

In The Matter Of:

*Application of NTE Connecticut, LLC for a
Certificate of Environmental Compatibility*

January 26, 2017

BCT Reporting LLC

PO Box 1774

Bristol, CT 06010

860.302.1876

1 STATE OF CONNECTICUT
2 CONNECTICUT SITING COUNCIL

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4 Docket No. 470

5 Application of NTE Connecticut, LLC for a
6 Certificate of Environmental Compatibility and
7 Public Need for the Construction, Maintenance and
8 Operation of a 550-megawatt Dual-Fuel Combined
9 Cycle Electric Generating Facility and Associated
10 Electrical Interconnection Switchyard Located at
11 180 and 189 Lake Road, Killingly, Connecticut

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14 Continued Public Hearing held at the
15 Connecticut Siting Council, Ten Franklin Square,
16 New Britain, Connecticut, Thursday, January 26,
17 2017, beginning at 11:01 a.m.

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21 H e l d B e f o r e :

22 ROBERT STEIN, Chairman
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1 A p p e a r a n c e s :

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 Council Members:

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 SENATOR JAMES J. MURPHY, JR.,

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 Vice Chairman

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 ROBERT HANNON

7

 MICHAEL HARDER

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 LARRY P. LEVESQUE, ESQ.

9

 DANIEL P. LYNCH, JR.

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 ROBERT SILVESTRI

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 Council Staff:

12

 MELANIE BACHMAN, ESQ.,

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 Executive Director and

14

 Staff Attorney

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 MICHAEL PERRONE,

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 Siting Analyst

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 For NTE Connecticut, LLC:

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 ROBINSON & COLE LLP

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 280 Trumbull Street

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 Hartford, Connecticut 06103

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 BY: KENNETH C. BALDWIN, ESQ.

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 JAMES P. RAY, ESQ.

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1 A p p e a r a n c e s : (Cont'd.)

2

3 For Not Another Power Plant and the Wyndham
4 Land Trust:

5 REID AND RIEGE, P.C.

6 One Financial Center

7 Hartford, Connecticut 06103

8 BY: JOHN BASHAW, ESQ.

9

10 Town of Killingly:

11 SEAN HENDRICKS, Town Manager

12 Town of Killingly

13 172 Main Street

14 Killingly, Connecticut 06239

15 TRC Solutions:

16 CARL N. STOPPER

17

18 For the Sierra Club, Connecticut Chapter:

19 SIERRA CLUB

20 50 F Street N.W.

21 Washington, D.C. 20001

22 BY: JOSHUA BERMAN, ESQ.

23

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1 A p p e a r a n c e s : (Cont'd.)

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3 For the Connecticut Fund for the Environment:

4 CONNECTICUT FUND FOR THE ENVIRONMENT

5 900 Chapel Street

6 Upper Mezzanine

7 New Haven, Connecticut 06510

8 BY: JOHN LOONEY, ESQ.

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1 THE CHAIRMAN: Good morning, ladies and
2 gentlemen. I'd like to call to order this meeting
3 of the Connecticut Siting Council, today,
4 Thursday, January 26, 2017 at approximately 11
5 a.m. My name is Robin Stein, and I'm chairman of
6 the Siting Council.

7 This evidentiary hearing is a
8 continuation of hearings held on October 20th of
9 last year, November 3rd of last year, November
10 15th of last year, December 15th, also 2016, and
11 January 10th of 2017. It is held pursuant to the
12 provisions of Title 16 of the Connecticut General
13 Statutes and of the Uniform Administrative
14 Procedure Act upon an application from NTE
15 Connecticut, LLC for a Certificate of
16 Environmental Compatibility and Public Need for
17 the construction, maintenance, and operation of a
18 550-megawatt dual-fuel combined cycle electric
19 generating facility and associated electrical
20 interconnection switchyard at 180 and 189 Lake
21 Road in Killingly, Connecticut. This application
22 was received by the Council on August 17, 2016.

23 A verbatim transcript will be made of
24 this hearing and deposited with the town clerk's
25 offices in Killingly, Pomfret, and Putnam Town

1 Halls for the convenience of the public.

2 We will proceed in accordance with the
3 prepared agenda, copies of which are available
4 somewhere in the back.

5 I wish to call your attention to those
6 items shown on the hearing program marked as Roman
7 Numeral I-D, Items 1 through 109.

8 Does the applicant, or any party or
9 intervenor, have an objection to the revision from
10 draft to final report for Item 27 that the Council
11 has administratively noticed?

12 MR. BALDWIN: No.

13 THE CHAIRMAN: Hearing and seeing none,
14 the Council hereby administratively notices this
15 final report.

16 We'll start with the appearance of the
17 Town of Killingly with Mr. Hendricks, the town
18 manager. And we'll begin with cross-examination
19 by the Council. We'll start there. Mike.

20 MR. PERRONE: Thank you, Mr. Chairman.

21 THE CHAIRMAN: I think we have to swear
22 you in, sir. We have to swear you in and then
23 also have your witness verify your exhibits. So
24 please rise.

25 S E A N H E N D R I C K S,

1 C A R L S T O P P E R ,

2 called as witnesses, being first duly sworn
3 by Ms. Bachman, were examined and testified
4 on their oaths as follows:

5 MS. BACHMAN: Thank you.

6 THE CHAIRMAN: Mr. Hendricks and
7 Mr. Stopper, you have offered the exhibits listed
8 under the hearing program as Roman numeral IV-B-1
9 through 6 for identification purposes.

10 Is there any objection to marking these
11 exhibits for identification purposes at this time?

12 (No response.)

13 THE CHAIRMAN: Mr. Hendricks and
14 Mr. Stopper, did you prepare, or assist in the
15 preparation, of Exhibits 1 through 6?

16 THE WITNESS (Hendricks): I did.

17 THE WITNESS (Stopper): Yes, I did.

18 THE CHAIRMAN: Do you have any
19 additions, clarifications, deletions, or
20 modifications to these documents?

21 THE WITNESS (Hendricks): No, sir.

22 THE WITNESS (Stopper): No.

23 THE CHAIRMAN: Are these exhibits true
24 and accurate to the best of your knowledge?

25 THE WITNESS (Hendricks): Yes, sir.

1 THE WITNESS (Stopper): Yes, they are.

2 THE CHAIRMAN: Do you offer these
3 exhibits as your testimony here today?

4 THE WITNESS (Hendricks): I do.

5 THE WITNESS (Stopper): Yes.

6 THE CHAIRMAN: And do you offer these
7 as full exhibits?

8 THE WITNESS (Hendricks): Yes, sir.

9 THE WITNESS (Stopper): Yes.

10 THE CHAIRMAN: Is there any objection
11 to these items being admitted as full exhibits?

12 (No response.)

13 THE CHAIRMAN: Hearing and seeing none,
14 these items shall be admitted as full exhibits in
15 the proceedings.

16 (Town of Killingly Exhibits IV-B-1
17 through IV-B-6: Received in evidence - described
18 in index.)

19 THE CHAIRMAN: And are you ready for
20 cross-examination?

21 THE WITNESS (Hendricks): Yes, sir.

22 THE WITNESS (Stopper): Yes.

23 THE CHAIRMAN: Thank you.

24 Mr. Perrone.

25 MR. PERRONE: Thank you.

1 CROSS-EXAMINATION

2 MR. PERRONE: Could you update us on
3 the status of any Community Environmental Benefit
4 Agreement between the town and NTE?

5 THE WITNESS (Hendricks): Yes, sir.
6 The, I guess, discussions between the town and the
7 applicant have been ongoing. We're sort of what
8 we hope -- we are where we hope to be in sort of
9 the final stages of that. We're in the process of
10 wrapping up an agreement that I will be bringing
11 to the town and town council in Killingly on
12 Tuesday night, the 31st. So I'm going to be
13 recommending that the Council approve or adopt
14 that agreement. But obviously how that goes on
15 Tuesday night remains to be seen.

16 MR. PERRONE: Now I have a few
17 noise-related questions. I understand that L90 is
18 required for measuring background sound, according
19 to DEEP and town standards. Is L equivalent,
20 versus L90, only applicable to background sound
21 levels, or is that distinction important also for
22 modeled or calculated sound levels?

23 THE WITNESS (Stopper): It's our
24 opinion that the background levels at L90 can be
25 used to assess whether there is a potential impact

1 depending on the level of increase in noise at the
2 receptor. And that if that increase is greater
3 than 3 decibels, that there is a potential impact,
4 given the measured readings from the background,
5 as compared to the projected levels.

6 MR. PERRONE: On page 30 of NTE's
7 appeal of in response to the Municipal Regulate
8 and Restrict, which I'll call the AMRR, NTE notes
9 that the L90 values in Section 7.4 of its
10 application are below 51 dBA. And with that,
11 would you agree that high background noise areas
12 would not apply?

13 THE WITNESS (Stopper): Could you
14 repeat what page you're on?

15 MR. PERRONE: Sure. Page 30 of NTE's
16 Municipal Regulate and Restrict. In the middle of
17 the page, actually a little bit higher, it talks
18 about how the L90 comes out lower than the
19 requirement to establish high background noise. I
20 was wondering if you agreed with that.

21 THE WITNESS (Stopper): Well, the
22 Connecticut noise standards and the -- it's not
23 required under the Connecticut noise standards,
24 but under the Killingly noise ordinance, in order
25 to determine the potential noise impact of the

1 project, the background L90 is used to determine
2 the potential impact, in other words, how much
3 higher will the project sound levels be than the
4 existing levels or ambient levels. And it's been
5 TRC's opinion that while it is not a requirement,
6 per se, that it should be evaluated in order to
7 determine if there's an impact.

8 MR. PERRONE: So you're thinking more
9 in terms of a possible incremental impact?

10 THE WITNESS (Stopper): Correct.

11 MR. PERRONE: Thank you. That's all I
12 have for the town.

13 THE CHAIRMAN: Are there any questions
14 by the Council members? Senator Murphy?

15 SENATOR MURPHY: Just one quick
16 question to the town manager. You indicated on
17 this environmental agreement that you were where
18 you hoped to be at this point, and you're
19 recommending it to the council this coming week?

20 THE WITNESS (Hendricks): Yes, sir.

21 SENATOR MURPHY: And I take it that
22 with the agreement that's being sent to the town
23 council, you as the city manager and chief
24 executive officer, you are satisfied with this
25 arrangement with the applicant here today, should

1 they are approved?

2 THE WITNESS (Hendricks): I am. Again,
3 we're kind of getting down -- one of the things I
4 think that remains to be seen in this particular
5 agreement that's different than other CEBAs that
6 we've seen in other projects is that the CEBAs
7 tend to be one-sided in terms of, you know, these
8 are the accommodations, or this is the dollar
9 value, or this is what the applicant or the
10 project is going to be giving, quote/unquote
11 giving to the town. One of the things that I'm
12 trying to accomplish with any CEBA that may --
13 with this project, should it land in Killingly, is
14 some obligation on the part of the town to spend,
15 in particular, some of the financial, you know,
16 assets that would be coming to the town, in
17 particular, areas of environmental concern, as
18 opposed to kind of just landing in a, you know, a
19 big sum of money that the town can then turn
20 around --

21 SENATOR MURPHY: Ends up in a big pot.

22 THE WITNESS (Hendricks): Exactly,
23 which, don't get me wrong, towns like money.

24 SENATOR MURPHY: So what you're telling
25 me is you'd like to earmark a little of this for

1 certain things?

2 THE WITNESS (Hendricks): That's
3 correct. Obviously, in the future we would have
4 the ability to use any of those funds. But what
5 I'm trying to do is take a certain part of them
6 and make those part of the CEBA, as opposed to
7 doing it all after the fact.

8 SENATOR MURPHY: Okay. But essentially
9 as far as the total of the funds, it's kind of an
10 agreement as to --

11 THE WITNESS (Hendricks): I believe
12 it's fair. Yes, sir.

13 SENATOR MURPHY: I have nothing else,
14 Mr. Chairman.

15 THE CHAIRMAN: Mr. Silvestri.

16 MR. SILVESTRI: Thank you,
17 Mr. Chairman.

18 With reference to the noise ordinance
19 for Killingly, specifically Section 12.5-126,
20 which is enforcement, and dash 127, which is
21 violations and penalties, within, say, the past
22 five years, have there been any instances in which
23 the town investigated alleged noise violations?

24 THE WITNESS (Hendricks): I can only
25 speak for the last three years that I've been in

1 town. I've had, in terms of investigations, only
2 one, and it actually happened to be a municipal
3 entity. One of our fire companies has a horn that
4 sort of goes out and let's people know that they
5 have to show up. And its placement is not
6 advantageous to certain residences when it
7 actually happens. So we worked with the fire
8 company to redeploy that. But other than that,
9 especially in terms of, you know, in the area of
10 the industrial park and the area of the town that
11 this project would be in, there have been no
12 official complaints or investigations that I'm
13 aware of.

14 MR. SILVESTRI: Let me ask one
15 follow-up question regarding Section 12.5-128,
16 which is the variance section. Again, going back
17 in the three years that you've been town manager,
18 has anybody applied for a variance?

19 THE WITNESS (Hendricks): No, sir.

20 MR. SILVESTRI: That's all I have,
21 Mr. Chairman.

22 THE CHAIRMAN: Thank you.

23 Mr. Levesque?

24 MR. LEVESQUE: No further questions of
25 the town.

1 THE CHAIRMAN: Mr. Hannon?

2 MR. HANNON: Thank you, Mr. Chair. I
3 do have a couple.

4 One of the issues that came up early on
5 in this process was the water levels at Alexander
6 Lake. I think there have been studies as how this
7 particular project would, or would not, have any
8 impact on Alexander Lake. And I'm just wondering
9 what your opinion is on the documentation that's
10 been submitted to this point in time.

11 THE WITNESS (Stopper): TRC's opinion
12 has not focused on the water levels at Alexander
13 Lake. I don't believe that there is any activity
14 associated with the project where there's going to
15 be a withdrawal of groundwater that may
16 potentially impact the levels in Alexander Lake.
17 I'm not aware of any proposal by the applicant to
18 do that. So the site activities that they're
19 proposing, I'm not aware of anything that would
20 have a direct impact on those water levels.

21 MR. HANNON: Following up on that then.
22 So with some of the scenarios that had been put
23 forth as to connecting it with other water systems
24 so that there's more of a community-wide basis,
25 and you're saying that if that is the case and it

1 goes that way, those interconnections are, in
2 fact, approved, then that really should not have
3 any impact on Alexander Lake?

4 THE WITNESS (Stopper): My
5 understanding, having read the documentation on
6 the water supply issue and having communication
7 with the Connecticut Water Company, is that their
8 current plan for supply for Killingly, as well as
9 the surrounding communities that they serve, that
10 they have adequate supply to meet the needs for
11 this project, as well as the other future needs in
12 their planning period. I'm not aware that they've
13 identified an issue with any withdrawals that
14 would have an impact directly on Lake Alexander.

