  
8 construction versus the typical noise levels it  
9 presented in response to N0-15.

10 A. [BERGERON] Yes, the company has on a  
11 recent construction project. I'd like to take it as  
12 a record request, if I could, to be able to provide  
13 that information. I think that would be a better  
14 way to answer that question, rather than trying to  
15 work through the details of that particular document  
16 that I don't have in front of me right now.

17 Q. That would work well for me.

18 MS. SEDOR: Maybe if you could restate  
19 what that request actually is.

20 Q. So if the company could please provide  
21 information it has from a recent construction  
22 project on the actual sound levels associated with  
23 construction activities, in comparison to the  
24 typical construction sound levels reported in

1 response to EFSB-N0-15.

2 MS. SEDOR: That will be RR-EFSB-47.

3 (Record Request RR-EFSB-47.)

4 Q. Mr. O'Malley, I believe you spoke a bit  
5 about this earlier, but to follow up: Is any of the  
6 noise generated during construction of an  
7 underground transmission line unique to  
8 transmission-line-type construction, or is the  
9 equipment used and the sound levels associated  
10 pretty typical of general road construction  
11 activities?

12 A. [O'MALLEY] It's -- you know, it's typical  
13 of any utility-type construction, the equipment.  
14 The equipment used is, you know, pretty much  
15 typical, whether it's underground construction....

16 Q. Would the projects be unique compared to  
17 other road-paving or excavation that would take  
18 place that's not a utility activity?

19 A. [O'MALLEY] No. You know, for example, if  
20 the water company was putting a water line in the  
21 street, it's basically the same operation. You  
22 sawcut the street, the pavement; excavate with an  
23 excavator. They would place their pipe in the  
24 excavated hole, similar to how we would place our

1 duct banks. And then they would backfill, and then  
2 they would repave.

3 So it's a very similar operation. It's,  
4 you know, standard, typical utility work, whether  
5 it's a water pipe, an electrical duct bank, a  
6 telephone line, or what may be the case.

7 Q. And before we move on from NO-15: Looking  
8 at this table, it shows the closest abutter to a  
9 manhole is located in Chelsea, at a distance of 26  
10 feet; is that correct?

11 A. [BERGERON] I believe that is correct,  
12 yes -- the abutter being --

13 I think CM-4 spoke to residences near  
14 manholes. I think this is a business.

15 I could check -- I might as well  
16 double-check CM-4. If you'll give me a minute to do  
17 so, I'll go ahead and take a look at that figure.

18 Q. Please do.

19 A. [BERGERON] Sorry for the delay. CM-4 is  
20 residences only. So I know we have another figure  
21 that shows closest abutters to manholes that are not  
22 residences.

23 Q. Maybe I can cut to the chase of my  
24 question, though. I think CM-4 is indicating that

1 that particular residence is only 18 feet away from  
2 the proposed manhole location, which would make it  
3 closer than the abutter identified in Chelsea here  
4 in this table.

5 A. [BERGERON] Which are you looking at in  
6 CM-4, please?

7 Q. Page 5 of 6 on CM-4. I believe it's  
8 Attachment 1.

9 A. [BERGERON] Yeah, I see that now.

10 Q. So maybe this is a record request. But if  
11 you could confirm either that particular residence  
12 is located 18 feet away from a manhole, and, if so,  
13 update Table NO-15-1 to reflect the maximum sound  
14 levels that would be observed at that residential  
15 abutter as the closest one.

16 A. [BERGERON] I will. Thank you. I was  
17 confused because that abutter actually is in  
18 Everett, and so I was looking for one in Chelsea.

19 A. [O'MALLEY] Is that the one on Robin  
20 Street?

21 A. [BERGERON] That would be great. We'll  
22 take that as a record request, please.

23 Q. And then I guess, if it's not actually 18  
24 feet, the closest abutter is 26 feet, to leave the

1 table as is, but to please update CM-4.

2 A. [BERGERON] I understand. Thank you.

3 Q. I'd like to make that a record request,  
4 please.

5 MS. SEDOR: Can you just repeat it for  
6 me? I apologize.

7 Q. I would like the company to confirm the  
8 distance of the closest abutter to a manhole  
9 location, and if the residential abutter in Everett  
10 that was identified at 18 feet is in fact closer  
11 than the one currently presented in response to  
12 NO-15, that the company please update Table NO-15-1  
13 with the maximum sound levels at the closest  
14 abutter.

15 MS. SEDOR: That will be RR-EFSB-48.

16 (Record Request RR-EFSB-48.)

17 A. [BERGERON] Just to be clear, when you say  
18 abutter, do you mean residence, or do you mean any  
19 land use, such as a business?

20 Q. In NO-15 I was referring to, whether it be  
21 a residence or a business, the closest to that  
22 source. In this case it's specifically -- I thought  
23 there might be a residence we'd discussed in an  
24 earlier response that was listed in the table as the

1 general "abutter."

