ORIGINAL

STATE OF CONNECTICUT

SITING COUNCIL

CONNECTICUT LIGHT & POWER COMPANY

AND UNITED ILLUMINATING COMPANY

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION OF A NEW 345-kV ELECTRIC TRANSMISSION LINE AND ASSOCIATED FACILITIES BETWEEN THE SCOVILL ROCK * SWITCHING STATION IN MIDDLETOWN AND THE NORWALK SUBSTATION IN NORWALK, CONNECTICUT

APRIL 22, 2004 (10:00 A.M.)

DOCKET NO. 272



BEFORE: PAMELA B. KATZ, CHAIRMAN

BOARD MEMBERS: Colin C. Tait, Vice Chairman Brian Emerick, DEP Designee

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- AN INTERVENOR, THE FIRST DISTRICT WATER COMPANY
- AN INTERVENOR, NORWALK ASSOCIATION OF SILVERMINE HOMEOWNERS
- A PARTY, ROBERT W. MEGNA, STATE REP. 97th DISTRICT
- AN INTERVENOR, MARY G. FRITZ, STATE REP. 90th DISTRICT
- AN INTERVENOR, AL ADINOLFI, STATE REP. 103rd DISTRICT
- AN INTERVENOR, RAYMOND KALINOWSKI, STATE REP. 100th DISTRICT
- AN INTERVENOR, THEMIS KLARIDES, STATE REP. $114^{\rm th}$ DISTRICT

AN INTERVENOR, JOHN E. STRIPP, STATE REP. 135th DISTRICT

AN INTERVENOR, WILLIAM ANISKOVICH, STATE REP. $12^{\rm th}$ SEN. DISTRICT

AN INTERVENOR, JOSEPH CRISCO, JR., STATE REP. $17^{\rm th}$ SEN. DISTRICT

AN INTERVENOR, LEONARD FASANO, STATE REP. $34^{\rm th}$ SEN. DISTRICT

1	Verbatim proceedings of a hearing
2	before the State of Connecticut Siting Council in the
3	matter of an application by Connecticut Light & Power
4	Company and United Illuminating Company, held at Central
5	Connecticut State University Institute of Technology &
6	Business, 185 Main Street, New Britain, Connecticut, on
7	April 22, 2004 at 10:30 a.m., at which time the parties
8	were represented as hereinbefore set forth
9	
10	
11	CHAIRMAN PAMELA B. KATZ: I'd like to call
12	this continuation of the Docket 272 hearing to order this
13	morning. The subject of today's hearing will be various
14	alternatives to the proposed route. I'd just like to
15	note for the record that the alternative known as East
16	Shore will be taken up in June, along with the G.E. model
17	and not today. First I'm going to ask the Applicants to
18	give us a brief report on several homework assignments
19	and then they will give us an overview of the various
20	alternatives that will be the subject of cross
21	examination. So Ms. Randell you
22	MS. LINDA RANDELL: Yes, thank you.
23	MS. RANDELL: Mr. Zaklukiewicz, there was
24	some discussion yesterday, I think in response to a

1	question from Mr. Emerick, with respect to the length
2	between manholes, do you recall that yesterday?
3	MR. ROGER ZAKLUKIEWICZ: My name is Roger
4	Zaklukiewicz. Yes, I do.
5	MS. RANDELL: Could you just do a brief
6	general explanation of what the philosophy will be on
7	placement of manholes and distance between?
8	MR. ZAKLUKIEWICZ: Certainly. First, in
9	laying out an underground laying out I mean the
10	engineering design of an underground transmission line is
11	a very precise engineering task. It is not cookie
12	cutter. In other words, we do not place vaults every
13	1,500 feet, or 1,600 feet, or 1,800 feet. We take the
14	data that we have available to us, which would be the
15	subsurface data of what infrastructure is in the path
16	between Vault A and Vault B and lay out the distances
17	between vaults, recognizing the curves in the roadway,
18	which add additional pulling friction to the cables once
19	the pipes are installed.
20	We also have to account for and put in a
21	contingency factor for the fact that when we are going
22	between Vault A and Vault B we may have to go down deeper
23	beneath existing infrastructure, which did not show up in
24	the drawings and/or go in the street or adjacent to the

street and have to veer off a straight direct path such that at each point where we either move from a direct line between Point A and Point B by having to go down deeper in elevation or up in elevation or from side to side on this straight line, each of those curves and bends adds additional friction when it comes time to doing the cable pull. And the last thing we want to do is design a vault system, which are typically placed in the subsurface first and then you put your trenches in after, such that we are at the maximum design length for the pulling of the cable prior to installing the pipe associated with it such that when it becomes time to pull the cable into the pipe that was installed we exceed the cable pulling strength of the cable itself and by so doing so would damage the cable.

So those are all the factors that go into what is the distance between vaults and clearly we need to ensure that when we do the preliminary engineering design, which is shown on the D&M plans, which are submitted to counsel we also have contingency factors in those distances to account for the fact that there will be differences and it will not be a perfect straight line from Vault A to Vault B. Now in the case of a direct bore there are no differences. In other words, that bore

is straight, it's going to change in elevation, but it's going to be straight and there are not going to be any movements up and down around infrastructure such that the poles now on a direct bore or a jack-and-bore are going to be straight shots between Point A and Point B so you'll have the minimum amount of friction when it comes to pulling those cables. And they are typically laid out to the vaults and in those cases would be laid out such as to minimize the stresses on the cable, once it's physically installed on the splices in the vaults, recognizing the direct bore or the jack-and-bore in between those locations.

So another item that has to be considered is, is when working with the towns the last thing we want is a vault installed at a four-way intersection. In other words, you want to be on one side or the other side of the intersection. So optimally we want to locate the vaults such as they have the minimum impact on the community and on traffic in the area such that it's not - we cannot typically go in and say, well every 1,922 feet we're going to put a vault in at this location. So in some areas the vaults are going to be appreciatively closer together because of reasons that I've identified primarily working with the towns and in other cases we

7	would try to maximize the lengths of the vaults between
2	Point A and Point B, recognizing that the cost to install
3	a vault is appreciable along with the splices in the
4	cable.
5	So I hope that helps clarify the question
6	you raised Mr. Emerick over why are we not designing
7	everything to the maximum length of what we can put cable
8	on a reel and basically place the vaults at those
9	distances throughout the entire 24 mile length.
10	CHAIRMAN KATZ: Mr. Ashton?
11	MR. PHILIP ASHTON: May I ask a follow-up
12	question?
13	MR. ASHTON: You used two terms in your
14	description recent the past answer Mr.
15	Zaklukiewicz. You used the term pulling friction and
16	pulling strength. Would I be correct in assuming that
17	pulling friction is the resistance offered by the pipe in
18	its particular configuration to the insertion of a cable,
L9	which is pulled through it?
20	MR. ZAKLUKIEWICZ: That is correct.
21	MR. ASHTON: And pulling strength would be
22	the capability of the cable to withstand the burden, the
23	load, if you will, imposed by pulling friction, is that
24	correct?

1	MR. ZAKLUKIEWICZ: That is correct.
2	MR. ASHTON: If you ignore issues of
3	shipping reel limitation, what is the for a cable such
4	as we're talking here, what is the maximum length that
5	you practically can get, allowing for reasonable
6	variations in the route, elevation, lateral curves and
7	whatnot, what kind of distances are we talking about that
8	are limited by the strength of the cable to pulling?
9	MR. ZAKLUKIEWICZ: I'd say somewheres
10	around 2,500 to 3,000 feet.
11	MR. ASHTON: Okay. And is it fair to say
12	that that is more or less coincidental coincident with
13	the limitations imposed by shipping reels of cable?
14	MR. ZAKLUKIEWICZ: That is true and also
15	need to account for what are the stresses then on the
16	splices at each end, the longer the cable is the greater
17	the strengths will be from compression and the stretching
18	of the cable due to the changing and the loading of the
19	cable from minute to minute.
20	MR. ASHTON: Okay. Thank you.
21	CHAIRMAN KATZ: Thank you. Any other
22	reports?
23	MS. RANDELL: I think that's it for the
24	moment.

1	CHAIRMAN KATZ: Do you want to therefore
	· · · · · · · · · · · · · · · · · · ·
2	offer new exhibits for identification purposes only?
3	MR. ANTHONY FITZGERALD: Yes. We in
4	response to Mr. Ashton's query yesterday that the
5	companies look at a segment of the railroad that was not
6	covered in the railroad report that's previously been
7	filed, they have put together a presentation that
8	involves a lot of graphics, which they're prepared to
9	show today in a PowerPoint projection format. And what
10	we would propose to do is to just put a exhibit for
11	identification number in the record and we will promptly
12	get these graphics printed out on an eight and a half by
13	11 format. And then that package will be offered as a
14	full exhibit with that number.
15	CHAIRMAN KATZ: Mr. Cunliffe, what number
16	would that be?
17	MR. FRED CUNLIFFE: I'd like to propose
18	that the Applicant has submitted a exhibit as of
19	yesterday and I would like to reserve that number 65 for
20	that one and for the railroad presentation number 66.
21	CHAIRMAN KATZ: And other exhibits that we
22	have received are some responses to interrogatories and a
23	new Burns and McDonell report?
24	MR. FITZGERALD: Yes? Apparently yes,

1	Madam Chairman. They must have been filed directly by
2	the Company and didn't come through me.
3	CHAIRMAN KATZ: Okay. So can we identify
4	those at this time?
5	MR. FITZGERALD: Could you do that?
6	Someone needs to verify the accuracy of the exhibits that
7	were filed yesterday.
8	MS. RANDELL: Yes. We filed three
9	CHAIRMAN KATZ: I'm sorry. Mr. Cunliffe
10	is going to help here. Yes?
11	MS. RANDELL: three.
12	MR. CUNLIFFE: Interrogatory number 29
13	amended number one was filed and that was in response to
14	council question 29 and also response to council
15	questions 42 and 44 as well were filed. And that
16	addendum included a Middletown to Norwalk 345 kV
17	Transmission Line Project Route 15 Corridor Study, dated
18	April 2004.
19	MS. RANDELL: Correct. That was a
20	supplemental study.
21	CHAIRMAN KATZ: Are the witnesses who
22	prepared those here today? Or some of them or
23	MR. FITZGERALD: Yes.
24	MS. RANDELL: I believe Mr. Hogan from

1	Burns and McDonell is able to verify the Burns and
2	McDonell report.
3	CHAIRMAN KATZ: Okay. Can we do that now?
4	MR. FITZGERALD: Yes.
5	MR. JAMES HOGAN: Yes. That is the Burns
6	and McDonell report.
7	MR. FITZGERALD: And is the information in
8	that report true and accurate to the best of your
9	knowledge Mr. Hogan?
10	MR. HOGAN: Yes, it is.
11	MR. FITZGERALD: Was it prepared under
12	your supervision?
13	MR. HOGAN: Yes, it was.
14	MR. FITZGERALD: Okay. And Ms.
15	Bartosewicz, the Mr. Cunliffe has identified some
16	additional interrogatory responses that were filed
17	yesterday. Are they true and accurate to the best of
18	your knowledge?
19	MS. ANNE BARTOSEWICZ: Yes.
20	MR. FITZGERALD: So, I offer them as full
21	exhibits?
22	CHAIRMAN KATZ: And we have numbers for
23	these?

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MR. CUNLIFFE: Those would be 65.

24

1	MR. FITZGERALD: I'd offer them as full
2	exhibits?
3	MR. CUNLIFFE: And that was at number 65.
4	CHAIRMAN KATZ: Number 65. Is there any
5	objection to making 65 a full exhibit? Hearing none,
6	it's a full exhibit.
7	(Whereupon, Applicant's Exhibit No. 65 was
8	received into evidence as a full exhibit.)
9	CHAIRMAN KATZ: This is the one dated
10	April 21 st , it looks like this, and the Burns and McDonell
11	is attached to it. Okay. Does that cover the procedural
12	
13	MS. RANDELL: Just one question?
14	CHAIRMAN KATZ: yes?
15	MS. RANDELL: I suppose I should know the
16	answer, but if I could just ask Ms. Bartosewicz and Mr.
17	Prete, the poster boards, the easel items that are being
18	used this morning for the overview and discussion of the
19	alternatives, is each one of those already included as an
20	exhibit as part of a prior filing in this Docket, or are
21	there new ones? Or perhaps we could take these along the
22	way?
23	MS. BARTOSEWICZ: Well, they are the
24	maps the maps are all included in this record. The

1	only thing that's different on the map that's currently
2	on the easel is we drew in some lines for the benefit of
3	the Council this morning.
4	CHAIRMAN KATZ: Well, the first time you
5	use each board would it be possible to give the exhibit
6	number?
7	MS. BARTOSEWICZ: Yes.
8	CHAIRMAN KATZ: And then if it's been
9	modified since the exhibit it was filed an exhibit
LO	just mention what the modifications are into the record,
11	how about if we do it that way? Does that work?
12	MS. BARTOSEWICZ: Yes.
L3	MS. RANDELL: In that event we do not need
L 4	them to identify or mark new exhibits.
L5	CHAIRMAN KATZ: Okay. So at this point we
16	are going we have asked the Applicants to give us a
L7	brief overview of the alternatives and we will do that at
L8	this time and then we are going to follow that by a
L9	overhead projection of some information. I'm going to
20	invite Council members on that end of the table to feel
21	free to wander down this way to see the various boards.
22	MR. FITZGERALD: Madam Chairman, if I
23	might just to keep the record clear make the point that
2.4	the overview that you're being given now is not of

1	what the application has identified as the alternatives.
2	These are one might say, not alternatives. These are
3	the routes, the large routes that are covered in the
4	report filed as part of the application entitled Route
5	Options Considered But Eliminated.
6	CHAIRMAN KATZ: Yeah, we will take that
7	clarification though the matter of elimination is up to
8	the judgement of the Council.
9	MR. FITZGERALD: We understand that.
10	CHAIRMAN KATZ: Yes.
11	MS. BARTOSEWICZ: Is there a hand-held
12	mic. so that I can speak from the boards?
13	CHAIRMAN KATZ: Yes. Joe? So again, I'm
14	going to ask you at the beginning of each board to give
15	the title of the board and if you have the exhibit number
16	give it please?
17	MS. BARTOSEWICZ: The map that you're
18	looking at on the easel here is in Exhibit 1. It is
19	actually at the back of Volume 1 of the Application.
20	There were some plastic sheets, these are the this
21	would be the fold out maps that would be in there.
22	CHAIRMAN KATZ: And again, members of the
23	audience if you'd like to come closer feel free.
24	MS. BARTOSEWICZ: Now I'm going to take

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these routes one at a time and $I^{\prime}m$ going to start with 1 2 the marine route. And we -- in the application the 3 marine route starts at Singer Substation, comes out into Long Island Sound, crosses the Sound, comes up in Norwalk 4 5 in about the location of the Norwalk Power Plant. underground to the Norwalk Substation. And so the marine 6 7 report addresses this marine route. 8 The red line is the Merritt Parkway, Route 9 The evaluation in what was filed, Exhibit -- can I 15. 10 have the exhibit? The one we just did. 11 MR. FITZGERALD: Oh. 66. 12 MS. BARTOSEWICZ: In Exhibit 66 --13 MR. FITZGERALD: No, I'm sorry. 65. 14 MS. BARTOSEWICZ: -- 65 discusses the 15 Route 15 alternative. The -- our evaluations started at Route 15 in Wallingford, follows the red line to -- and 16 17 we need to get to East Devon Substation. You know that 18 the Merritt Parkway does not come close -- come exactly 19 to where East Devon Substation is, so we looked at how do 20 we get from Route 15 to East Devon, and there were these 21 two little red jogs are the two ways that we looked at to 22 get into East Devon Substation and then get back out to

Route 15 goes all the way to Norwalk. You

23

24

Route 15.

1	have to come down near Route 7 to get to Norwalk
2	Substation. You also have to remember we have to get
3	into Singer Substation, so there is an underground path
4	that would essentially have to get you into Singer
5	Substation. So that is the Route 15 alternative.
6	We also looked at 91 and 95. And these
7	purple and yellowish green is actually the 91/95 route
8	starting up in Meriden, following 91 south through New
9	Haven all the way to Norwalk. Now this route is
10	identified, you see the different colors on this path,
11	you see purple lines and the greenish lines, and they
12	actually represent parts of what we determined to be
13	feasible for construction, whether overhead or
14	underground, and unfeasible for construction. So those
15	are how we differentiate those points and you can see one
16	of our concerns is that the purple is not contiguous and
17	that would be where we believe it's feasible to build.
18	The last alternative that we looked at
19	would have been is the railroad. The path that we
20	looked at and the report in the application starts at
21	East Devon Substation. It's the green line. It follows
22	the railroad all the way to Norwalk. You would have to
23	go away from the railroad tracks north underground to
24	Norwalk Substation. So that's a high level of the routes

1	that we looked at as investigated and certainly the
2	Company eliminated them from consideration based on the
3	results of our investigation.
4	CHAIRMAN KATZ: Thank you.
5	MR. FITZGERALD: Now to comply with your
6	directive I should note that the lines in different
7	colors that demarked those routes that Ms. Bartosewicz
8	just referenced with the exception of the 95 route, which
9	is shown as such on there, the other three routes are
10	designated in magic marker, which which to make
11	them stand out from other things on the other
12	information on the exhibit. So to that extent the
13	exhibits she was just talking to, or the illustrations
14	she was just talking to differs from what's in the
15	record.
16	CHAIRMAN KATZ: Great. And we will get a
17	smaller version of this for the record eventually?
18	MR. FITZGERALD: We could do that.
19	MS. BARTOSEWICZ: In addition, as we talk
20	about each individual alternative what was filed in this
21	proceeding are maps for each specific alternative and we
22	have blown up those maps. So a we talk about the Merritt
23	Parkway or as we talk about the railroad, or I mean, the
24	highway we have those maps here to show you separately.

1	This was to put everything on one map for your
2	convenience.
3	CHAIRMAN KATZ: Okay.
4	MR. ASHTON: Ms. Bartosewicz, you used the
5	term that some of the route segments are infeasible?
6	MS. BARTOSEWICZ: Correct.
7	MR. ASHTON: What sort of things make it
8	infeasible? What does that really mean?
9	MS. BARTOSEWICZ: Things like 91 in some
10	places is elevated. So if you were to put an underground
. 11	route along the elevated portion of the highway we would
12	term that infeasible. Some places the highway is cut
13	through rock, so going around the highway would be very
14	difficult and we term that infeasible.
15	MR. ASHTON: But if you for an elevated
16	highway if you went in the right of way and did not
17	attach to the elevated portion, isn't that feasible?
18	MS. BARTOSEWICZ: If you went
19	MR. ASHTON: I don't want to get into a
20	philosophical argument, but
21	MS. BARTOSEWICZ: sure.
22	MR. ASHTON: or a specific argument,
23	but I'm trying to understand the philosophy.
24	MS. BARTOSEWICZ: And we can go through

1	each segment that we that Burns and McDonell study
2	_
2	determined to be infeasible section by section because
3	every section has a different concern. One area could
4	have as you go around a service area you impact houses
5	MR. ASHTON: Okay.
6	MS. BARTOSEWICZ: and then we determine
7	that as infeasible.
8	MR. ASHTON: Okay.
9	CHAIRMAN KATZ: Can you hang a 345 cable
10	on a bridge, on the outside of a bridge?
11	MS. BARTOSEWICZ: Technically, yes.
12	CHAIRMAN KATZ: Okay. So an overpass in
13	itself does not eliminate the possibility of having a 345
14	transmission cable crossing it?
15	MR. HOGAN: Are you talking overhead or
16	underground?
17	CHAIRMAN KATZ: Well, an overpass, I guess
18	I was thinking overhead.
19	MR. HOGAN: In the
20	COURT REPORTER: Can you repeat that
21	please?
22	COURT REPORTER: We didn't get that.
23	MR. HOGAN: oh. I asked whether she
24	was referring to overhead or underground.