15 MR. HANNON: Thank you. One other
16 question. This ties in with the environmental
17 justice. Has the town administration had the
18 meeting with local residents to kind of come up
19 with some of the ideas of if this project went
20 forward, what type of issues should be raised, and
21 the benefit agreement? Is that sort of what
22 you're basing some of your positions on?

23 THE WITNESS (Hendricks): Yes, and yes.
24 Yes, we did. I cannot remember the date. I'm
25 thinking it must have been just before

1 Thanksgiving when I had that meeting. But yes, it
2 was a productive meeting. I think probably 30, 35
3 residents showed up. We sat and talked for a
4 couple of hours. I have quite a long list of
5 submissions of ideas from the community.

6 Obviously, not all of them are things that we're
7 going to be able to work into the -- we'd be
8 either able to work into the CEBA, perhaps things
9 that we may be able to implement, you know, moving
10 on down the line. But I hope to be able to
11 include some of those in that list of obligations
12 on the part of the town.

13 And I will say just in reference to
14 Alexander Lake, although, to echo what Mr. Stopper
15 said, that Connecticut Water sort of represented
16 that any water use wasn't going to have any direct
17 effect on, you know, Lake Alexander. We are
18 worried about recharging the local aquifer and
19 that kind of thing. And so one of the points in
20 the CEBA is going to be some sort of funds that
21 are going to be set aside for water level testing
22 at that lake.

23 MR. HANNON: And then following up on
24 that, knowing some of the agreements that had been
25 approved in the past, is anything being addressed

1 as it relates to asthma?

2 THE WITNESS (Hendricks): Well, we have
3 a hospital very close by in the next town in
4 Putnam. I have made a couple of phone calls to a
5 couple of folks there. So I sort of have a
6 two-pronged approach. I'm trying to find a way to
7 help fund any sort of studies as far as, you know,
8 the seemingly high level of asthma that exists in
9 Wyndham County and in our area. One of the other
10 things that I'm also trying to do with the CEBA is
11 use the CEBA as a funding source for nonreimbursed
12 medical expenses that may be associated -- that
13 folks may have that may be associated with asthma
14 or allergic issues or whatever.

15 So to that end, the plan would be to
16 work closely with the Northeast District
17 Department of Health and with the local hospital
18 in order to make sure that those funds went to
19 folks that would need them. And it would be
20 administered as much as possible through my
21 office.

22 MR. HANNON: The reason I'm asking is
23 I'm trying to remember. I think it might have
24 been with a peaking plant that was proposed in
25 Waterbury where there were issues about asthma

1 raised. And what ended up happening is there were
2 funds actually put into an account that was
3 managed by a nonprofit that went to actually going
4 in and helping to clean the schools. So I don't
5 know if that's anything that's been discussed or
6 not, but that's something that was done quite a
7 while ago.

8 THE WITNESS (Hendricks): I hadn't
9 heard of that. So certainly, as I said, we're
10 open to ideas. The difficult part now is I'm just
11 dealing -- you know, I'm not going to be able to
12 program all of this, all these funds out for the
13 next 20 years, but I think, at least if we come
14 out on the other end of this, the town is going to
15 have some obligation to study the conditions and
16 to, where possible, help those folks that may be
17 having sort of those respiratory issues. So
18 whether or not we can do more moving forward, that
19 just comes down to, you know, the funds will be in
20 place.

21 Again, my overall goal with the CEBA --
22 and in the end it all comes down -- it largely
23 comes down to the money. I think everybody wants
24 to see that money used as much as possible
25 straight faced environmental purposes, as opposed

1 to hiring people or paving roads or whatever.

2 Right. So --

3 MR. HANNON: And the only reason I'm
4 bringing up the asthma issue is I know that it's
5 been mentioned at a number of meetings. So that's
6 it. I have no further questions.

7 THE WITNESS (Hendricks): Thank you.

8 THE CHAIRMAN: Mr. Harder.

9 MR. HARDER: Just one question. A more
10 general version, I guess, of my Silvestri's
11 question. I was interested more in -- or
12 especially in noise but also more generally. Are
13 you aware of any complaints that have been made of
14 an environmental nature regarding any other
15 issues, not just noise, but water, air, any health
16 issues that have been directed to the town? Or,
17 also issues or incidents that might have occurred,
18 that might have been directed toward DEP regarding
19 any of the existing facilities or sites nearby,
20 especially along Lake Road?

21 THE WITNESS (Hendricks): Not
22 officially. Much of my knowledge of any issues
23 that are out there is anecdotal. I run across
24 people outside, you know, when I'm in town. I'm
25 certain that Mr. Bashaw's folks could probably

1 testify more directly to that. But this plant
2 would be going in an area that is already
3 industrially developed. So there are -- one of
4 the largest businesses there is Frito-Lay. So
5 there's a lot of noise associated with Frito-Lay,
6 there's odors associated with Frito-Lay, there's
7 light.

8 So outside of what I would characterize
9 as fairly normal citizen complaints, specifically,
10 especially regarding noise that you would
11 associate with a residential area that's close by
12 an industrial area, we get those. But I would say
13 nothing official. And sort of to go along with
14 that, there's been nothing that's risen to the
15 level that would have required an investigation,
16 or there haven't been any necessarily official
17 allegations of violations of noise ordinances or
18 anything.

19 MR. HARDER: Thank you. That's all.

20 Thank you, Mr. Chairman.

21 THE CHAIRMAN: Thank you. We'll now
22 continue cross-examination starting with Attorney
23 Baldwin or whichever of the attorneys representing
24 NTE.

25 MR. BALDWIN: Thank you, Mr. Chairman.

1 Just one question for Mr. Hendricks.

2 Expanding on your answer from Mr.
3 Perrone regarding the Community Environmental
4 Benefits Agreement, could you just touch on some
5 of the elements, or documents, that are included
6 in that Community Environmental Benefits Agreement
7 that has been negotiated?

8 THE WITNESS (Hendricks):
9 Specifically -- can you be more specific? I mean,
10 documents?

11 MR. BALDWIN: Components.

12 THE WITNESS (Hendricks): I'm not
13 trying to be difficult.

14 MR. BALDWIN: What types of issues that
15 you've negotiated with NTE have become a part of
16 this Community Environmental Benefits Agreement?

17 THE WITNESS (Hendricks): Well, outside
18 of the financial component, you have like a cash
19 payment. I think one of the more important
20 components is at least the reference to a
21 decommissioning plan. One of the concerns of the
22 town is what's going to happen at the end of the
23 useful life of this plant.

24 I think one of the other, I think,
25 things that's happening in the town that's not

1 necessarily directly connected with the CEBA, but
2 we're concerned also about the effect on the
3 residential property values near the plant. So
4 the applicant has supplied the town with a letter,
5 which I will be supplying to the town council, in
6 which it's going to commit to a property value
7 guarantee with certain residences within a certain
8 distance from the proposed plant. So this is
9 something that the town advocated for and we're
10 happy with.

11 In terms of, you know, the things that
12 I'm particularly adding to the CEBA, these are
13 things that I mentioned here. I'm hoping to
14 establish a couple of educational scholarships for
15 Killingly students who are going to go on and
16 study environmental sciences in college.

17 I'm hoping to see some funds that will
18 help us purchase and plant trees on an annual
19 basis moving forward. The town has in the last
20 four or five years, we've seen sort of a growth in
21 community gardens and pollinator gardens, and that
22 kind of thing, and so we're hoping to be able to
23 help give those types of funds, you know, a boost.
24 And obviously those are directly related to
25 environmental concerns.

1 So was there anything specific that
2 I -- I don't believe there's anything else that I
3 missed.

4 MR. BALDWIN: That's helpful. Thank
5 you.

6 Nothing further, Mr. Chairman. Thank
7 you.

8 THE CHAIRMAN: Now cross-examination by
9 the grouped parties. I don't know whether it's
10 either/or or both, Attorney Bashaw and Berman.

11 MR. BASHAW: Just a couple of very
12 quick questions.

13 Regarding the last question, one of the
14 last questions you received from Mr. Harder
15 regarding complaints of an environmental nature
16 that have been directed to the town regarding
17 existing facilities on Lake Road, I think you
18 testified that you weren't aware of any. Do you
19 recall that?

20 THE WITNESS (Hendricks): Yes, sir.

21 MR. BASHAW: Do you keep a file when
22 somebody calls you with a complaint of an
23 environmental nature, for example, that apply to
24 Lake Road?

25 THE WITNESS (Hendricks): Well, I don't

1 think my office would keep a file. That's the
2 sort of thing, if it came into my office, that
3 would immediately go down to -- you know, I would
4 refer that down to the planning and development
5 department. Those folks would have a log of that.

6 MR. BASHAW: So are you saying that
7 there may be complaints of an environmental nature
8 in that area that just haven't gotten to your
9 office that may be in another office of the town?

10 THE WITNESS (Hendricks): Well, I don't
11 think I said that there weren't any complaints. I
12 said that -- there haven't been a lot of my
13 complaints to my office, I can tell you that, but
14 I'm not aware of any complaints that have made it
15 to any official sort of investigatory level. And
16 even though I don't talk to everybody that calls,
17 and I don't personally refer all the calls that
18 come into my office, I do have an idea of what's
19 on the agendas of, say, the planning and zoning,
20 or zoning board of appeals, or the conservation
21 commission, that kind of thing.

22 MR. BASHAW: I may be incorrect, but I
23 did not interpret the question as asking whether
24 there have been complaints that have risen to the
25 level of requiring an investigation. I thought

1 the question was just a little bit broader than
2 that, just asking if you had received any
3 complaints.

4 THE WITNESS (Hendricks): I wouldn't
5 call them complaints. I think I mentioned a lot
6 of the comments that I hear are anecdotal, just
7 when I'm out in the town. I've heard folks that
8 are unhappy with the level of noise at times at
9 the Lake Road Generating plant. I've heard that
10 folks are unhappy at times with the odors and the
11 noise at Frito-Lay. And I think maybe the only
12 other business there might be Automatic Rolls, and
13 that's not even a big deal. I don't think that's
14 a business that we've heard about a lot. But I
15 would say Frito-Lay is the one I hear about the
16 most, and then secondarily it has been Lake Road.

17 MR. BASHAW: So one way or another you
18 have received complaints of some kind regarding
19 noise and/or odors at some of the facilities along
20 the --

21 THE WITNESS (Hendricks): Oh, sure.

22 MR. BASHAW: And with respect to
23 complaints that might have been filed with the
24 Connecticut DEP, you would not be aware, would
25 you, of complaints that individuals might have

1 filed with the DEP regarding Frito-Lay or other
2 facilities along Lake Road?

3 THE WITNESS (Hendricks): Not unless
4 the DEP notified me directly. And so I'm not
5 aware of any of those. It's quite possible that
6 if DEP had received any, they could have gone
7 directly to the agency, and the town would have
8 handled that. But, again, in the three, almost
9 three years that I've been in town, I'm not aware
10 of any, no.

11 MR. BASHAW: Thank you. I don't have
12 any other questions.

13 THE CHAIRMAN: Thank you.

14 Connecticut Fund for the Environment,
15 Attorney Looney?

16 MR. LOONEY: We have no questions.

17 THE CHAIRMAN: Thank you.

18 Cross-examination is complete.

19 THE WITNESS (Hendricks): Thank you
20 Mr. Chairman.

21 (Witnesses excused.)

22 THE CHAIRMAN: We'll now proceed,
23 hopefully, with the final cross-examination of the
24 applicant. The applicants, I believe you've all
25 been sworn in, so we don't have to go through

1 that.

2 So we'll start with Mr. Perrone.

3 MR. PERRONE: Thank you, Mr. Chairman.

4 F R E D E R I C K S E L L A R S ,

5 L Y N N G R E S O C K ,

6 M A R K M I R A B I T O ,

7 T I M E V E S ,

8 M I C H A E L B R A D L E Y ,

9 E T H A N P A T E R N O ,

10 C H R I S R E G A ,

11 N O R M T H I B E A U L T ,

12 G E O R G E L O G A N ,

13 having been previously duly sworn, testified

14 further on their oaths as follows:

15 CROSS-EXAMINATION

16 MR. PERRONE: On page 6 of volume 1 of
17 the application on the fourth bullet point it
18 mentions a sign posted on the property identifying
19 it as a proposed site of the KEC. Is that sign
20 separate and different from the four by eight sign
21 that was put up as a Council requirement?

22 THE WITNESS (Eves): You're talking
23 about the Council requirement, the notice for the
24 various meetings?

25 MR. PERRONE: I'm referring to a

1 physical sign. On page 6 of volume 1, it talks
2 about a sign posted on the property identifying it
3 as a proposed site of KEC. I was wondering if
4 that was a different sign from the four by eight
5 sign that was put up according to Council
6 requirements.

7 THE WITNESS (Mirabito): Yes, it's a
8 different sign.

9 MR. PERRONE: Do you know roughly when
10 that first sign was put up?

11 THE WITNESS (Eves): The first sign,
12 the sign that's still standing there now, the one
13 that we're referring to here on page 6?

14 MR. PERRONE: Yes.

15 THE WITNESS (Eves): Yes, that was put
16 up in Octoberish. Let us check on that date.

17 MR. PERRONE: Sure. And regarding the
18 public comment hearing, there was discussion about
19 a potential -- there's a request for a project
20 labor agreement if the project was approved. Has
21 NTE given any thought to a project labor
22 agreement?

23 THE WITNESS (Eves): We have had talks
24 with the unions. This will be a union project.
25 We are in the process of selecting an EPC

1 contractor right now. And our contractor will
2 work with the unions to put an agreement in place
3 under which they'll complete this project.

4 MR. PERRONE: Also, as an update to
5 what we currently have regarding the open house
6 sessions, at the public comment hearing it was
7 mentioned that NTE held an additional public
8 information session on October 19, 2016. Is that
9 correct?

10 THE WITNESS (Eves): That's correct.

11 MR. PERRONE: And where was that held?

12 THE WITNESS (Eves): In the Killingly
13 High School auditorium.

14 MR. PERRONE: And I understand that was
15 on the 19th, the night before the Council's public
16 hearing session. Is that also correct?

17 THE WITNESS (Eves): That's correct.

18 MR. PERRONE: And since those two
19 sessions, has NTE continued to receive questions
20 from the public and address those questions?

21 THE WITNESS (Eves): We have not
22 received any additional questions from the public.
23 I would say before the meeting on the 19th,
24 actually, through Ms. Pestana, she reached out and
25 collected hundreds of pages of questions which we

1 addressed on the evening of the 19th.

2 MR. PERRONE: And I had asked the town
3 about the status of the Community Environmental
4 Benefits Agreement. Would NTE have anything to
5 add to that as far as the status?

6 THE WITNESS (Eves): No, we've been
7 working very closely with the town and are in full
8 support of what Mr. Hendricks said.

9 MR. PERRONE: Is the purpose of the
10 proposed project to develop and operate an
11 independent power production facility in the
12 wholesale electric market operated by ISO?

13 THE WITNESS (Bradley): Yes, that's
14 correct.

15 MR. PERRONE: And this is just a
16 clarification regarding NTE's experience with
17 other plants. How many megawatts is the combined
18 cycle facility for Kings Mountain Energy Center in
19 North Carolina?