2 A. [BERGERON] Thank you.

3 Q. So if there's a business closer than 18  
4 feet, I'd love to hear about that, too, please.

5 If you could please refer to EFSB-N0-12.

6 A. [ZICK0] Yes, I have that in front of me.

7 Q. In this response the company stated that it  
8 expects to be able to comply with the City of  
9 Boston's maximum allowable construction sound  
10 pressure levels by the use of the most sound-  
11 attenuating equipment available, augmented with  
12 portable barriers if practicable. How effective are  
13 noise barriers at reducing sound pressure levels  
14 associated with underground transmission line  
15 construction?

16 A. [ZICK0] That would depend, of course, on a  
17 number of factors, and it would be the distance that  
18 you could place the barrier between the source and  
19 the receptor.

20 As a practical matter -- and again,  
21 speaking in generality -- when you're in a narrow  
22 street with buildings proximate to the street, the  
23 sound will diffract around the barriers.

24 Q. So not very effective is what you're

1 saying?

2 A. [ZICK0] Again, depending on a number of  
3 facts, and it would depend, you know, on the exact  
4 geometry, if you will, of the source with regard to  
5 the receptor.

6 Q. So there isn't a typical dBa reduction that  
7 you could quote a sound barrier providing?

8 A. [ZICK0] I could not, no.

9 Q. Does anyone else on this panel have  
10 experience with sound barrier technology and the  
11 impacts it may have?

12 A. [BERGERON] I do not.

13 A. [O'MALLEY] No.

14 Q. Are there certain construction activities  
15 that have better or worse results when noise  
16 barriers are employed, in terms of the amount of  
17 sound that can be mitigated?

18 A. [ZICK0] Certainly a construction activity  
19 that used a smaller source, sound source, would be a  
20 lot easier to shield from the receptor than one that  
21 had, say, a large source.

22 Q. Can you provide an example?

23 A. [ZICK0] So I would say like a portable --  
24 a portable generator or a portable vacuum pump

1 versus a dump truck.

2 Q. So it may be more effective at mitigating  
3 noise -- or sound barriers may be more effective at  
4 mitigating noise impacts associated with cable  
5 splicing and transformer vacuum filling than with  
6 trench excavation, for example?

7 A. [ZICK0] If they're needed at all, yes.

8 Q. Other than use of the most sound-  
9 attenuating equipment available and portable noise  
10 barriers, are there any other mitigation measures  
11 that the company has implemented to reduce  
12 construction-related sound levels?

13 A. [ZICK0] Beyond quieting the equipment and  
14 shielding, there really are no other alternatives to  
15 the noise -- noise reduction.

16 Q. Could you please refer to EFSB-N0-7. The  
17 company stated that use of noise barriers such as  
18 curtains and rigid walls can restrict movement  
19 within the work zone, can slow the pace of  
20 construction, and could pose hazards to workers and  
21 the general public. Could you please describe the  
22 company's recent experience with the use of noise  
23 barrier technology, both for transmission line  
24 construction and manhole construction, and how the

1 company managed any safety risks associated?

2 A. [BERGERON] Could we take a minute to go  
3 off the record and talk to counsel, please?

4 MS. SEDOR: Yes.

5 (Discussion off the record.)

6 MS. SEDOR: Let's go back on the record.

7 A. [O'MALLEY] The company recently performed  
8 a reconductoring type of project, which wasn't  
9 subject to the review process. And what we can do,  
10 we can get the data from that and provide that on a  
11 record request if applicable. I personally don't  
12 have experience with the sound barriers, but the  
13 company does have previous projects.

14 Q. Do you have a sense of the type of  
15 information you'd be able to gather from that other  
16 project?

17 A. [O'MALLEY] The types of sound barriers --  
18 you know, specific types of sound barriers -- if  
19 sound levels were obtained and, you know, the  
20 reduction of the sound with the use of the barriers  
21 and possibly any types of equipment used that may  
22 help provide some information for this process,  
23 also.

24 Q. I think that would be very helpful. If I

1 could add to that list just, though, how the company  
2 managed the safety risks it discussed in response to  
3 NO-7 as well?

4 A. [O'MALLEY] Sure.

5 MS. SEDOR: That will be RR-EFSB-49.

6 (Record Request RR-EFSB-49.)

7 Q. Are there any circumstances specific to  
8 this case that would make noise-barrier technology  
9 impractical?

10 A. [O'MALLEY] I think, you know, and based on  
11 the information we'll find out from the previous  
12 project, I think the only areas or one of the areas  
13 that would make noise barriers impractical  
14 potentially may be how much space is available,  
15 whether to buildings, sidewalks, roadways. When you  
16 do have the noise barriers, you do have to extend  
17 the work zone out somewhat, so you'd be infringing  
18 on adjacent areas.