24

1	CHAIRMAN KATZ: Since this is the first
2	time today can you just identify yourself?
3	MR. HOGAN: Oh. My name is Jim Hogan, I'm
4	the Project Manager from Burns and McDonell.
5	COURT REPORTER: Thank you.
6	CHAIRMAN KATZ: So I'm just saying if it's
7	overhead when you come to the could you put it on
8	or you're saying underground?
9	MR. HOGAN: In the overheads typically you
10	would span over
11	CHAIRMAN KATZ: Just span over.
12	MR. HOGAN: and the undergrounds then
13	you either go through the embankment or somehow have to
14	get back down in the roadway to take advantage of the
15	crossing.
16	MR. ASHTON: I heard the question slightly
17	differently. The specific question I heard was can you
18	attach an underground cable to an overhead road
19	structure? I'm not sure maybe I heard wrong.
20	MR. HOGAN: And the answer is the cable
21	can be and you have to coordinate that with the DOT to
22	make sure the structure can handle the loads.
23	MR. ASHTON: Are there any unusual
24	problems other than the physical strength of the

1	structure to which you're attaching?
2	MR. HOGAN: Unless there may be some
3	problems with physically room to get the clearance you
4	need to attach it to the bridge.
5	CHAIRMAN KATZ: Understood. Thank you.
6	Mr. Lynch?
7	MR. DANIEL LYNCH: With regards to
8	Interstate 91 which portion of the highway would you be
9	using? Northbound lane, southbound lane, median? When
10	you're talking about elevation on 91 the northbound lane
11	may be a raised highway, but the southbound lane is not.
12	MS. BARTOSEWICZ: You're not talking about
13	using the actual highway or the median, you're looking at
14	the right of way adjacent to the highway.
15	MR. LYNCH: Yeah, but what I want to know
16	is what right of way are you looking at, northbound lane
17	or southbound lane?
18	MR. HOGAN: Essentially we looked at the
19	entire corridor and in some places you may be on one side
20	versus the other. So it could be either one.
21	CHAIRMAN KATZ: Because Mr. Lynch is
22	right, one is at a lower elevation than the other.
23	MR. HOGAN: Right. Although there are
24	portions like I-95 where both sections are elevated and

1	those were some of the sections that and the right of
2	way is very narrow through that as well.
3	MS. BARTOSEWICZ: Now the last piece on
4	this map
5	CHAIRMAN KATZ: Yes.
6	MS. BARTOSEWICZ: the piece that you'll
7	hear next, based on comments yesterday we went out and
8	looked at the railroad from Singer to East Devon. That's
9	a piece that as you heard this morning was not part of
10	our railroad study. And that piece would essentially
11	connect Singer here on this piece of green line.
12	CHAIRMAN KATZ: Thank you. So the other
13	boards will be available during cross examination, the
14	more detailed boards?
15	MS. BARTOSEWICZ: Correct.
16	CHAIRMAN KATZ: Okay. At this point do
17	you want to do this presentation that we've identified as
18	number 66?
19	MR. FITZGERALD: Yes.
20	CHAIRMAN KATZ: Okay. I'm going to ask
21	MR. FITZGERALD: Mr. Prete is going to do
22	that I think.
23	CHAIRMAN KATZ: Do you want to make some
24	introductory remarks before the Council members move from

1	the table and take some seats down below?
2	MR. JOHN PRETE: Yeah, I'd be happy to.
3	Joining me will be Richie Pinto, he worked as the Project
4	Engineer for the project team. They were out late
5	yesterday to take pictures and hopefully to graphically
6	show you the railroad and what we'll show you here really
7	is indicative of the railroad both from Singer to East
8	Devon as well as Singer to Norwalk. I think it would be
9	very helpful. So can we get a mic. for Richie and if I
10	can get a mic. that would be super.
11	CHAIRMAN KATZ: Great. First we need to
12	have him sworn. First can you give your name and spell
13	your name for the record at a microphone and then Mr.
14	Marconi will swear you in.
15	MR. RICHARD PINTO: Rich Pinto from United
16	Illuminating. P-I-N-T-O.
17	(Whereupon, Richard Pinto was duly sworn.)
18	CHAIRMAN KATZ: Okay. Would you like us
19	to move at this point?
20	MR. PRETE: That would probably be the
21	best.
22	CHAIRMAN KATZ: Okay.
23	MR. PRETE: Great. So oh, thank you.
24	I apologize in advance if the presentation isn't as

1	smooth as some. It's only been 12 hours since Mr. Ashtor
2	and Tate has given us this. But just to kind of frame it
3	Anne had said that the railroad study proper doesn't
4	include this corridor. But this was looked at when Burns
5	and McDonell was hired about two years ago. We asked
6	them to do very simple things. We said, okay, connect
7	the terminal points. We said, Beseck Strong Source
8	connect to East Devon, connect East Devon to Singer,
9	connect Singer to Norwalk. Sky's the limit. Go for it.
10	Here's the guidelines the Siting Council has so we want
11	the results of those guidelines.
12	So they did indeed look at this corridor
13	and they rejected it in proper because it has social
14	impacts and environment impacts and there's an economic
15	consideration. So I think this will help as we get into
16	further discussion with the railroad as well.
17	I'd like to show you three things kind of
18	in segments. First I'll give you an overview of what
19	this segment is from this aerial photography. Then I'll
20	walk down and kind of take you out to the railroad
21	tracks, what we call catenarys. Then we have some
22	snapshots as to what would have to take place indeed if
23	we were to do a 345 line. So what Rich has here is
24	indeed the aero photography. In the right corner is East

1	Devon and as he traces down towards
2	MR. ASHTON: That's not East Devon.
3	MR. PRETE: It's the East Devon area.
4	MR. ASHTON: That's the Housatonic River
5	and East Devon is east of that.
6	MR. PRETE: Correct. It's right up there.
7	So if you can trace the railroad
8	VOICE: (Indiscernible)
9	MR. PRETE: there's always a mic.
10	there. That's good. So if you go down to where
11	eventually Singer Substation is, as Rich goes down south,
12	it's about eight miles in length. And if we can take a
13	picture now of the catenarys along that route what we
14	have here, and I'll point out, these structures that are
15	kind of upside down C's, we call those catenary
16	structures, the one in the foreground you can see has two
17	what we call bonnets on top of it. Rich has one on the
18	right and one on the left. Those bonnets, those
19	catenarys, they house in this area two 115 kV lines. For
20	simplicity sake we'll call one A and one B.
21	And what they do along that route is they
22	come in and out of our bulk substations, five to be
23	exact. There's Devon Tie, there's Ash Creek, there's
24	Barnum, there Baird and there's finally Pequonnock. Each

of those bulk substations, as they're named, feed roughly 1 2 So they're very important. Why do we have two 3 Well simple. They go in and out in the event you lines? 4 have a lightning strike or an unplanned failure of a line 5 you don't want to take down those substations. 6 go in and out. So any construction that we'd have on the 7 345 we'd have to somehow remove one of those. And that somehow would probably and most have to be underground. 8 9 We have to duplicate one of those lines at 115 10 underground and loop in and out. 11 And indeed we've looked at that. It would 12 be roughly 15 miles. It would be two cables because the 13 two cable's capacity equals one in the air that we call 14 wire. And that would be roughly about 15 miles at about 15 6,000,000 a mile. 16 So we have a couple more snapshots. I'd 17 like to point out some differences. You can see in this 18 catenary again, very similar things. On top are the A 19 and B line on top of the bonnets. You can see this one 20 on the bottom here is breached out in various areas with 21 the infrastructure, these are buildings or so forth that 22 require more clearances, so the railroad structures 23 themselves are blended in that area. You can see some 24 proximities of some buildings as well. Rich?

1	Here's another example of a catenary
2	structure. A little different. You can see now they're
3	kind of in the middle of this upside down C. The reason
4	they're in the middle as opposed to the outside there was
5	clearance problems long ago to install them on the
6	outside. Clearance is associated with NESC and so forth.
7	Rich?
8	Yet another picture.
9	MR. ASHTON: What's the NESC you referred
10	to?
11	MR. PRETE: It's the National Electric
12	Safety Code.
13	MR. ASHTON: Thank you.
14	MR. PRETE: Here you can see congestion
15	with some distribution lines which are on the street, but
16	
	again, this particular catenarys are in the middle again,
17	again, this particular catenarys are in the middle again, showing that there's some problems with clearances.
17 18	
	showing that there's some problems with clearances.
18	showing that there's some problems with clearances. Again, in another picture you can see it in the
18 19	showing that there's some problems with clearances. Again, in another picture you can see it in the foreground, a catenary structure that happens to be a
18 19 20	showing that there's some problems with clearances. Again, in another picture you can see it in the foreground, a catenary structure that happens to be a house in and around the Bridgeport/Stratford area. You
18 19 20 21	showing that there's some problems with clearances. Again, in another picture you can see it in the foreground, a catenary structure that happens to be a house in and around the Bridgeport/Stratford area. You can see some proximity.

itself. And I think that will be important as I get into 1 2 the next slide. Again, very similar. Where the catenary 3 structures are in this area here there's roadways or 4 sidewalks. And why that's important is that any type of 5 construction that would be probable, although very, very difficult, would involve as I said before you take one of 6 7 the A or B lines down, put it underground, you then would 8 construct something in this manner. These are poles that 9 actually CL&P constructed at Pequonnock Ely line. They 10 happened to be at 115. A couple of height comparisons. 11 The top of the catenarys that exist today, the A and B 12 line, are roughly 65 feet off the rail bed. 13 particular structures here are 90. In order for us to 14 even consider building a 345 line you're talking about 15 structures of about 120 feet, or approximately 30 feet 16 higher than what's there today. 17 One other and very important factor, it's 18 very hard to see, on the outside of these particular 19 poles are two wires. They're called feeder wires. 20 are the railroad wires. In order for us to put the wires 21 inboard for safety clearances you had to take their wires 22 at 12 kV and put them outside. Why that's important is 23 that any clearances not only need to be with the 345, 24 they now have to be within the feeder signal wires or

Τ	clearances with the 12 kV.
2	So a couple of things to note here, any
3	construction would have these poles outside that abutment
4	could we go back to the prior structure? Or in
5	sidewalks and streets and so forth and so on. And you're
6	talking about a butt side excuse me, a pole size at
7	the bottom you see, I told you this wasn't polished,
8	of about six to eight feet. So again, that would
9	probably take up relatively a half a lane. Okay Rich,
10	could we proceed?
11	Can we walk the route? What Rich is going
12	to do, we have this entire project on what is called the
13	GIS, the Geographic Information System. And what I asked
14	him to do is kind of start at Singer Substation, which
15	he's zooming into. That particular field there is
16	Bluefish Stadium for Bridgeport. Okay. Zoom out just
17	once please Rich? One more time?
18	Just to orientate things here, this
19	particular location here this was Site One of the Site
20	Selection Study for Singer Site. This was the warehouse
21	and of course in our discussions we are now going to
22	relocate at this site, which just happens to be a parking
23	lot or a lay down area for PSE&G. So what we have here
24	is on their proposal we have underground coming roughly

1	in this manner to feed. So to the extent that we would
2	need this 1.5 to 1.8 acres for the GIS Substation, we
3	would then need to take the 345 overhead somehow through
4	ostensively either the residential area of Bridgeport or
5	through PSE&G's property.
6	MR. ASHTON: Would you point out PSE&G?
7	MR. PRETE: Yes, I will.
8	MR. ASHTON: The coal pile at one time
9	(indiscernible).
10	MR. PRETE: Yeah. This is a coal pile for
11	Unit Three. The entire facility here that I'm showing is
12	PSE&G. They have two major generating plants, Unit One
13	and Unit Three and Unit Two, and Unit One as well.
14	This particular facility right here is B.E. That's the
15	new gas-fired turbines that exist. So anyway, as we said
16	we would somehow have to terminate at that location.
17	Chairwoman Katz asked about Pequonnock Sub. Can we go up
18	a little bit Rich? Oh. Thank you.
19	Being Italian this is really good. This
20	is Pequonnock Sub. here and in it's entirety major 115
21	lines go into it as well as 13A, which is the
22	distribution feeders that come out of it. So in order
23	for anything to be done here you would need room and
24	indeed we look at that. There's no room to piggyback on

1	or add to for the 345 line. So as we now kind of in this
2	area, this is the railroad tracks. Each one of these
3	horizontal lines, which is hard to see, is indeed the
4	catenary structures that we just saw. So we would
5	proceed relatively east or north to go to East Devon.
6	Rich, can you pan down? As you pan down can you just
7	show them where the railroad is?
8	And Mr. Ashton, you're right on. As you
9	either ride the rail or what have you you can start to
10	see some opening areas here and as we get a little bit
11	further. Again, following the railroad, large areas that
12	are open here. And indeed when we first looked at this
13	particular route and with the City of Bridgeport, this
14	area here is indeed open at this point in time. But it
15	has some specific plans.
16	There's a dual school going here of about
17	1,250 kids that will that will participate in it. As
18	well as a major redevelopment in residential as well as
19	commercial. So both on this side and some on this side
20	as well. So this would be the railroad that you would go
21	down and again, you would envision 120 foot or 130
22	structures. Rich?
23	Now as you get kind of closer to Stratford
24	you'll find out that the congestion on either side

1	becomes pretty noticeable.
2	MR. ASHTON: What's the scale on that
3	approximately?
4	MR. PINTO: Right now that'll go one to
5	4,000.
6	MR. PRETE: We can measure can you
7	measure for instance this area right here, Rich, for me?
8	MR. PINTO: It's around 70 feet.
9	MR. PRETE: 70 feet almost to the rail.
10	To abutment you're probably talking about 50 or less.
11	MR. ASHTON: 70 feet is where to where?
12	MR. PINTO: From the corner is this
13	building to the edge, you know, where I'm
14	MR. ASHTON: Okay.
15	MR. PRETE: How about how about this
16	particular location right here, this house?
17	MR. PINTO: From about here to here to
18	here that's the railroad. You would probably be near the
19	abutment right there, approximately 30 feet, 27. And
20	then you have a little outcropping there.
21	MR. PRETE: So you start to see some
22	congestion both with commercial, some industrial and then
23	some residential as we proceed to the Stratford line.
24	Right around this area. And again, you'd have to be on

1 one side, this is a real tight area. Some areas in here 2 This is some other redevelopment that the are tight. 3 Director of Planning is going to fax us some information. I couldn't remember specifically what it was. 4 5 VOICE: Is that a cemetery? 6 Yeah. Actually this is a MR. PINTO: 7 cemetery in Stratford. 8 MR. PRETE: Oh, that's the cemetery. 9 There's not much opposition there. 10 (Laughter) 11 Again, along this area here. MR. PRETE: 12 Come up through here. Rich, where is the Stratford line 13 approximately? Are we entering that? 14 MR. PINTO: We're into Stratford this here 15 actually is the Stratford Train Station. 16 MR. PRETE: Oh, this is the train station 17 Both with various buildings on both sides. 18 MR. ASHTON: That's I-95 immediately to 19 the south of this? 20 MR. PRETE: That's correct. 21 MR. PINTO: That's correct. 22 MR. PRETE: Again, through this whole area 23 you have major crossings. So those 120 foot towers would

have to at least be raised by 20 or 30 feet as you start

24

1	to cross those. So again, I guess to reiterate the main
2	message, again, things like again, here's a here's
3	a major crossing where some of the towers would be
4	extremely high. The fact of the matter is the social
5	impacts are a great their environmental impacts again
6	trying to get poles of those natures in the streets, the
7	streets would have to be relocated and/or pushed over,
8	which would then further push over into people's
9	property, whether it takes houses and what have you.
10	Then you have the crossing of one of the
11	major river bodies
12	MR. ASHTON: That's the Housatonic.
13	MR. PRETE: the Housatonic River. And
14	Rich, this right here are some crossings that exist
15	today, correct?
16	MR. PINTO: Yes.
17	MR. ASHTON: Where's the Devon Power
18	Plant?
19	MR. PINTO: Just give me one second.
20	That's the crossing. Devon
21	MR. ASHTON: Yeah, why don't you show
22	Devon? That's the switch area.
23	MR. PINTO: that's Devon Seven and

24 Eight over in here.

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1	MR. ASHTON: No, Devon Seven and Eight is
2	down the bottom.
3	MR. PRETE: So I think Roger Zaklukiewicz
4	was talking or answered a question that talked about
5	NRG's property roughly is this area here. These are some
6	of the switch yards and the property that is owned by
7	CL&P at this point in time and the only property. If you
8	go a little bit further we then
9	MR. ASHTON: Excuse me. Go back to the
10	bottom of the picture. The just below you're arrow,
11	no, come up a bit. Right there. That's the railroad
12	substation, isn't it? Or is it down below?
L3	MR. PINTO: No, the railroad substation is
L 4	just north of my cursor right here. That's the this
L5	is UI's Devon tie.
L 6	MR. ASHTON: Okay.
L7	MR. PRETE: What we'd like to do is from
L8	the railroad you have to somehow get to the proposed East
L9	Devon Substation. So I believe our underground cable
20	route is along this particular area here?
21	MR. PINTO: Yeah, it comes up here.
22	MR. PRETE: So as we go further up there's
23	an existing 115 line along I believe this right of way,
24	so you'd essentially come down here overhead roughly 85

1	to 100
2	MR. ASHTON: You're off to the right there
3	you can see the four structures
4	MR. PINTO: Yeah. They're in the right of
5	way.
6	MR. ASHTON: right go a little
7	lower, a little lower
8	MR. PRETE: Right here. Right here.
9	MR. ASHTON: right there. That's it.
10	MR. PRETE: So again, proceeding on a fair
11	amount of residential area here and then you have a major
12	condominium complex on the left. You have a major
13	condominium complex, Coswell Cove, I think the name of it
14	is?
15	MR. PINTO: Yes.
16	MR. PRETE: Okay. This is in Milford
17	Power Plant
18	MR. PINTO: Actually, this is BIC.
19	MR. ASHTON: That's BIC.
20	MR. PRETE: oh, I'm sorry.
21	MR. PINTO: Milford Power is across the
22	street over here.
23	MR. ASHTON: Right there.

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MR. PINTO: Years ago.

24

1	MR. ASHTON: And your lines are on the
2	left.
3	MR. PRETE: So in 10 hours that's the best
4	we could do.
5	MR. ASHTON: Where is your East Devon
6	Substation now? Just show that?
7	MR. PRETE: East Devon would be up in this
8	corner here.
9	MR. PINTO: Proposed is
10	MR. PRETE: I think it's this, correct?
11	MR. PINTO: actually I believe it's
12	this parcel right here.
13	MR. ASHTON: Yeah.
14	MR. PRETE: So again, I think in summary
15	the look that was done early on showed these type of
16	environmental, social and economic and construction
17	challenges, which I'll be happy to get into in more
18	detail, but the railroad report from Singer to Norwalk
19	very similar problems, probably to a larger extent. And
20	that's why the Company has looked at and rejected it.
21	MR. ASHTON: Just one question I have.
22	The portal structures which support the catenarys, do you
23	have any idea how old those structures are?
24	MR. PRETE: The question was the abutments

1	themselves?
2	MR. ASHTON: The portal structures?
3	MR. PRETE: I don't know what that is.
4	MR. ASHTON: Those are structures like
5	that. Those aren't catenarys, they're portal structures
6	they're called.
7	MR. PRETE: Okay. Oh good. I would
8	imagine around 50 years. Rich, do you know?
9	MR. ZAKLUKIEWICZ: Some date back to the
10	1900's.
11	MR. PRETE: Oh, the 1900's.
12	MR. ASHTON: 1920 would you accept.
13	MR. RICHARD REED: Some of them are dated
14	19-0-something.
15	COURT REPORTER: Sir, could you identify
16	yourself?
17	MR. REED: Richard Reed.
18	COURT REPORTER: Thank you.
19	MR. PRETE: Is there any other questions?
20	MR. BRIAN EMERICK: Yes. While we have
21	this screen up could you point out the other substation
22	site that we talked about yesterday?
23	MR. PRETE: Oh, yes. That's a good point.
24	Can you zoom out a little bit and then we can do both of

1	them at one time and get a comparison? Mr. Emerick, both
2	where East Devon is proposed and the one that was
3	okay, that's a good idea. Why don't you go up one more?
4	Pan out once?
5	MR. PINTO: Oh, sorry.
6	MR. PRETE: Not pan out, zoom out,
7	whatever.
8	MR. PINTO: Here's one, there's the other.
9	MR. PRETE: This right here is the first
10	area that Anne had talked about in great detail as a site
11	they pursued and of course with the arrangement with the
12	seller weren't able to get a Phase 1 or access to it.
13	MS. BARTOSEWICZ: That site is owned
14	had the Blacktite (phonetic) Corporation on it and it has
15	a driving range on it. It's two businesses at that site.
16	MR. PRETE: And up in this area? A little
17	bit further, is it this right here?
18	MS. BARTOSEWICZ: Across the street. The
	included in the second of the
19	main street there is Oronoke Road.
19 20	
	main street there is Oronoke Road.
20	main street there is Oronoke Road. MS. PRETE: Right here?

MR. PRETE: Is that all set Mr. Emerick?

24

44

1	MR. EMERICK: Yep. Thank you.
2	MR. PRETE: I'm sorry?
3	MR. CUNLIFFE: Could you look at the
4	Bridgeport one? You have a Proposed Site 1 and a
5	Proposed Site 8. You now want to go to Site 8. Could
6	you identify the Site 8 at the Bridgeport location?
7	MR. PRETE: Sure. I'd be happy to. Can
8	we go back to Bridgeport?
9	MR. ASHTON: Start over would be easiest.
10	MR. PINTO: Yeah, just give me a second.
11	MR. PRETE: As Richie does this, I don't
12	know if everybody knows what a GIS is, but if you can
13	envision layers, almost physical layers you can actually
14	they're electronic so you can actually on a GIS turn
15	them on and off, which is what Rich is doing today.
16	There's about 20 layers here that we can see various
17	things.
18	Again, getting acclimated, the coal pile
19	and PSE&G, this particular property was Site 1, which you
20	can see the outline of the warehouse and this is all Site
21	8 today and this is where PSE&G and the City, as well as
22	UI are pursuing a sale. It would more than likely be
23	located along Main Street. All set?
24	CHAIRMAN KATZ: Mr. Cunliffe?

1	MR. CUNLIFFE: Mr. Prete, you said the
2	information is in GIS format?
3	MR. PRETE: Yes.
4	MR. CUNLIFFE: What would that take to
5	have that transferred to the Council? We do have
6	capabilities to review that material.
7	MR. PRETE: Do you have ARC Info?
8	MR. CUNLIFFE: ARC View.
9	MR. PRETE: Oh, perfect. Then we'll be
10	happy to give you have we have right here on a CD. Rich
11	I need Rich's help.
12	MR. PINTO: We can provide something.
13	MR. PRETE: Absolutely.
14	MR. CUNLIFFE: Thank you.
15	MR. PRETE: You're welcome.
16	CHAIRMAN KATZ: Thank you for the
17	presentation and you do get points for responsiveness.
18	Okay.
19	MR. PRETE: I'll take them.
20	CHAIRMAN KATZ: At this do we have any
21	procedural matters before we begin cross examination?
22	MS. RANDELL: I don't think so.
23	CHAIRMAN KATZ: Great. We will start,
24	first State Representative Al Adinolfi? Let the record

1	show not present. Next Town of Wallingford, Durham,
2	Woodbridge, Milford, etcetera. Ms. Kohler, cross
3	examination?
4	MS. JULIE DONALDSON KOHLER: None.
5	CHAIRMAN KATZ: Ms. Kohler says, no. City
6	of Norwalk? Let the record show absent. Next, Town of
7	Westport, Mr. Cederbaum? Absent. City of Meriden,
8	Attorney Moore? Absent. Assistant Attorney General
9	Michael Wertheimer?
10	MR. MICHAEL WERTHEIMER: No questions.
11	CHAIRMAN KATZ: Mr. Wertheimer says no
12	questions. Communities for Responsible Energy? Absent.
13	Office of Consumer Counsel, Mr. Johnson? Absent.
14	Woodlands Coalition, Mr. Golden?
15	MR. LAWRENCE J. GOLDEN: No questions.
16	CHAIRMAN KATZ: Woodlands Coalition says
17	no questions. ISO New England, Mr. MacLeod? Absent.
18	DOT, Assistant Attorney Generals Walsh and Meskill,
19	questions for the Applicant?
20	MR. CHARLES WALSH: No questions.
21	CHAIRMAN KATZ: No questions. PSEG, Mr.
22	Reif?
23	MR. DAVID REIF: Madam Chairman, this
24	morning's presentation Madam Chairman, this morning's

1	presentation indicates that if this proposal does go
2	forward obviously it runs through our property and has a
3	significant potential impact. Since it really is new
4	matter and since we have a wrap up day in June, I wonder
5	if and presumably Mr. Prete will be back at that time,
6	whether we could cross examine at that time and certainly
7	we're going to have to file some testimony related to
8	this issue.
9	CHAIRMAN KATZ: Thank you. We'll assume
10	that we'll allow you to revisit that in June.
11	MR. REIF: Thank you Madam Chairman.
12	CHAIRMAN KATZ: Okay. Mr. Ball? Towns of
13	Wilton and Weston?
14	MR. DAVID BALL: No questions.
15	CHAIRMAN KATZ: No questions Mr. Ball
16	says. Attorney Lord, Regional Water Authority?
17	MR. DAVID BALL: No questions.
18	CHAIRMAN KATZ: He says no questions.
19	Town of Cheshire, absent. City of Middletown, absent.
20	Town of North Haven?
21	MR. BENJAMIN J. BERGER: No questions.
22	CHAIRMAN KATZ: North Haven says no
23	questions. Mr. Cunliffe, questions for the Applicant?
24	MR. CUNLIFFE: Yes, I do. On your

Τ	analysis of the railroad you were able to identify $\frac{1}{\sqrt{1}}$ and
2	this is between I believe the Singer Substation and the
3	Norwalk Substation, correct? You identified up to about
4	113 homes and businesses would need to be taken, is that
5	correct?
6	MR. PRETE: That is correct.
7	MR. CUNLIFFE: And was that same analysis
8	done for the road highway corridor? Let's identify
9	91/95, was there an analysis done for a number of homes
10	or businesses to be taken?
11	MR. PRETE: Yes, that analysis was done.
12	MR. CUNLIFFE: And the number was?
13	MR. PRETE: And that number escapes me at
14	the moment but I'll look it up.
15	MR. CUNLIFFE: While you're looking that
16	up, Mr. Hogan I'll go ahead and ask another question in
17	regards to the proposed 345 cable along the railroad and
18	the inductance and it's interference with rail
19	operations. Would that be true?
20	MR. PRETE: Yes, that would.
21	MR. CUNLIFFE: What measures could be done
22	to mitigate that?
23	MR. PRETE: I would defer that to Mr. Zak
24	since he's sitting at the side of his chair.