20 THE WITNESS (Eves): Nominally 450
21 megawatts.

22 MR. PERRONE: And the Middletown Energy
23 Center in Ohio?

24 THE WITNESS (Eves): Nominally 450
25 megawatts.

1 MR. PERRONE: Are those both combined
2 cycle?

3 THE WITNESS (Eves): Yes.

4 MR. PERRONE: I know there's been some
5 discussion about Connecticut being an importer
6 versus exporter of electricity. In general, does
7 NTE know where the power from the KEC facility
8 would flow to?

9 THE WITNESS (Bradley): The physical
10 power from the KEC facility will be delivered to
11 ISO New England at the facility busbar, and it
12 will just follow the normal physical flow of power
13 across the ISO New England system at that time.

14 MR. PERRONE: So it would flow to where
15 it is needed within ISO's region?

16 THE WITNESS (Bradley): Yes, that's
17 correct.

18 MR. PERRONE: Going back to the public
19 comment hearing, there was a question about how,
20 if the adjacent Lake Road Plant operates
21 intermittently, why would a base load plant like
22 KEC be needed in the same vicinity?

23 THE WITNESS (Bradley): The KEC plant
24 has a lower heat rate than the Lake Road facility,
25 and therefore it would have a different dispatch

1 profile and would be expected to operate more than
2 Lake Road.

3 MR. PERRONE: Also following up on a
4 question from the public comment session, did NTE
5 consider a carbon capture and sequestration
6 system?

7 THE WITNESS (Sellars): I can answer
8 that. As part of the best available control
9 technology analysis for our air permit
10 application, we were required to consider the
11 feasibility of such a system.

12 MR. PERRONE: Is that type of
13 technology generally more intended for higher
14 carbon emitting plants such as coal?

15 THE WITNESS (Sellars): Yes, it is, not
16 just from the higher emissions of coal, but from
17 the characteristics of the flue gas itself, that
18 technology would not work particularly well on a
19 combined cycle facility for a number of reasons.
20 On a coal-fired power plant you have bigger
21 exhaust flows, plus much more carbon dioxide, and
22 it would be technically more feasible on a
23 facility like that. Some pilot projects have been
24 advanced forward with coal-fired power plants, but
25 none have been advanced forward with a combined

1 cycle plant.

2 MR. PERRONE: At the last hearing
3 Mr. Fagan was asked about whether an interruptible
4 gas customer would be -- their service would be
5 curtailed before a firm gas customer. So I'd like
6 to ask NTE a similar question. Would all
7 interruptible customers have their service
8 curtailed before they would consider curtailing a
9 firm gas customer?

10 THE WITNESS (Bradley): I believe that
11 is the case on the pipeline, yes.

12 MR. PERRONE: And I know we've had
13 discussions about how firm gas has been
14 traditionally uncommon for many power plant
15 projects. However, is it uncommon for a natural
16 gas fired power plant to have both firm gas and
17 ULSD backup?

18 THE WITNESS (Bradley): That is
19 uncommon, yes.

20 MR. PERRONE: And would that be a
21 reliability benefit since it's not commonly done
22 to have just firm gas and ULSD?

23 THE WITNESS (Bradley): Yes, that's
24 correct.

25 MR. PERRONE: As far as the delivery of

1 natural gas, had NTE considered tapping off the
2 natural gas line that feeds the Lake Road Power
3 plant or expanding that line?

4 THE WITNESS (Bradley): That was one of
5 the considerations that was looked at as part of
6 the natural gas process, yes.

7 MR. PERRONE: And was that determined
8 not to be feasible?

9 THE WITNESS (Bradley): It was not the
10 most economical alternative.

11 MR. PERRONE: Was it perhaps related to
12 the distance?

13 THE WITNESS (Bradley): It was related
14 to the distance, and there were some operational
15 issues given that there was another generation
16 facility on that lateral, and the
17 Eversource/Yankee Gas lateral is much closer to
18 the facility.

19 MR. PERRONE: And page 39 of volume 1
20 also on the natural gas pipeline topic. So the
21 average operating pressure in the vicinity of KEC
22 ranges between 650 and 750 psi, thus requiring gas
23 compressors. Is that pressure range referring to
24 the Algonquin transmission line or the Eversource
25 lateral?

1 THE WITNESS (Bradley): That's
2 referring to the Algonquin transmission line.

3 MR. PERRONE: So even though on the
4 lower end you have 650 on the Algonquin line, you
5 would still need the gas compressors because would
6 you have some pressure drop across the Eversource
7 line?

8 THE WITNESS (Bradley): You could have
9 a pressure drop on the Algonquin line or on the
10 Eversource line, either one.

11 MR. PERRONE: So the gas compression
12 would cover both of those?

13 THE WITNESS (Bradley): Yes, that's
14 correct.

15 MR. PERRONE: And I understand in
16 response to Question 5 of the Council
17 interrogatories we had gotten the efficiency of
18 the plant using the higher heating value. Could
19 you briefly explain the difference between higher
20 heating values and lower heating values?

21 THE WITNESS (Rega): Many times
22 equipment manufacturers will use a lower heating
23 value number. It's generally about 11 percent,
24 kind of rule of thumb number, between a lower
25 heating value and a higher heating value for

1 natural gas. A higher heating value is really
2 what we get -- will bill based on. So fuel supply
3 will bill based on a higher heating value.
4 Sometimes equipment manufacturers use lower
5 heating value because it's more usable energy for
6 them, but it turns out to be sort of irrelevant
7 for power producers and billing purposes.

8 MR. PERRONE: Does it have something to
9 do with some of the heat getting trapped in the
10 steam combustion process?

11 THE WITNESS (Rega): That's right, the
12 water vapor. And it gets energy to sort of
13 vaporize and then recondense that water vapor that
14 turns out to be unusable energy for the gas
15 turbines.

16 MR. PERRONE: I know we have all the
17 megawatt outputs for the plant for ISO conditions
18 summer and winter. So the summer conditions, is
19 that about 90 degrees F, and winter about zero F?

20 THE WITNESS (Rega): I believe the
21 numbers we put in here -- I would have to go back
22 and look -- but summer should be 90 degrees F, and
23 then winter should be 20 degrees F, I believe.

24 MR. PERRONE: And I understand that for
25 natural gas operations cold start-up is about 35

1 minutes; hot start-up is about 30 minutes. How
2 does start-up under ULSD compare to that? Does it
3 take longer?

4 THE WITNESS (Rega): We have those
5 numbers somewhere. I don't have those at hand,
6 but they should be pretty similar numbers.

7 Fred, do you happen to have those in
8 the --

9 THE WITNESS (Sellars): I can look up
10 the specific numbers, but I believe that they are
11 almost identical.

12 MR. PERRONE: So they're comparable.

13 THE WITNESS (Sellars): Yes.

14 MR. PERRONE: Now I'm going to turn to
15 the appeal of Municipal Regulate and Restrict,
16 which I'll call the AMRR. I understand there are
17 some proposed changes to the site. However, the
18 distance of the closest residence, since that's
19 based on the center of the site, would that
20 materially change with AMRR?

21 THE WITNESS (Gresock): No, that would
22 not materially change.

23 MR. PERRONE: And would the number of
24 homes from the center of the site remain the same
25 also?

1 THE WITNESS (Gresock): That wouldn't
2 materially change either, yes.

3 MR. PERRONE: I have a couple noise
4 questions, which also will tie into this. But
5 first as a general noise question, could you
6 explain why your ambient noise sample locations do
7 not necessarily have to coincide with the property
8 boundaries?

9 THE WITNESS (Gresock): When we --
10 because the model generates results that can be
11 determined at any location along the property
12 boundaries, when we identify locations for ambient
13 measurements, we typically are looking for
14 locations that are a little offset from the
15 project itself, but in the various compass
16 directions around the site and generally trying to
17 focus on public ways in those vicinities.

18 MR. PERRONE: And just to cover all the
19 different types of sound, I understand in the AMRR
20 there's a mention that there's no discrete tones.
21 Would there be any projected infrasonic or
22 ultrasonic noise?

23 THE WITNESS (Gresock): No.

24 MR. PERRONE: And the conclusion page
25 of the original noise report, which is page 24,

1 would the conclusions of the noise report remain
2 the same even with the AMRR changes?

3 THE WITNESS (Gresock): Yes, the
4 conclusions the project complies with the required
5 standards is the same. And the addendum that was
6 submitted on October 27th reflects the updated
7 layout.

8 MR. PERRONE: I know at the last
9 hearing you had mentioned projected noise levels
10 are based on the equipment running at steady
11 state. My question is, are the noise levels
12 somewhat tied to the power output of the plant?
13 For example, are the noise levels higher when the
14 plant is at 550 megawatts versus 200, or is it
15 fairly level across the plant operation?

16 THE WITNESS (Gresock): There's
17 probably some variability, but for the most part
18 it's fairly level.

19 MR. PERRONE: But nevertheless it was
20 modeled for the worst case?

21 THE WITNESS (Gresock): It was modeled
22 for full-on, yes.

23 MR. PERRONE: Also back to the AMRR.
24 Did the HRSG stack location remain the same?

25 THE WITNESS (Gresock): It did, yes.

1 MR. PERRONE: So the existing and final
2 ground elevations would remain the same on the
3 stack?

4 THE WITNESS (Gresock): That's correct.

5 MR. PERRONE: And because the FAA
6 letter is based on the coordinates of the stack,
7 it would not change any FAA issues?

8 THE WITNESS (Gresock): It would not,
9 yes.

10 MR. PERRONE: And also, in general,
11 since your visibility analysis to a large extent
12 discusses the HRSG stack, would your visibility
13 analysis be essentially the same with the AMRR?

14 THE WITNESS (Gresock): Yes, it would
15 be very much the same. There were only very, very
16 minor shifts of some of the taller equipment. For
17 example, their cool condenser. And removing the
18 berm around the ULSD tank wouldn't be a material
19 visual change.

20 MR. PERRONE: Would it materially
21 affect the vernal pool analysis when you get out
22 to the critical terrestrial habitat, the pre and
23 post?

24 THE WITNESS (Gresock): No material
25 effect. Of course, that was redone as well. And

1 so some of the distances were increased, so that
2 presumably one would imagine that that is more
3 beneficial with the change.

4 MR. PERRONE: And lastly, the portion
5 of the access drive near the compressor building,
6 I know originally it was straight, and with the
7 AMRR it has a bit of a curve to it. So would your
8 total access road length increase somewhat?

9 THE WITNESS (Gresock): Yes, it would.

10 MR. PERRONE: A couple last
11 specifications to get. Obviously, we have the
12 height and elevation on the HRSG stack. The
13 diameter of the stack?

14 THE WITNESS (Gresock): That has not
15 changed.

16 MR. PERRONE: And that's how many feet?

17 THE WITNESS (Sellars): I'll look that
18 up. The diameter of the HRSG stack is 22 feet.

19 MR. PERRONE: And one last
20 specification. The height of the auxiliary boiler
21 stack?

22 THE WITNESS (Sellars): That would be
23 90 feet.

24 MR. PERRONE: Great. Moving more
25 towards air emissions topics. What is the status

1 of the Federal Clean Power Plan?

2 THE WITNESS (Sellars): I would say
3 highly uncertain at this point. Nothing official
4 has changed other than some signals from the
5 president that he is not particularly in favor of
6 that plan.

7 MR. PERRONE: Is the plan still
8 currently being challenged?

9 THE WITNESS (Sellars): Yes, it's still
10 under legal challenge.

11 MR. PERRONE: Okay. Could you also
12 give us the most up to date status of the KEC air
13 permit?

14 THE WITNESS (Gresock): We are
15 expecting that the tentative determination will be
16 available for public review sometime in the very
17 near future.

18 MR. PERRONE: And would that include
19 the status of DEEP's approval of the NOx emission
20 reduction credits?

21 THE WITNESS (Gresock): It would
22 specify the number of NOx emission reduction
23 credits that will be required to be obtained by
24 the project, yes.

25 MR. PERRONE: Could you tell us briefly

1 how the reduction credits work, for example, how
2 it would get perhaps another plant to lower its
3 emissions?

4 THE WITNESS (Sellars): Sure. To meet
5 the offset requirements, one has to obtain and
6 surrender emission reduction credits, and these
7 are created by a source that either shuts down or
8 controls its emissions beyond what is legally
9 required.

10 So to meet the requirement for an
11 emission reduction credit to be certified, it has
12 to meet essentially five tests. The reduction has
13 to be real, so it has to be a reduction from
14 actual emissions, not from a paper potential to
15 emit. So those emissions have to be quantified,
16 so it's quantifiable to the satisfaction of the
17 agency that approves the emission reduction
18 credit. So that's generally based on its last
19 couple of years of operation before the shutdown,
20 for example, of what the actual emissions were.

21 The emission reductions have to be
22 surplus, which means they have to be above and
23 beyond what would be required by any regulation
24 that was on the books at the time. For example,
25 if an existing facility had to comply with the new

1 reasonable available control technology limit and
2 it opted to shut down instead, it would have to
3 reduce from the emission reduction credit the
4 amount of reduction that would have otherwise been
5 required by that regulation.

6 The credit also has to be federally
7 enforceable, so it has to have resulted in someone
8 surrendering their permit or opting into a permit
9 restriction.

10 I think that's pretty much the gist.

11 THE CHAIRMAN: I have a couple of
12 follow-ups. Can that be anywhere, or does it have
13 to be within Connecticut?

14 THE WITNESS (Sellars): That's the
15 fifth one. Thank you, Mr. Chairman. Emission
16 reduction credit has to be in the same
17 nonattainment area, or a contiguous nonattainment
18 area, that contributes to nonattainment in the
19 location of the source. So the Department of
20 Energy and Environmental Protection would have to
21 determine that the donor source met those
22 geographic requirements.

23 THE CHAIRMAN: So that could be Ohio,
24 for example?

25 THE WITNESS (Sellars): No, it could

1 not be Ohio. That would not meet the test because
2 it wouldn't be a contiguous nonattainment area.
3 So it could be Massachusetts, Rhode Island, New
4 York.

5 THE CHAIRMAN: And I assume the closing
6 of a nuclear plant wouldn't have any impacts since
7 that doesn't --

8 THE WITNESS (Sellars): It wouldn't
9 help much, no. They would not have very material
10 -- they have some ancillary sources that do emit,
11 but they wouldn't have a significant number of
12 emission reductions to actually bank.

13 THE CHAIRMAN: Are you confident that
14 you will find these in a contiguous area?

15 THE WITNESS (Mirabito): We are. We've
16 actually found several sources, and we're working
17 with those sellers now in terms of a transfer that
18 we'll need to have before our final permit is
19 issued to demonstrate the control our acquisition
20 of those offsets before our final permit would be
21 issued to us.

22 THE CHAIRMAN: But it's a federal
23 program so --

24 THE WITNESS (Sellars): The emission
25 reduction credit has to be federally enforceable.

1 So credits from a shutdown would have to have,
2 say, a PSD permit that they surrendered. And if
3 they were to then operate without that permit, the
4 United States Environmental Protection Agency
5 could enforce against them from doing so.