19 Q. Along the same lines of thinking, are there  
20 any locations around the preferred and noticed  
21 alternative routes that the company has identified  
22 where noise barriers would be particularly useful  
23 and appropriate for implementation?

24 A. [O'MALLEY] I'm just reviewing the route --

1 Q. Thank you.

2 A. [O'MALLEY] -- generally to see if anything  
3 jumps out at me.

4 I don't believe at this time we've  
5 identified specific locations where we did determine  
6 that noise barriers would be specifically. But  
7 again, as the planning process, and especially the  
8 construction process, continues, that will be part  
9 of the ongoing review that we'll be doing for that.

10 BY MS. SHAPIRO:

11 Q. If you could turn to the petition, and I'm  
12 looking at Figure 5-7, and it's the land use maps  
13 for the preferred route and the Bow Street  
14 variation.

15 A. [O'MALLEY] Yes.

16 Q. And if you started at Sheet 1: I'm just  
17 trying to identify which areas seem to have -- are  
18 more residential with regard to the proximity of the  
19 transmission line construction.

20 And if you're looking at Sheet 1, is it  
21 that the -- what also looks like a lighter green is  
22 really the yellow along East Eagle? Or it's all  
23 residential across from -- along East Eagle Street?

24 A. [BERGERON] That's correct. There are

1 approximately 12 residences on the south side of  
2 East Eagle Street, which is across the street from  
3 the City of Boston parcel.

4 Q. Okay, thank you. And then if you're on  
5 Sheet 2, you're looking more at residential areas  
6 between Shawmut Street and Shurtleff Street along  
7 Marginal?

8 A. [BERGERON] That's correct. There are  
9 approximately six residences along that stretch of  
10 the route.

11 Q. And then there's some interspersed between  
12 Pearl and the Tobin Bridge, also along Marginal?

13 A. [BERGERON] Yes, there appear to be two or  
14 three residences in that stretch as well.

15 Q. And then between Tobin and, I believe,  
16 Mulberry Street, along Williams, would also be  
17 residential?

18 A. [BERGERON] That's correct, on the south,  
19 would be the west side of the street, just beyond  
20 the Tobin Bridge stretch, there are approximately  
21 six, seven residences.

22 Q. Then you don't really hit any residential  
23 areas until you're back on Robin Street, and I  
24 believe that's Sheet 5?

1 A. [BERGERON] That's correct.

2 Q. Thanks so much.

3 A. [BERGERON] You're welcome.

4 BY MS. DE BOER:

5 Q. Regarding the company's assessment of  
6 ongoing operational noise from the East Eagle  
7 substation: If you could please refer to Figure 4-1  
8 of Appendix 5-3.

9 A. [BERGERON] Did you say Figure 5-1?

10 Q. 4-1. Sorry.

11 A. [BERGERON] Yes.

12 Q. Why did the company choose not to take  
13 measurements of the ambient sound levels along the  
14 western side of the proposed substation site,  
15 closest to where the transformers would be located?

16 A. [BERGERON] If I could have a moment to  
17 confer with the representative of the company that  
18 performed the noise studies off the record.

19 MS. SEDOR: Yes, you may.

20 (Discussion off the record.)

21 MS. SEDOR: Back on the record, please.

22 A. [BERGERON] It was determined not to take a  
23 measurement at the western edge of what would be the  
24 company's developed site, substation site, because

1 the project was going to involve the installation of  
2 a screen wall, which would also serve to attenuate  
3 noise, and the closest sensitive receptors were  
4 further to the west, with the ballfields. So a  
5 determination was made to take noise measurements at  
6 the City of Boston property line, closest to what  
7 would be the sensitive noise receptors around that  
8 area.

9 Q. Given the City of Boston plans provided  
10 showing a proposed soccer field adjacent to the  
11 substation site, would that impact the company's  
12 position on where the sensitive receptors are  
13 located to the west of the substation property?

14 A. [BERGERON] Yes, if there had been an  
15 existing soccer field there, I would assume they  
16 would have wanted to take a measurement at that  
17 western edge of the station.

18 Q. Are any of the other measurement points  
19 representative of the sound levels that would be  
20 expected -- the ambient sound levels that would be  
21 expected along that western boundary of the  
22 property, the company's property?

23 A. [BERGERON] I would suggest that MP-2 could  
24 be representative of the sound levels that you would

1 expect. And again, the screen wall that would be  
2 installed along that western edge would also tend to  
3 attenuate noise from the station operation.

4 Q. In the locations where the company did take  
5 measurements for ambient sound levels, is it correct  
6 that a single roughly five-minute measurement was  
7 used to establish the ambient noise levels?