1	MR. ZAKLUKIEWICZ: We would have to
2	perform a full study of the impacts of electromagnetic
3	fields onto the railroad signaling system. This would be
4	an extensive study. Something that we would perform if
5	we were to install construct 345 kV lines along the
6	railroad right of way. It would be a study for which we
7	would hire consultants working with the CDOT to perform
8	and if required it would mean extensive change over of
9	all of the signaling systems and on the existing
10	railroad system today.
11	MR. CUNLIFFE: Thank you. I just want to
12	confirm again, you would need to probably rebuild the
13	foundation for the catenary structures or the pole
14	locations, is that correct?
15	MR. ZAKLUKIEWICZ: I think for the loading
16	of a 345 kV facilities I do not envision any of the
17	existing catenary structures or foundations being used
18	for that loading. I think as we found on the
19	Pequonnock/Ely Avenue line these would have to be
20	separate structures in between the existing catenary
21	structures today, totally independent of those
22	structures. And in some cases we would probably have to
23	reinforce the existing catenary structures as we put in
24	the caissons and concrete foundations, which go down

1	probably about 20 feet or so in the area to prevent any
2	structural damage to the existing catenary structures.
3	So it would not be my envision, as you've
4	seen the bonnets on top of the C catenary structures 345
5	it's quite clear in our minds that those structures are
6	not sufficient to handle the weight and the stresses that
7	would be placed on those foundations and structures for a
8	345 kV overhead transmission line.
9	MR. CUNLIFFE: In other words, there would
10	be a brand new 345 kV corridor adjacent to that corridor?
11	MR. ZAKLUKIEWICZ: It would be those
12	structures would be physically located between the
13	existing catenary structures and they would rise on top
14	of, just as the one portions of the Pequonnock/Ely Avenue
15	line are. And I believe one of them had a picture.
16	Those monopoles were totally independent of the catenary
17	structures. If you recall there was
18	MR. CUNLIFFE: Right.
19	MR. ZAKLUKIEWICZ: so I would vision
20	the same thing for 345 except the foundations now would
21	be somewheres six to eight feet in diameter at the base
22	for which we would then bolt on the steel monopoles and
23	depending on the weight restrictions in crane heights
24	that can be erected at that time would limit the amount

1	of the length or the height of the structures that
2	would have be bolted together or slipped on one to the
3	other in the design and that could be done. But they
4	would be totally independent of the catenary structures
5	that exist in place today.
6	MR. CUNLIFFE: Would this line also
7	parallel the recent construction in the 90's of the
8	Ely/Pequonnock line?
9	MR. ZAKLUKIEWICZ: It's clear that one of
10	those lines would have to be removed from service to
11	place in service a new 345 kV line and we would have to
12	look and see the impacts of whether it would be on the
13	south side or the north side of the existing tracks
14	between Pequonnock and Ely Avenue.
15	MR. HOGAN: In the railroad report there's
16	a
17	COURT REPORTER: Excuse me sir.
18	MR. HOGAN: Jim Hogan. In the railroad
19	report there's a sketch that depicts that at C-1 that
20	gives it a good comparison. It's toward the very end of
21	the report in the appendix.
22	MR. EMERICK: Mr. Zak, could you just
23	refresh my memory on the Pequonnock and Ely, when that
24	was redone? What dates?

1	MR. ZAKLUKIEWICZ: We were actually
2	beginning construction in '91 to '93 timeframe.
3	MR. ASHTON: First circuit or second
4	circuit?
5	MR. ZAKLUKIEWICZ: This is the second
6	circuit. The first circuit was on the south side and we
7	built the Ely Avenue/Pequonnock line was placed on the
8	north side of the railroad tracks.
9	CHAIRMAN KATZ: Mr. Emerick?
10	MR. EMERICK: Yes. Mr. Zak, just to
11	follow up on the signaling interference potential?
12	MR. ZAKLUKIEWICZ: Yes.
13	MR. EMERICK: Do you while it will
14	require a degree of study do you anticipate that those
15	issues could be resolved, or are they unresolvable?
16	MR. ZAKLUKIEWICZ: No. They can be
17	resolved and I think I said if there is sufficient
18	interference it would basically mean the existing
19	signaling system would have to be totally replaced today
20	because the standards by which the existing signaling
21	system was put in was not designed to handle the level of
22	electromagnetic fields that would be present for a 345 kV
23	system.
24	MR. EMERICK: Okay.

1	MR. ZAKLUKIEWICZ: And so you would use
2	shielding technologies that were not available at that
3	time and those would be a requirement of the project to
4	replace that entire signaling infrastructure
5	MR. EMERICK: Okay.
6	MR. ZAKLUKIEWICZ: big, big issue and a
7	very, very expensive intensive project.
8	MR. EMERICK: Okay. Thank you.
9	CHAIRMAN KATZ: When you looked at East
10	Shore was one of the things you looked at using Amtrak
11	from Meriden/New Haven and then getting somehow from New
12	Haven to East Devon?
13	MS. BARTOSEWICZ: On the East Shore route
14	from East Shore to East Devon?
15	CHAIRMAN KATZ: Correct. Did you look at
16	the using Amtrak overhead to get from Meriden to New
17	Haven when you looked at that?
18	MS. BARTOSEWICZ: We looked at the right
19	of way that currently exists between Wallingford and East
20	Shore. There's an existing 345 kV right of way.
21	CHAIRMAN KATZ: Yeah, but I'm asking, did
22	you look at the railroad right of way?
23	MS. BARTOSEWICZ: Yes.
24	CHAIRMAN KATZ: Okay. So when we get to

1	East Shore we can talk about that one?
2	MS. BARTOSEWICZ: Mr. Cunliffe, we do have
3	a response for you. On the Merritt approximately 24
4	structures are impacted and on I-91/95 approximately 100.
5	MR. CUNLIFFE: Thank you. The
6	MS. BARTOSEWICZ: Excuse me. Structures
7	could have been buildings or homes or businesses.
8	MR. CUNLIFFE: okay. The new line that
9	would go along the railroad, the supporting arms would
10	need to face into the rail?
11	MR. ZAKLUKIEWICZ: That is correct.
12	That's what we would envision. We have not designed it,
13	but I would envision for clearance reasons that you would
14	put the monopoles in facing towards the railroad tracks
15	or the conductors themselves would overhang the railroad
16	tracks such that that minimizes now the clearances
17	required should the arms be placed away from the railroad
18	tracks. Now your clearance from the edge of the railroad
19	to any trees or properties would increase significantly
20	if the conductors are faced away from the railroad
21	tracks.
22	MR. CUNLIFFE: And is there a needed
23	distance, a right of way from the conductor to any
24	distance that is required for installation? Just like a

1	regular right of way has a 120 foot necessity is there
2	one required here?
3	MR. ZAKLUKIEWICZ: If you envision a
4	monopole, vertical construction, with the conductors over
5	the railroad tracks then there could be from the center
6	of the monopole itself of the structure you would have a
7	requirement a minimum under the ideal conditions of
8	approximately 25 feet away from the railroad track to
9	meet clearance requirements. We base that on the fact
10	that just as the construction took place on the
11	Pequonnock/Ely Avenue line the spans between conductors -
12	- I mean, between structures are extremely small, in the
13	three to 400 foot range as opposed to typical
14	construction over land, which is typically around 700
15	foot to 750 to 800 and this case we would have many, many
16	more structures. Approximately three to 400 foot apart
17	at maximum. This would now minimize the amount of
18	conductor movement and blow out by having such short span
19	lengths. That would be an idea case would be a minimum
20	of 25 and depending on where we need to place structures
21	that could increase up to 45 foot.
22	MR. CUNLIFFE: Thank you.
23	MR. PRETE: Mr. Cunliffe, I would like to
24	add.

1	MR. CUNLIFFE: Go ahead.
2	MR. PRETE: That distance Mr. Zak is
3	talking about is indicative of the results of the
4	railroad study. So with those clearances we have a
5	conflict with about 100 buildings. And we expect that
6	same type of ratio between Singer and East Devon.
7	MR. CUNLIFFE: Thank you. The study that
8	you provided in the route options considered, but
9	eliminated, and that was provided in the municipal
10	consultation material, Appendix B, it states it's a 1990
11	evaluation of the railroad right of way. Do you believe
12	that that study is still valid?
13	MR. HOGAN: Yes, it is.
14	MR. CUNLIFFE: I'll move to the highway
15	corridor. You speak of right of way criteria and
16	placement of overhead lines would be adjacent to the
17	existing DOT right of way but it would share their right
18	of way, including an additional 65 feet outside their
19	right of way. How does that right of way sharing work?
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	MR. HOGAN: Essentially that the
21	MR. HOGAN: Essentially that the conductors would be I guess have an aerial easement maybe
21 22	_
	conductors would be I guess have an aerial easement maybe

1	be acquired.
2	MR. CUNLIFFE: So that let's use the
3	center line of the pole
4	MR. HOGAN: Okay.
5	MR. CUNLIFFE: 65 feet away from the
6	pole away from the highway you would need to acquire?
7	MR. HOGAN: Right.
8	MR. CUNLIFFE: The other direction toward
9	the highway, how does that agreement how is that
10	agreement reached?
11	MR. HOGAN: That would have to be worked
12	with DOT, but essentially it would be an aerial easement.
13	MR. CUNLIFFE: Thank you.
14	MR. HOGAN: I guess that would also
15	facilitate any maintenance along it. You would be not on
16	the DOT's side.
17	MR. CUNLIFFE: For the Route 15 corridor
18	it is identified as part of the National Register of
19	Historic Places and also on the National Scenic Byway.
20	Is there any Legislation that precludes the siting of an
21	electric transmission line infrastructure within these
22	designated corridors?
23	MR. ZAKLUKIEWICZ: I am not aware of
24	formal Legislation that would preclude that.

1	MS. RANDELL: Chairman Katz, if you'd like
2	us to address that from a legal standpoint we will.
3	COURT REPORTER: Could you repeat that
4	please? Please repeat that?
5	MS. RANDELL: Certainly.
6	CHAIRMAN KATZ: I should say that anyone
7	before you speak if you can catch the eye of the
8	MS. RANDELL: Will do.
9	CHAIRMAN KATZ: we'll try to raise your
10	mic. promptly.
11	MS. RANDELL: Chairman Katz, if you'd like
12	us to address that legal issue we will.
13	CHAIRMAN KATZ: Yes, yes. Thank you. Mr.
14	Emerick?
15	MR. EMERICK: Just a point of
16	clarification with respect to the historic designation of
17	Route 15. What portion of that route is so designated?
18	MR. HOGAN: The Merritt Parkway, which
19	starts at the Housatonic River and heads into Fairfield
20	County.
21	MR. EMERICK: And the other segment is not
22	designated as
23	MR. HOGAN: No, that would be the Wilbur

24 Cross and it is not.

1	MR. EMERICK: So it doesn't have a similar
2	restriction?
3	MR. HOGAN: No.
4	MR. EMERICK: Okay. Thank you.
5	CHAIRMAN KATZ: So it really doesn't
6	effect the part that goes from to East Devon, the
7	historic designation?
8	MR. HOGAN: Right. Yes.
9	MR. CUNLIFFE: Was the median location
10	considered for location of a line either overhead or
11	underground?
12	MR. HOGAN: Along the Merritt Parkway?
13	MR. CUNLIFFE: Merritt Parkway first.
14	MR. HOGAN: Yes, it was considered, but it
15	was deemed impractical.
16	CHAIRMAN KATZ: Can you elaborate?
17	MR. HOGAN: Certain areas one, the median
18	is very narrow and so all the vegetation would have to be
19	cleared. Hazards are, you know, difficulty to get in to
20	do that construction and maintenance. So we have chosen
21	that the better option or more practical to have it on
22	one of the shoulder sides.
23	CHAIRMAN KATZ: Well, let's pursue that a
24	little bit. You need a four foot wide trench in the

1	median, correct to actually drop let's say you were
2	going underground?
3	MR. HOGAN: Okay. I was thinking
4	overhead.
5	CHAIRMAN KATZ: Well, let's talk about
6	underground for a moment. Let's say we'll take this
7	hypothetical that you can do more underground north of
8	East Devon, okay? So you have to get from East Devon
9	over to Route 15. And now let's say you get to Route 15
10	and you want to go underground through the median of 15.
11	You'd need a four foot wide trench plus you'd need some
12	easement I assume?
13	MR. HOGAN: 15 feet.
14	CHAIRMAN KATZ: How many?
15	MR. HOGAN: 15 feet.
16	CHAIRMAN KATZ: Why 15 feet?
17	MR. HOGAN: That's, you know, I guess four
18	feet is just the width of the trench and so there's some
19	buffer I guess on either side.
20	CHAIRMAN KATZ: Well, is there any
21	flexibility in that buffer?
22	MR. HOGAN: There may be. But I know
23	we've also looked at some areas where it may be more
24	practical to have a thinner cross section, which would be

wider than the four feet depending if we're going above or over utilities.

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MR. ZAKLUKIEWICZ: I think you need in these -- you need access to the cable system, which means some place we would have to drive vehicles and we would not want to each time we need to get to a section of the cable seek from someone, the State of Connecticut the rights to be on the property for which you would have an easement. So you basically need enough width alongside of the cable system because the last thing you really want to do is drive over the cable system to turn around and bring in maintenance vehicles to get to the vaults to do the checking and ensuring that everything is alright like you would on a periodic basis. So we would -- we would need some sort of an easement rights and during the construction itself we would need a construction easement significantly wider than that to have the vehicles to remove the excavated materials and for the cement trucks to come in with the thermal-slurry backfill and all plus the piping and the welding and all that's going to take place in those areas.

So during the construction time you need probably the entire width, if it's wide enough, for that construction easement. And if it was not then we would

1	have to work in one of the lanes at nighttime whether it
2	be the southbound or the northbound lane closest to the
3	median itself. Those would have to be barricaded off
4	with the Jersey barriers or whatever to protect the
5	workers.
6	CHAIRMAN KATZ: During construction only,
7	correct?
8	MR. ZAKLUKIEWICZ: During construction
9	only and we would have to reestablish that if you had a
10	problem with one of the cable sections or a problem in
11	one of the vault areas.
12	CHAIRMAN KATZ: Let's assume that DOT gave
13	you the entire median width for construction purposes
14	from Milford to West Rock, would it if they if you
15	had permission to use that entire median would it be
16	possible assuming you can do more underground, would
17	it possible to install an underground cable from in the
18	median of Route 15 from Milford to West Rock? Other than
19	I'm looking at figure three in your latest submittal
20	and other than a small orange section it looks like that
21	area is listed as feasible for underground.
22	MR. ASHTON: While you're thinking about
23	that question let me add this question. Are you aware if
24	the DOT has normally used the median for drainage

1	purposes such as they're doing along I-95 in the
2	Fairfield County area? A median do you know if the
3	median is physically available?
4	MR. HOGAN: The median was not our, you
5	know, the spot that we thought most likely to use. It
6	would be, you know, adjacent to the shoulders.
7	MR. ASHTON: It would be the shoulder. Do
8	you know what the width of the right of way of the
9	Parkway is?
10	MR. HOGAN: On the Parkway it's 300 feet.
11	MR. ASHTON: Okay.
12	MR. HOGAN: The Merritt.
13	CHAIRMAN KATZ: Just I would assume you
14	would have to remove less trees if you worked in the
15	median as opposed to working on the sides of the Parkway?
16	MR. HOGAN: In the Merritt Parkway there's
17	trees in the median, but on the Wilbur Cross that
18	wouldn't generally be
19	CHAIRMAN KATZ: Right. And I'm talking
20	just the Wilbur Cross at this this hypothetical is
21	just the Wilbur Cross. Mr. Emerick?
22	MR. EMERICK: I think it gets confusing
23	when we're talking 15, Wilbur Cross, Merritt. I think
24	we're talking Wilbur Cross here. What is the right of

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1	way of the Wilbur Cross as opposed to the Merritt?
2	MR. HOGAN: They're both 300 feet.
3	MR. EMERICK: They're both 300 feet. So
4	both roadways envisioned another roadway alignment?
5	MR. HOGAN: The difference is the Wilbur
6	Cross is centered in that 300 foot where the Merritt
7	Parkway is scooted over towards the north side. So the
8	Merritt has a bigger unused corridor.
9	CHAIRMAN KATZ: And wouldn't it be fair to
10	say that the Wilbur Cross is less treed immediate
11	adjacent to the travel portion?
12	MR. HOGAN: We're our environmental
13	planner we're thinking may be in a better position to
14	answer some of these detailed questions. And I guess
15	CHAIRMAN KATZ: Okay. We'll let you get
16	back
17	MS. RANDELL: Sorry. We'll need to have
18	him sworn.
19	CHAIRMAN KATZ: but just to be clear
20	though if you go to your figures in your latest report,
21	which we received today, it appears that if you could go
22	basically underground on the Wilbur Cross from Milford to
23	almost West Rock?
24	MS. BARTOSEWICZ: The evaluation from

1	the two points that you just mentioned was being on the
2	outside of the highway.
3	CHAIRMAN KATZ: Okay.
4	MS. BARTOSEWICZ: And your questions have
5	been in the center lane, which I think is something we'll
6	have to double check.
7	CHAIRMAN KATZ: Let's talk about both.
8	Let's talk about firs the outside. It appears that you
9	could go underground near the outside of the Wilbur Cross
10	from Milford to almost West Rock, is that correct?
11	MR. HOGAN: Yes. Essentially there's one
12	part just south of West Rock.
13	CHAIRMAN KATZ: Okay. Well, let's say you
14	got to West Rock, which of course has it's own problems,
15	could you hang a cable inside the tunnel of West Rock?
16	MR. HOGAN: No, we would not do that.
17	CHAIRMAN KATZ: And why not?
18	MR. HOGAN: Underground cable would like
L9	some more protection, physical protection. So somehow
20	either burying it or tunneling through would be the
21	preferred way to install that.
22	CHAIRMAN KATZ: And is that feasible at
23	West Rock?
24	MR. HOGAN: It could be. It would be very

1	difficult and it's a very long tunnel. And I guess to
2	this point it might just be worth saying we have
3	identified underground routes that get, you know, from
4	the northern parts to the south that we feel are far
5	advantageous to the Merritt. So, you know, if you were
6	looking at underground in those northern areas those
7	routes we feel would be much easier to construct, more
8	easy to access, less impact, not on you know, restricted
9	access highways. And so, you know, if, you know, our
10	thoughts are certainly if you find a way to put more
11	underground in we've got routes better than the Merritt,
12	better than I-91/95 to put them.
13	CHAIRMAN KATZ: Okay. But you could also
14	go overhead on Route 15 from Milford according to this
15	chart, this map?
16	MR. HOGAN: Yes.
17	CHAIRMAN KATZ: Okay. So if you went
18	overhead from Milford, roughly East Devon, along Route 15
19	and you get to West Rock and your overhead can you carry
20	the cable through the tunnel of West Rock, or do you have
21	to go over the top of West Rock?
22	MR. HOGAN: You would have to go either
23	around or over it.
24	CHAIRMAN KATZ: Okay. And then you come

1	down and then you could continue along 15 it looks like
2	up toward Meriden, correct?
3	MR. HOGAN: Yes.
4	CHAIRMAN KATZ: Okay. Now does this
5	report that we got today indicate any pitfalls for going
6	overhead along Route 15 that I should look at?
7	MR. HOGAN: You know, the areas that we
8	show that it can be the pitfalls certainly are the
9	construction along the restricted access highway. An
10	awful lot of trees, you know, that have to be cleared to
11	clear the right of way for the overhead line.
12	CHAIRMAN KATZ: Okay.
13	MR. HOGAN: And then there's a cross
14	section in there that depicts what that may look like.
15	CHAIRMAN KATZ: Okay. Then perhaps I'll
16	try to look at this today and come back to that. Mr.
17	Cunliffe?
18	MR. CUNLIFFE: I believe at the outset you
19	had identified I think five criterion. You're going to
20	have to help me. I believe it's social, technical,
21	economic, environmental and one other, is that
22	MS. BARTOSEWICZ: Mr. Cunliffe, could you
23	tell me where you are in the report?
24	MR. CUNLIFFE: I'm going off my notes.