6 THE CHAIRMAN: If there's anybody in
7 that agency left to do it.

8 THE WITNESS (Gresock): But it's a
9 state program relative to accepting the ERCs. And
10 as Mark says, we're very close to the point of
11 coordinating with the specific staff people at
12 DEEP who will conduct their own evaluation about
13 whether those donor sources are contributing to
14 the same airshed, and also evaluating whether
15 they've been appropriately discounted for all of
16 the otherwise applicable pollution control
17 programs. So that is something that happens at
18 Connecticut DEEP.

19 THE CHAIRMAN: And that information
20 will become publicly available?

21 THE WITNESS (Gresock): It will. The
22 tentative determination will go out for public
23 notice. But before the project can have a final
24 permit issued, those specific ERCs will need to be
25 identified and certified.

1 THE CHAIRMAN: Thank you.

2 Mr. Hannon.

3 MR. HANNON: Thank you, Mr. Chair. I
4 just want to follow up on that. For the air
5 permit, you need to specifically identify who is
6 supplying those credits, correct? So it's not
7 we're getting so many credits from New York, so
8 many from New Jersey, you have to specify the
9 specific --

10 THE WITNESS (Gresock): That's correct.
11 The final permit will be very specific, exactly.

12 MR. HANNON: Thank you.

13 THE CHAIRMAN: Mr. Silvestri.

14 MR. SILVESTRI: Thank you,
15 Mr. Chairman. Just as a follow-up, you mention
16 ERCs. I call them offsets. But I think we're
17 talking the same -- yeah. Would they be obtained
18 from what I consider a bank and other sources that
19 are already reduced or curtailed their emissions,
20 or would you be looking for an agreement with an
21 existing source to either reduce or curtail their
22 emissions?

23 THE WITNESS (Sellars): A bank would be
24 a lot more convenient. Unfortunately, there's
25 only registries of facilities that have emission

1 reduction credits. The transfer of emission
2 reduction credit to NTE would be a contract with
3 that specific donor source.

4 MR. SILVESTRI: So it would be somebody
5 emitting right now that would either curtail or
6 reduce?

7 THE WITNESS (Sellars): No. It could
8 be somebody that has shut down recently.

9 MR. SILVESTRI: By "recently," how far
10 back would that go?

11 THE WITNESS (Sellars): It depends on
12 the state. So if somebody were to have shut down,
13 say 15 years ago, the state would severely
14 discount those emission reductions based on any
15 regulation that had been put into place since that
16 shutdown had occurred. So as the -- for example,
17 periodically the state will tighten the reasonable
18 available control technology requirement and
19 require existing facilities to lower numbers. If
20 that facility had shut down before one of those
21 RACT rules went into place, the emission reduction
22 credits would be discounted to reflect the
23 application of that requirement because they would
24 no longer be surplus. They wouldn't be above and
25 beyond what was required.

1 MR. SILVESTRI: That I understand.
2 What I struggle with is just say there was a
3 source retired five years ago, four years ago,
4 that already happened. So if we're obtaining
5 offsets from that particular source, it's really,
6 in my opinion, not a real reduction because it
7 happened already.

8 THE WITNESS (Sellars): All reductions
9 will happen at a certain point in time, but it is
10 considered by the regulations a real reduction in
11 that the facility had the right -- was actually
12 emitting before it shut down, and it applied for
13 and got certified emission reduction credits when
14 it did so.

15 MR. SILVESTRI: But unfortunately that
16 source would not be included in a current
17 emissions inventory, so you wouldn't have a plus
18 and minus when you look at current emissions that
19 are going on?

20 THE WITNESS (Sellars): That's correct.
21 It wouldn't be in a current emissions inventory,
22 but most of the reductions would have to have
23 occurred recently enough so that they didn't just
24 get discounted into nothingness along the way.

25 MR. SILVESTRI: Thank you,

1 Mr. Chairman.

2 THE CHAIRMAN: Mr. Perrone.

3 MR. PERRONE: I understand there was
4 some discussion about the height of the HRSG
5 stack, how air emissions, as well as visibility,
6 was considered. It was also compared to the
7 165-foot high stacks at the Lake Road Power Plant
8 as a comparison. Did you also look at the
9 difference in ground elevation between Lake Road
10 and here so that it was compared on an AMSL basis?

11 THE WITNESS (Gresock): I don't
12 remember the exact numbers, but they're very
13 similar in base elevation.

14 MR. PERRONE: And one last question on
15 the air emissions topic. In Docket 192B, finding
16 of fact 272, it states, "As required by the Clean
17 Air Act, the EPA sets the NAAQS through a rigorous
18 scientific process at levels determined to be
19 protective of the health of the most sensitive
20 individuals, such as children, the elderly,
21 chronic asthmatics, and people with other
22 pulmonary diseases. Furthermore, an added margin
23 of safety is included in calculating the
24 standards." Is that still true and correct for
25 the purposes of this docket as well?

1 THE WITNESS (Sellars): Yes, it is.

2 MR. PERRONE: Just some cleanup on
3 visibility. I understand the plume rise was
4 estimated to be about 41.2 meters above the top of
5 the stack. Is that about 135 feet above the top?

6 THE WITNESS (Sellars): Yes, that would
7 be about 135 feet.

8 MR. PERRONE: And one last calculation.
9 I understand the visibility analysis, it had a 5
10 mile radius?

11 THE WITNESS (Gresock): That's correct.

12 MR. PERRONE: Do you have the acreage
13 of a 5 mile radius?

14 THE WITNESS (Gresock): I believe it
15 was in the application somewhere, but let me see
16 if I can find it. See if the calculations are
17 faster.

18 THE WITNESS (Sellars): That would be
19 78.5 square miles.

20 MR. PERRONE: Okay.

21 THE WITNESS (Gresock): Would you like
22 me to draw something? I would rather do that.

23 MR. PERRONE: Oh, no, not draw. I'm
24 sorry, just in acres. That's all.

25 THE WITNESS (Eves): It's 78 times 640.

1 THE WITNESS (Sellars): It's just about
2 50,000.

3 THE CHAIRMAN: How about 50,265.
4 (Laughter.)

5 THE WITNESS (Sellars): Touche,
6 Mr. Chairman.

7 MR. PERRONE: So about 50,265 roughly.
8 Okay.

9 Also, moving on, within the viewshed
10 area, I understand we had asked for the highest
11 elevation. It came out about 764 AMSL. Would you
12 know roughly the lowest elevation within that
13 area?

14 THE WITNESS (Gresock): I do not.

15 MR. PERRONE: That's okay.

16 Moving on to lighting of the plant. On
17 page 55 of Volume 1 of the application when NTE
18 mentions photovoltaic cells in the context of
19 plant lighting, you're referring to sensors that
20 turn the lights on when there's darkness,
21 vice-versa?

22 THE WITNESS (Rega): That's correct.

23 MR. PERRONE: Would the lighting of the
24 plant adversely impact adjacent properties?

25 THE WITNESS (Rega): We do not expect

1 it to adversely impact the adjacent properties,
2 no.

3 MR. PERRONE: And if the project is
4 approved, could the final lighting plan for the
5 plant be included in a D&M plan?

6 THE WITNESS (Rega): Yes, it could.

7 MR. PERRONE: Moving on to the water
8 topic. Is the CTG evaporative cooler blowdown
9 process also a continuous process like the HRSG
10 blowdown process?

11 THE WITNESS (Rega): That's correct.
12 When the evaporative cooler is in operation,
13 that's correct.

14 MR. PERRONE: Understood. And one of
15 the questions had asked about the possibility of
16 mechanical chilling of the incoming air, and I
17 understand it was rejected because of cost and
18 parasitic loads. Did you have any specifics on
19 the cost or additional parasitic loads?

20 THE WITNESS (Rega): At hand I do not.

21 MR. PERRONE: That's fine. Is it also
22 correct to say that hypothetically if you had the
23 mechanical chilling, you would save the water
24 associated with evaporative cooling or about
25 14,300 gallons per day?

1 THE WITNESS (Rega): You would
2 certainly save the water savings associated with
3 the evaporative cooler. I would have to look
4 through here to verify the quantity.

5 MR. PERRONE: But, in general, that
6 would be a small percentage of the, say, 400,000
7 gallons per day under ULSD?

8 THE WITNESS (Rega): That's correct.

9 MR. PERRONE: I know extensive analysis
10 was done on the possibility of gray water. The
11 only thing I was looking for is since gray water
12 is a bit of a term of art, could NTE explain in
13 layperson's terms exactly what gray water is?

14 THE WITNESS (Rega): Real quickly, it's
15 essentially treated wastewater, treated sewage,
16 that we would potentially source from the
17 Killingly Wastewater Treatment Plant.

18 MR. PERRONE: Going back to the public
19 comment hearing briefly, page 40 of the
20 transcript, there was comments regarding -- from
21 Mr. Dan Berk, B-E-R-K, of Lannon Farm,
22 L-A-N-N-O-N, at 251 Lake Road in Dayville. His
23 farm abuts the proposed site on the east side, and
24 he had concerns about the possibility of de-icing
25 chemicals or oils as runoff possibly getting into

1 adjacent streams and affecting the water quality
2 on his property. Does NTE have any response to
3 that?

4 MR. BALDWIN: I'm sorry. Could you
5 give the page reference again just so we're
6 looking at the same thing?

7 MR. PERRONE: Sure. On the public
8 comment it actually begins on page 40, and most of
9 it continues onto page 41. Page 41. "Our
10 concerns are that the switchyard and parking lot
11 runoff water may be contaminated with de-icing
12 chemicals and oils and other possible
13 contaminants." And he goes on to say how he has
14 cattle on his farm and concerned about runoff
15 affecting the streams that they drink from.

16 THE WITNESS (Gresock): The stormwater
17 management system has been designed to collect and
18 control stormwater on the site. There are best
19 management practices that will be in place at the
20 site in areas where fuel on loading or storage
21 will occur that would be protecting such areas.
22 The parking areas I'm sure also will have some
23 curbing and drainage that will direct potential
24 icy weather de-icing materials into the stormwater
25 management system for treatment as well.

1 THE WITNESS (Eves): And Mr. Berk's --
2 I think his concerns really arise out of
3 conditions that currently exist there. We've had
4 a lot of discussions with him. We've talked to
5 him about how our stormwater plant has been put
6 together and why this will not be an issue.

7 MR. PERRONE: Moving on to more site
8 issues, page 54 of Volume 1 notes that
9 construction laydown areas would be on site. By
10 "on site," do you mean at the generating facility
11 site as opposed to the switchyard site?

12 THE WITNESS (Gresock): Yes, there are
13 some incorporated at the generating facility site.
14 Yes.

15 MR. PERRONE: Do you anticipate the
16 need for any off site construction laydown areas?

17 THE WITNESS (Rega): That's certainly
18 possible, either on the switchyard parcel or off
19 site. We're currently in conversations with
20 potential EPC contractors now, and ultimately
21 they'll have to decide how much space exactly they
22 need. But we certainly have a significant amount
23 on the current site, but it's certainly possible
24 in the future there could be some off site.

25 MR. PERRONE: So it's possible that you

1 may need an off site laydown area for the
2 generating plant?

3 THE WITNESS (Rega): During
4 construction I think it's possible, yes.

5 MR. PERRONE: And, if so, could any off
6 site laydown areas, if this project is approved,
7 could that be identified in the D&M plan?

8 THE WITNESS (Rega): Yes, it could.

9 MR. PERRONE: I also understand at the
10 last hearing the question was asked about whether
11 equestrian traffic was considered in the traffic
12 analysis. My question is, does NTE have any
13 specific knowledge of the equestrian traffic such
14 as the days of the week it's most active, or
15 portions of Lake Road where it's most common?

16 THE WITNESS (Gresock): I think, in
17 general, we haven't seen a lot of equestrian
18 traffic along the industrial segment of the road
19 when we've been there, but we certainly are aware
20 that further to the west there are farms that have
21 horses and have no doubt that there are people who
22 use the roads in that way.

23 MR. PERRONE: In NTE's supplemental
24 response to Council Interrogatory 59, the
25 Mashantucket Pequot Tribal historic preservation

1 office agreed with Tetra Tech that no
2 archeological sites were identified in the area,
3 but they did express concerns about the absence of
4 assessment of historic properties in the area that
5 might be eligible for the National Register.

6 Could NTE respond to that?

7 THE WITNESS (Gresock): We noted their
8 comment, but because we have already coordinated
9 with the Connecticut State Historic Preservation
10 Office who had stated that there would be no
11 significant impact to historic structures, we
12 believe that no further activities in that area
13 are required.

14 MR. PERRONE: And I understand that
15 letter was from the Mashantucket Pequot Tribe.
16 Did you receive a response from the Mohegan Tribe?

17 THE WITNESS (Gresock): Not yet, but
18 they are planning to come visit the site, and have
19 been reviewing the report.

20 MR. PERRONE: Moving on to wildlife.
21 Could you please update us on the status of any
22 response from DEEP regarding the natural diversity
23 database?

24 THE WITNESS (Gresock): We have
25 provided additional information, received some

1 additional questions relative to some of the
2 Lepidoptera, the butterfly and moth species, and
3 have some ongoing design development underway that
4 we will provide to them, that will incorporate in
5 our wetland replication area an upland component
6 that will be a bit of a butterfly garden intended
7 to attract and to support the species that are of
8 interest to DEEP.

9 MR. PERRONE: And in response to
10 Council Interrogatory 52 regarding the northern
11 long-eared bat, there's a map of Connecticut. It
12 mentions there are no known northern long-eared
13 bat maternity roost trees. Is it fair to say that
14 that statement is referring to Connecticut.

15 THE WITNESS (Gresock): Yes.

16 MR. PERRONE: I understand that a
17 turtle protection plan was included as a response
18 to a Council interrogatory, and it's related to
19 the construction process. But if the project is
20 approved and constructed, in the final fencing of
21 the plant would it make sense to consider having
22 the bottom of the fence nearly touching grade so
23 it doesn't leave a gap where turtles or other
24 wildlife could be caught?

25 THE WITNESS (Gresock): I would expect

1 the fencing would touch the ground, yes.

2 MR. PERRONE: And if the project is
3 approved, as part of the fence design, could that
4 be considered in the D&M plan?

5 THE WITNESS (Gresock): Yes.

6 MR. PERRONE: In the prefile testimony
7 of Benjamin Williams, president of the Wyndham
8 Land Trust. On page 5 of those comments towards
9 the end in the testimony there's a mention for
10 potential damage to hay fields as habitat for
11 nesting grassland birds. Would NTE know what type
12 of grassland birds one might expect to find in the
13 vicinity of duck marsh?