8 A. [BERGERON] My firm did not complete the  
9 noise studies. But from reviewing the report, on  
10 Page 4-5, that is what's stated, is that the ambient  
11 sound level measurement periods were five minutes  
12 long.

13 Q. Is that a typical practice for establishing  
14 ambient noise levels in sound studies you're  
15 familiar with?

16 A. [BERGERON] I could not answer that  
17 question. I don't have that area of expertise.

18 Q. Anyone else on the panel familiar with  
19 ambient-noise-level measurements?

20 A. [ZICKO] I am, and I've seen it -- I've  
21 seen it be various durations. It depends on what  
22 the usage patterns are in the area. In some  
23 instances the five minutes may be enough to get a  
24 characterization of what the sound levels, or the

1 ambient sound levels, are.

2 Q. And is it the company's position that, in  
3 this particular case, given the nature of the area,  
4 five-minute durations were appropriate for  
5 establishing the ambient noise levels?

6 A. [ZICKO] Yes.

7 BY MS. SHAPIRO:

8 Q. If you're looking at the map -- I'm also  
9 looking at Appendix 5-3, and I'm looking at Figure  
10 4-1. So you're saying that the ambient or the  
11 predicted noise levels at MP-2 would be  
12 representative of the soccer field?

13 A. [BERGERON] Could you give a little more  
14 clarification on that question? I'm not sure what  
15 you're asking.

16 Q. I believe Ms. de Boer asked why you didn't  
17 take measurements on the western portion -- and  
18 maybe I misunderstood. But you said that MP-2 could  
19 be representative of that. And are you talking  
20 about the noise that emanates from the transformers  
21 or from -- or for which ambient would be  
22 representative?

23 A. [BERGERON] My understanding is that MP-2  
24 is the location where they measured existing ambient

1 noise.

2 Q. Okay. And so -- and then if I'm looking at  
3 Table 5-1, the substation sound levels; would the  
4 sound levels, if -- if you're trying to estimate the  
5 sound levels on the western portion of the site, are  
6 you saying you would use the MP -- the predicted  
7 sound levels of transformers, 49.7, at the MP-2?

8 A. [BERGERON] Again, I'm not a noise  
9 evaluation expert, and Ms. de Boer asked the  
10 question of which one could I suggest might be  
11 representative. And just given the fact that MP-2  
12 is closest to the transformers, I just suggested  
13 that that might be a place that's representative.  
14 But without taking a measurement on the western  
15 property line, I can't confirm or state what the  
16 actual levels would be there.

17 BY MS. DE BOER:

18 Q. If you could refer to Figure 5-2. Is it  
19 correct that this figure would show us the  
20 anticipated post-project noise levels along the  
21 western side of the project as well as at those  
22 locations that were measured for ambient sound  
23 levels?

24 A. [ZICKO] That's Figure 5-2 of Appendix 5-3?

1 Q. Correct.

2 A. [ZICK0] The lines that are on there show  
3 the predicted -- actually show contours of, say,  
4 constant sound levels from the proposed project.  
5 And you can see that the measurement point, MP, is  
6 superimposed on that. And if you can see, there's  
7 an orange line that's the 50-dBa line, that goes  
8 right through where MP-2 was. And if you follow  
9 that around, you can also see that it hugs the  
10 western wall of the transformer enclosure.

11 Q. And is there a specific time of day  
12 associated with the contours presented in Figure  
13 5-2?

14 A. [ZICK0] When these studies -- when these  
15 predictions are done, they take the highest ambient  
16 that they measured and then model the highest sound  
17 output from the transformer on top of it. So that  
18 may or may not necessarily be tied to a time of day.

19 BY MS. SHAPIRO:

20 Q. Did you mean the highest ambient or the  
21 lowest ambient?

22 A. [ZICK0] I'm sorry, they take the lowest  
23 ambient and add the predicted.

24 Q. So based on Table 5-2, are you still

1 stating that if you're on the western portion -- or  
2 can you --

3 When you look at this, at 5-2, and then  
4 you look at the location of the soccer field, would  
5 it still be below a 3-dB increase?

6 A. [ZICK0] The measured -- the single-number  
7 equivalent was 50 dBa at MP-2; and using that for a  
8 proxy for outside the transformer wall, and looking  
9 at the sound-level contours, it's essentially the  
10 same sound level, 50 dBa. And then, you know, a  
11 little bit further away it becomes 45 dBa.

12 So without seeing the soccer field  
13 superimposed on this I would say, you know, it's  
14 between 45 and 50 post-project, where it was 50  
15 pre-project.

16 MS. SEDOR: It's quarter to 4:00. Why  
17 don't we take a break and come back at 4:00. Off  
18 the record.

19 (Recess taken.)

20 MS. SEDOR: Let's go back on the record.

21 BY MS. DE BOER:

22 Q. I'd like to move to some questions on  
23 water-related impacts.

24 Outside of the East Eagle Street

1 substation, is Chapter 91 approval required anywhere  
2 else along the project?