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1	MS. BARTOSEWICZ: Overhead criteria?
2	Which would differ slightly from underground criteria.
3	MR. CUNLIFFE: Then give both. I recall I
4	thought it was like a scope of the project. We have to
5	meet five criteria.
6	MR. PRETE: Yes, we do.
7	MS. BARTOSEWICZ: Correct. We looked at
8	the system benefit. We looked at the operability and
9	reliability. We looked at technical feasibility, which
10	is can it be engineered, can it be built? We looked at
11	property impacts, impact on homes, property visual. We
12	looked at environmental impact, impact on wildlife,
13	vernal pools, aquifers. And we looked at cost.
14	MR. CUNLIFFE: Would any one of those
15	criteria kick out an alternative or would you base your
16	decision on cumulative?
17	MR. PRETE: In answering that question the
18	first one, system benefit. Since the project is
19	associated with need reliability if it doesn't work that
20	would kick that out, in your words.
21	MR. CUNLIFFE: But any of the others would
22	be a mix in your decision?
23	MR. PRETE: It would be a balance.
24	MS. BARTOSEWICZ: Technical feasibility

would be another one. If it can't be built or engineered 1 2 that would be problematic. 3 MR. ASHTON: Would it also -- would it also not be a problem if you had a severe environmental 4 5 consequence? For example, I can't conceive of any circumstance whatsoever in this life or the next one that 6 you could built an over 345 kV line across the front lawn 8 of the State Capital. 9 (Laughter) 10 MS. BARTOSEWICZ: I would agree with you 11 Mr. Ashton. 12 MR. ASHTON: You know, insofar as there is a very severe environmental consequence, couldn't that 13 14 knock it out? 15 MS. BARTOSEWICZ: That's the balance that 16 Mr. Prete was talking about. And those are the factors 17 that we weigh to determine if it's feasible. 18 MR. ASHTON: Yeah, I understand routine things, but there could be an absolute no go condition 19 20 with an environmental impact, is that not true? 21 MS. BARTOSEWICZ: You're correct. 22 MR. PRETE: And certainly if you couldn't -- if you couldn't get it permitted -- if you couldn't 23

get it permitted then that would preclude it from being

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constructed.
MR. ASHTON: Well, I wouldn't even try to
get it across the front lawn of the Capital without a
permit.
MR. PRETE: I'm not there much anymore.
MR. ASHTON: There isn't that much money
in the world
CHAIRMAN KATZ: Off the record. Off the
record.
(Off the record)
CHAIRMAN KATZ: Mr. Cunliffe, back to you.
MR. CUNLIFFE: I was seeing a common
thread in part of these alternatives and part of it is
the social impact to these alternatives, i.e. property
being taken probably the highest and do they all share
that more than the proposed route?
MR. PRETE: Yes. And that was a very
important criteria early on. That certainly the taking
of homes was something that we were trying to avoid at
all costs.
MR. CUNLIFFE: I'd like to go into marine
and you've only identified a route that went from
Bridgeport to Norwalk. Was a route not considered from
East Shore?

1	MS. BARTOSEWICZ: The when we first
2	started looking at the marine route we chose a route
3	between Bridgeport and Norwalk because this part of the
4	route would have the highest level of shellfish beds that
5	we were going to have to go through so it would require
6	the most analysis and be the most difficult to traverse.
7	It's also the longest it would be the longest part of
8	the underground route. So our look at this was this
9	route because of those factors is the route we looked at.
10	We did not study the portion between East Devon and
11	Singer, although I understand we have some information on
12	what lays underneath that part of Long Island Sound as
13	well.
14	CHAIRMAN KATZ: That's not quite
15	responsive because we're I'm sorry. Go head.
16	MR. CUNLIFFE: Well, you brought up Devon
17	as well. I also had Millstone on my list.
18	MS. BARTOSEWICZ: We did not look at the
19	underground route did not study underground route from
20	Millstone to East Devon. Certainly trying to permit in
21	Long Island Sound we believe it will be very difficult
22	MR. ROBERT MARCONI: Do you think this is
23	easy?
24	MS. BARTOSEWICZ: more difficult?

1	MR. COLIN TATE: Somebody other than us
2	may have to make some choices.
3	MR. ZAKLUKIEWICZ: I think Mr. Cunliffe
4	there's another issue here and that is the length of the
5	cable that would have to be installed between Millstone
6	and East Shore and/or Devon and/or Bridgeport far exceeds
7	the capability of what can be done with alternating
8	current. So A, the route onto Millstone
9	MR. CUNLIFFE: I'll stop you there Mr
10	MR. ZAKLUKIEWICZ: would have to be
11	done with DC transmission due to the length of the cable
12	unless we're proposing to approximately every 20 miles
13	along the shoreline come on land and install substations
14	with reactor banks and then go back out into Long Island
15	Sound, if you will, and we just deem that highly
16	unacceptable for all of the towns along the routes if you
17	were proposing to do this with AC. We did file a high
18	voltage DC alternative package that was part of the
19	filing and I think that was in volume
20	CHAIRMAN KATZ: Which volume was that in?
21	MR. ZAKLUKIEWICZ: volume six, or four.
22	Which one was the DC?
23	CHAIRMAN KATZ: And where did it go, from
24	where to where?

1	MR. ZAKLUKIEWICZ: Volume six we discussed
2	high voltage DC, the positives and the negatives of going
3	with high voltage DC. The requirements and the cost
4	associated with putting in DC terminals and what impact
5	they would have on the operation of the system and more
6	importantly will the high voltage DC resolve a number of
7	the issues that have been brought out as to what the
8	proposed project resolves and some of those issues are
9	does it eliminate the short circuit duty? Does it
10	alleviate it in some way? Are we able to connect
11	additional generation into the high voltage DC? Is high
12	voltage DC going to allow us to meet all other criteria
13	we established when we had the project proposed and how
14	does it compare to resolving all of those issues relative
15	to an alternating current solution?
16	CHAIRMAN KATZ: Mr. Tate?
17	MR. TATE: Would these would these vary
18	from whatever point it was or are all of these problems
19	comparable from East Shore, or from Devon, or from
20	Millstone?
21	MR. ZAKLUKIEWICZ: I think it depends Mr.
22	Tate on how far you want to extend the high voltage DC.
23	CHAIRMAN KATZ: Let's take
24	MR. TATE: Tell me the perimeters of going

1	further and further with DC unless
2	MR. PRETE: If I can could I just
3	the study was in the volume was identified the actual
4	study is attached to the Durham/Wallingford interrogatory
5	014.
6	CHAIRMAN KATZ: Okay. Well, if we talk
7	if we're talking about going from DC from New Haven to
8	East Devon because basically you need to get the energy
9	to East Devon and then from there to your other hubs,
10	correct? So let's say you were able to get down to East
11	Shore, could you do a DC from East Shore area over to
12	East Devon?
13	MR. ZAKLUKIEWICZ: The answer to that is,
14	yes, you can. That would mean a DC converted terminal at
15	East Shore.
16	CHAIRMAN KATZ: Well, there's already one
17	in New Haven, a DC
18	MR. ZAKLUKIEWICZ: There's one basically
19	there at East Shore, the other properties. You'd have to
20	install a second one now. As a matter of fact to carry
21	the load we're talking, if we were talking using the same
22	technology, which is DC light, we're talking about four
23	converter terminals. The one that is there today is one
24	and it has 330 megawatt capability. This one would now

1	have to have 1,200 megawatt capability.							
2	So we're talking about a site now which							
3	would house the DC converter terminals four times as							
4	large as the existing facilities and and turn around							
5	and restructure, if you will, the 345 kV bus that is							
6	already there and at the Devon terminal, the East Devon							
7	terminal you would have to have four similar converter							
8	stations to go to DC and then the interconnecting 234 kV							
9	equipment at that facility and then pick up the rest of							
10	the 345 kV transmission system as proposed between East							
11	Devon, Singer and Norwalk because you resolve virtually							
12	nothing but have a transmission pipe or a path between							
13	East Devon and East Shore in the New Haven area.							
14	CHAIRMAN KATZ: So it might be better to							
15	go further and go from East Shore all the way to Singer?							
16	In the direction to drill right through the coal pile.							
17	MR. ZAKLUKIEWICZ: By doing that by							
18	doing that then I do not get my generation off the 115 kV							
19	system in the East Devon area.							
20	CHAIRMAN KATZ: Okay.							
21	MR. ZAKLUKIEWICZ: I need to resolve the							
22	short circuit problem. I need to be able to							
23	interconnection generation onto this transmission project							
24	so I can move it from Point A to Point B. By bringing DC							

1	then to Singer from East East Shore all I do is make
2	up that transmission connection but I leave my generation
3	at East Devon, if you will, connected onto the 115, which
4	is a bottleneck. So at some place, at Singer then, I'd
5	have to bring 345 kV back up to Devon and then it's on a
6	radial leg as opposed to interfaced on the whole
7	transmission system recognizing we're talking four
8	cables, not one cable. Each cable at approximately 330
9	megawatt capability
10	CHAIRMAN KATZ: So the 345 really has to
11	run through East Devon?
12	MR. ZAKLUKIEWICZ: yes.
13	CHAIRMAN KATZ: Do you want to finish this
14	thought and then we'll have our lunch break?
15	MR. TATE: I'm just a
16	VOICE: Let's have lunch now.
17	MR. TATE: is there any sense in
18	thinking about taking a source from Millstone to East
19	Shore for the DC current? To bring a strong source into
20	East Shore for the DC?
21	MR. ZAKLUKIEWICZ: Millstone down to East
22	Shore?
23	MR. TATE: Yeah.
24	MR. ZAKLUKIEWICZ: The answer to that is,

1 yeah, that was looked at. I think you're better off 2 going from a strong source like Beseck directly down to 3 East Shore. It's a lot shorter. The same transmission 4 capabilities would be out of Beseck as opposed to a Millstone. The issue that is out there at Millstone we 5 6 all have to be cognizant of. This to my knowledge would 7 be the first DC terminal at a nuclear plant and we have 8 to be cognizant of the harmonics issues and the interplay 9 between that terminal and the operation of the nuclear 10 I'm certain we would end up going through 11 extensive testing and I don't know exactly how you do 12 that without putting a large harmonic generator in the Millstone switch yard to get the NRC to license such a 13 14 facility there, recognizing that the NRC periodically 15 review the transmission infrastructure that operates with 16 Millstone plant. 17 There is such a review coming up next 18 month as a matter of fact where the NRC not only conducts 19 their review of the engineering of the facilities out of 20 there, but they also because the plant relies on the 345 21 kV lines coming into Millstone for the safe shutdown of 22 the nuclear plant for an accident reviews extensively 23 where all of these 345 lines terminate and there is an 24 extensive study that goes on and review of all of the

1	terminals in such that if we make changes at any of the
2	terminals where the four lines presently terminate that
3	review goes also back to the NRC so you keep the
4	operating license of the plant in place.
5	CHAIRMAN KATZ: Mr. Emerick?
6	MR. EMERICK: Just a point of
7	clarification with respect to Millstone and a strong
8	source. I can see how Millstone is a strong source if
9	it's generating but we all can remember a period of time
10	fairly recently when Millstone was entirely shut down.
11	Would Millstone still maintain that same category as a
12	strong source under such conditions, and how?
13	MR. ZAKLUKIEWICZ: Okay. Let me refresh
14	your memory. There are four 345 kV transmission lines
15	that terminate at Millstone. One is to a station called
16	Montville, which is probably six or seven miles away. At
17	the Montville terminal you have generators number five
18	and number six. Approximately a mile away from that
19	Montville station you have 180 megawatt AES Thames
20	generating plant. So you have three generators a short
21	distance from Millstone.
22	If you take the second line you end up at
23	Cod Street Substation, which is in the Willimantic area.
24	That is the direct tie to the 345 line which goes to

1 Lake Road Substation, which is 870 megawatts and all the 2 generation in -- and all the generation in northern Rhode 3 Island and southeastern Massachusetts. The third line 4 goes to Manchester Substation. That is in Manchester. That interconnects now with Ludlow, which is in the 5 6 Springfield area and immediate to the Springfield area 7 there are the generating plants. There's two combined 8 cycle generating plants within five miles of that 9 terminus. 10 The fourth line goes to Southington. 11 Southington of course ties in to the New York system via 12 Pleasant Valley in New York with Long Mountain in the New 13 Milford area over to Frost Bridge, which is immediately 14 north of Waterbury and then over to Southington. 15 those -- their ability to tie with our 345 kV lines along 16 with the generation that's on at Millstone itself makes 17 Millstone the strongest substation on the NU system. 18 Especially when the units are running, that's units 19 number two and unit number three, which have 20 approximately a 2,000 megawatt output. 21 And I believe in our filing on my direct testimony on March $9^{\rm th}$ Mr. Emerick, on page 15 there are 22 23 two diagrams there which kind of pictorially describe 24 what I just did verbally. So that may be helpful to look

1	at those two diagrams on page 15 of my March testimony.
2	CHAIRMAN KATZ: Mr. Emerick, unless you
3	have a follow-up I was going to have the lunch break now?
4	MR. EMERICK: Just a point, I guess I put
5	it in maybe perhaps a sentence. Even though when
6	Millstone is not generating because of the inter-ties
7	outside of the Millstone area it still maintains it's
8	quality as a strong source?
9	MR. ZAKLUKIEWICZ: That is correct.
10	MR. EMERICK: Thank you. But I did like
11	your explanation. Thank you.
12	CHAIRMAN KATZ: And I liked your summary.
13	And on that note we're going to since we got a late
14	start we're going to resume promptly at 1:00 p.m.
15	(Whereupon, a lunch break was taken.)
16	CHAIRMAN KATZ: Okay. We're ready to go.
17	This session is back in order. The Applicant has
18	offered to have two additional witnesses sworn in. Two?
19	Correct?
20	MS. RANDELL: Two.
21	CHAIRMAN KATZ: Two and who will go
22	through some more detailed review of Route 15. So if you
23	could introduce your witnesses and have them spell their
24	names?

1	MS. RANDELL: Yes. Mr. Welter, would you
2	state your full name and spell it for the Court Reporter?
3	MR. CYRIL WELTER: My name is Cyril
4	Welter, C-Y-R-I-L, Welter, W-E-L-T-E-R.
5	MS. RANDELL: And your business
6	affiliation?
7	MR. WELTER: I work with Burns and
8	McDonell Engineering.
9	MS. RANDELL: And you will be able to
10	provide the Council with a run through of the Wilbur
11	Cross/Merritt Route 15 option?
12	MR. WELTER: Correct.
13	MS. RANDELL: And then Mr. Kleiman, to the
14	extent that there are any questions with respect to the
15	marine study Mr. Kleiman will be available to answer
16	those. Would you again, state your full name for the
17	record?
18	MR. RICHARD KLEIMAN: Richard Kleiman, K-
19	L-E-I-M-A-N.
20	MS. RANDELL: And your affiliation?
21	MR. KLEIMAN: ESS Group.
22	MS. RANDELL: Thank you.
23	(Whereupon, Cyril Welter and Richard
24	Kleiman were duly sworn.)

1	CHAIRMAN KATZ: Okay. Gentleman, I
2	understand you're going to come up with your pointer and
3	run us through these
4	MS. RANDELL: Yes. Mr
5	CHAIRMAN KATZ: and if you could
6	preface any boards by an exhibit number that would be
7	helpful. Your legal team will help you on that part.
8	MS. RANDELL: we will help and here's a
9	microphone you can use over here Mr. Welter. Chairman
10	Katz, I'm told that the easel boards are blow ups of the
11	maps contained in Exhibit 66.
12	CHAIRMAN KATZ: Thank you.
13	MS. RANDELL: I'm sorry, 65. Yes, I'm
14	sorry. 65.
15	CHAIRMAN KATZ: Okay.
16	MR. WELTER: Are we ready?
17	MS. RANDELL: Yes.
18	MR. WELTER: Okay. I guess what I need to
19	is first identify the scope of the study that we did for
20	Northeast Utilities. The idea was to reinvestigate this
21	alternative, having been considered by eliminated earlier
22	and the purpose there was to look at any way, either
23	overheard or underground that we could follow that route
24	and still make all the connections to all of the

1	substations that have been identified. One of the things							
2	we did as part of that was we looked at the National							
3	Highway Design Standards for building along highways and							
4	one of the things that's in the report that I submitted							
5	were a couple of figures that show the drawings and how							
6	those if you have if we had drawing of overhead							
7	structures to identify how much right of way you would							
8	need to be and where those poles would need to be.							
9	And one of the things I wanted to point							
10	out there was that according to the design standards you							
11	need to be outside of the clear zone for safety and that							
12	is on a 55 mile per hour is another approximately 30							
13	feet. So we were going to set that pole at least 30 feet							
14	away. Likewise for construction we would not want the							
15	equipment within that area, or if you get close to that							
16	area you may be shutting down a lane for safety purposes.							
17	That is one of the reasons that the median wasn't							
18	considered viable.							
19	The median in fact is mostly less than 20							
20	feet wide on the Wilbur Cross section, around 20, 24 feet							
21	wide on the Merritt Parkway section.							
22	CHAIRMAN KATZ: How wide on the Wilbur							
23	Cross?							
24	MR. WELTER: Only 20 feet at maximum. In							

some places the Jersey barriers are virtually back to 1 back so you would really not even be able to get 2 3 equipment in there. So the median was never considered as a feasible option in this evaluation. So having said that we decided -- determined how much space we would 5 6 need. 7 The other critical item I wanted to talk about in terms of the design guides is that it 8 9 specifically states you need be beyond the toe of the 10 slope if you have an embankment that supports the 11 highway. In other words, we would not want to be 12 trenching through that side slope where you have a raised bed for the highway. So any construction would start 13 beyond that point, either for overhead or underground, 14 15 and that becomes very significant in following this. 16 So if I looked at -- when we looked at 17 that we came up with a need for at least 75 feet of right of way beyond the edge of the payment for the overhead 18 19 line. More if you used a delta to try and shorten that 2.0 structure. The vertical one is about 130 feet tall. 21 you wanted to lower that, that compact delta has been proposed in other parts of the project, raises the 22 clearing to 95 feet. For the underground we're talking 23 40 feet because you have the 15 feet of actual 24

1	construction, 25 feet of access as we talked about, the
2	truck next door or to the side where you're, you know,
3	putting the dirt and other things like that. So we're
4	looking at 40 feet.
5	So those are the two dimensions that we
6	used in trying to determine what would happen if we
7	followed the corridor.
8	CHAIRMAN KATZ: When you say 40 feet of
9	actual construction for underground
10	MR. WELTER: Right.
11	CHAIRMAN KATZ: when you're doing
12	underground under Route 1 sometimes you don't have 40
13	feet.
14	MR. WELTER: There is 40 feet because
15	we're using the payment to park the truck next to the
16	trench and that's why that lane is closed.
17	CHAIRMAN KATZ: So is there any
18	flexibility in that 40 feet?
19	MD WEITED. Thoro has to be physically
	MR. WELTER: There has to be physically
20	that amount of space. Now the question is where that
20 21	
	that amount of space. Now the question is where that
21	that amount of space. Now the question is where that space comes from. And as we're saying with the overhead

1	not	having	to	take	from	some	other	place.
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2 CHAIRMAN KATZ: I see.

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in there.

3 MR. WELTER: So when we looked at 4 following the Wilbur Cross to start here at the north end, first we have to get to it. And there are two ways 5 and these are sort of options that came from the original 6 study. They're in the overall map at the back of the 7 8 application. You can get there overhead following the 9 line that goes to Schwab (phonetic) Junction. You can 10 get there underground on Barnes Road. Those options were

If you did overhead you'd have to put in a transition station. That would not be a very good place for one right there, so that would then dictate this would probably be overhead. But as we get down just south of Barnes Road, a situation that isn't shown very well on this map is the Quinnipiac River parallels this roadway for quite a long distance. I mean, most of the way, and then wanders along here. And at this section down here you can see the State park and as it gets right up about this point it crosses under the highway and is on the west side.

What's happening is because of that -that's there the wetlands you have -- this is all flood

1 plain and a large amount of this highway is on a raised 2 So what I was saying earlier is we can't 3 measure just from the edge horizontally out from there to see how much space we need. We go down the toe of the 4 5 slope to find where we can be. If we're next to the river the toe of that slope puts us almost in the river, 6 7 so we look at what's on the other side and we've got 8 buildings, both commercial and residential in this 9 stretch right here, that are less than -- some of them 10 less than 40 feet from that point. 11 Therefore we found that situation here, as 12 you get farther down Masonic Avenue if you know that 13 specific area, you've got a large hill on the west side. 14 Now the river is on the east side. That means we're forced into the hill. You go up the slope and you have 15 16 buildings. That won't work. We can't get that distance in there. We'd either be in, as I said, down in the 17 18 river, or up into the residences. And then there's a 19 long stretch down here of commercial and it doesn't show 20 real well, it's a very narrow stretch of State park, but 21 it is adjacent to the right of way all the way up to this 22 point here. 23 And that again, has no -- water on one 24 side, structures on the other. So if we said that we

1	could get around that by one of the, you know, we have in
2	the proposed route the overhead option coming down East
3	Wallingford Junction and then west. So that could get
4	you to here. If you wanted to go underground you'd have
5	to find a place for a transition station.
6	CHAIRMAN KATZ: At the
7	MR. WELTER: At Point B.
8	CHAIRMAN KATZ: and just describe agair
9	where B is, that node?
10	MR. WELTER: B is at the intersection of
11	the existing overhead line, west of the the Tradition
12	Golf Course pretty much.
13	CHAIRMAN KATZ: Okay.
14	MR. WELTER: And the highway.
15	CHAIRMAN KATZ: Okay. So if you went
16	underground along the Wilbur Cross from Milford you would
17	probably logically end at B and then pick it up at B and
18	go across east to East Wallingford Junction and then -
19	_
20	MR. WELTER: Are you coming from the south
21	now are you saying?
22	CHAIRMAN KATZ: Yes. Coming from the
23	south.
24	MR. WELTER: If you came up here then you

1	would need to have to put in a transition station or
2	something like that, which would be difficult in this
3	same area because we've got the wetlands and all that
4	sort of thing.
5	CHAIRMAN KATZ: Well, if you were
6	underground how would you get through the West Ridge Rock
7	tunnel?
8	MR. WELTER: Well, I was going to say, if
9	we go down here then we're clearing virtually the entire
10	distance. Like I said, almost the 75 acres or I mean,
11	75 feet or the 40 feet. And let me go to the next sheet
12	here. These figures are there's four sheets to make
13	them all up. So now this is a stretch that's labeled B-1
14	and we'll continue down this direction and there we've
15	identified two major problems. And that's not to say
16	that any of this is easy. Every single one of the
17	bridges or stream crossings or railroads would have to be
18	bored here because
19	CHAIRMAN KATZ: Absolutely nothing about
20	this Docket is easy.
21	MR. WELTER: yeah. The point is vis-à-
22	vis we've got under street like the Hartford Turnpike and
23	those cases we can be in that roadbed and go through here
24	whereas if we're over here we're on new, undisturbed

1	ground. And we'd be doing that and as we come to these
2	
	overpasses or underpasses then we'd be having to do
3	something special whereas all of the underground routes
4	we've identified we've basically tried to go underneath
5	these overpasses in the road pavement. A major
6	difference.
7	And then, yes, we have the tunnel and not
8	only is it a tunnel as a physical object, it's part of
9	the West Rock Ridge State Park, which again in trying to
10	minimize impacts we identified avoiding, you know,
11	recreation areas as one of those criteria. If you tried
12	to go over it you'd have a, you know, visually you'd be
13	lined up at that tunnel and you'd take this swath across
14	it which has hiking trails up there and I understand some
15	archaeological resources.
16	MR. TATE: Aren't there also towers up on
17	that ridge?
18	MR. WELTER: There is a communication
19	tower.
20	MR. TATE: We put a couple there ourselves
21	I think.
22	MR. WELTER: Yeah. What?
23	MR. TATE: I think this Council authorized
24	a couple of those ourselves earlier.