14 THE WITNESS (Gresock): Well, the duck
15 marsh preserve referenced here is associated with
16 the natural gas pipeline construction. And
17 although we have done some general evaluations,
18 that will be the responsibility of the pipeline
19 contractor to do the particular evaluations along
20 that route. So we haven't specifically assessed
21 the characteristics of that marsh and what
22 specific bird species we would expect to be using
23 that area. Most commonly when there is habitat
24 that nesting grassland birds utilize, there are
25 certain species that are prime nesting periods

1 that can be avoided during construction. And I'm
2 sure that the gas pipeline company will be
3 considering that as part of their permitting
4 review.

5 MR. PERRONE: So there may be a
6 possible seasonal restriction that they could
7 consider at that time?

8 THE WITNESS (Gresock): Sometimes
9 that's the case, yes.

10 MR. PERRONE: I also understand, moving
11 on to switchyard design, that NTE had looked at
12 the possibility of gas insulated switchyard versus
13 air insulated switchyard. Just to get some
14 background, in the case of an air insulated
15 switchyard, is the air insulated switchyard
16 generally larger in size because you have to space
17 the conductors farther apart?

18 THE WITNESS (Rega): That's correct.

19 MR. PERRONE: And in the case of a gas
20 insulated switchyard, if you use sulfur
21 hexafluoride as your insulator dielectric, you can
22 move the phases closer together and make it more
23 compact?

24 THE WITNESS (Rega): Correct.

25 MR. PERRONE: There's also mention in

1 the context of a GIS switchyard the possibility of
2 a loss of about a half a percent of sulfur
3 hexafluoride per year. In that case, would that
4 be a maintenance issue where you have to top off
5 the charge, or is that fairly negligible?

6 THE WITNESS (Rega): It would have to
7 be topped off as the losses occur.

8 MR. PERRONE: And there was also
9 discussion comparing -- let me back up a second --
10 treating the sulfur hexafluoride as a greenhouse
11 gas, there was a comparison in greenhouse gas
12 equivalent emissions between an air insulated
13 switchyard and a gas insulated switchyard. And my
14 question is, where do the greenhouse gas emissions
15 come from from an air insulated switchyard?

16 THE WITNESS (Rega): There are
17 generator circuit breakers that have SF6 in them,
18 but it's just limited to the generator circuit
19 breakers, not all of the conductors.

20 MR. PERRONE: So just because it's air
21 insulated doesn't mean that there's no SF6. There
22 still may be some?

23 THE WITNESS (Rega): That's correct.

24 MR. PERRONE: Moving on to safety and
25 reliability. I understand that the ISO New

1 England System Impact Study is in progress and
2 would be completed by the first quarter of 2017.
3 Do you have any other updates at this time?

4 THE WITNESS (Mirabito): No, we don't.
5 That's still our understanding of the schedule.

6 MR. PERRONE: And just to be clear, how
7 is that related to applying to the ISO reliability
8 committee for a determination of no significant
9 adverse impact to the transmission system? Is
10 that a separate process or related?

11 THE WITNESS (Mirabito): I believe that
12 happens at the end of the various studies at the
13 same time of the interconnection agreement, but I
14 would want to verify that.

15 MR. PERRONE: That's fine. And lastly,
16 getting to safety. If requested by local
17 emergency services, would NTE assist in the
18 training of emergency responders to address a
19 power plant emergency?

20 THE WITNESS (Eves): Yes.

21 MR. PERRONE: Just a couple final
22 clean-ups. Regarding the FAA letter, I understand
23 that that determination expires on January 18,
24 2018. Is it fair to say that NTE, if this project
25 is approved, would commence construction prior to

1 that?

2 THE WITNESS (Gresock): That is the
3 plan, yes.

4 MR. PERRONE: And you would provide
5 notice to FAA of the commencement of construction?

6 THE WITNESS (Gresock): Yes.

7 MR. PERRONE: One other -- not FAA
8 related, but getting to the plume analysis which
9 was the response to Question 68. There's a
10 sentence about overcongested areas, such as cities
11 and towns, aircraft must fly no lower than 1,000
12 feet above the highest obstacle with a horizontal
13 2,000-foot radius of the aircraft. Would the
14 Killingly area in the vicinity of KEC, would that
15 be considered a congested area?

16 THE WITNESS (Gresock): It's my
17 understanding from talking with the FAA that
18 that's generally applied to most residential
19 areas. So yes.

20 MR. PERRONE: And lastly, there was
21 discussion about the Siting Council forecast and
22 also its reference to the ISO New England Regional
23 System Plan. Is it fair to say that the Siting
24 Council forecast and the most recent regional
25 system plan are both late 2015 reports?

1 THE WITNESS (Paterno): Yes, that's
2 correct.

3 MR. PERRONE: And FCA 11, that would be
4 early 2017?

5 THE WITNESS (Paterno): Correct. I
6 believe it's about ten days from today. February
7 the 6th is when it will be held.

8 MR. PERRONE: And FCA uses NICR, which
9 also involves 50/50 forecast. Is that correct?

10 THE WITNESS (Paterno): Yes, that's one
11 of the components that goes into the NICR
12 calculation.

13 MR. PERRONE: So for FCA 11 here in
14 2017, would ISO New England use, or potentially
15 use, a more up to date 50/50 forecast than the RSP
16 or the Council's report?

17 THE WITNESS (Paterno): Yes, you are
18 correct.

19 MR. PERRONE: Thank you. That's all I
20 have.

21 THE WITNESS (Eves): Mr. Chairman, if
22 it would be all right, I'd like to go back and
23 correct an earlier answer. We actually installed
24 that sign on the site in late June.

25 MR. PERRONE: Thank you.

1 THE CHAIRMAN: You're finished?

2 MR. PERRONE: Yes, sir.

3 THE CHAIRMAN: We'll now have the
4 Council. Mr. Silvestri.

5 MR. SILVESTRI: Thank you,
6 Mr. Chairman. I'd like to begin with a couple
7 clarifications that I'm looking for. At our last
8 meeting there was discussion about the
9 above-ground oil storage tank, particularly
10 secondary containment. But I thought the design
11 was changed to have a double-wall tank. So my
12 question is which one is current?

13 THE WITNESS (Rega): The design was
14 changed to have a secondary containment being a
15 steel containment area. It serves almost as a
16 secondary wall, but I don't think you would
17 necessarily -- I don't know if it would be called
18 double containment or a double-wall tank
19 necessarily. But it is a steel containment around
20 the tank rather than the earthen berm that had a
21 much larger footprint.

22 MR. SILVESTRI: Thank you. Staying
23 with the tank and with oil. In the event that the
24 unit must run on ULSD, ultra low sulphur
25 distillate, will there or is there a firm contract

1 that the supplier can meet the demand, seeing that
2 oil would probably be needed during extremely cold
3 weather when demand from other consumers would
4 also be high?

5 THE WITNESS (Bradley): At this time
6 NTE has not contracted for the delivery of ULSD.
7 That occurs closer to operation. There are a
8 number of suppliers of ULSD in the region, and
9 most likely, such as the case with many power
10 generation facilities, there will be a contract
11 for delivery of ULSD from multiple suppliers. But
12 that happens closer to commercial operation.

13 MR. SILVESTRI: Related to that, any
14 idea where the oil would actually come from in
15 terms of either terminal or port?

16 THE WITNESS (Bradley): We do not know
17 yet.

18 MR. SILVESTRI: All right. Moving on,
19 when Michael was talking about the de-icing
20 situation, other than roads and walkways, what
21 might be de-iced?

22 THE WITNESS (Rega): Nothing I'm aware
23 of.

24 MR. SILVESTRI: Okay. Also, going back
25 to further discussion that Michael had, the

1 comment was made that Lake Road Generating Plant
2 is intermittent, and it has a higher heat rate
3 than what's being proposed for KEC. So the
4 comment was made that KEC is expected to run more.
5 My question is, if KEC is then approved and is in
6 operation, would that mean that Lake Road is going
7 to run even less?

8 THE WITNESS (Bradley): It is possible
9 that Lake Road would run less. It would depend on
10 the overall dispatch stack of ISO New England and
11 what units were in that dispatch stack between
12 Killingly and Lake Road, but that is a
13 possibility.

14 MR. SILVESTRI: So with the proposed
15 KEC power plant and with Lake Road, would there
16 be, I'll call it, a transmission bottleneck if the
17 two plants are running full load?

18 THE WITNESS (Bradley): No, sir.
19 That's part of the ISO New England transmission
20 evaluation. They ensure before transmission is
21 approved that there is no bottleneck and the
22 system is reliable with both facilities operating
23 at full load.

24 THE CHAIRMAN: Can I just do a
25 follow-up? Then on the Lake Road, was that

1 originally designed and built for intermittent, or
2 is that something that's happened since?

3 THE WITNESS (Bradley): When Lake Road
4 was built, combined cycle generating facilities
5 generally had a lower operating load factor than
6 they do now simply because of the difference in
7 efficiency of the machines, and there was a good
8 bit more base load coal generation available, some
9 additional base load nuclear generation. So at
10 the time I don't remember the exact year Lake Road
11 was built. Lynn, you may. But it's been many
12 years. At that point in time, you generally
13 looked at combined cycle facilities operating in
14 the 30 to 50 percent load factor range. Now with
15 the high efficiency gas turbines, the operating
16 efficiency is much better, and so they tend to
17 operate at more of a base load type operating
18 scenario.

19 MR. SILVESTRI: Another clarification.
20 If you look at Appendix F -- and I don't know if
21 Dr. Klemens brought this up. But if he did,
22 forgive me, I'm going to bring it up again. Photo
23 E13. I don't have a page number. I only have the
24 photo number.

25 THE WITNESS (Gresock): Do you know in

1 Appendix F which subappendix?

2 MR. SILVESTRI: Let's see. I believe
3 it's B, as in bravo.

4 THE WITNESS (Gresock): So probably the
5 ecological assessment report?

6 MR. SILVESTRI: Uh-huh.

7 THE WITNESS (Gresock): I'm sorry. Was
8 that photo E15, did you say?

9 MR. SILVESTRI: 13.

10 THE WITNESS (Gresock): Yes.

11 MR. SILVESTRI: That is a mouse, not a
12 moth, correct?

13 THE WITNESS (Logan): Yes, indeed. I'm
14 going to fire that person.

15 MR. SILVESTRI: I don't know if Dr.
16 Klemens picked that up.

17 (Laughter.)

18 THE WITNESS (Gresock): Thank you.

19 MR. SILVESTRI: Moving on to the
20 Connecticut Water Company, will the agreement with
21 the Connecticut Water Company and its ability to
22 supply the needed water be a take or pay
23 agreement?

24 THE WITNESS (Mirabito): Yes,
25 essentially. We call it a reservation agreement,

1 but it's that concept.

2 MR. SILVESTRI: Okay. Now, getting
3 back to -- I want to stay on the water topic.
4 Just bear with me as I check my volumes.
5 Connecticut Water had provided a letter back on
6 December 14th that talks about the ability for the
7 Crystal system to supply water, and then it also
8 mentions the interconnection of the Plainville and
9 Crystal systems somewhere out in the future to
10 continue supplying the water that would be
11 available for KEC.

12 SENATOR MURPHY: Plainfield.

13 MR. SILVESTRI: Plainfield, I'm sorry,
14 not Plainville. Thank you.

15 They mention in good detail about the
16 Crystal system, but I did not see any details as
17 to what happens with the Plainfield system. So
18 did the Connecticut Water Company provide any data
19 for Plainfield, similar to what they provided for
20 Crystal?

21 THE WITNESS (Mirabito): Not
22 specifically, but our understanding is the
23 wellfield that would be accessed for this
24 incremental amount is currently underutilized.
25 There's not additional wells going in, but it's

1 not being utilized up to its withdrawal capacity.

2 MR. SILVESTRI: But again, the tables
3 that they provided for Crystal, they did not
4 provide one for Plainfield?

5 THE WITNESS (Mirabito): Correct.

6 MR. SILVESTRI: On the water topic,
7 turning slightly onto the gray water study that
8 you folks had, are the studies, the quality
9 studies, still continuing on the Killingly
10 Wastewater Treatment Plant?

11 THE WITNESS (Rega): Yes, we're
12 continuing to take water samples from the
13 wastewater treatment plant.

14 MR. SILVESTRI: One more that I had on
15 gray water. I tried to obtain analyses on the
16 Crystal system, but they weren't as detailed as
17 what you folks had provided when you were
18 analyzing the Killingly Wastewater Treatment
19 Plant. But in looking at that, I saw a number of
20 parameters that I'm going to say were kind of in
21 the same ballpark between what Crystal has and
22 what Killingly Wastewater has. The question I'd
23 like to pose to you is, when you talk about
24 treatment or additional treatment of the gray
25 water from the Killingly plant, specifically what

1 parameters or constituents would you be looking at
2 for treatment?

3 THE WITNESS (Rega): Mainly a lot of
4 the biologicals. There's also some TDS, dissolved
5 solids, as well as suspended solids, that would
6 have to be removed from that water.

7 MR. SILVESTRI: So that would
8 constitute, when you mentioned you would need
9 additional treatment --

10 THE WITNESS (Rega): Yes.

11 MR. SILVESTRI: -- so between total
12 dissolved solids or the biological, those
13 components would require the additional treatment
14 in your estimation?

15 THE WITNESS (Rega): That's correct.
16 Yeah. There would be an additional filtration
17 system. It's called an ultrafiltration system, a
18 membrane-type system that would be added upstream
19 of the existing or currently planned reverse
20 osmosis system in the facility.

21 THE WITNESS (Gresock): And when using
22 the well water, the characteristics are fairly
23 stable and established. And part of the program
24 that we're doing right now is to try to get our
25 arms around how much variability there is in

1 treated effluent characteristics, which could also
2 be an issue in terms of designing a treatment
3 program.

4 MR. SILVESTRI: One last question on
5 the gray water. Would it be an all or nothing
6 type of situation that you either would take all
7 of Crystal or a feasible all of Killingly
8 wastewater, or is there a possibility you could
9 combine and say do a 50/50 mix?

10 THE WITNESS (Rega): It's certainly
11 technically possible to do that. Of course, to
12 get the most benefit if you were going to install
13 the infrastructure for the gray water system, then
14 it would make it most beneficial to really go that
15 entire route for all of that water with the
16 exception, of course, of sanitary water, you know,
17 for drinking and toilets and showers and that kind
18 of thing.

19 MR. SILVESTRI: Let me change gears to
20 air. On my notes I have from December 28th of
21 last year, our Department of Energy and
22 Environment Protection published its notice of
23 determination to approve the application for
24 PSEG's Bridgeport Unit 5. Are you aware of that
25 notice?

1 THE WITNESS (Sellars): Yes, I am.

2 MR. SILVESTRI: In that draft permit
3 PSEG notes that there's an operating scenario mode
4 4, and it's described as the turbine operating on
5 ULSD with the duct burner operating on natural
6 gas. From information that I looked at in the
7 application that you folks submitted, I did not
8 see that mode. Would you have that or not have
9 that in your operation?

10 THE WITNESS (Sellars): No, we would
11 not have that mode of operation. I've never heard
12 of ULSD. It is theoretically possible, but not
13 envisioned by our application. We're not seeking
14 approval to do that.