3 A. [BERGERON] Yes, a portion of the  
4 transmission and distribution lines on each side of  
5 the creek crossing itself are located within Chapter  
6 91 jurisdictional areas, filled tidelands as well.

7 Q. Is there anything near the Mystic  
8 substation that requires Chapter 91 approval?

9 A. [BERGERON] My recollection is that,  
10 although a portion of the Mystic substation is  
11 within Chapter 91 jurisdiction, the portion that the  
12 project is located within is not.

13 Q. Thank you. Would construction of the  
14 project restrict public access to the Chelsea Creek  
15 in any way?

16 A. [BERGERON] No, as can be seen on the many  
17 different maps that we've submitted to support our  
18 petition, the company's site does not have direct  
19 access or frontage on Chelsea Creek.

20 Q. Is the project located in a Zone 1 or Zone  
21 2 wellhead protection area?

22 A. [BERGERON] No, it is not.

23 Q. Could you please refer to the company's  
24 response to CF-16.

1 A. [BERGERON] Yes.

2 Q. The company stated that a stormwater  
3 pollution prevention plan would be developed for the  
4 project and that this plan would establish the  
5 protocols that, when implemented, would minimize  
6 pollution caused by soil erosion and sedimentation  
7 during construction and stormwater pollution after  
8 construction is complete.

9 Is the company aware of any existing  
10 erosion problems at the substation site,  
11 particularly along the northern boundary?

12 A. [BERGERON] When you say northern boundary,  
13 do you mean adjacent to the City of Boston's  
14 property at Chelsea Creek or on our northern  
15 boundary, the limits of our site?

16 Q. Primarily the edge of the DPW parcel, but  
17 if there is an issue at the edge of the company's  
18 parcel, that would be wonderful to know as well.

19 A. [BERGERON] There is no issue at the edge  
20 of the company's controlled parcel.

21 With regard to the City of Boston's  
22 parcel on the Chelsea Creek, our understanding is  
23 that there is currently proposed by the Army Corps  
24 of Engineers and the City a stream-bank

1 stabilization project, and that that project will be  
2 undertaken by the City, due to the fact that the  
3 shoreline is eroding in that area.

4 Q. Would any of the work proposed by the  
5 company impact the City's plans for stabilization or  
6 accelerate any of the issues the company -- or the  
7 City is looking to address?

8 A. [BERGERON] No. The portion of the site  
9 the company intends to build on currently consists  
10 of pavement or broken pavement and previously  
11 disturbed areas; and construction of the project  
12 should in no way impact the stream-bank  
13 stabilization project nor exacerbate the current  
14 erosion issue at the creek.

15 Q. And would ongoing operation of this  
16 substation site have any impacts on erosion in the  
17 area?

18 A. [BERGERON] No, it will not. The entire  
19 site will be stabilized following construction, as  
20 well as during construction there will be, as  
21 indicated in response to CF-16, a stormwater  
22 pollution prevention plan that will be submitted as  
23 part of the US EPA NPDES construction general  
24 permit. So there will be a suite of erosion control

1 measures implemented during the project to ensure  
2 that there are no effects from erosion and  
3 sedimentation to adjacent water bodies during  
4 construction.

5 Q. And when you say the site will be  
6 stabilized for ongoing operation, can you explain  
7 what that means for us?

8 A. [ZICK0] So the yard inside the fenced area  
9 will be covered with what we refer to as traprock.  
10 It's just crushed stone, with certain diameter,  
11 usually three quarters of an inch to an inch. The  
12 whole yard will be finished with that, so that the  
13 water will soak in in a controlled sort of way and  
14 not erode the soils underneath it.

15 Q. Could you compare the likely runoff of the  
16 parcel today where it's paved versus traprock? Is  
17 there a difference in the properties between the  
18 two?

19 A. [ZICK0] The traprock is much more  
20 pervious.

21 Q. Would that result in potentially a decrease  
22 in erosion from the area?

23 A. [BERGERON] I'm not sure which exhibit it  
24 is in, but as one of the site plans will show, at

1 the substation site there is actually an underground  
2 detention basin that will be installed. So the  
3 project has to comply with the Massachusetts  
4 stormwater standards, which at the end of the day  
5 will result in an improvement to recharge and  
6 control of sheet flow off of the site. Currently  
7 there are no stormwater management controls that  
8 pick up sheet flow, that may have sediment in it,  
9 going off the site. So the construction of the  
10 substation should result in an improvement on the  
11 site for stormwater for our portion of the site,  
12 anyways.