1	MR. WELTER: Okay.
2	MR. TATE: There's three or four up there,
3	isn't there?
4	MR. WELTER: Right. But none of them have
5	a swath that we can go straight through.
6	MR. TATE: How tall are they?
7	MR. WELTER: I couldn't tell you the
8	height of those.
9	MR. TATE: Could you use any of them for
10	your crossing?
11	MR. WELTER: To share that? I don't
12	believe so. And we need the I know the ones that are
13	there you do have a continuous woods there. I'm not sure
14	how they get to them, but some back way.
15	CHAIRMAN KATZ: So the problem is not the
16	structures it's the swath?
17	MR. WELTER: Right, in part. And then of
18	course going up and coming down these would be rather
19	unique and significant structures, more than the average.
20	And talking briefly with Jay Williams again about what
21	would happen at a tunnel here like this would not be a
22	single bore as he talked about with some of these under
23	river crossings. It would take two bores through this
24	West Rock Ridge. Again, a significant obstacle. Now

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1 there is rock along -- throughout here, shallow rock and 2 we said we could get through the majority of it, but you 3 get to some places like just south of that where you have 4 a significant rock cut, where you have a rock wall. 5 you couldn't, you know, your structure won't fit next to 6 it if you have an overhead and the underground there is 7 not the 25 or 30 feet, it's you know, too close to the 8 roadway to place it there. So those are ones that we just said, you know, physically not practical to go 9 10 through there. 11 I have a little problem with MR. ASHTON: 12 the last characterization. As I recall that area the 13 north side of the highway there --14 MR. WELTER: That's right. 15 MR. ASHTON: -- is a definite cut. On the 16 south side it's a fill. At the top it's -- I'm not sure 17 it's a cut at all, it may be a natural defile through 18 there, but it's not --19 MR. WELTER: It's a drop off that goes 20 down beyond -- yes, you're right. The south side is a significant drop and goes down beyond to the toe of that 21 22 is beyond the highway virtually. 23 MR. ASHTON: Is that your -- that's 24 causing the problem?

1	MR. WELTER: Right. I mean, you've got
2	in other words, you've a steep slope coming up on one
3	side and then a wall on the opposite side. If we
4	continue down again, we have the overhead route
5	identified as proposed that would intersect at this point
6	and if we come to I think I can get this on the next
7	sheet. Do we have three and four? Okay. Here we are.
8	An issue that we didn't really show in
9	. orange because we resolved it in another way, Sikorsky
10	Helicopter manufacturing plant sits on the north side of
11	now across the Housatonic River, the Merritt Parkway,
12	they have a helicopter pad near the roadway here and some
13	more up there. We would not suggest following that due
14	to those concerns and that's identified in the report.
15	What we would have to do is get off on the Milford
16	Parkway, come along there between the business that's on
17	that side and you've got, you know, a subdivision on the
18	other side, and pick up the existing right of way.
19	That would get you to the East Devon
20	Substation and then as we say in the report you've got
21	three options. You take your proposed route as is in the
22	application. You can go back up to the parkway or we've
23	got a third option would be to backtrack, but that one
24	we've just eliminated.

1	And then finally it would be to go all the
2	way down to Norwalk, this last stretch. You would have
3	to get back out of Singer to get up to the parkway in
4	some manner. Again, we had in the application
5	Alternative B would take you through Trumbull Junction
6	but then we'd need a transition station there. That's
7	considered to be an all overhead route. You'd need to
8	get a transition station if you were going to go up here
9	and go underground. Or you go up along the highway and
10	pick it up again. Or you go through the Hawthorne Route.
11	Again, that would be underground and would need a
12	transition station.
13	And then you have as we talked about we
14	told it in the report somewhere around 24 bridges and
15	overpasses to be dealt with. The majority of those
16	bridges are, you know, National Register Historic Sites.
17	A visual of having the transmission line or transmission
18	structure next to those would be obviously considered
19	severe impact by the state.
20	CHAIRMAN KATZ: Let me ask you, other than
21	the two orange spots it's feasible to go overhead from B
22	to C as an alternative to going through Woodbridge and
23	Bethany?
24	MR. WELTER: It is physically possible is

1	what we're saying. Environmentally there would be
2	significantly more impact on that route than any of the
3	other routes we've identified, either using the existing
4	overhead or other under street because the under street
5	if you want to go underground it's not
6	CHAIRMAN KATZ: No, I'm just saying if we
7	went overhead
8	MR. WELTER: Right.
9	CHAIRMAN KATZ: from B to C so that we
10	don't have to go through Woodbridge and Bethany,
11	etcetera, then you could do that technically except you'd
12	have to solve some problems at those two orange
13	locations, correct?
14	MR. WELTER: Right. And then clear many
15	acres of trees. Right.
16	CHAIRMAN KATZ: Right.
17	MR. WELTER: It would be the the
18	environmental impacts there would be much more than using
19	the existing available right of way.
20	CHAIRMAN KATZ: Understood.
21	MR. WELTER: Any other questions on this?
22	CHAIRMAN KATZ: At this point are there
23	other why don't we take questions from the Council for
24	this witness while he's standing there with the

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1	microphone? Okay. I think we're all yes?
2	MR. EDWARD WILENSKY: Let me just ask one
3	question here. Just to get this correct in my own mind,
4	as proposed this would work from B to C as Chairman Katz
5	just asked? Is that you feel it would work?
6	MR. WELTER: No, we've identified
7	MR. FITZGERALD: Just a second. First of
8	all, it's hard to object to a question from the member of
9	the Council
10	CHAIRMAN KATZ: So you'll do it
11	delicately.
12	(Laughter)
13	MR. FITZGERALD: but you used the term
14	as proposed. This is not proposed.
15	MR. WILENSKY: Alright. I stand
16	corrected. As shown here on this map or this
17	presentation today would that work, would that be alright
18	as far as the question goes? Give me the question and
19	I'll it any way you want.
20	MR. FITZGERALD: Your question was, would
21	it be physically possible to construct an overhead line
22	from B to C?
23	MR. WILENSKY: Yes. Thank you very much.

24

That's the question.

1	MR. WELTER: Well, the answer to that is
2	we've identified two locations where we don't think it
3	would be practical to build it. And the, you know, I
4	know said we still have concerns that there'll be more
5	environmental impacts in that option than the others.
6	And the one other item that's in the report that we
7	haven't touched on is one of the criteria for considering
8	allowing something in a highway is whether or not it
9	would effect potential future expansion of that.
10	Anything we do out here would directly effect the future
11	possibility of expanding this highway.
12	CHAIRMAN KATZ: But we have other people
13	in the room that we're going to ask that question of.
14	MR. WELTER: Okay.
15	CHAIRMAN KATZ: But I'm going to ask you
16	as a homework assignment to just give us a little bit
17	more detail about what would be involved on the two
18	orange spots?
19	MR. TATE: Could you you're talking
20	about boring going through West Rock Ridge?
21	MR. WELTER: Right.
22	MR. TATE: We'd like a little bit more
23	information on that.
24	CHAIRMAN KATZ: Yes.

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1	MR. TATE: And how would you solve the
2	other orange spot with the rock face if it's possible
3	to solve?
4	MR. WELTER: Right. It may be that we
5	would have to go up and around and take houses.
6	MR. TATE: But we want to know that.
7	MR. WELTER: Right, yes.
8	MR. TATE: Not may, but
9	MR. WELTER: Okay.
10	CHAIRMAN KATZ: On those two orange
11	locations if we could get a little more detail from you
12	we'd appreciate that. And then those other matters we'll
13	explore with other witnesses. Okay. Any other questions
13 14	explore with other witnesses. Okay. Any other questions for this witness?
14	for this witness?
14 15	for this witness? VOICE: I'm afraid to ask.
14 15 16	for this witness? VOICE: I'm afraid to ask. CHAIRMAN KATZ: He did to it gently.
14 15 16 17	for this witness? VOICE: I'm afraid to ask. CHAIRMAN KATZ: He did to it gently. MR. MARCONI: Okay. Are we going to cross
14 15 16 17	for this witness? VOICE: I'm afraid to ask. CHAIRMAN KATZ: He did to it gently. MR. MARCONI: Okay. Are we going to cross examination with other parties at this point?
14 15 16 17 18	for this witness? VOICE: I'm afraid to ask. CHAIRMAN KATZ: He did to it gently. MR. MARCONI: Okay. Are we going to cross examination with other parties at this point? CHAIRMAN KATZ: I'm going to offer for
14 15 16 17 18 19	for this witness? VOICE: I'm afraid to ask. CHAIRMAN KATZ: He did to it gently. MR. MARCONI: Okay. Are we going to cross examination with other parties at this point? CHAIRMAN KATZ: I'm going to offer for other parties and intervenors to cross examine this
14 15 16 17 18 19 20 21	for this witness? VOICE: I'm afraid to ask. CHAIRMAN KATZ: He did to it gently. MR. MARCONI: Okay. Are we going to cross examination with other parties at this point? CHAIRMAN KATZ: I'm going to offer for other parties and intervenors to cross examine this witness at this time. Is there anyone who would like to

1	so we can take a look at the filing this morning. So
2	we don't have any cross examination right now, but we may
3	in the future.
4	CHAIRMAN KATZ: Okay. So you're politely
5	reserving your right?
6	MS. KOHLER: Yes.
7	CHAIRMAN KATZ: Yes. Mr. Walsh?
8	MR. CHARLES WALSH: The DOT would like to
9	echo the same concerns and also reserve the same right.
10	CHAIRMAN KATZ: Okay.
11	MR. WALSH: Thank you.
12	VOICE: That clean-up day is turning into
13	a clean-up month.
14	(Laughter)
15	CHAIRMAN KATZ: Okay. Ms. Randell, do you
16	want to have Mr. Kleiman give us a little something?
17	MR. FITZGERALD: Actually, I would like to
18	have Ms. Mango give us a little something.
19	CHAIRMAN KATZ: Okay.
20	VOICE: She has already been sworn.
21	MR. FITZGERALD: Yes.
22	MS. RANDELL: She has. And given that the
23	Council's questions have related on the marine side in

large part to East Shore, which was not studied by Mr.

24

Kleiman
CHAIRMAN KATZ: Yes.
MS. RANDELL: we thought Ms. Mango
would be the more appropriate person.
CHAIRMAN KATZ: Okay.
MS. RANDELL: Would it also be appropriate
at this time to ask that the Council take administrative
notice of it's findings of fact and opinion in Docket 197
with respect to marine? That would be the Transenergy
Docket decision March 28, 2001.
CHAIRMAN KATZ: We still have the scars,
we remember that one.
VOICE: I don't remember that one.
MS. RANDELL: Mr. McDermott and I have
that same problem.
CHAIRMAN KATZ: Any objection to the
Council taking administrative notice of the opinion,
decision and order in Docket 197? Was that 197?
MS. RANDELL: 197. Do you want me to read
the whole name for the record?
CHAIRMAN KATZ: No, that's alright. Okay.
MR. ASHTON: Ms. Randell, would it be
appropriate to also take cognizance or notice of the
subsequent Docket that related to this?

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1	MS. RANDELL: That would be fine with us.
2	And it's number 208.
3	MR. ASHTON: Thank you.
4	CHAIRMAN KATZ: Okay. Any objection of
5	taking administrative notice of 197 or 208? Hearing none
6	we will do that. Ms. Mango, I guess are you going to
7	
8	MR. FITZGERALD: Yeah. I'd like I'll
9	just ask a question to put things in a little context.
10	CHAIRMAN KATZ: Okay.
11	MR. FITZGERALD: Now Ms. Mango were you
12	involved as a consultant in the early stages of this
13	project in assisting CL&P in-house folks in making the
14	decision about what kind of a submarine alternative might
15	be analyzed in detail, if any, and then participating in
16	the decision to commission the work that ended up being
17	done by Mr. Kleiman?
18	MS. LOUISE MANGO: Yes, I was.
19	MR. FITZGERALD: And could you please
20	recreate for the Council the thought process that you and
21	the other people who were involved on behalf of CL&P went
22	through in arriving at the conclusion that it would be a
23	good idea to have ESS do a detailed analysis of the
24	marine route that was analyzed and what their mission was

1 to be?

MS. MANGO: Yes. Let me just first summarize how we came to look at a marine route in the first place. First of all, having been involved in many of these projects, as have been the people from UI and CL&P, we felt that it was prudent to look at a marine route because it is something that I believe the Council and the companies always get asked about. If you have to balance impacts to property owners somebody in these proceedings invariably does say, put it down that river, or put it in Long Island Sound. It's just something that we've heard for years and years.

13 CHAIRMAN KATZ: People vote, fish don't.

MS. MANGO: Yes, apparently so. That being said we're also particularly cognizant of several main factors. Two of those are called the Federal Clean Water Act, and the Federal Coastal Zone Management Act, and the third factor is the Governor's recent -- and the Legislators' recent acts concerning the protection of Long Island Sound and the formation of the Long Island Sound Task Force of which I had the dubious distinction of being a part. And I know some of the Council members also appeared as part of that task force. Whose mission was of course to protect the natural resources of Long

1 Island Sound. 2 The Coastal Zone Management Act that we kept in mind primarily hinged on the fact that projects 3 that are not water-dependent, that is a project that does 4 not have to be adjacent to the water, a project that does 5 6 not have to cross the water is encouraged to be located 7 inland. We have a project here from Middletown to 8 Norwalk to serve the southwest Connecticut portion of the 9 state that is obviously not a water-dependent project. The last time I looked Norwalk was not an island, nor was 10 11 Middletown. 12 So obviously we were faced with the issue of having a project for which we should potentially look 13 14 at a marine option to be prudent, knowing full well that we would not meet the test of a water-dependent use as 15 posed by the Federal Coastal Zone Management Act. Which 16 17 as I'm sure you all know is administered Federally 18 delegated to the DEP Office of Long Island Sound Programs 19 to be administered. 20 So that being said, the companies and I 21 first looked at, should we evaluate a route from say, 22 Millstone/East Shore over to Norwalk? We looked closely 23 at that but we ultimately decided that a detailed study 24 of that option was not in fact necessary because for that

1 particular portion, first off from East Devon from the --2 if you want to draw a line from Millstone north up to Middletown, in that particular area there are existing 3 rights of ways that the companies have easements on, 4 5 which are wide enough to follow. Upland rights of way 6 which would avoid water resource impacts. 7 We also had quite a bit of information on 8 Long Island Sound, that portion of Long Island Sound, not 9 only from the Task Force but also as a result of work 10 done by ESS and others on the Islander East Project and 11 of course the Cross Sound Cable Project, both of which I 12 think the Council is familiar with. So just taking a 13 gross kind of general scale look at the impacts that 14 would occur from a marine line from that central part of 15 Connecticut all the way to Norwalk, just for example 16 looking back and I believe it's the Cross Sound, the 17 early Transenergy Docket 197, if we came out of East 18 Shore and had to go down New Haven Harbor we would be 19 looking at the same sort of shellfish bed impacts that I 20 believe the Council was disinclined to let occur on the 21 Transenergy case. 22 We are looking at for any marine route 23 self-contained fluid-filled cables for technological 24 reasons that Mr. Gregory or others can talk about.

1	all of the things that the witness testified yesterday
2	about as being good about the dielectric fluid and HPFF
3	would not be the case for any marine cable. That was an
4	issue that we considered.
5	Also in order to get for B

Also in order to get from East Shore, even to hook up at East Devon, which I think Mr. Zak has testified is a necessary thing to occur as far as project feasibility, we'd have to come up the Housatonic River. The Housatonic River is a major source of seed oysters, major natural resource for the State of Connecticut, very important to the shellfish industry. And in doing so we'd also pass the Stewart B. McKinney National Wildlife Refuge, various state wildlife management areas and we'd have a host of other potential issues.

That being said, those are all the things that led us to not consider a marine route for that eastern part of the project. That being said, we still felt it was feasible to look at, or I should say it was prudent to see if there were a potential route that would minimize impacts from Bridgeport to Norwalk, because in that particular section of the state we don't have a clear cut upland alternative that would knock out any social type of impacts. At that time we are looking at potentially an upland route following an existing right

1	of way that would take homes. So we are thinking about
2	balancing social impacts as has been done in other
3	projects.

So from that point of view and at that point in time we commissioned ESS to take a serious look at the feasibility of a marine route coming out of Singer and going up to Norwalk. And that was their mission. It was not to tell us all the bad things that would happen.

It was to see could a route be found in the marine environment that would minimize impacts to shellfish resources and minimize impacts to other resources and possibly, possibly pass the test that we would need to pass to get permits from the Corps of Engineers and DEP.

That being said, Mr. Kleiman can talk in detail about the findings of his study and I think Mr. Gregory could speak about, you know, the issues that could result from the actual placement of the cables, how wide a cable trench in the marine environment would have to be and things of that sort.

MR. FITZGERALD: If you would like.

MS. MANGO: If you would like.

CHAIRMAN KATZ: We like? Yes, we like.

Mr. Kleiman, I think that means you're on.

MR. KLEIMAN: Thank you. And I'm not sure

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just how much detail you'd like to have on the study that

2	we looked at from
3	CHAIRMAN KATZ: Why don't you start at a
4	high level and if we need to delve in we'll have
5	questions.
6	MR. KLEIMAN: okay. I can go over it
7	generally for you. The first step was to take into
8	consideration the constraints that Ms. Mango just
9	mentioned, some of which include the end points of
10	course, the Singer Substation to Norwalk Substation. And
11	then to try and adhere to the guidance that came out of
12	the Long Island Sound Task Force to the extent possible,
13	which would be to follow existing utility rights of way

in cases where that is feasible.

We also took into consideration, I had a personal conversation with John Voch, the former Director of Aquaculture, while he was still in that position. And he recommended that if we could stay beyond the minus 55 foot contour offshore that we would then avoid commercial shellfish areas to the greatest extent possible.

Obviously you need to get from land out to that area, so there's sort of an unavoidable greating of the contour of the c

there's sort of an unavoidable crossing of certain shellfish resource areas, lease areas and concentration areas. But he suggested that we use that as a kind of

1 working guideline to the extent possible. 2 Then we have issues related to cable 3 spacing that require depending on the depth of water and the other conditions certain space between the cable 4 5 And in this case we're talking about as Ms. 6 Mango mentioned, self-contained fluid-filled cables 7 similar to the cables, although a different voltage I quess, from the 1385 line from Norwalk to Northport. 8 those are also self-contained fluid-filled cables. 9 10 these cables would at a minimum in the near shore areas 11 need to be 90 feet apart and in the offshore areas more 12 like 200 feet apart and that would have to be looked at a 13 little bit more specifically, but that's a general 14 engineering estimate. 15 And there would be two bundles of three 16 cables separated by either 90 or 200 feet. And then 17 you'd have to embed them, put them under the seafloor to 18 protect them against potential damage from anchors and 19 other obstacles, impacts. And that would be anywhere from -- well, we look at 10 to 15 feet, but depending on 20 21 the case it could be anywhere from six to 15 feet 22 depending on how the Army Corps or others would have us 23 look at that.

Then we looked at these potential -- we

24

1	looked at a series of potential areas in between the two
2	end points and went through a screening exercise and
3	looked at all of the geological obstacles, shallow
4	bedrock, sediment-type potential sediment transport,
5	navigational obstacles, Federal channels, dredge material
6	dumping ground, shipwrecks, sensitive environmental
7	resources. And in particular we looked at shellfish
8	beds, lease areas and concentration areas in this minus
9	55 foot contour that Mr. Voch recommended. And looked at
10	wetlands in the coastline and shoreline habitats,
11	protected species habitats, cultural resources and
12	impacts to communities.
13	We mapped all of these obstacles in
14	sensitive areas and identified nine potential route
15	alternatives that did their best to avoid the most of
16	these potential impacts or obstacles. And we ended up
17	with what we called an optimized route, which isn't to
18	say it's absolutely feasible from a technical point of
19	view, there would have to be further evaluations on an
20	engineering basis on that route, but we did identify an
21	optimized route, which is approximately 23 miles long,
22	15.4 miles of that would be marine and 7.6 upland.
23	If you compare that to the upland route of
24	the preferred alternative from Bridgeport to Norwalk that

1	would have been that would be 15 miles. So you're
2	talking about 23 miles versus 15 miles overall. And this
3	would be 15.4 miles in the marine environment.
4	CHAIRMAN KATZ: Mr. Kleiman, the type of
5	cable, marine cable that you described going from
6	Bridgeport to Norwalk, would that same type of cable be
7	workable to go from East Shore to Devon marine-wise?
8	MR. FITZGERALD: Perhaps Mr. Gregory
9	should answer that question.
10	MR. KLEIMAN: I don't think I yeah.
11	I'd like to defer that question.
12	CHAIRMAN KATZ: Okay.
13	MR. FITZGERALD: Mr. Kleiman is an
14	environmentalist. He was just given the assumptions to
15	use as far as the cable was concerned.
16	MR. BRIAN GREGORY: Can you repeat the
17	question please?
18	CHAIRMAN KATZ: Well, there's we're not
19	allowed the Applicant gets nervous when I call it an
20	alternative, but there's a thing called the East Shore
21	Alternative and one of the things would be to take get
22	the power down to East Shore and then have a marine cable
23	to go from East Shore New Haven to Devon and then pick up
24	from there. So the type of cable that Mr. Kleiman just

1	described in his assumptions would that work anywhere in										
2	the Sound or is there a distance limitation or										
3	MR. GREGORY: Can you give me the distance										
4	please of this part of the route?										
5	CHAIRMAN KATZ: Approximately East Shore										
6	to Devon, can we give him a distance?										
7	MR. ZAKLUKIEWICZ: About 15 miles.										
8	MR. GREGORY: Okay. Thank you. Thank you										
9	very much. So as been explained it's approximately 15										
10	miles and that's on top of the 23 miles, which was 15										
11	sub-sea miles and the rest land. Because it's being										
12	landed there isn't a limit by the addition of the two										
13	lengths, otherwise there would be a problem with the need										
14	to feed hydraulic fluid during expansion or contraction										
15	of the fluid in the cable. You asked the question, is										
16	the same type of cable suitable, and the answer is the										
17	type of cable is the lesser of the evils of the cables										
18	that you could choose for a Long Island Sound crossing.										
19	So it's equally unsuitable.										
20	CHAIRMAN KATZ: Okay. You're going to										
21	have to elaborate.										
22	MR. ASHTON: Do you want to qualify that										
23	as damning with faint praise?										
24	MR. GREGORY: Yes.										