15 MR. SILVESTRI: Like I said, that is in
16 there for mode 4, and hence my question.

17 Staying with that permit, if you look
18 at the steady-state emission limits that are in
19 that tentative determination. In PSEG's draft
20 permit, our Connecticut DEEP is limiting VOC on
21 natural gas firing with no duct burner to 0.7
22 ppmvd. The question I have, if that limit is also
23 imposed for the KEC project, could you meet it?
24 Right now it's listed as 1.0.

25 THE WITNESS (Sellars): Yes. On

1 December 8th we notified the DEEP that we would be
2 accepting a 0.7 ppm limit on VOC with a unit
3 without duct burning.

4 MR. SILVESTRI: The related question:
5 For a turbine operating on natural gas with duct
6 firing, DEEP is proposing that PSEG's limit for CO
7 would be 1.7, and for VOC would be 1.6, where KEC
8 has 2.0 for both of those parameters.

9 THE WITNESS (Sellars): Also on
10 December 8th we revised the VOC number, all with
11 duct burning, to 1.6 parts per million.

12 MR. SILVESTRI: To 1.6 for VOC and CO?

13 THE WITNESS (Sellars): For CO with
14 duct burning it's 1.7.

15 MR. SILVESTRI: Okay. So it would
16 mimic what DEEP put out in the tentative
17 determination for PSEG?

18 THE WITNESS (Sellars): Yes, sir.

19 MR. SILVESTRI: Very good.

20 That's all I have, Mr. Chairman. Thank
21 you.

22 THE CHAIRMAN: Thank you.
23 Mr. Levesque.

24 MR. LEVESQUE: You had stated that the
25 minimum height for, you know, regular flight, once

1 they take off and land, for aircraft is 1,000
2 feet, did you say? And I assume that's above
3 ground level?

4 THE WITNESS (Gresock): That's correct.

5 MR. LEVESQUE: Is it any lower for
6 helicopters?

7 THE WITNESS (Gresock): I think
8 helicopters do have some different rules that, of
9 course, have greater flexibility for landing in
10 different areas as well.

11 MR. LEVESQUE: They just seem lower.

12 THE WITNESS (Gresock): They certainly
13 do, don't they?

14 MR. LEVESQUE: But maybe they're just
15 flying at the 1,000 minimum.

16 THE WITNESS (Gresock): Yeah. I mean,
17 I'm not sure whether the helicopters follow the
18 same procedures.

19 MR. LEVESQUE: Maybe it could even be
20 directed to keep below a fixed-wing airport for
21 safety on a regular basis.

22 THE WITNESS (Gresock): Right.

23 MR. LEVESQUE: As part of your safety
24 plan, could you formally notify like emergency
25 helicopter services or the hospital that your new

1 stack and plume will be there?

2 THE WITNESS (Gresock): Yeah. I mean,
3 the FAA will indicate the location of the stack in
4 the notices that are provided, and any aircraft
5 using the airways will be aware of its presence.
6 Of course, there are other structures in the near
7 vicinity, for example, in the electric
8 transmission right-of-way that also are currently
9 indicated as tall or taller features that are
10 right there as well.

11 MR. LEVESQUE: Thank you.

12 THE CHAIRMAN: Mr. Hannon.

13 MR. HANNON: Thank you, Mr. Chairman.

14 I want to follow up on a couple of
15 questions that have already been asked. I wasn't
16 able to write it down fast enough, one of these
17 chemicals that you were talking about, SF6.
18 What's the loss attributable to?

19 THE WITNESS (Rega): Just leakage in
20 the equipment from, you know, components, that I
21 guess it's not possible to completely seal
22 something off entirely, but from the manufacturers
23 they just accept a certain amount of leakage.

24 MR. HANNON: Going back to the oil
25 tank, I think you said that it's a steel tank

1 that's mainly used for secondary containment. Is
2 that open to the elements?

3 THE WITNESS (Rega): It would be, yes.

4 MR. HANNON: And how would you propose
5 to keep that relatively dry? Because if you have
6 water collecting in there, then you start falling
7 below the minimum requirement for secondary
8 containment capacity.

9 THE WITNESS (Rega): We would have a
10 sump in between the tank and the containment area,
11 and we would remove the water that would
12 accumulate inside there.

13 MR. HANNON: And that water would go
14 where?

15 THE WITNESS (Rega): That water, first
16 it would be checked to make sure that there were
17 no contaminants in any oil that was in that, and
18 then it would go through an oil water separator
19 and then out to discharge with the stormwater.

20 MR. HANNON: This is just sort of a
21 general question. In terms of where there may be
22 some fuel exchange areas like with oil going into
23 the tank, are there any special precautions being
24 taken in terms of where that loading area is, like
25 concrete pads, are they sealed, are there any

1 berms or anything along those lines; and if so,
2 please explain?

3 THE WITNESS (Rega): There is an
4 unloading area that's shown on our drawings. It's
5 specified there, and it will have containment
6 around those unloading stations.

7 MR. HANNON: Emergency spill kits also
8 located close by?

9 THE WITNESS (Rega): Yes, for sure.

10 MR. HANNON: I want to go to -- it's
11 listed as Exhibit 5. It's the maps, but it's
12 specifically referring to the revision date of
13 10/25/2016. I do have a couple of questions
14 associated with the maps. One of the concerns I
15 have --

16 MR. BALDWIN: Mr. Hannon, excuse me. I
17 didn't mean to interrupt. I just want to make
18 sure if that was, in fact, the latest version of
19 the site plan.

20 MR. HANNON: But it still deals with
21 the questions that I have.

22 MR. BALDWIN: Thank you.

23 MR. HANNON: So even if it changes a
24 little bit, I'm not getting into that kind of
25 minutia.

1 MR. BALDWIN: Okay. Thank you.

2 MR. HANNON: You're welcome.

3 I guess one of the problems that I
4 see -- and I still haven't had an adequate answer
5 to this -- is because of the way the site is being
6 graded, how do you propose to maintain any of the
7 basins? It doesn't appear as though there's
8 really much in the way of access to those basins
9 for any type of maintenance work that may have to
10 be done.

11 THE WITNESS (Gresock): I'm sorry, I
12 don't know the exhibit number, but we did file
13 information that showed the location of the access
14 roads that are intended for maintenance.

15 MR. HANNON: Okay. And then this may
16 sound like a very crazy question. You may have to
17 get the calculator back out. But can you give me
18 an approximate area of the embankment that is
19 surrounding this site? And there's a reason for
20 my madness here.

21 THE WITNESS (Gresock): So you're
22 looking for --

23 MR. HANNON: Not the site itself, the
24 plateau of the site, but more sort of the
25 embankment area sloping down --

1 THE WITNESS (Gresock): Around the
2 perimeter.

3 MR. HANNON: -- the contours that you
4 have to go in and regrade.

5 THE WITNESS (Gresock): Norm will do
6 that.

7 MR. HANNON: And just approximate is
8 fine.

9 THE WITNESS (Rega): You can't ask an
10 engineer approximate.

11 MR. HANNON: When you bring out the
12 engineering rule, sometimes you just don't know.

13 MR. BALDWIN: While they're doing these
14 calculations, Mr. Hannon, the exhibit reference is
15 number 23, which is the revised plan that shows
16 access to the potential basins.

17 MR. HANNON: Okay. Thank you

18 THE WITNESS (Thibeault): About 72,000
19 square feet.

20 MR. HANNON: I thought it might be a
21 little bit bigger. And here's the reason why I'm
22 asking: Because in looking on the third page as
23 far as permanent seeding goes, we talk about
24 establishment of permanent stand of grass and/or
25 legumes. I was wondering whether or not this

1 might be a suitable area, if it has to be
2 replanted, to take into consideration pollinators,
3 because we're having so many problems in the state
4 with bees, if this might not be an area where
5 something like that could be established.

6 THE WITNESS (Gresock): Certainly, the
7 wetland replication area and the special butterfly
8 area that we're intending as a part of that, we'll
9 include legumes and species that will be
10 supporting pollinators. I think the concern about
11 plantings in the detention basin will just be for
12 maintenance purposes. I think you want to be able
13 to mow what's in there and --

14 MR. HANNON: Not so much in the basins
15 themselves, but more along that embankment around
16 the site itself.

17 THE WITNESS (Gresock): I think it
18 could certainly be considered.

19 MR. HANNON: Thank you. I have no
20 other questions.

21 THE CHAIRMAN: Mr. Harder.

22 MR. HARDER: Yes. Thank you.

23 A couple follow-ups also. Mr. Perrone
24 had asked the question, and Mr. Silvestri had
25 followed up. But on the issue of the question

1 that Mr. Perrone raised about need, I think the
2 basic question was with the operation of the Lake
3 Road facility why is this needed, and you had
4 provided an answer. Could you maybe explain the
5 answer a little bit more? I'm not sure it will
6 still sink in even with a little more detail, but
7 if you could give us a little more on that, I'd
8 appreciate it.

9 THE WITNESS (Bradley): Certainly. And
10 just to make sure I understand your question, is
11 looking at kind of the overall picture of need,
12 even though there is a facility there in Lake
13 Road. Lake Road, an existing generating facility,
14 Killingly, a new planned facility -- and I'll try
15 to keep this as short as possible -- are both part
16 of the ISO New England interconnected system, so
17 they both serve a need for the overall New England
18 system.

19 And so as you look back at the number
20 of things that we've described being resource
21 adequacy from retirements, winter reliability,
22 support of renewable generation, CO2 emissions
23 reductions, even though those two facilities are
24 in close proximity, they both meet these needs for
25 the overall ISO New England system. And with the

1 interconnected system, they're serving
2 Connecticut. They're also serving the rest of New
3 England.

4 So that's kind of the big picture of
5 why both of these facilities are needed, even
6 though they're in very close proximity. It's
7 related -- and you could look at that as well
8 related to the number of high voltage transmission
9 lines. Think of those as interstate highways for
10 electricity. You've just got two particular on
11 ramps on that reliable interstate highway to
12 transmit electricity, and they just happen to be a
13 very similar location.

14 Does that answer your question?

15 MR. HARDER: Yes, it does. I was also
16 wondering about the question that Mr. Silvestri
17 raised, which is does that mean that Lake Road
18 would operate less, maybe less frequently, or
19 there would be less demand, and you said possible.

20 THE WITNESS (Bradley): It is possible.
21 Theoretically -- and Ethan Paterno may want to
22 address this too -- theoretically you're serving a
23 fixed amount of energy at each instantaneous time.
24 So if you bring a more reliable, a lower cost
25 generating facility into the resource mix,

1 everything above that kind of takes one step up,
2 and theoretically each generating unit going up
3 that stack could operate slightly less because
4 you're bringing another resource in below them to
5 replace that.

6 Do you want to add anything to that?

7 THE WITNESS (Paterno): Yes, exactly.
8 I mean, I would expect that Lake Road would
9 operate a little less. It's an older technology
10 that was built in the early 2000s, somewhere
11 between 2002, 2004. I believed it used the second
12 vintage of combined cycle turbine technology,
13 F-class, early F-class turbines.

14 Killingly is using H-class turbines, so
15 it's light years ahead in terms of flexibility and
16 efficiency. Because of that, it will have more
17 inexpensive dispatch. Because of that, it will
18 operate slightly ahead of Lake Road. But they
19 will both continue to operate once Killingly comes
20 into the system, and there won't be any issues as
21 far as the transmission system because ISO,
22 through the impact study, ensures that. It will
23 not allow people to interconnect until those
24 issues that they identify, if any, have been
25 addressed.

1 MR. HARDER: So I guess in a way this
2 kind of comes with the territory, but in a way,
3 you take business away from the Lake Road
4 facility. Does that raise any other issues? I
5 mean, in addition to just, I suppose, demand or
6 frequency of the operation of that facility, are
7 there any other ways in which the operation of
8 this facility would affect the operation of the
9 Lake Road facility?

10 THE WITNESS (Bradley): No, nothing
11 comes to mind. No.

12 MR. HARDER: Okay. Thank you. Follow
13 up on the issue or the question on stormwater. I
14 think it was raised in the context of de-icing
15 chemicals, and you said the de-icing chemicals
16 would flow in through the stormwater system.
17 De-icing chemicals, though, are soluble, as far as
18 I know. So my question is related to specifically
19 the de-icing chemicals, but also more generally
20 anything that's dissolved or soluble. How would
21 the stormwater system remove those materials?

22 THE WITNESS (Thibeault): Well, there
23 are several mechanisms within the stormwater
24 treatment system that allow for different
25 constituents to be removed. There are mechanisms

1 to remove sediment, which carry a lot of
2 contaminants in their own sense. And then the
3 basins, there will be a vegetative layer and also
4 an organic layer within the basins as well, which
5 will act as a filtration device. Typically, these
6 organic layers, at least in the pretreatment form
7 of it, will serve to allow some removal of a
8 portion of the dissolved constituents that may
9 become entrained in the stormwater.

10 MR. HARDER: Thank you. No other
11 questions. Thanks.

12 THE CHAIRMAN: It's almost 1, so we're
13 going to break now, and we'll resume at about
14 1:45.

15 Mr. Hannon has one question, and he
16 does not require a yes or no answer.

17 MR. HANNON: No, it does require a yes
18 or no answer.

19 THE CHAIRMAN: You can make it a long
20 answer.

21 MR. HANNON: Is there any proposed
22 vehicle maintenance on site?

23 THE WITNESS (Rega): No, I don't
24 believe so. I think any vehicles that we would
25 have on site, any maintenance vehicles, would be

1 taken off site for maintenance. There's certainly
2 no shop. There are no mechanics that can really
3 do that sort of work. Obviously, you've got the
4 simple things, windshield wipers, and that kind of
5 thing, but certainly no major maintenance on those
6 motor vehicles.

7 MR. HANNON: Thank you.

8 THE CHAIRMAN: Okay. I'll try again.
9 We'll see you all at 1:45, sharp.

10 (Whereupon, the witnesses were excused,
11 and a recess for lunch was taken at 12:53 p.m.)

12 AFTERNOON SESSION

13 1:47 P.M.

14 F R E D E R I C K S E L L A R S ,

15 L Y N N G R E S O C K ,

16 M A R K M I R A B I T O ,

17 T I M E V E S ,

18 M I C H A E L B R A D L E Y ,

19 E T H A N P A T E R N O ,

20 C H R I S R E G A ,

21 N O R M T H I B E A U L T ,

22 G E O R G E L O G A N ,

23 having been previously duly sworn, testified
24 further on their oaths as follows:

25 THE CHAIRMAN: Good afternoon, ladies

1 and gentlemen. I'd like to resume our hearing
2 that started this morning. I guess it's my turn.
3 I have a few questions.

4 Sort of following up on that discussion
5 on Lake Road, my understanding is facilities, such
6 as you're proposing, the standard is 30 years, it
7 might actually be in operation longer. Is that
8 roughly correct, 30 years?

9 THE WITNESS (Eves): Yes, that's
10 roughly correct.

11 THE CHAIRMAN: So my question is --
12 well, I'll preface the question -- Lake Road
13 which, I guess, was the newest and most efficient
14 when it was built, you said 2002/2004, roughly.
15 Is that correct?