13 Q. And when you say sheet flow, what does that  
14 mean exactly?

15 A. [BERGERON] When you have a precipitation  
16 event and you have an impervious surface such as  
17 pavement, the rain will hit and then the sheet  
18 flow -- it will flow in the direction of the grade,  
19 because there's a lower elevation, and you have the  
20 potential, depending upon the grade, to carry any  
21 fine sediment that may be on the ground with it  
22 towards water bodies, potentially, if they have a  
23 lower elevation than the paved area that they're  
24 hitting.

1 Q. Could you please refer to EFSB-Z-9,  
2 Attachment 5. Specifically, I'm looking at Page 10  
3 of 19.

4 A. [BERGERON] Yes.

5 Q. Could you please summarize for me the  
6 company's understanding of Channel Fish's concerns  
7 regarding the combined sewer outflow, which it  
8 describes in its submission to Mass. DEP.

9 A. [O'MALLEY] Could you ask that question  
10 again, please?

11 Q. I'm going to start again. In its  
12 submission to Mass. DEP, Channel Fish raised  
13 concerns around an existing combined sewer outflow,  
14 or CSO, which is maintained and operated by the  
15 Boston Water and Sewer Commission.

16 A. [O'MALLEY] Yep.

17 Q. I'm wondering if you could please summarize  
18 for me the company's understanding of the concerns  
19 related to this CSO.

20 MS. GOODHEART: If I may, just to  
21 clarify for the record, that the term we used in our  
22 letter was combined sewer outfall.

23 MS. DE BOER: Thank you.

24 A. [O'MALLEY] CSO does mean combined sewer

1 overflow. The outfall would be the end of the pipe.

2 There is an existing CSO that runs  
3 adjacent to both properties, let's say. As a matter  
4 of fact, we met with Boston Water and Sewer  
5 Commission about this, if I'm not mistaken. And  
6 they have an easement which -- for the CSO which is  
7 also partially on the company's property. As a  
8 matter of fact, to remain out of that easement, we  
9 are moving our screen wall a few inches in towards  
10 the station a little bit further because we cannot  
11 build on that easement.

12 MS. SEDOR: Mr. O'Malley, I hate to  
13 interrupt you, but when you said "they have an  
14 easement," who were you referring to?

15 WITNESS O'MALLEY: Boston Water and  
16 Sewer Commission. Sorry.

17 A. [O'MALLEY] And the existing CSO is  
18 approximately, I'm thinking, 50 by 60, something  
19 like that.

20 The existing CSO is approximately 4 foot  
21 by 5 foot. And I believe it was built in the late  
22 1800s. We have had a consultant look at the  
23 outflow -- I'm sorry, the outfall of the CSO, and I  
24 believe the outfall size may be around 36 inches,

1 and all except for approximately the top foot,  
2 approximately, is filled with sedimentation. And we  
3 also opened manholes within the East Eagle, and  
4 there is standing water within the CSO.

5 And we conveyed this to Boston Water and  
6 Sewer and mentioned to them that -- they had  
7 requested that we do a pre-video -- pre- and  
8 post-construction video. But we conveyed the  
9 information to them that the sedimentation in the  
10 outfall and the fact that there is standing water  
11 within the pipe itself doesn't allow us -- we can't  
12 do the video because of the condition of the blocked  
13 CSO.

14 Q. So what are the company's next steps with  
15 regard to the City's request for a video inspection?  
16 Is the ball now in the City's court, or is the  
17 company pursuing a secondary action?

18 A. [O'MALLEY] It's within the City's court.

19 Q. Do you have any expectation of what the  
20 City's response will be?

21 A. [O'MALLEY] They were interested to hear  
22 what we said, and we actually forwarded them  
23 pictures of the outfall and the photo looking down  
24 through the manhole. And I believe internally, they

1 are working internally to -- I don't know if they're  
2 going to clean it out or what their next action will  
3 be.

4 Q. Does the current condition of the CSO  
5 impact its operation, in your opinion? Is it  
6 functioning properly, given its condition?

7 A. [O'MALLEY] Well, I'm not a sanitary  
8 engineer, so I couldn't professionally comment on  
9 that.

10 Q. Could you speak to any impacts the project  
11 may have on the CSO?

12 A. [O'MALLEY] It should be very minimal.

13 Q. Given the stormwater pollution prevention  
14 plan and the ways that water would be managed at the  
15 substation, does that require use of the CSO? Is  
16 that part of the plan, or is stormwater being  
17 managed at the substation site separately from the  
18 CSO?

19 A. [O'MALLEY] Well, my understanding -- and  
20 someone else may chime in here. The CSO is, my  
21 understanding of their system -- the CSO is used  
22 when there's excessive amounts of rainwater, and  
23 it's called a combined sewer overflow, because  
24 Boston has sanitary and also storm drains that are

1 combined.