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1	CHAIRMAN KATZ: What's the problem? You
2	said it's unsuitable, let's get on the record what the
3	problem is.
4	MR. GREGORY: Well, basically I've looked
5	at the route from Bridgeport down to Newark as written in
6	detail by ESS and it's a good report from the point of
7	view of the choice of cable type
8	MR. FITZGERALD: Excuse me. I think you
9	meant Norwalk.
10	MR. GREGORY: Sorry. What did I say?
11	MR. FITZGERALD: Newark is in New Jersey.
12	MR. GREGORY: Yes, please excuse me. In
13	detail, and it's a good report and in my job I'm used to
14	evaluating sub-sea routes. In my previous job we
15	manufactured sub-sea cable and were involved in hiring
16	ships to lay cable and I've done this for 35 to 40 years.
17	So the problem is basically the combination of the
18	choice, the length of the route and I'm talking about now
19	15 miles sub-sea, 23 miles total, together with the depth
20	of burial the combination that it's the high voltage
21	heavy cable makes it a scheme which I think is not
22	practical. You're doing the same as basically when you
23	were considering XLPE cable for land. It's a bridge too
24	far. You're incurring risks of unreliability of the

1	power transmission scheme.
2	CHAIRMAN KATZ: So are you saying that's
3	assuming it's an AC cable, correct?
4	MR. GREGORY: Yes. 345 kV.
5	CHAIRMAN KATZ: How about if we assume for
6	a second it's a DC cable from East Shore to Devon, does
7	that have make it easier?
8	MR. GREGORY: In some respects it does.
9	DC cables are inherently suited for longer distances.
10	You can't use a self-contained fluid-filled cable for
11	distances of longer than about 25 to 30 miles. And so
12	although it's the better type of cable for DC you have to
13	change to a lower grade type of cable, which in this
14	situation for DC would be a mass impregnated paper cable,
15	which is paper impregnated with a waxy type of compound.
16	And this permits you to make the cable in
17	longer lengths. You would be installing two cables, a
18	plus and a minus pole, and so you would have at least two
19	circuits for this rating. You'd probably put a spare
20	cable in or maybe two spare cables so it'd end up between
21	two and six cables.
22	CHAIRMAN KATZ: So you'd have a bundle?
23	MR. GREGORY: Yeah. But I don't like
24	bundles. And maybe if we revisit that later on.

1	MR. ASHTON: Would the plus or minus two
2	cable configuration give you 1,000 megawatts of capacity?
3	MR. GREGORY: Yes. With two circuits.
4	MR. ASHTON: I'm sorry?
5	MR. GREGORY: With two circuits.
6	MR. ASHTON: With two complete circuits?
7	MR. GREGORY: Two cables per phase, yes.
8	MR. ASHTON: Okay. And each circuit being
9	two cables?
10	MR. GREGORY: Yes.
11	MR. ASHTON: So you'd have a total of four
12	active cables plus you'd then have to have spares as
13	appropriate?
14	MR. GREGORY: Yes.
15	CHAIRMAN KATZ: Do you have further
16	questions of Mr. Kleiman and Mr. Gregory on marine
17	cables? Mr. Ashton?
18	MR. ASHTON: I've got a couple. Mr.
19	Kleiman you mentioned I believe 90 foot separation of the
20	cables, is that correct?
21	MR. KLEIMAN: That would be in the near
22	shore areas and that was seen as a possible minimum
23	separation distance given
24	

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1	MR. KLEIMAN: I think I should defer
2	that question. It has to do with the system issues and
3	not so much with an environmental issue.
4	MR. ASHTON: I'd be happy to talk with
5	anybody who can give me a good reason.
6	MR. KLEIMAN: But I can say this. We
7	tried to look at, based on those system constraints, we
8	had we tried to look at a minimum distance, a minimum
9	separation distance that would impact the least amount of
10	shellfish beds and other seabed resources. So that
11	number was given to me and then we then calculated the
12	overall impact to the various resources.
13	MR. ASHTON: I see Mr. Zaklukiewicz with
14	smoke curling out of his ears. I assume he wants to
15	answer that.
16	MR. ZAKLUKIEWICZ: Well, the distance
17	between the cables has to be for number one has to be
18	the repair of the cables and the anchoring of the vessels
19	in case we need to ever make repairs to those cables such
20	that you do not damage the adjacent cables in the
21	anchoring of the splicing vessels for one. And the
22	deeper you get in the water the more you need for
23	because when you splice into a cable if you remember you
24	are severing the cable, bringing one end up and adding a

length of additional cable at least approximately one and 1 a half times the depth of the water. And when you drop 2 3 one end of the cable down it curls -- there's got to be enough space such that when you bow it out and bring it 4 5 back in it does not overlap the adjacent cable system. 6 So you need that separation and I remind everyone that on the Northport to Norwalk line the cable 7 is in the shallow water between Manreaser (phonetic) and 8 Sheffield Island, the cable is out approximately 15 to 30 9 10 foot, but once you get on the south side of Sheffield and you start into deeper waters each of the cables is 11 12 approximately 900 foot apart. The deepest part of the 13 Sound south of Sheffield is approximately 130 to 150 feet and typically you use a range somewheres around two to 14 two and a half times the water depth is what you need 15 16 space between the phase conductors to lay down a cable in 17 case you need to bring the cable up and put a splice in 18 you add to the cable each time you need to do that. 19 In this case, since we're going to be closer to the shore, the water depth is not as deep. 20 Ι 21 believe Mr. Kleiman already stated that somewheres between 90 and 200 foot would be the distance then 22 23 between the conductor phases in this area. would be one of the reasons to space the cables at that 24

1	distance.
2	MR. ASHTON: So if putting your testimony
3	and Mr. Gregory's testimony together it's my
4	understanding that a DC 1,000 megawatt capability in this
5	vicinity would require four active cables, at least one
6	spare, possibly two, and that would involve a total
7	spread if you will out in water in the near shore area of
8	five times assuming two spares, five times 90, 450
9	feet. And if you get into deeper water five times 200,
10	1,000 foot. Is that fairly put?
11	MR. ZAKLUKIEWICZ: That would be that
12	would be a fair and correct assumption.
13	MR. ASHTON: And did the route that goes
14	offshore take you up offshore of the oyster beds or would
15	you still faced with a lot of problem with oyster beds?
16	MR. KLEIMAN: I direct you to figure two
17	from our report, which is on the easel up there, and I
18	don't think I need to go up there and point to it, but
19	there simply is no route from Bridgeport to Norwalk by
20	which you do not cross either shellfish lease areas or
21	shellfish concentration areas or both.
22	CHAIRMAN KATZ: Are there shellfish beds
23	off of Devon we know exactly where the shellfish beds
24	are in New Haven Harbor, but are there shellfish beds off

1	of Devon that are particularly on concern?
2	MR. KLEIMAN: There are shellfish beds in
3	that area. We don't have them on that map to show you.
4	CHAIRMAN KATZ: Okay. Is there a shipping
5	channel like we have in New Haven in Milford?
6	MS. MANGO: There is a shipping channel in
7	the Housatonic River. It's a Federal Navigation Channel.
8	That portion of the Housatonic River we were told by the
9	Bureau of Aquaculture, and I also remember this from
10	other projects, it's a major source of seed oysters
11	CHAIRMAN KATZ: In the shipping channel?
12	MS. MANGO: the whole area, the entire
13	area.
14	CHAIRMAN KATZ: Oh.
15	MS. MANGO: The entire area. That entire
16	section of the River is one of the major sources of seed
17	oysters for the state.
18	CHAIRMAN KATZ: But when we were spending
19	a lot of time in New Haven we heard that in the shipping
20	channel they don't do oysters because the ships churn up
21	the sediment too much. Is that probably true in the
22	Milford Housatonic?
23	MS. MANGO: I'm not quite sure that that
24	would necessarily be true because you have a different

level of shipping. That's something that we could pursue 1 2 with the Department of Agriculture and Bureau of 3 Aquaculture. 4 CHAIRMAN KATZ: If you could ask that 5 question we would appreciate it prior to our East Shore day in June. 6 7 MS. MANGO: Okay. 8 MR. ASHTON: Has the Connecticut Shellfish Council given their enthusiastic support for this 9 10 concept? 11 (Laughter) 12 MS. MANGO: I can't even comment on this 13 as a former member of the Task Force. 14 CHAIRMAN KATZ: Yes? 15 MS. RANDELL: We did bring a large easel 16 map of the shellfish beds in New Haven if you cared to 17 see it. 18 CHAIRMAN KATZ: We probably know it from 19 memory. 20 MS. RANDELL: Don't we all. 21 MR. ASHTON: They're kind of etched in our 2.2 mind I think. 23 (Laughter) 24

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CHAIRMAN KATZ: Okay. And other questions

1	for I'm sorry. Do we have other questions for Mr.									
2	Kleiman and Mr. Gregory?									
3	MR. ASHTON: If I could anticipate a									
4	little bit, did the consideration any of your									
5	consideration focus on a Millstone to this area cable									
6	system, and I'm thinking now could be East Shore, could									
7	be Pequonnock, could be Norwalk, take your pick. But was									
8	there did you do any cursory examination of that?									
9	MS. MANGO: We did what I would call like									
10	a tabletop analysis. This was done approximately a year									
11	ago and it consisted of representatives of the companies'									
12	environmental staff sitting down with me and we went									
13	through some of the major issues that would occur drawing									
14	upon the experience of the Task Force for Long Island									
15	Sound, some of the issues that came up there, some of the									
16	issues that came up on Islander East, such as having to									
17	traverse near or through the Thimble Islands areas. And									
18	given all that concern and the fact that, you know, we									
19	would not pass a water-dependent test we just felt it was									
20	not prudent to do it any sort of a detailed routing study									
21	because we could not avoid the shellfish resources. We									
22	knew that. We could not avoid some of the resources that									
23	caused problems for Islander East for Cross Sound.									
24	So that's the basic concern. We felt that									

1 we couldn't put forward a proposal for which we -- we 2 knew we could never ever get a permit. 3 MR. ASHTON: Would the potential of 4 Millstone as a strong source give any dignity to the 5 concept that this is much more -- using Millstone as a 6 source therefore makes it a much more water-oriented 7 project? 8 MS. MANGO: Well, I worked at Millstone 9 and I know Millstone itself is designated a water-10 dependent use for national security purposes. 11 having electric cable, an in-trust state electric cable 12 out of Millstone, go into Long Island Sound so that it 13 could serve upland portions of that same state would be 14 problematic. Because in fact Connecticut has not allowed 15 cables to go from Connecticut to Long Island by virtue of 16 definition and that is an island. So I don't think --17 MR. ASHTON: I understand that, but --18 MS. MANGO: -- that argument I can't see 19 that fly without political pressure. 20 MR. ASHTON: -- my next question was going 21 to be, have you floated this idea past the Attorney 22 General? 23 MS. MANGO: I was waiting for you to do 24 that.

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1	CHAIRMAN KATZ: Chicken.										
2	MR. ASHTON: I'm rash, but not suicidal.										
3	CHAIRMAN KATZ: Mr. Lynch?										
4	MR. LYNCH: Ms. Mango, you're referencing										
5	Islander East and either the Cross Sound Cable cables										
6	out of New Haven, but didn't the Iroquois Pipeline coming										
7	out of Milford go through shellfish beds and what's the										
8	difference between Iroquois and what we're talking about										
9	now? And I know you're familiar with Iroquois?										
10	MS. MANGO: Yes. Well, I mean I can										
11	answer the question simply because I think you're how										
12	can I put it, there's impacts and there's impacts.										
13	Iroquois was in fact one of the it was the first										
14	natural gas pipeline in Connecticut. It was the first										
15	cross Sound project apart from Northeast Utilities										
16	Northport to Norwalk lines and I think that when that										
17	line was constructed, you know, what it's almost like										
18	14 years ago now, it was done based on that technology at										
19	the time. And Iroquois felt that they could restore the										
20	shellfish beds. Since that time I'm not sure that issue										
21	has ever been resolved to the satisfaction of all the										
22	parties. The Iroquois felt that they restored the										
23	shellfish beds.										
24	Those of you who were on the Long Island										

Sound Task Force will have heard from the seafood group and the aquaculture group that, you know, that's never been the case. It's all been doom and gloom for the last 13 years. So we're faced with an issue that there is no solution to it. At this point in time Connecticut has made a political decision that these shellfish beds are to be protected and I can't think of a technology right now that would not impact them with the type of project that we're doing now. Now whether the state decides to accept that level of impact, you know, that's a political decision.

MR. LYNCH: Thank you.

these two witnesses? Getting back to Route 15 for a moment, the Council is going to issue an interrogatory to the towns, the DEP parks people and the Applicants asking to comment on what I'm calling Wilbur Cross B to C, specifically the pros and cons of that as an alternative. Overhead B to C as an alternative to the proposed overhead. And I want to take that up that first week in June at that session so therefore I'm going to ask that Burns and McDonell do their comments, their homework assignment before that and so that all the parties will have time to review that before submitting their comments

1	4		_		C			
Τ	to	us	Ior	that	Ilrst	session	in	June.

- MR. FITZGERALD: Excuse me Madam Chairman.
- 3 You said you were issuing it to the towns?
- 4 CHAIRMAN KATZ: Well, it's going to be to
- 5 all parties.
- 6 MR. FITZGERALD: Oh, okay.
- 7 CHAIRMAN KATZ: But specifically the towns
- 8 of Hamden and those towns are going to want to comment.
- 9 MS. RANDELL: And the homework assignment
- is with respect to the two orange areas, correct?
- 11 CHAIRMAN KATZ: Yes, right.
- MS. RANDELL: Thank you.
- 13 CHAIRMAN KATZ: So that we will have that
- when we're discussing segments one and two in early June.
- 15 Is there any questions on that interrogatory? Mr.
- 16 Cunliffe will be drafting it. Yes, Mr. Prete?
- MR. PRETE: Yes. I'd just like a
- 18 clarification. That would be on map 204, that would just
- 19 be from B to C?
- 20 CHAIRMAN KATZ: Just from B to C. Would
- 21 you like to make it longer?
- MR. PRETE: No, I just wanted to make
- 23 sure.
- 24 CHAIRMAN KATZ: Yes. I'm calling it

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1	Wilbur Cross B to C. Okay. Are we all set for Mr.
2	Kleiman and Mr. Gregory and Ms. Mango? Are we ready to
3	resume cross examination?
4	MR. FITZGERALD: I believe so.
5	MS. RANDELL: I think so.
6	CHAIRMAN KATZ: Okay. Mr. Cunliffe, do
7	you have questions for the panel? Then we're going to
8	finish up with Council questions, then we're going to go
9	to the DOT direct case.
10	MR. CUNLIFFE: I have one and it's a
11	policy question. The moratorium that's in place, what
12	would that effect have on any marine proposal?
13	MR. ZAKLUKIEWICZ: It would slow it down
14	until the Siting Council gets legislation passed to
15	remove it.
16	MS. MANGO: I have to add one more thing.
17	I'm not sure that for this project the lifting of the
18	moratorium would solve your permitting issue for the
19	Coastal Zone Management Act and the meeting of the test
20	for a water-dependent use. I'm not sure.
21	MR. FITZGERALD: The moratorium is an
2122	MR. FITZGERALD: The moratorium is an additional issue. I think we have the existing

1	MR. FITZGERALD: is it going to be
2	is it going to be extended by the current Legislature or
3	not.
4	MS. RANDELL: We would ask in that regard
5	to take administrative notice of File No. 554, Senate
6	Bill No. 591 that Mr. McDermott just handed to me and act
7	concerning the protection of Long Island Sound, which if
8	passed in it's form would extend the moratorium another
9	year.
10	CHAIRMAN KATZ: Any objection to taking
11	administrative notice of that, it's a Senate bill bill
12	
13	VOICE: 591.
14	CHAIRMAN KATZ: thank you. Hearing
15	none we'll take administrative notice and you'll supply
16	Mr. Cunliffe with a copy?
17	MS. RANDELL: Absolutely.
18	CHAIRMAN KATZ: Okay. Okay. Mr.
19	Cunliffe, is that
20	MR. CUNLIFFE: That concludes my
21	CHAIRMAN KATZ: cross examination?
22	Let's go down to Mr. Emerick?
23	MD EMBRICAL III
	MR. EMERICK: No questions.

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1	MR. GERALD HEFFERNAN: No questions.
2	CHAIRMAN KATZ: Mr. Tate?
3	MR. TATE: The railroad alternative, could
4	you describe the railroad north of New Haven, is it a
5	catenary where do the catenary's stop and where does -
6	- how does the power get the trains up to Hartford?
7	MR. PRETE: That's a two-part question.
8	I'll answer the first part. From Milford to New Haven
9	the slide show that I put together the lines are
10	extremely similar, if not exact.
11	MR. TATE: With catenarys
12	MR. PRETE: With catenarys, two lines. UI
13	has four substations, both substations between those
14	points. So any construction would require first the
15	total rerouting of the 115 underground in that area then
16	a separate pole line structure that would support the
17	345. And again, the height of that would be minimum of
18	120 to the extent you're going to be crossing any
19	highways which occur there you're upwards of 200 feet.
20	And of course the encroachment on the rights of way would
21	require some condemnation of property.
22	MR. ZAKLUKIEWICZ: North of New Haven, the
23	bare roads are not electrified.
24	MR. TATE: Okay. So

1	MR. ZAKLUKIEWICZ: So at if you were on											
2	a train from Springfield to New York you have to swap											
3	trains at New Haven and get on electrified train at New											
4	Haven for your continuating path.											
5	MR. TATE: What power lines, if any, are											
6	on the railroad tracks from New Haven to Meriden?											
7	MR. REED: There is a 115 kV line that											
8	goes north from New Haven up into North Haven/Wallingford											
9	line. That's as far as UI goes. I don't know if there's											
10	anything further north that NU has.											
11	MR. TATE: How tall are those											
12	COURT REPORTER: Could you state your											
13	name? Pardon me, I'm sorry. Could you state your name?											
14	MR. REED: Richard Reed.											
15	COURT REPORTER: Thank you.											
16	MR. TATE: These are UI poles?											
17	MR. REED: Yes.											
18	MR. TATE: How tall are they?											
19	MR. REED: I'm going to subject to											
20	check, 80 to 100 feet.											
21	MR. TATE: And there's one 115 single											
22	circuit on that?											
23	MR. REED: For a distance there's actually											
24	two circuits. When it gets as far as Sacket Substation											

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- in North Haven there's one circuit going north. And then
- when it gets to North Haven sub. again and to the
- 3 Wallingford line it's double circuit.
- 4 MR. TATE: How wide is the railroad right
- of way there? How wide is --
- MR. REED: We don't know offhand, but we
- 7 could find that out.
- MR. TATE: -- there are two tracks as I
- 9 understand the whole way? One track?
- 10 MR. REED: Two tracks. I'm almost
- 11 positive it's two tracks.
- MR. TATE: What would be the problems of
- adding a 345 line to that stretch of railroad?
- MR. REED: I think we'd find some similar
- problems that we'd find along the corridor. I think it's
- 16 a little wider open going north, but --
- MR. TATE: Yeah, could you compare the
- problems on that with the problems you have on the other
- 19 section?
- MR. REED: -- similar problems there are
- 21 structures, houses, buildings built right up against the
- right of way. Again, not nearly as bad as I think you'd
- find along the shoreline, but you do have similar
- 24 problems along there.

HEADING DE GLAD 130

1	MR. TATE: There is another railroad line
2	coming out of New Haven, the Airline Line or goes up
3	to Middletown? It's on the map. It looks like it
4	parallels Route 17 or
5	MR. ZAKLUKIEWICZ: Subject to checking I
6	think in the Berlin area there's only a single track
7	there.
8	MR. REED: Yeah, there is a single track
9	that I know goes through part of North Haven.
10	MR. TATE: I'm looking on sheet two of
11	your highway map. I see a railroad that says, Conrail
12	Railroad that goes up to East Wallingford Junction and on
13	up. I assume that doesn't go to Hartford.
14	MR. WELTER: If I might respond to that a
15	little bit? We did look at those again in the beginning
16	when we began the overall
17	MR. TATE: Could you just identify those
18	first?

- MR. WELTER: -- okay. I think one is
- 20 Conrail and one is Amtrak.
- 21 MR. TATE: Okay. The -- we're first
- 22 talking about the Amtrak line that goes up to --
- 23 MR. REED: That's the one I was talking
- about.

1	MR. TATE: that goes on into Hartford?
2	MR. REED: Yes.
3	MR. TATE: Okay. So we're looking at
4	it says Conrail, is it Conrail? Is that the old Airline?
5	CHAIRMAN KATZ: That's the old
6	Hartford/New Haven, right?
7	MR. WELTER: It changed names and I can't
8	vouch that is the
9	MR. TATE: I know. I'm looking on a map -
10	_
11	MR. WELTER: but that is the way it's
12	labeled on this.
13	MR. TATE: it's named Conrail?
14	MR. WELTER: Right.
15	MR. TATE: Okay. And that goes on up to
16	Middletown?
17	MR. WELTER: Correct.
18	MR. REED: It is the old Airline that
19	you're talking about.
20	MR. TATE: Do you have any power poles on
21	that line?
22	MR. REED: UI does not.
23	MR. TATE: Does CL&P have any power lines
24	on that line?