16 THE WITNESS (Bradley): That's correct.

17 THE CHAIRMAN: So something like 13 or
18 14 years afterwards is, I won't say it's obsolete,
19 but certainly the technology has passed it by.
20 And that's just in these type of plants, not even
21 talking about the technology relating to
22 renewables and energy storage. So I'm just
23 curious as to how to react to the question. Isn't
24 this facility going to be obsolete long before
25 that 30-year period?

1 THE WITNESS (Bradley): No. And I'll
2 address that one. And that goes back to the
3 earlier discussion regarding Lake Road. Lake
4 Road, although it's 12 to 14 years old,
5 approximately, is very far from an absolute power
6 plant. When we're talking about the operation of
7 Lake Road being reduced because it's the previous
8 generation of combustion turbine, the F-class
9 versus the H-class we're using, you're only
10 talking about a few percentage points reduction in
11 annual energy production. Maybe the load factor
12 goes from 45 percent to 44 percent. It's still a
13 very useful, very economic, very much needed
14 facility in ISO New England. So it is by no
15 stretch of the imagination outdated. It is
16 simply, where it was one of the most efficient
17 facilities in ISO New England from a natural gas
18 perspective, it now just moves one technology up
19 that ladder as the high efficiency facilities,
20 such as Killingly, move in right below it in
21 generation cost. There's not a tremendous
22 differential in generation cost, maybe a few
23 dollars a megawatt hour based on heat rate. But
24 Lake Road still will have a very, very high load
25 factor, very long useful life, very much needed

1 resource for the ISO.

2 THE WITNESS (Paterno): If I could add,
3 Mr. Chairman. When you talk about power plants
4 whose technology has really passed them by, I
5 don't think Lake Road, as Mr. Bradley said, would
6 fit into that category. We're seeing evolutions
7 within the combined cycle technology, but it still
8 represents the latest and greatest way to make
9 power using a fossil fuel resource.

10 I think the types of power plants that
11 are becoming obsolete are your Middletowns, your
12 Montvilles, and your New Havens, which were built
13 in the 60s and 70s, which Mr. Bradley can talk
14 about how they operate much better than me, but
15 they're not a combined cycle technology. It's a
16 giant steam boiler, basically, that you burn gas
17 or oil in, and it's quite an inefficient process.
18 So those are the types of facilities that I see as
19 Killingly replacing, and it's not Lake Road.

20 THE CHAIRMAN: Thank you. I just want
21 to make sure I understand. And forgive me,
22 because we started this, I think, last year, so
23 I'm not sure. And the volume of materials is
24 great, so I don't know if I got through it all
25 again. But part of what we have to try to grapple

1 with is this issue of need and sort of balancing
2 what you and, I guess, ISO New England calls sort
3 of at-risk retirements looking into the future,
4 and you've given us a pretty good list and
5 rationale for that.

6 I want to get a sense, or maybe you can
7 help me remember, of what's sort of in the queue
8 as far as is it coming online because it's already
9 been approved in the prior auctions or, I assume,
10 unless it's -- well, it can't be a secret since
11 everybody knows that you're going to be applying
12 in this upcoming auction -- what other facilities
13 are being proposed?

14 THE WITNESS (Paterno): Yeah,
15 absolutely. So there's a couple of different
16 parts there. To answer the first part, really,
17 which is what other technologies like Killingly
18 are going to come online over the next couple of
19 years, based on the auction results, there's four
20 that come to mind.

21 The first would be the Salem Harbor
22 repower in Massachusetts that should be coming
23 online later this year, I believe. The second is
24 CPV Towantic, which was Docket 192B, obviously, in
25 front of the Council, I think, this time last

1 year. We have Bridgeport Harbor Unit 5, which
2 will be coming on in 2019. And then in Rhode
3 Island there is the Clear River Energy facility,
4 which is also a combined cycle, which currently
5 does not have a water agreement signed in place
6 which, in theory, would be coming online
7 2018/2019.

8 THE CHAIRMAN: Now, are any of these,
9 other than the Bridgeport one, directly tied to a
10 specific retirement?

11 THE WITNESS (Paterno): No. In the
12 case of Unit 5, which is tied to the retirement of
13 Unit 3 two years after Unit 5 enters the market,
14 none of these facilities are directly tied to a
15 retirement, but I would wager that most, if not
16 all, of them are being built in anticipation or in
17 reaction of retirements in the market.

18 THE CHAIRMAN: Also, for helping to
19 determine sort of future resources, upgrades to
20 transmission or new transmission lines, are they
21 also factored in? In other words, you put in a
22 new transmission line in a plant such as Lake Road
23 which Connecticut, as an example, didn't have
24 access to, even though it was in Connecticut. We
25 now do. And other -- I mean, this Council has

1 seen a number of major transmission upgrades just
2 in Connecticut. I'm sure there are others. I
3 mean, is that something that get factored in
4 because they allow resources that may be available
5 but not available because you didn't have the
6 transmission facilities?

7 THE WITNESS (Paterno): Yes, it
8 certainly does get factored in. When we do our
9 analyses, we're looking at the latest ISO reports
10 from ISO New England saying, okay, we see these
11 bottlenecks as far as transmission, and we planned
12 on building these particular lines to alleviate
13 that transmission.

14 In particular, in Connecticut, it was a
15 source of -- it was a load pocket, to sort of
16 describe it in power market parlance, which is
17 basically you couldn't get enough generation into
18 the system to reliably serve power. That was
19 fixed during a series of transmission upgrades
20 over the past four to five years. That really
21 resolved a lot of the transmission issues that
22 were wide spread throughout New England.

23 The remaining transmission issues, I
24 would say, that may be a somewhat high-level
25 generalization, has to deal with getting wind and,

1 in particular, onshore wind, and the best
2 resources of which are located in Northern Maine,
3 to the load centers down to the south, because
4 there's obviously very few people that live in
5 Northern Maine. And that's an issue that's
6 currently being tackled by ISO New England.

7 THE CHAIRMAN: And also, is hydro in
8 Canada also related to transmission?

9 THE WITNESS (Paterno): It is in a
10 different sense in, at least, the way I think
11 about it where that new Canadian hydro
12 transmission is being built to basically import
13 new hydroelectrons into the ISO New England
14 system, as opposed to curing a load pocket issue
15 or a trapped wind resource issue. So it's still
16 within the transmission conversation, but I would
17 say it's a slightly different beast than what
18 we've seen happen with transmission in
19 Connecticut, and then the Maine wind example that
20 I talked about earlier.

21 THE CHAIRMAN: You also look in this
22 whole big picture of need is what's being
23 continued to be developed. And I never have
24 understood why ISO New England calls it a
25 resource, but energy efficiency, which I think

1 impacts demand, but that's --

2 THE WITNESS (Paterno): They're
3 actually the only ones to do that. Everyone else
4 counts it as a demand reduction. They count it as
5 a supply resource.

6 THE CHAIRMAN: And is that something
7 that's calculated based on past trends? How do
8 you calculate future --

9 THE WITNESS (Paterno): You're always
10 looking at the past, right, whether you're doing
11 energy efficiency projections, gas forecasts, oil
12 forecasts, or whatever. You need to benchmark
13 what your thoughts are going forward looking in
14 the past.

15 The way the ISO thinks about it, which
16 is similar to us, it's where have we been today,
17 what is the current level of these resources on
18 the market, and how do we think about the cost of
19 procuring more resources going forward. And
20 they're doing a forward view, both of the cost of
21 procuring more energy efficiency in this case
22 based on the ability and the appetite of the New
23 England states to continue to fund energy
24 efficiency programs because energy efficiency is
25 not a free resource in a sense.

1 I believe it was two hearings ago where
2 we discussed briefly New England spends about a
3 billion dollars a year procuring energy
4 efficiency. I think about a third of that comes
5 from the State of Connecticut. Massachusetts
6 makes up about half of that number. And, in
7 general, each energy efficiency megawatt is about
8 \$2 to \$4 million to procure. That, in comparison,
9 is Killingly is about a million dollars a megawatt
10 to build.

11 THE CHAIRMAN: That gets to a general
12 question, since it's always helpful to see, since
13 we have so many experts that ought to be able to
14 easily answer a simple question, which I think I
15 also posed to the Sierra Club, was Connecticut's
16 high cost when it comes to electricity rates. It
17 has come down somewhat in the past. So maybe your
18 answer is just build more plants like you're
19 proposing. But can you help us sort of get a
20 sense of what, not so much why, because that would
21 probably take a long time, but what can we do in
22 Connecticut to be more competitive from a rate --

23 THE WITNESS (Bradley): Sure, we can.
24 It's a pretty straightforward answer, actually.
25 Certainly, in some cases the energy efficiency

1 renewable resources have their place, even though
2 they're not the lowest cost to ratepayers, but
3 it's a small component.

4 What really impacts the rates to the
5 ratepayers is to take advantage of the lowest cost
6 fuel that's available that you can permit, which
7 at this point would be natural gas, take advantage
8 of the highest efficiency generator, which is an
9 H-class combined cycle turbine such as Killingly,
10 and then have it in a construct, such as the
11 merchant nature of Killingly, into the ISO New
12 England where the ratepayers are not paying for an
13 out-of-market type resource.

14 Where with Killingly there are really
15 two revenue streams that go to the ratepayers.
16 There's capacity payment, and energy and ancillary
17 services. On the capacity side, Killingly clears
18 the ISO New England auction. That means it's
19 grouped with the lowest-cost resources available,
20 because that's a descending clock option that's
21 done on an economic basis, as we've discussed. So
22 you know there it is a market-based resource.

23 The energy from it is also generated on
24 a market-based type of arrangement with
25 dispatching the ISO where there's no dispatch for

1 out-of-merit or out-of-the-money generation. If
2 Killingly runs, it runs because it is the lowest
3 cost resource out there. If Killingly never
4 generates a single megawatt hour, then the
5 ratepayers have absolutely no exposure to the cost
6 of Killingly.

7 That's really how to get the overall
8 energy costs down is to move to -- whatever type
9 resources they are, whether it's a resource like
10 Killingly or any other resource -- move to a more
11 market-based price signal, as opposed to an
12 out-of-the-money price signal, such as a Block
13 Island or something like that.

14 THE CHAIRMAN: I guess the one problem
15 I have with that, and that's also mentioned by
16 ISO, it makes us more dependent on one particular
17 source of -- type of fuel. And maybe you can, but
18 I'm not sure we can prophesize if natural gas is
19 always going to be as cheap as it is. So if that
20 price goes up, sort of, you know, we're at the
21 mercy of that one source.

22 THE WITNESS (Paterno): You're
23 completely right, Mr. Chairman. In theory, if gas
24 prices double, that would lead to higher
25 electricity rates, all else equal. And I guess I

1 am in the business of prognosticating, whether I
2 want to or not. And as I sit here today and think
3 about the currently low natural gas prices, which
4 I think we all agree that New England ratepayers
5 enjoy and really have enjoyed over the past couple
6 of years, if we think about the energy components
7 or the physical cost to produce electrons in
8 Connecticut, that's actually decreased by about 25
9 percent since 2008.

10 Now, a large portion of that has been
11 new combined cycle technology with low heat rates
12 coming into the market, but also utilizing natural
13 gas, where natural gas prices in I believe they
14 topped out at a high in August of 2008 at around
15 \$12 an MMBTU, and right now we're looking at about
16 \$2 to \$3 an MMBTU. So a material decrease given
17 technological improvements in the drilling of
18 natural gas.

19 I'm getting to the end of my point
20 here. As you think about what drilling for
21 natural gas is going to do going forward, we can
22 all -- whether we like a President Trump
23 administration -- but I think we can all agree
24 that he will allow more oil and gas drilling for
25 these natural resources, which the US is rich in.

1 And as I think about gas prices going forward,
2 more drilling will keep gas prices low. Perhaps
3 not at the current levels that we see, but
4 certainly not nearly to the levels that we saw in
5 2008.

6 THE CHAIRMAN: Since you mentioned the
7 president, I can't --

8 THE WITNESS (Paterno): I apologize for
9 that.

10 THE CHAIRMAN: -- I can't resist just
11 asking a curiosity question. Where are the major
12 components of your facility manufactured?

13 THE WITNESS (Rega): Most of the
14 components manufactured will come out of
15 Charlotte, so the gas turbine, steam turbine
16 generators.

17 THE CHAIRMAN: Where?

18 THE WITNESS (Rega): Charlotte, North
19 Carolina.

20 THE CHAIRMAN: Mr. Lynch has a
21 follow-up.

22 MR. LYNCH: Following up on the
23 Chairman's question about the increase in natural
24 gas prices, we may have an abundance of natural
25 gas in this country, but the vehicles to get it up

1 here where it's restricted or constricted,
2 whatever the right word is, now, if the volume --
3 the need for natural gas increases exponentially
4 here in New England, wouldn't that also, because
5 it is difficult to get it here, cause the price of
6 natural gas to go up?

7 THE WITNESS (Paterno): All else equal,
8 yes, it certainly could. And really the gas
9 constraints we see in New England are a winter
10 phenomenon, so basically when it's very, very cold
11 out, and power plants compete with us to make sure
12 that we have enough gas molecules to make sure
13 that we don't freeze to death. So all else equal,
14 yeah, if you add more gas intensive technologies
15 to the system, you increase the burden on the
16 system.

17 But I think Killingly is a little bit
18 different as you think about its dual fuel
19 capability and the ability to burn ULSD when you
20 do see those emergency events when those
21 constraints occur. So Killingly, I don't think,
22 will add to the gas constraints, because it will
23 be able to pivot away from gas when the system is
24 stressed and burn the ULSD. Obviously, that's all
25 dependent on ISO approval under the air permit

1 and, in particular, I think we talked about OP4
2 emergency events. But those type of emergency
3 events generally tend to correspond with extremely
4 low temperatures.

5 MR. LYNCH: You anticipated my
6 follow-up on OP4. So thank you very much.

7 Mr. Chairman, thank you.

8 THE CHAIRMAN: One other thing. The
9 2014, or the latest Integrated Resource Plan of
10 the State of Connecticut, states and pretty much
11 follows with our Siting Council that Connecticut
12 will continue to have plenty of capacity through
13 2024 and beyond, and that's talking specifically
14 about Connecticut, not the ISO region. So, I
15 assume, unless you -- you may disagree with that,
16 with what I just said, but I assume you're talking
17 about the entire ISO New England when you're
18 talking about the need and capacity issues in the
19 future. Am I correct or --

20 THE WITNESS (Bradley): We are talking
21 about both Connecticut and the ISO. Because going
22 back to that, we discussed this in one of the
23 hearings back at the end of last year. Looking at
24 the Integrated Resource Plan that's from 2014, in
25 that Integrated Resource Plan I think it was

1 Strategy 3 that discussed resource adequacy
2 mentioned that if up to 2,000 megawatts of
3 generation in Connecticut retired, then
4 reliability in Connecticut would be very suspect
5 at that point in time. I don't remember the exact
6 words, but it was something along those lines.