2 -- and what this does typically in a  
3 situation is, when you get those large flows, it  
4 triggers the CSO, let's say, as a route, as opposed  
5 to water, whether it be sewerage or water, drainage,  
6 coming up through manhole covers or drainage. You  
7 know, that's my understanding of the operation of a  
8 typical CSO --

9 A. [BERGERON] I don't believe that the  
10 proposed facility will use -- tie into that CSO.

11 If I could have five minutes to go back  
12 to the previous answer and look at the previous  
13 plans, that I can confirm that we will not be tying  
14 into that CSO.

15 MS. SEDOR: Yes.

16 (Discussion off the record.)

17 MS. SEDOR: Back on the record.

18 A. [BERGERON] Thank you. Upon further  
19 review, I can confirm that the proposed substation  
20 is not going to tie into the existing CSO that we've  
21 been speaking about. And as I said before, the lot  
22 is going to be graded inward to prevent surface  
23 stormwater runoff from leaving the lot. It will  
24 maintain existing grades along the property line.

1 And surplus runoff that hits the station site itself  
2 will be collected by proposed catch basins and  
3 underdrains placed at the low points of the lot to  
4 direct runoff towards the underground detention  
5 basin.

6 Q. Thank you.

7 A. [BERGERON] You're welcome.

8 Q. Switching to air impacts: If you could  
9 please refer to EFSB-A-1.

10 A. [ZICKO] Yes.

11 Q. Just a single question from me on this  
12 topic. But in response to Part B the company stated  
13 that approximately 4000 pounds of SF6 would be  
14 required for the project for use in the GIS at the  
15 East Eagle substation and in the proposed circuit  
16 breaker at the Mystic substation.

17 A. [ZICKO] Correct.

18 Q. How much of the 4000 pounds of SF6 would be  
19 used at the East Eagle Street Substation versus the  
20 Mystic substation?

21 A. [ZICKO] I don't know precisely. I will  
22 offer subject to check that it would be  
23 approximately 500 pounds at Mystic and the balance,  
24 3500 pounds, at East Eagle.

1 Q. Great. Thank you. Could you please refer  
2 to EFSB-S-5.

3 A. [BERGERON] Yes.

4 Q. The company stated that sulfuric acid is  
5 found as an electrolyte solution in batteries used  
6 at the substation. How large a battery system would  
7 be needed at the East Eagle Street substation?

8 A. [ZICKO] We have not sized the battery yet.  
9 I could probably get an approximate size based on a  
10 similar substation, but I just don't have that in my  
11 head.

12 Q. That would be great. If we could make that  
13 a record request, please.

14 MS. SEDOR: That will be RR-EFSB-50.

15 (Record Request RR-EFSB-50.)

16 Q. And are any new batteries needed at either  
17 the Chelsea or Mystic substations in association  
18 with the project?

19 A. [ZICKO] No.

20 Q. Are you aware of any specific safety  
21 standards that govern the size of the containment  
22 system associated with substation batteries?

23 A. [ZICKO] There is a recommendation for  
24 containment in the National Electric Safety Code,

1 NESC, sometimes referred to as ANSI, too, that calls  
2 for containment but is silent on a size. We provide  
3 containment for at least one jar, and eats probably  
4 way more than that. "Way more," I don't know that I  
5 can describe it. Suffice it to say that I've never  
6 seen more than three or four jars fail at any one  
7 given time, and we are well in excess of that.

8 Q. When you say "jar" in the context of a  
9 battery, can you please explain to me what that  
10 means?

11 A. [ZICK0] Certainly. Each jar is a -- or  
12 "cell" is the word that's sometimes used. It's a  
13 polycarbonate container that holds the plates of the  
14 battery in the electrolyte solution.

15 Q. Thank you. Could you please refer to  
16 EFSB-S-8.

17 A. [BERGERON] Yes.

18 Q. In response to this IR the company  
19 described its plans for managing solid waste  
20 associated with the project. Does the company  
21 intend to develop a recycling plan for the project?

22 A. [O'MALLEY] Typically what we would do, any  
23 recyclable materials we would require a contractor  
24 to send it to the appropriate recycling facility.

1 For this project, and I'm thinking of a substation,  
2 besides asphalt, there's really no recyclable  
3 materials.

4 Q. Thank you. Turning to EFSB-S-9: In  
5 response to Part B the company stated that three  
6 concrete containment sumps under the East Eagle  
7 Street substation transformers would have a combined  
8 capacity of 17,000 gallons, 10,000 gallons of which  
9 would be to accommodate mineral-oil dielectric  
10 fluid, or MODF. Could you please explain to me why  
11 the company proposes three linked containment sumps  
12 rather than an independent containment system for  
13 each of the transformers?

14 A. [ZICK0] It reduces the depth that each  
15 containment needs to be, which translates to less  
16 soil hauled off-site and less of a construction  
17 impact.

18 Q. Given the amount of MODF contained within  
19 each of the transformers, what would happen if there  
20 was a simultaneous leak from two or more of the  
21 transformers at a single time?