HEADING DEL. CLAD 132

1	MR. REED: No, we do not.
2	MR. TATE: How about up at A-3? Upper
3	right-hand corner of sheet two.
4	
	MR. REED: I'm sorry. Could you say that
5	again what you're talking about?
6	MR. TATE: I'm looking at sheet two of
7	four in the upper right-hand corner at East Wallingford
8	Junction. It looks like your line parallels the railroad
9	tracks? The blue line is right on top of it.
10	MS. BARTOSEWICZ: The right of way
11	you're looking at sheet one of four?
12	MR. TATE: No, two of four.
13	MS. BARTOSEWICZ: South of East
14	Wallingford Junction
15	MR. WELTER: Yes, it does parallel for a
16	little ways. It's the 387 line of CL&P that follows that
17	for a little ways.
18	MR. TATE: And then on sheet one it seems
19	the parallel is almost all the way to Beseck Substation?
20	I'm just following your map. Back on sheet one now it
21	goes from East Wallingford Junction up to Beau's Beady
22	(phonetic), it seems to parallel that railroad track most
23	of the way too.
24	MS. BARTOSEWICZ: Yes. And you're looking

1	on the Merritt maps and you're looking at Beseck to East
2	Wallingford Junction.
3	MR. TATE: On sheet 104
4	MS. BARTOSEWICZ: Correct. The blue line.
5	MR. TATE: the blue line.
6	MS. BARTOSEWICZ: The blue line is an
7	existing right of way, correct.
8	MR. TATE: Yes.
9	MS. BARTOSEWICZ: It has a 345 kV circuit
10	on it today.
11	MR. TATE: How wide is it?
12	MS. BARTOSEWICZ: It's almost 300 feet.
13	It is part of the proposed route where we're looking to
14	put the second 345 on that blue line.
15	MR. TATE: And does it abut the railroad
16	right of way?
17	MS. BARTOSEWICZ: It crosses and comes
18	very close to the railroad right of way in several
19	locations.
20	MR. ASHTON: Did your examination of route

- of the second of
- 21 alternatives consider extending the facilities down the
- 22 Airline railroad at all?
- MR. WELTER: Yes, we did.
- MR. TATE: And what was your conclusion?

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Τ	MR. ASHTON: Yeah, don't keep up in
2	mystery. The suspense is killing me.
3	MR. WELTER: Okay. Right. We looked at
4	it and there were two, I guess in a general sense there
5	were two major problems. There were tight areas, there
6	were some industrial areas, places that were sort of what
7	we've seen on other railroad sections in places down
8	there. And then the other major issue with these both
9	of these railroad lines is they feed you into central New
10	Haven where we found ourselves at more or less kind of a
11	dead end.
12	CHAIRMAN KATZ: Why is that you mean,
13	if you wanted to end up near East Shore would they get
14	you close to East Shore?
15	MR. WELTER: No, we still had a problem
16	even going through town and if we were going to get
17	through there we would then be looking for a transition
18	station or something to go underground.
19	CHAIRMAN KATZ: For what distance?
20	MR. PRETE: Well, the route was Beseck to
21	East Devon. So even though East Shore is coming up into
22	this mix our routing preference wasn't to bypass or go by
23	way of East Shore to East Devon. So you're right, we
24	could potentially to go East Shore during this route, but

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1	as Cyril was saying you then have to go underground from
2	that point, which we put in our East Shore route.
3	MR. TATE: We always have that problem
4	when we're talking about East Shore?
5	MR. PRETE: Absolutely.
6	MR. TATE: So when we look at East Shore
7	would you add the Airline trail to your analysis and
8	compare it to the other railroad? Look at it as an
9	alternative. Is that a possible alternative or not?
10	Going from to East Shore by the Airline?
11	MR. PRETE: Sure. It's probably equally
12	an alternative as the existing right of way that goes
13	from East Wallingford Junction to East Shore.
14	MR. TATE: Just add it to your analysis
15	for the
16	CHAIRMAN KATZ: East Shore day.
17	MR. TATE: East Shore day.
18	CHAIRMAN KATZ: Which is probably going to
19	be the second June iteration at this point. Mr. Ashton,
20	another question?
21	MR. ASHTON: I have a couple of questions
22	if I could?
23	MR. WILENSKY: Phil, could I just ask one
24	quick follow-up question Madam Chairman?

1	CHAIRMAN KATZ: Yes. Yes.
2	MR. WILENSKY: You said underground at
3	East Shore. How far would that underground be that you'd
4	have to hook up with?
5	MR. PRETE: In the application in the
6	supplemental filing if you get to East Shore any way the
7	two probable routes would be, A, to go entirely
8	underground from East Shore, largely through Route 1 to
9	East Devon approximately 13 miles, or you would go from
10	East Shore approximately six miles along the streets of
11	New Haven up to the existing right of way on our proposal
12	in around the area of West Haven and Orange, install a
13	two to four acre transition station and then hop on the
14	right of way in our proposal approximately 10 miles to
15	East Devon.
16	MR. WILENSKY: So on that last statement
17	you made the underground portion would be what? Six
18	miles, is that what you said?
19	MR. PRETE: That's correct. And that
20	would be a porpoising.
21	MR. WILENSKY: Okay. Thank you.
22	CHAIRMAN KATZ: Okay. And do we have a
23	filing that shows that?
24	MR. PRETE: Yes ma'am. It's part of all

1	of	our	three	addendums	starting	on	December	16 th	on	the

- 2 supplemental filing.
- 3 CHAIRMAN KATZ: Okay. Can you just point
- 4 us -- oh, it's the supplemental file, it's not in the
- 5 original volumes?
- MR. PRETE: That's correct.
- 7 CHAIRMAN KATZ: Okay. Great. I know
- 8 which pile to look in now.
- 9 MR. PRETE: It is a pile.
- 10 CHAIRMAN KATZ: Yes.
- 11 MR. ASHTON: Yeah, our problem is we're
- 12 almost needing a seeing eye dog to get through the Docket
- here.
- 14 CHAIRMAN KATZ: Yes.
- MR. ASHTON: I have a couple of questions
- that relate to previous testimony today. They're not so
- much for Mr. Welter, or Mr. Kleiman, or Ms. Mango, but
- 18 Mr. Prete and Mr. Zaklukiewicz I'm sure can do it. There
- is frequent mention of the line from Pequonnock to Ely
- 20 Avenue. That is not the western terminus of the electric
- 21 transmission lines along the railroad, is it, they go all
- the way down to Cos Cob, don't they? Along the railroad?
- 23 MR. ZAKLUKIEWICZ: Ely Avenue was just a
- junction where we went from overhead to underground at

1	that location.
2	MR. ASHTON: I understand. But they go
3	MR. ZAKLUKIEWICZ: They go they go
4	MR. ASHTON: railroad circuits go all
5	the way down to Cos Cob, almost to the New York line.
6	MR. ZAKLUKIEWICZ: they go all the way
7	down to Cos Cob.
8	MR. ASHTON: Okay. Has CL&P and I
9	should ask also UI, any experience in dealing with the
10	railroad on inductive interference for rebuilding or
11	installing 115 kV circuits along the railroad and the
12	railroad signal circuits, have you had to rebuild any of
13	the signal circuits, have you paid for their railroad to
14	rebuild them?
15	MR. ZAKLUKIEWICZ: Not to my knowledge on
16	the CL&P system and in particular the Pequonnock/Ely
17	Avenue project is my understanding there were no
18	modifications required.
19	MR. ASHTON: Are you aware that CL&P may
20	have paid for such modifications when Norwalk Harbor
21	Plant opened and the line from Ely Avenue to Rowaton
22	Junction paralleled the railroad?
23	MR. ZAKLUKIEWICZ: I hate to admit it, but
24	I think you're dating yourself.

1	MR. ASHTON: Oh, I know that. (Laughter)
2	But you're not that far behind so don't push too much.
3	MR. TATE: No one else would.
4	MR. ASHTON: May I suggest you go there
5	is some experience there that may want to look at?
6	MR. ZAKLUKIEWICZ: I will take that in
7	notice and pursue it. Thank you.
8	MR. ASHTON: In terms of the use of the
9	parkway or any other state road your access would not be
10	by easement so much as permit, wouldn't it? Does DOT
11	give you an easement along on the existing right of way,
12	or do they give you a permit? Maybe that's a legal
13	question.
14	MR. FITZGERALD: Well, let me answer that.
15	CHAIRMAN KATZ: We can ask the DOT witness
16	this question Mr. Fitzgerald if you want.
17	MR. FITZGERALD: Or you could ask us to
18	submit a copy of the
19	CHAIRMAN KATZ: Well, first I'm going to
20	ask you to sit closer to the microphone?
21	MR. ASHTON: In the interest of time Mr.
22	Fitzgerald maybe that's something you'd like to pick up
23	as just a housekeeping item and catch up with us next
24	time?

HEADING DEC. GLED and HI

1	MR. FITZGERALD: We can give you a copy of
2	the least agreement.
3	CHAIRMAN KATZ: Yes. That would be
4	excellent.
5	MR. ASHTON: Without getting into a long
6	wheeze on it, has the company considered whether or not
7	the cost all in, all in cost of building an overhead 345
8	along the railroad is about the same, more, or less than
9	an underground 345 line?
10	CHAIRMAN KATZ: You mean 24 miles of
11	underground?
12	MR. ASHTON: Well, whatever it is,
13	whatever distance.
14	MR. PRETE: Actually we did. Taken the
15	experience that CL&P had on the Pequonnock/Ely line that
16	you were mentioning and taking into consideration the
17	constructibility problems most generated by the small
18	window of time the railroad would allow you to do the
19	construction I believe the cost of that line was
20	approximately three times more expensive than a normal
21	overhead line. So if you were to rough those figures in
22	it would mean that the 345 line would be roughly the same
23	as an underground line.
24	MR. ASHTON: So economically it's a wash?

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1	MR. PRETE: From that point of view I
2	agree, yes.
3	MR. ASHTON: Okay. Let's see, that one
4	was done.
5	CHAIRMAN KATZ: My husband is doing a span
6	across the line railroad line near Route 7 and they're
7	only allowed to work between midnight and 5:00 a.m.
8	MR. PRETE: We find that all the time.
9	CHAIRMAN KATZ: Yes.
10	MR. ASHTON: Have you
11	MR. PRETE: I would also want to I'm
12	sorry, I didn't mean to interrupt. That would probably
13	be on top of the cost of the 115 that you would have to
14	take into consideration, so I would imagine it would be
15	more expensive.
16	MR. ASHTON: That's why I said, all in.
17	The all in costs, everything. So there's a lot of work
18	there.
19	MR. ZAKLUKIEWICZ: I think more
20	importantly Mr. Ashton if we have to do that you have
21	just thrown away any possibility of a December 2007 date.
22	MR. ASHTON: Yeah.
23	MR. ZAKLUKIEWICZ: You've got to keep that
24	in mind for the socialization because if we need to build

1	the 115's first 15 miles, that's basically 15 months at a
2	minimum after you let the orders out and the contracts
3	before then you could start any of the 345 work because
4	you need the 115 in place feeding those stations along
5	the right of way, the railroad right of way. So adding
6	15 months into a construction schedule for that portion
7	of it after you submit the D&M plans, after we get all
8	the approvals you're talking a two year delay probably at
9	a minimum in the actual completion of the construction.
10	So you're into 2010 and in the meantime southwest
11	Connecticut is suffering and the state of Connecticut is
12	suffering from the congestion cost in the locational
13	installed capacity charges, which are ringing up the cash
14	register heavily.
15	MR. ASHTON: Is either UI or CL&P aware of
16	any actual derailments along this section of line which
17	would threaten the integrity of an overhead structure?
18	MR. REED: Not in that particular section.
19	Further down in the West Haven area there was a
20	derailment that took one of the catenarys down that
21	basically took both of our circuits out. It took us
22	quite a while to get both of those circuits back in
23	service. This was I^{\prime} m going to guess 15 years ago.
24	MR. ASHTON: Okay.

1	MR. REED: That's the one that I do
2	remember.
3	MR. ASHTON: Does there may be more.
4	MR. REED: Yeah.
5	MR. ASHTON: Does that factor into your
6	consideration of use of overhead facilities along the
7	railroad?
8	MR. REED: Most definitely.
9	MR. ASHTON: Thank you. Nothing further.
10	CHAIRMAN KATZ: Thank you. Mr. Wilensky?
11	MR. WILENSKY: No questions.
12	CHAIRMAN KATZ: Mr. Murphy?
13	MR. MURPHY: No questions.
14	CHAIRMAN KATZ: Mr. Lynch?
15	MR. LYNCH: No questions.
16	CHAIRMAN KATZ: Okay. If there's no
17	further questions of this panel I'd like to get to the
18	DOT direct case?
19	MR. FITZGERALD: Can I just ask Mr. Zak to
20	verify that this document that he handed me earlier today
21	is a true copy of the agreement between the State of
22	Connecticut DOT and the Connecticut Light and Power
23	concerning CL&P's use of the rail line between it's
24	identified here

1	MR. ZAKLUKIEWICZ: Pequonnock/Ely Avenue?
2	MR. FITZGERALD: Pequonnock and Ely
3	Avenue?
4	MR. ZAKLUKIEWICZ: It is.
5	MR. FITZGERALD: And Mr. Prete, you've
6	reviewed this document?
7	MR. PRETE: I have.
8	MR. FITZGERALD: And you were able to
9	confirm that UI has a similar agreement with the State of
10	Connecticut with respect to it's rights?
11	MR. PRETE: Yes, in fact we do and we have
12	copies as well.
13	CHAIRMAN KATZ: We've identified it as
14	number 67. Is there any objection to making it a full
15	exhibit? Seeing none, thank you.
16	(Whereupon, Applicant's Exhibit No. 67 was
17	received into evidence as a full exhibit.)
18	CHAIRMAN KATZ: Okay. Are we ready to
19	switch out the table? Yes, Mr. McDermott? Do you want
20	to go off the record for a minute?
21	MR. FITZGERALD: Could we have a short
22	break to see if we have any redirect?
23	CHAIRMAN KATZ: Okay. We'll take a five,
24	emphasis on five only, minute break.

1	(Off the record)
2	CHAIRMAN KATZ: We'll resume and we're on
3	the record again. At this time in the hearing program we
4	will go to the direct case by DOT and I'd like to
5	publicly say what I've privately told DOT. We appreciate
6	DOT's participation in this Docket. I think it's going
7	to be a very valuable addition to helping us develop the
8	record.
9	MR. TATE: And we hope you enjoy
10	yourselves so much that you'll join us in other Dockets
11	where you're help would be appreciated.
12	CHAIRMAN KATZ: And where were you on 217?
13	No.
14	(Laughter)
15	MR. MARCONI: And Madam Chairman, I might
16	add that at least Mr. Gruhn has been one my clients once
17	when I was in the Transportation Division of the Attorney
18	General's Office before I came to the Siting Council
19	Division.
20	CHAIRMAN KATZ: Before they exiled you
21	over here?
22	MR. ASHTON: That's just in case things
23	get dull over at DOT.
24	MR. WALSH: That will never happen.

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1	CHAIRMAN KATZ: Okay. Mr. Walsh, are you
2	going to be the lead?
3	MR. WALSH: I'm going to allow Assistant
4	Attorney General Meskill to lead on this.
5	CHAIRMAN KATZ: Okay. Ms. Meskill, do you
6	want to introduce your witnesses and while they're still
7	at the microphones have them give their names and spell
8	their names and then we'll have Mr. Marconi swear them
9	in?
10	MS. EILEEN MESKILL: Sure. Thank you.
11	For the record, Assistant Attorney General Eileen Meskill
12	and with me is Assistant Attorney General Charles Walsh.
13	And we have today Mr. Arthur Gruhn and Mr. Harry Harris
14	from the Department of Transportation. And if you could
15	identify yourselves and give your titles as well?
16	MR. ARTHUR GRUHN: Okay. My name is
17	Arthur Gruhn, G-R-U-H-N. I'm the Chief Engineer for the
18	Connecticut Department of Transportation and the Bureau
19	Chief for the Bureau of Engineering and Highway
20	Operations.
21	MR. HARRY HARRIS: And I'm Harry Harris,
22	H-A, double R, I-S. And I'm the Bureau Chief for the
23	Bureau of Public Transportation for the Connecticut
24	Department of Transportation.

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CHAIRMAN KATZ: Thank you. Ms. Meskill, if you could identify your exhibits and number them in this matter and then we'll have your witnesses verify them? MS. MESKILL: Sure. Thank you. I believe we have pre-filed testimony of Mr. Arthur Gruhn. It's dated April 8 th and I believe it was filed April 16 th . Mr. Gruhn have you had a chance to review that? MR. GRUHN: Yes, I have. MS. MESKILL: And does that also include two attachments as well? MR. GRUHN: Yes, it does. MS. MESKILL: And those are the 2003 Limited Access State Numbered Highways as of December 31 st , 2002, is that a true and accurate copy? MR. GRUHN: Yes, it is. MS. MESKILL: And is the second one the policy on the accommodations of utilities on highways rights of way, dated April 1977, is that a true and accurate copy? MR. GRUHN: Yes, it is. MS. MESKILL: And are you adopting this as	1	(Whereupon, Arthur Gruhn and Harry Harris
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22 accurate copy? MR. GRUHN: Yes, it is.	20	policy on the accommodations of utilities on highways
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100, 1010.	22	accurate copy?
MS. MESKILL: And are you adopting this as	23	MR. GRUHN: Yes, it is.
	24	MS. MESKILL: And are you adopting this as

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1	your testimony today as true and accurate to the best of
2	your knowledge and belief?
3	MR. GRUHN: Yes, I do.
4	MS. MESKILL: I don't know how you want to
5	number that?
6	CHAIRMAN KATZ: I believe that's number
7	one. Is there any objection to making number one a full
8	exhibit? Hearing none we will make that a full exhibit.
9	(Whereupon, DOT Exhibit No. 1 was received
10	into evidence as a full exhibit.)
11	CHAIRMAN KATZ: And number two is the pre-
12	filed of Mr. Harris.
13	MS. MESKILL: Right. We have Mr.
14	Harris, did you you have pre-filed testimony
15	originally dated April $16^{\rm th}$, 2004 and a supplemental
16	testimony dated April 22 nd , 2004. Have you had a chance
17	to review those?
18	MR. HARRIS: Yes, I have.
19	MS. MESKILL: And is there also an
20	additional change that you wanted to make to that as well
21	for the record?
22	MR. HARRIS: Yes, there is.
23	MS. MESKILL: And what is that?
24	

1	$22^{n\alpha}$ in response to the next to the last question
2	concerning technical reason why the option was not
3	included in the agreement I would like to add to the end
4	of that my response the following phrase, and that the
5	345 kV line would not adversely impact rail operations.
6	MR. ASHTON: So it's actually on the top
7	of the second page?
8	MR. HARRIS: The top of the second page,
9	that's correct.
10	MS. MESKILL: And are you adopting this as
11	your testimony as true and accurate to the best of your
12	knowledge and belief?
13	MR. HARRIS: Yes, I am.
14	MS. MESKILL: And I would just like to
15	clarify also for the record, you referred to the issue of
16	both the legal issue and the on your supplemental
17	testimony and the technical reason. Is it your
18	understanding that if the Siting Council were to approve
19	this line that that would remove the legal impediment as
20	far as our office was concerned?
21	MR. HARRIS: I'm not an attorney, but I
22	would assume so.
23	MS. MESKILL: Okay. Thank you.
24	CHAIRMAN KATZ. Thank you Is there any

1	objection to making DOT No. 2 a full exhibit? Hearing
2	none it is.
3	(Whereupon, DOT Exhibit No. 2 was received
4	into evidence as a full exhibit.)
5	CHAIRMAN KATZ: And that's all the
6	exhibits, correct?
7	MS. MESKILL: That's correct.
8	CHAIRMAN KATZ: Okay. Do your your
9	witness had a chance to sit here and hear all the
10	testimony and everything. Do they want to make any
11	statement before we have them subject to cross?
12	MS. MESKILL: I don't believe so.
13	CHAIRMAN KATZ: Okay. We will then go
14	immediately to
15	MR. WALSH: If I may?
16	CHAIRMAN KATZ: yes. All their
17	testimony in as full exhibits, correct?
18	MR. WALSH: If I may? Yes.
19	CHAIRMAN KATZ: Brother Marconi is
20	reminding me here. Yes?
21	MR. WALSH: Could we ask the witnesses
22	just two questions before we begin?
23	CHAIRMAN KATZ: Yes.
24	MR. WALSH: It might help clarify matters.