7 When that study was done, the
8 approximate 1,600 to 2,000 megawatts of
9 retirements that are projected by ISO New England
10 by the 2021, 2022 time frame now were not
11 considered in that IRP. So whenever you look at
12 two years for a study in an evolving power system
13 is a very long time. So looking at the vintage of
14 that IRP versus what was included as a retirement,
15 that 2,000 megawatts that's addressed in the IRP
16 as being kind of the breaking point of reliability
17 is imminently coming to fruition in these
18 facilities that are projected by ISO New England
19 to retire just in Connecticut, and that's not even
20 considering the additional several thousand
21 megawatts of projected retirements in New England
22 as a whole.

23 So that's kind of the disconnect
24 between current situation in the ISO and what the
25 thinking was in 2014 when the IRP was developed.

1 THE CHAIRMAN: Because on the one hand
2 you are looking at retirements, which you just
3 mentioned, but you've also -- I mean, we know that
4 there are additions to the resources which are not
5 insignificant.

6 THE WITNESS (Bradley): There are some
7 additions, but the additions are not sufficient to
8 overcome all those projected retirements,
9 particularly within the state boundaries of
10 Connecticut.

11 THE WITNESS (Paterno): We had a little
12 dialogue on this in our November 15th supplemental
13 response hearing, Questions 83 and 84. So if you
14 want some late night reading, it's discussed on
15 pages 16 and 17 of that document where we outline
16 that the IRP doesn't contemplate actually 2,500
17 megawatts of at-risk and planned retirements
18 across Montville, Middletown, New Haven, as well
19 as Bridgeport Harbor Unit 3. And then we also
20 compare that to what we know are the facilities
21 coming online in Connecticut over the next couple
22 of years, and it does indeed show a deficit of
23 where there's more likely to come out of the stack
24 than to enter into it.

25 THE CHAIRMAN: I forget. Does that

1 include the nuclear plant?

2 THE WITNESS (Paterno): No, we assumed
3 Millstone stays.

4 THE CHAIRMAN: At the moment, though,
5 is it safe to say Connecticut is a net exporter
6 rather than an importer of energy?

7 THE WITNESS (Paterno): Yes. As we
8 stand here today, it is a net exporter. My
9 personal view is it's Connecticut, but it's also
10 part of the wider New England system, and they
11 work symbiotically. So while Connecticut might
12 have a surplus of electrons today, the rest of New
13 England depends on Connecticut, just as
14 Connecticut depends on the rest of New England to
15 meet its various RPS targets. So technically,
16 yes, it's an exporter, but when I think about
17 need, it's really Connecticut and the other five
18 states together in the single conversation.

19 THE CHAIRMAN: I don't disagree with
20 you. I mean, 200 years ago somebody decided to
21 create boundaries which don't make a whole lot of
22 sense now, but we're stuck with them.

23 But where there's an issue, and it's
24 artificial, but it is because that's the way we do
25 things, Connecticut does have a requirement that a

1 certain percentage of energy resources have to be
2 renewables, and it's a targeted goal. So if we're
3 adding, what is it, 550 megawatts of fossil fuel,
4 then just to be consistent would have to,
5 whatever, whatever the math is, have more than 100
6 megawatts of renewables to meet that goal.

7 So by adding that -- while you're right
8 in saying we should be looking at the region and
9 not the states, but if each state -- and in this
10 case we're talking about Connecticut -- has
11 specific goals, and I think also for greenhouse
12 gas emission, by building more fossil fuel plants
13 in Connecticut, we make reaching those other goals
14 more challenging

15 THE WITNESS (Paterno): I think about
16 it slightly differently. So based on my
17 understanding of the RPS targets, or the renewable
18 energy standards in Connecticut, let's say it's 20
19 percent of renewable electrons by 2020. I think
20 that's the number, but let's just work with that.
21 It's actually based on the electrons consumed. So
22 what is the actual energy usage within the state.
23 And whether Killingly is in the market or not,
24 it's not going to change the actual energy usage.
25 So as I think about Connecticut's need for new

1 renewables to meet those RPS targets, it's
2 actually divorced from Killingly.

3 THE WITNESS (Bradley): And to follow
4 up on that as well, one of the other things that
5 we had discussed as part of the need conversation
6 was that resources, such as Killingly, do provide
7 the reliability and the operating characteristics
8 that the ISO needs to follow up and support that
9 renewable generation.

10 THE CHAIRMAN: That part I remember.
11 Although, my question is maybe a smaller plant of
12 200 megawatts would serve that purpose just fine,
13 but obviously there are other considerations as to
14 why you've picked the one you've picked.

15 THE WITNESS (Paterno): For what it's
16 worth, when you're building power plants, scale
17 does matter. So, in theory, a bigger power plant
18 typically leads to a lower dollar per megawatt
19 cost to build that power plant.

20 THE WITNESS (Rega): And higher
21 efficiency.

22 THE WITNESS (Bradley): And much higher
23 efficiency.

24 THE WITNESS (Paterno): And higher
25 efficiency. So there's something to be gained

1 from building bigger power plants as opposed to
2 100 to 200 megawatts. So I'm not talking about
3 building 5,000 or something like that, but I just
4 wanted to provide that.

5 THE CHAIRMAN: Okay. Thank you.

6 Anybody else on the Council?

7 MR. HARDER: Just one quick follow-up.

8 THE CHAIRMAN: Sure.

9 MR. HARDER: Regarding Lake Road,
10 roughly how much of the time does Lake Road
11 operate now?

12 THE WITNESS (Paterno): It's been a
13 little since I looked at its capacity factor. I'd
14 say 45 to 55 percent of the time.

15 MR. HARDER: Thank you.

16 THE CHAIRMAN: Okay. We'll now go
17 through other parties and intervenors to see if
18 they have any final questions.

19 The grouped parties, Attorney Berman?

20 MR. BERMAN: This will be very quick.
21 I just have one additional question, Mr. Paterno.

22 THE WITNESS (Paterno): You're not
23 going to make me draw, right?

24 MR. BERMAN: No drawing. This is going
25 to take 30 seconds. Mr. Paterno, have you been

1 following the program review for the Regional
2 Greenhouse Gas Initiative?

3 THE WITNESS (Paterno): I'm not
4 familiar with the intimate details, but yes, I do
5 understand that they're undergoing review.

6 MR. BERMAN: So are you aware of the
7 cap trajectories that are currently under
8 consideration by the Regional Greenhouse Gas
9 Initiative states for the period from 2020 to 2030
10 at this time?

11 THE WITNESS (Paterno): I believe they
12 are talking about further decreases in the cap,
13 but I would have to look back as to exactly what
14 those decreases are.

15 MR. BERMAN: So you're not aware of the
16 specific percentages that the states are taking
17 comment on at this time?

18 THE WITNESS (Paterno): No, I'm not.

19 MR. BERMAN: Thank you. That's all I
20 have.

21 THE CHAIRMAN: The Town of Killingly?

22 (No response.)

23 THE CHAIRMAN: Anybody else from the
24 grouped parties?

25 (No response.)

1 THE CHAIRMAN: Connecticut Fund for the
2 Environment?

3 MR. LOONEY: No questions.

4 THE CHAIRMAN: So before closing, does
5 the applicant have anything on redirect?

6 MR. BALDWIN: Just one question,
7 Mr. Chairman, for Mr. Mirabito.

8 REDIRECT EXAMINATION

9 MR. BALDWIN: Back on November 15th
10 there was discussion that NTE was asked about
11 declining CO2 caps in Massachusetts and whether
12 NTE would be willing to consider implementing
13 something similar for its Killingly facility. Can
14 you expand on your answer?

15 THE WITNESS (Mirabito): Yes.
16 Absolutely. Thanks, Ken. Although, it's really
17 more of an air permit issue, we wanted to expand
18 on our thoughts since that hearing. We've been
19 looking at what we can do to commit to reducing
20 our greenhouse gas emissions over time.

21 And what we're looking at is committing
22 to reducing our emissions 80 percent from the time
23 we're operational to 2050, reducing those
24 greenhouse gas emissions consistent with
25 Connecticut's Global Warming Solutions Act. So

1 again, this will be part of our air permit
2 process, but since this was discussed previously,
3 we wanted to make you aware of the progress we've
4 made on that front.

5 THE CHAIRMAN: Okay. You have a
6 question, and I have a follow-up. Go ahead.

7 MR. SILVESTRI: Related to what you
8 said about the reduction, how would you accomplish
9 that?

10 THE WITNESS (Mirabito): Well, it would
11 be a commitment to operate less frequently in
12 those later years. Because by the time you're in
13 30 years out, you're at basically 20 percent where
14 you were in year one. So there would be a
15 limitation on how often we can operate.

16 We're also looking at some potential
17 offset mechanisms where we could continue to
18 operate more frequently to the extent that we were
19 otherwise acquiring additional RGGI offsets, for
20 instance, or maybe a renewable energy credit type
21 offset. The details are still being worked out,
22 but the commitment would be a reduction by 80
23 percent from 2020 to 2050.

24 MR. SILVESTRI: Thank you.

25 Thank you, Mr. Chairman.

1 THE CHAIRMAN: I was just going to say
2 this is really a policy question. But since
3 you've raised it, perhaps there might be some
4 mechanism that, in view of the fact that the state
5 and the region wants to both increase renewables,
6 whether we're talking about consumption or
7 production, but I won't revisit that one, and just
8 to reduce greenhouse gas emission, whether
9 something based on the number -- on the size of
10 the plant you're producing could be, just as you
11 have this agreement with the town, there could be
12 an agreement with the state that you'll contribute
13 something, either it's to energy efficiency or
14 renewable. That would be a very helpful policy.
15 But, again, we're not the policy making body.

16 THE WITNESS (Mirabito): NTE would be
17 generally supportive of that type of policy. NTE
18 is looking at renewables ourselves. We've paired
19 a solar project with our combined cycle that's
20 being built down in North Carolina. It's not
21 directly paired, but loosely paired. And that
22 type of arrangement for other projects would be
23 certainly something we'd look at.

24 THE CHAIRMAN: Mr. Hannon.

25 MR. HANNON: Thank you. Just to follow

1 up on what you were saying. So if you're able to
2 reduce greenhouse gas emissions, what you're
3 saying, by 80 percent by 30 years out, does that
4 also give you the opportunity to sell some of
5 those credits?

6 THE WITNESS (Mirabito): I don't know
7 if I quite follow the question.

8 MR. HANNON: Well, if you're reducing
9 some of your emissions at that plant, are those
10 reductions something that you can turn around and
11 sell on the market?

12 THE WITNESS (Mirabito): I don't
13 believe there's any current market for that type
14 of arrangement. It's certainly not something
15 we're contemplating as we think about implementing
16 the change.

17 MR. HANNON: I'm just asking.

18 THE WITNESS (Mirabito): It's a good
19 thought, but I'm not aware of it.

20 THE WITNESS (Gresock): And I think the
21 reason there is a thought about trying to
22 formalize that as part of the air permit
23 conditions, is for some of the very same reasons
24 Fred was talking about relative to other ERCs. If
25 it's something that's required, then it's not

1 excess so --

2 THE CHAIRMAN: Since you gave me a
3 homework assignment to read page 15 and 16, what
4 is the document? And, of course, where is it
5 located -- we'll take care of it.

6 Anybody else?

7 (No response.)

8 THE CHAIRMAN: Okay. Before closing
9 this hearing, the Connecticut Siting Council
10 announces that briefs and proposed findings of
11 fact may be filed with the Council by any party or
12 intervenor no later than February 27, 2017.

13 Submission of briefs or proposed findings of fact
14 are not required by the Council, rather, we leave
15 it to the choice of the parties and intervenors.

16 Anyone who has not become a party or
17 intervenor but who desires to make his or her
18 views known to the Council, may file written
19 statements with the Council within 30 days of
20 today's date.

21 The Council will issue draft findings
22 of fact, and thereafter the parties and
23 intervenors may identify errors or inconsistencies
24 between the Council's draft findings of fact and
25 the record. However, no new information, no new

1 argument, no new evidence, and no reply briefs
2 without our permission, will be considered by the
3 Council.

4 Again, copies of the transcript of this
5 hearing will be filed with the town clerk's
6 offices in Killingly, Pomfret, and the Putnam Town
7 Halls.

8 I hereby declare this hearing
9 adjourned. And thank you all for your
10 participation. Drive home safely.

11 (Whereupon, the witnesses were excused,
12 and the above proceedings adjourned at 2:21 p.m.)

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CERTIFICATE

I hereby certify that the foregoing 118 pages are a complete and accurate computer-aided transcription of my original stenotype notes taken of the Council Meeting in Re: DOCKET NO. 470, APPLICATION OF NTE CONNECTICUT, LLC FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A 550-MEGAWATT DUAL-FUEL COMBINED CYCLE ELECTRIC GENERATING FACILITY AND ASSOCIATED ELECTRICAL INTERCONNECTION SWITCHYARD LOCATED AT 180 AND 189 LAKE ROAD, KILLINGLY, CONNECTICUT, which was held before ROBERT STEIN, Chairman, at Ten Franklin Square, New Britain, Connecticut, on January 26, 2017.

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

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I N D E X

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CARL STOPPER

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The Chairman

Mr. Perrone

Senator Murphy

Mr. Silvestri

Mr. Hannon

Mr. Harder

Mr. Baldwin

Mr. Bashaw

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LYNN GRESOCK

MARK MIRABITO

TIM EVES

MICHAEL BRADLEY

ETHAN PATERNO

CHRIS REGA

NORM THIBEAULT

GEORGE LOGAN

1 I n d e x: (Cont'd)

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Mr. Perrone

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The Chairman

6

Mr. Lynch

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Mr. Hannon

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Mr. Silvestri

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Mr. Levesque

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Mr. Harder

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Mr. Berman

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Mr. Baldwin

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13

14

TOWN OF KILLINGLY EXHIBITS

15

(Received in evidence.)

16

EXHIBIT

DESCRIPTION

PAGE

17

IV-B-1

Town of Killingly Request for

1024

18

Party Status, dated September 15, 2016

19

IV-B-2

TRC Environmental Corporation's

1024

20

recommendations for CSC conditions and

21

third-party document review with

22

Killingly Energy Center's response to the

23

third-party document review attached,

24

submitted October 13, 2016

25

1 I n d e x: (Cont'd)

2

3 EXHIBIT DESCRIPTION PAGE

4 IV-B-3 Town of Killingly Planning and 1024

5 Zoning Commission Order of Regulations

6 and Restrictions pursuant to CGS 16-50x,

7 dated October 12, 2016

8 IV-B-4 Town of Killingly Inland Wetlands 1024

9 and Watercourses Commission Order of

10 Regulations and Restrictions pursuant

11 to CGS 16-50x, dated October 12, 2016

12 IV-B-5 Town of Killingly Noise Ordinance, 1024

13 dated November 17, 2016

14 IV-B-6 Town of Killingly Town Council 1024

15 correspondence, dated December 15, 2016

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