22 A. [ZICK0] Well, the -- in the IEEE standards  
23 for oil containment, it's not part of the design  
24 basis. But the simple answer to your question is

1 that if there were 20,000 gallons and only 10,000  
2 gallons of containment, they would overtop.

3 Q. Has the company ever experienced an  
4 equipment failure of this type, where multiple  
5 transformers in the substation had a leak at a  
6 single time?

7 A. [ZICKO] No.

8 Q. And the IEEE standard you discussed doesn't  
9 envision such a circumstance, either?

10 A. [ZICKO] No, it does not.

11 BY MS. SHAPIRO:

12 Q. So the IEEE standards only require -- what  
13 exactly do they require?

14 A. [ZICKO] It's a guideline, and it talks  
15 about different methods for fluid containment at  
16 substations. And nowhere in there does it mention  
17 the possibility of a breach of, say, more than one  
18 at a time.

19 BY MS. DE BOER:

20 Q. And is it IEEE that is the guiding document  
21 for containment under substation transformers, or is  
22 there a specific standard by an entity like Mass.  
23 DEP that would govern that as well?

24 A. [ZICKO] It clearly states in that IEEE

1 guideline that -- and I'm paraphrasing. But it  
2 discusses the engineering aspects of providing the  
3 containment. It doesn't -- it says quite clearly  
4 that it is not a substitute for a local regulatory  
5 document.

6 Q. But as far as your testimony goes, a single  
7 combined containment system would meet all the  
8 necessary regulatory requirements for containment in  
9 association with the transformers?

10 A. [ZICKO] To the best of my knowledge, yes.

11 Q. Please refer to EFSB-S-10.

12 A. [ZICKO] Yes.

13 Q. The company identified a number of MCP  
14 sites at the proposed East Eagle Street substation  
15 location, and stated that construction spoils  
16 generated as part of the project would be managed  
17 under a Mass. DEP release abatement measure, or RAM.  
18 Could you please describe the RAM and how this would  
19 be used to minimize the risk of exposure to  
20 construction workers and the surrounding area?

21 A. [BERGERON] As also stated in our response  
22 to S-10, the company has completed a series of soil  
23 borings and test pits on the substation site itself.  
24 As a result of that, it did identify exceedances in

1 lead in some of the soil samples. And so therefore,  
2 under the facility release abatement measure plan,  
3 there are standards for how that soil can be  
4 stockpiled and handled and where it needs to be  
5 disposed of and time periods it needs to be disposed  
6 of, which will all alleviate any long-term exposure  
7 to workers on site and/or from fugitive dust.

8 Q. When you say that the site will be managed  
9 under a RAM, the activities for dealing with lead  
10 contamination, that's what you're referring to?

11 A. [BERGERON] That's correct. There are  
12 standards underneath the utility release abatement  
13 measures that outline how that soil has to be  
14 handled, how much can be stockpiled, that it has to  
15 be covered with a certain material. So there are  
16 all standards in the protocol that identify how that  
17 soil has to be managed during construction.

18 Q. How will the company ensure construction  
19 activities are performed in compliance with the RAM?

20 A. [BERGERON] Typically the company employs a  
21 licensed site professional to do inspections and  
22 also to be responsible for the soil management plan  
23 that will be developed for the project. And the  
24 licensed site professional is responsible for making

1 sure that the contractor is complying with any of  
2 the conditions in the utility release abatement  
3 plan.

4 Q. Has the company had prior experience  
5 constructing substations under a RAM?

6 A. [O'MALLEY] Yes.

7 A. [BERGERON] Yes. And an example is, I  
8 believe, Station 99 in South Boston is one that  
9 currently has a similar situation.

10 Q. Thank you.

11 MS. SEDOR: It looks like that completes  
12 the Bench's questioning on environmental impacts.

13 Ms. Keuthen, do you have any redirect  
14 for the witnesses?

15 MS. KEUTHEN: None at this time.

16 MS. SEDOR: I think, then, what we're  
17 going to do is not have Channel Fish start now,  
18 unless you have a strong preference to start at this  
19 time.

20 MR. THAYER: No, Channel Fish believes  
21 that it makes more sense to not break it up over  
22 multiple days if that can be avoided.

23 MS. SEDOR: Why don't we go off the  
24 record and talk about scheduling.

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(Discussion off the record.)

MS. SEDOR: Thank you again to the witnesses, Mr. Bergeron, Mr. Zicko, and Mr. O'Malley. And we are adjourned.

(4:45 p.m.)

REPORTER'S CERTIFICATE

I, Alan H. Brock, the officer before whom the foregoing proceedings were taken, do certify that this transcript is a true record of the proceedings on February 11, 2016.

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Alan H. Brock, RDR, CRR

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CONFIDENTIAL PORTIONS - None