1	With regard to a question was raised earlier
2	regarding the limited access highways. Mr. Gruhn, do you
3	know whether or not there were any drainage structures in
4	the median of any of the limited access highways, whether
5	the Wilbur Cross, the Merritt, I-95 or I-91?
6	MR. GRUHN: Yes. Depending on the
7	location there are either scattered or very extensive
8	drainage systems in the median areas.
9	MR. WALSH: And with respect to Mr.
10	Harris, I believe there was some discussion earlier on
11	restrictions on working on rail rights of way. Could you
12	elaborate for the Council on restrictions on working in a
13	rail right of way?
14	MR. HARRIS: Working on the rail right of
15	way is governed by the operating railroad, whether it's
16	Amtrak or in the case of the New Haven Line Metro North
17	they establish the criteria and the requirements. It's
18	also establish by the Federal Railway Administration for
19	who may operate there, what kind of permits can be
20	obtained or need to be obtained, what kind of training
21	needs to be done. Anyone who works in the rail right of
22	way had to take and pass rail safety courses. They have
23	to have flag protection from the railroads and they have
24	to obviously operate within the confines of the railroad

1	schedule and operations.
2	MR. WALSH: Mr. Harris, I believe there
3	was some question as to the ownership of the railroad
4	line running from the New York border to New Haven. I
5	believe a map was entered into evidence that indicated it
6	was owned by the Penn Central Line. Do you know whether
7	or not that is accurate or whether or not the DOT has an
8	interest in that rail line?
9	MR. HARRIS: We purchased from Penn
10	Central the rail line in the late 1970's, early 1980's,
11	and we acquired all rights that the Penn Central Railroad
12	had at the time that we purchased the land from them.
13	MR. WALSH: Thank you.
13 14	MR. WALSH: Thank you. MR. ASHTON: May I just ask a question?
	-
14	MR. ASHTON: May I just ask a question?
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1	one, the Amtrak line is Amtrak
2	MR. ASHTON: Okay.
3	MR. HARRIS: National Rail Corporation,
4	Passenger Rail Corporation. The other line has multiple
5	owners. The section from the New Haven from the
6	northeast corridor north to Cedar Hill is owned by CSX
7	Railroad
8	CHAIRMAN KATZ: What's Cedar Hill? I'm
9	sorry.
10	MR. HARRIS: That's an old New York, New
11	Haven and Hartford rail line located in North Haven
12	rail yard located in North Haven.
13	MR. ASHTON: A marshalling yard?
14	MR. HARRIS: Pardon?
15	MR. ASHTON: A marshalling yard?
16	MR. HARRIS: It was a marshalling yard, a
17	hump yard where they used to stall freight. It's one of
18	the largest facilities that they used to have. It's
19	located if you're familiar with 91 you can see it as
20	you're heading north on 91 you can see the rail yard
21	behind the marshes over to the left. That's owned by
22	up to Cedar Hill it's owned by CSX. From north there is
23	owned either by Tilcon Corporation or some parts of it
24	are owned by Connecticut. It has multiple owners on

1	different sections up to Hartford.
2	MR. ASHTON: Thank you.
3	CHAIRMAN KATZ: Thank you.
4	MR. TATE: It goes to Hartford or to
5	Middletown?
6	MR. HARRIS: Well, there's a Middletown
7	secondary that's owned by Connecticut that goes from
8	Middletown into Hartford. And actually then connects
9	north of Hartford.
10	CHAIRMAN KATZ: Okay. Any other questions
11	direct for your
12	MR. WALSH: No further direct.
13	CHAIRMAN KATZ: Okay. At this point begin
14	cross examination. Mr. Fitzgerald, Ms. Randell?
15	MR. FITZGERALD: Well, thank you. Good
16	afternoon gentlemen. You were here I believe for the
17	examination of the Applicant's panel concerning the so-
18	called highway alternatives?
19	MR. HARRIS: Yes.
20	MR. FITZGERALD: Did you hear any
21	testimony concerning difficulties in obstacles of those
22	alternatives that seemed wrong to you?
23	MR. GRUHN: Nothing that I would
24	characterize that seemed wrong. There was not any

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- discussion about the impacts of any operations along the highway on congestion and safety.
- MR. FITZGERALD: Would you like to comment
- 4 on that?
- 5 MR. GRUHN: Yes, I would. One of our -several of the concerns the Department has is the 6 operations and safety along the highway system, wherever 7 that may be. The corridors being proposed, specifically 8 9 the Route 1 corridor in southwestern Connecticut is one of the most heavily traveled secondary roadways that we 10 11 have in the State of Connecticut. Not only is it a secondary roadway it is the primary alternate route for 12 the I-95 corridor and whenever there is an incident, 13 14 congestion or any type of an accident on I-95 traffic 15 diverts to Route 1. So operations on Route 1 is a critical concern to the Department and to the towns in 16 17 that corridor.
- MR. FITZGERALD: Alright. Now sir,

 actually I was referring to the discussion of the limited

 access highway alternatives.
- MR. GRUHN: Okay. On the limited access
 highways we have similar concerns. Again, safety and
 congestion are critical. They are high volume roadways,
 high speed roadways. Any activity cannot be -- any

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1 longitudinal activity along those highways cannot be 2 conducted anywhere within the proximity of the highway 3 pavements. 4 MR. FITZGERALD: Are your concerns of 5 operations and safety with respect to the limited access 6 highways similar to those that you have for construction 7 on Route 1 or greater? 8 MR. GRUHN: Similar and greater due to the 9 The safety concern is a much larger issue. 10 congestion concern is similar on any of the major routes in that corridor. 11 12 MR. FITZGERALD: Okay. I'd like to turn to your pre-filed testimony of April 8th. And you say on 13 14 page two that the burden of cost for relocation or 15 readjustment to the underground lines that would be 16 occasioned by CDOT projects once the lines were in place is a monumental concern to you and that ConnDOT desires 17 18 to enter into a formal agreement with NU to ensure that 19 the costs for further relocation or adjustments would not 20 be eligible for reimbursement and that the total cost 21 would be NU's. Have you had some discussions with NU in 2.2 relation to the construction under street required for 23 Docket 217 Mr. Gruhn?

MR. GRUHN: Yes, we have.

24

1	MR. FITZGERALD: And has the subject of
2	reimbursement and the extent to which a variance from the
3	statutory scheme might be considered been broached in
4	those discussions?
5	MR. GRUHN: Yes, they have been discussed.
6	MR. FITZGERALD: And has NU in
7	September of 2003 did NU request from you a draft co-
8	location agreement so as to advance those discussions?
9	MR. GRUHN: I'm not sure whether it was
10	September, sometime in the fall.
11	MR. FITZGERALD: And what is the status of
12	that draft?
13	MR. GRUHN: That draft is being prepared
14	by the Office of the Attorney General.
15	MR. FITZGERALD: And when will we see it?
16	MR. GRUHN: I do not have a date at this
17	point.
18	MR. FITZGERALD: You state in Item G,
19	State maintained roadways quite often handle high volumes
20	of traffic and as such conduct has routinely resorted to
21	night construction since the traffic volumes are
22	typically much lower then any work that occurs within the
23	State highway right of way that has an adverse effect on
2.4	traffic flow would be subject to the same limitations and

1	restrictions.
2	MR. GRUHN: That is correct.
3	MR. FITZGERALD: And in your discussions
4	with NU on Docket 217 have you been given any reason to
5	believe that they would not in general accept the night
6	construction restrictions that the DOT itself observes?
7	MR. GRUHN: Not that I'm aware of.
8	MR. FITZGERALD: Okay. With respect to
9	the disruption and interference that the installation of
10	an underground pipeline within a non-access highway, such
11	as Route 1 would occasion, it would be no greater than
12	many of the DOT's own highway repair and improvement
13	projects, isn't that right?
14	MR. GRUHN: The actual construction would
15	be similar, yes. And just for correction, Route 1 is not
16	a non-access highway.
17	MR. FITZGERALD: No, I said a non what
18	I meant to say was a highway that is not
19	MR. GRUHN: Non-limited access? Okay.
20	MR. FITZGERALD: limited access. Yeah.
21	MR. GRUHN: I just wanted to make it
22	clear.
23	MR. FITZGERALD: Okay. In Item J you say
24	that the depth of any transmission line is an issue that

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- 1 needs to be addressed and you argue here for an eight 2 foot installation depth measured from the ground surface 3 to the top of the conduit, otherwise stated as eight feet 4 of cover, right? 5
- MR. GRUHN: Correct.
- 6 MR. FITZGERALD: Just a minute. 7 scolded by my co-counsel as telling me that we're not 8 supposed to be examining on these topics today.
- 9 CHAIRMAN KATZ: Well, I mean, ideally when 10 we were doing segments three and four the other day we would have done Route 1, but they're here, you're here, 11 12 so let's just do it.
- 13 MR. FITZGERALD: Okay.
- 14 MR. WALSH: Madam Chairman, the witness will be coming back in June if you would like to wait to 15 16 explore that on a different date.
- 1.7 CHAIRMAN KATZ: Do you have a lot of cross 18 concerning Route 1?
- 19 MR. FITZGERALD: I don't, no. But maybe
- 20 Ms. Randell --
- 21 CHAIRMAN KATZ: I'd sort of like to --22 this week do the -- and I know I did not make this clear, 23 I'm not blaming you. I'd like to sort of finish up
- 24 segments three and four so why don't we go ahead with

1	cross concerning construction on Route 1?
2	MR. FITZGERALD: Okay. Actually, I don't
3	have much after alright. So we were just talking
4	about before I interrupted myself we were talking
5	about the issue of wanting eight feet of cover over the
6	line. Attached to your testimony is a set of
7	regulations, or standards entitled, The Policy on the
8	Accommodation of Utilities and Highway Rights of Way.
9	Could you turn to page 26 of that document? And that
10	deals with the accommodation of underground electric
11	power lines, doesn't it sir?
12	MR. GRUHN: Yes, it does.
13	MR. FITZGERALD: And Item 2 says, conduit
14	or duct construction within the paved area or abutting
15	roadside area, which might be effected by highway
16	widening, shall be installed at a minimum depth of 36
17	inches from the top of structure to the grade of crown of
18	the existing pavement, right?
19	MR. GRUHN: Correct.
20	MR. FITZGERALD: So how is it that your
21	standards require 36 inches of cover, but in connection
22	with the Norwalk construction and Docket 217 and this
23	construction you are asking for eight feet of cover?
24	MR. GRUHN: As you stated the requirement

1	under that particular section states a minimum depth of
2	36 inches. This particular facility is a large facility.
3	It will effectively block all drainage, all ability for
4	the Department to install any drainage for the highway
5	system. It's a five foot high structure and would
6	effective block any drainage that is required for the
7	highway system. So to go below where our normal drainage
8	installations would occur, which is in the three to eight
9	foot area, the duct bank would have to be below eight
10	feet.
11	MR. FITZGERALD: What is a five foot
12	structure?
13	MR. GRUHN: The as we were the
14	information we have been given is that the duct bank is
15	four feet wide and five feet high.
16	MR. FITZGERALD: And have you been made
17	aware of the contention of NU that the cables will not
18	perform at an eight foot installation depth?
19	MR. GRUHN: I do not know any of the
20	details about cable performance.
21	MR. FITZGERALD: Okay. In any case you do
22	acknowledge that the question for the question of the
23	ultimate location of the lines is for the Siting Council?
24	MR. GRUHN: That would be a legal

1	question. I'm not able to answer that.
2	MR. FITZGERALD: Turning to page 27 you
3	say in number Item Number One, under Location and
4	Alignment, a longitudinal installation locations parallel
5	to the pavement or adjacent to the right of way line are
6	preferable so as to minimize interference with highway
7	drainage, etcetera. And do I correctly understand that
8	in this that you're taking the position in this Docket
9	and with respect to the Norwalk construction and 217 that
10	the construction should be off the paved surface of the
11	right of way?
12	MR. GRUHN: We have taken the position
13	that the chambers must be off the paved surface of the
14	right of way due to the fact that any work in the
15	chambers, splicing of the cables, is a 24 hour a day
16	operation for up to 14 days, which would have a
17	significant impact on the traveling public.
18	MR. FITZGERALD: Okay. But you have it
19	is not your position that the cable itself must be off
20	the travel portion of the road?
21	MR. GRUHN: Not on the secondary highway
22	system.
23	MR. FITZGERALD: Okay. Now with respect
24	to the vaults, under these regulations their location

1	would be governed by the sentence, exceptions will be
2	made if it is in the best interest of the State and the
3	utility to locate the facility in the pavement or
4	sidewalk area along non-limited access highways only,
5	right?
6	MR. GRUHN: Can you repeat the question?
7	I'm sorry.
8	MR. FITZGERALD: Yeah. With respect to
9	the vaults there is a the last sentence in this
10	provision of your regulations would apply, exceptions
11	will be made if it is in the best interest of the State
12	and the utility to locate the facility in the pavement or
13	sidewalk area along non-limited access highways only?
14	MR. GRUHN: That's what it states in the
15	document, yes.
16	MR. FITZGERALD: And do you acknowledge
17	that it is for the Siting Council to determine what
18	location is in the best interested of the State and the
19	utility?
20	MR. GRUHN: Again, that would be a legal
21	interpretation and I'm not qualified to answer that
22	question.
23	CHAIRMAN KATZ: It might be the
24	Legislature that decides.

1	MR. FITZGERALD: Ultimately the
2	Legislature decides everything. You do have certain
3	delegated powers at the moment.
4	CHAIRMAN KATZ: Can you say that louder?
5	(Laughter)
6	MR. FITZGERALD: That's all I have.
7	CHAIRMAN KATZ: Ms. Randell, did you have
8	questions?
9	MS. RANDELL: I do have a few questions
10	but I would like to reserve to the June hearings
11	CHAIRMAN KATZ: Yes. Yes.
12	MS. RANDELL: with respect to non-
13	alternative routes.
14	CHAIRMAN KATZ: We are going to ask DOT to
15	return in June when we get into a discussion of segments
16	one and two and as you might have heard earlier we do
17	have an interrogatory going out on what we're calling
18	Wilbur Cross B to C and we definitely would like DOT's
19	comments.
20	MR. GRUHN: We will certainly review and
21	comment.
22	CHAIRMAN KATZ: Great. Okay. Next on the
23	list

1	questions
2	CHAIRMAN KATZ: I'm sorry.
3	MS. RANDELL: in addition to generally
4	reserving
5	MR. GRUHN: Oh darn.
6	MS. RANDELL: if I may? Sorry. They
7	won't be long.
8	MR. GRUHN: That's okay.
9	MS. RANDELL: Hopefully not hard either.
10	Just to clarify the DOT's position, and I don't know
11	whether this is to you Mr. Harris or to you Mr. Gruhn.
12	Does the DOT consider an executed co-location agreement
13	with the utility to be a condition of the utility doing
14	any work?
15	MR. GRUHN: Can you say that again?
16	MS. RANDELL: Sure. Does DOT does CDOT
17	consider an executed co-location agreement a requirement,
18	a pre-condition, of allowing the utility to do any work
19	in CDOT property?
20	MR. GRUHN: I would say for longitudinal
21	applications.
22	MS. RANDELL: But not for non-
23	longitudinal, perpendicular?
24	MR. GRUHN: Perpendicular or transverse

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locations are covered under our normal encroachment
permit operations.
MS. RANDELL: Thank you. There was
testimony yesterday with respect to the history of
cooperation between UI and CDOT. Would you agree that
there has been a long history of cooperation between
United Illuminating and the Department of Transportation?
MR. GRUHN: Yes. We've been working with
United Illuminating, CL&P, and many utilities, and while
they're not always relocated as quickly as everybody
would like to see them relocated we do have a history of
cooperation, yes.
MS. RANDELL: And you'd expect that
history to continue on to the future and that it would be
a cooperative effort to try to resolve problems?
MR. GRUHN: I would certainly hope so.
MS. RANDELL: Thank you.
CHAIRMAN KATZ: Does that conclude
MS. RANDELL: That's all I've got.
CHAIRMAN KATZ: great. Next is
Representative Al Adinolfi? Absent. Next, the towns.
Ms. Kohler, questions? Mr. Ball, any questions
representing the towns? Okay. City of Norwalk? Absent.
Mr. Cederbaum? Absent. City of Meriden, Attorney Moore?

1	Absent. Assistant Attorney General Michael Wertheimer?
2	MR. WERTHEIMER: No questions. Thank you.
3	CHAIRMAN KATZ: Mr. Wertheimer said no
4	questions. The Community for Responsible Energy?
5	Absent. Office of Consumer Council? Absent. Woodlands
6	Coalition, Mr. Golden? Woodlands Coalition says no
7	questions. ISO New England, Mr. MacLeod? Absent. PSED,
8	Power Connecticut, Mr. Reif? Absent. Town of Wilton,
9	Mr. Frank? Absent. Town of Weston, Mr. Ball? Absent.
10	RWA, Mr. Lord?
11	MR. ANDREW W. LORD: No questions.
12	CHAIRMAN KATZ: No questions from RWA.
13	Town of Cheshire? Absent. City of Middletown? Absent.
14	And town of North Haven?
15	MR. BENJAMIN J. BERGER: No questions.
16	CHAIRMAN KATZ: No questions from the town
17	of North Haven. Mr. Cunliffe, do you?
18	MR. CUNLIFFE: Yes. Could you define an
19	encroachment permit?
20	MR. GRUHN: An encroachment permit is
21	document which the Department will issue to the permittee
22	that allows the permittee to make installations within
23	the highway right of way under certain conditions of the
24	permit.

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1	MR. CUNLIFFE: How is this process
2	initiated?
3	MR. GRUHN: Generally it is initiated by
4	the permittee that wants to install a facility within the
5	highway system.
6	MR. CUNLIFFE: And what's the time to
7	review and issue a permit?
8	MR. GRUHN: It depends on the magnitude of
9	the work that is going to be performed. Something as
10	simple as a repair to a gate valve is very short
11	timeframe. Something as complex as something on this
12	document would require a full review of construction
13	plans, methodologies, what was going to be done, when it
14	was going to be done, how traffic was going to be
15	handled, so that would be rather extensive and would take
16	some time.
17	MR. CUNLIFFE: If an application such as
18	this was to come before your office for review what would
19	be your best estimate in time?
20	MR. GRUHN: I would guess one to two
21	months.
22	MR. CUNLIFFE: The term co-location
23	agreement has been used. Is this one and the same as an
24	encroachment permit?

1	MR. GRUHN: No.
2	MR. CUNLIFFE: Is this something the
3	Department of Transportation engages in, the co-location
4	agreement?
5	MR. GRUHN: We have. You could probably
6	call the agreement that was introduced earlier for the
7	work along the Metro North right of way a co-location
8	type of agreement. Under the statutes, and I'm sorry I
9	don't remember the particular section of the statute, for
10	longitudinal installations of transmission lines they are
11	permitted under whatever conditions are deemed
12	appropriate by the Commissioner of the Department of
13	Transportation. And that is paraphrased of course.
14	MR. CUNLIFFE: And would one and both I
15	think Ms. Randell already asked if the co-locations
16	agreement before work would have I wouldn't take that
17	an encroachment permit would be needed as well?
18	MR. GRUHN: You definitely you would
19	still need an encroachment permit if there was a co-
20	location agreement. We have had occasions where we would
21	issue a permit while the co-location agreement was still
22	in process.
23	MR. CUNLIFFE: And where would the fiscal
24	responsibilities be drawn out, would there be an

1	encroachment permit or the co-location agreement?
2	MR. GRUHN: What do you mean by the fiscal
3	responsibilities?
4	MR. CUNLIFFE: If in future action either
5	by the utility or by the State to move the said
6	utilities?
7	MR. GRUHN: That would be in the co-
8	location agreement.
9	MR. CUNLIFFE: And limit construction to
10	nighttime, when would that be a condition of?
11	MR. GRUHN: That could be in the co-
12	location agreement or it could be in the encroachment
13	permit. Typically it's in the encroachment permit.
14	MR. CUNLIFFE: And for this proposed
15	application what would be the Department's recommendation
16	for time to conduct construction along the proposed
17	route?
18	MR. GRUHN: The traffic volumes in the
19	area, particularly what we've looked at is the Route 1,
20	the route that has been proposed by the utility
21	companies, that area typically from 10:00 o'clock at
22	night to 6:00 o'clock in the morning are the allowable
23	times when traffic volumes are low enough to permit
24	taking of lanes.

1	MR. CUNLIFFE: What is the policy of open
2	trenches and length?
3	MR. GRUHN: Open trenches have to be as
4	short as possible. Longitudinal steel plates in a lane
5	of traffic are very hazardous. When they get wet they
6	are very slippery. Motorists do not drive on steel
7	plates, longitudinal steel plates, they will stay away
8	from them so if they are in the lane basically we have
9	reduced the roadway down by one lane width and that would
10	have a disastrous effect in the area of Route 1.
11	MR. CUNLIFFE: So the technique of
12	installing an HPFF line, a high pressure fluid filled
13	pipe would require an X distance. Would the Department
14	have to yield to the type of construction for that or
15	would they have a suggestion? Would they ask for a
16	change?
17	MR. GRUHN: I'm not familiar with the
18	construction techniques for that particular type of line,
19	but if it were to require long lengths of steel plates in
20	a lane we would have a major problem with that. The
21	general public would have a major problem with that. You
22	would have traffic back-ups on Route 1 because of the
23	fact that people will not drive on those steel plates
24	during high peak travel periods.

1	CHAIRMAN KATZ: Just to interrupt on that.
2	The Applicants, is there information that we can refer
3	to in the application for DOT so they can familiarize
4	themselves prior to our June hearings on the construction
5	techniques that would be used in Route 1?
6	MS. RANDELL: Yes. There's a section in
7	the application. I'll get you the citation. There are
8	also interrogatory answers.
9	CHAIRMAN KATZ: Okay.
10	MS. RANDELL: If you'd like offline we can
11	certainly provide them to the DOT.
12	CHAIRMAN KATZ: Yes. I'd like I'd like
13	the Applicants and the DOT attorneys to talk because Mr.
14	Gruhn we'd like when you come back in June to tell us in
15	more detail what you think having once you're given
16	the proper information what you think and if there's
17	anything that has to be done conditionally we want to
18	know that.
19	MR. GRUHN: Certainly.
20	MR. ASHTON: I have a question if I may
21	following up Mr. Gruhn?
22	CHAIRMAN KATZ: Yes.
23	MR. ASHTON: From my experience in driving
24	along Route 1 there's Route 1 and there's Route 1, there

are slight differences depending on which town you're in. 1 2 MR. GRUHN: Correct. 3 MR. ASHTON: In some cases there may be 4 ample parallel roads that you -- presumably, presumably 5 could allow for daytime construction and what have you. 6 Is your prohibition that you're suggesting for all of Route 1 or for key segments of it without trying to pin 7 8 you down as to which ones? 9 MR. GRUHN: Generally I'd say it's all of 10 I'm talking in generalities. You know, 11 specific locations if there was a viable detour plan that 12 was acceptable to the towns then we would permit that to 13 It would have to be worked out and there has been 14 no detailed plans developed at this point in time as to 15 how any of the traffic would be handled. 16 MR. ASHTON: Certainly. We'll appreciate 17 that. But the dilemma is sort of like going to the 18 dentist with some bad wisdom teeth, do you get them all 19 yanked at once or do you go back and suffer four times. 20 And therein lies the dilemma as to, you know, is it rigidly 10:00 to 6:00 or could we work it weekends, could 21 22 we work it holidays, could we work it 8:00 to 6:00, you 23 know, it contracts the duration of the construction by setting the work hours. And I'm not proposing to bind 24

1	you at all, but rather just test a little bit as to what
2	
3	MR. GRUHN: Well, quite frankly from, you
4	know, a prospective of the Department and as a taxpayer
5	and a rate payer if there were viable parallel routes I
6	think consideration should be given to putting the cable
7	in those parallel routes. Generally, secondary or town
8	roads do not have the amount of underground utilities
9	installed in them that the State highway system has.
10	They generally do not have the traffic volumes that the
11	State highway system has. They generally are not
12	reconstructed the way the State highway system is. They
13	can generally can stand alternating one way traffic
14	during construction, which the State highway system due
15	to the volumes of traffic could not handle. So wherever
16	the system could be put off of the State highway system
17	it would be easier for the utilities to install. It
18	would be easier for the utilities to maintain and would
19	probably be less expensive for everybody involved.
20	MR. ASHTON: There has been extensive
21	discussion of alternate routes.
22	MR. GRUHN: Okay.
23	MR. ASHTON: Thank you.
24	CHAIRMAN KATZ: Thank you.

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1	MR. CUNLIFFE: Mr. Harris, would you agree
2	with the characterization of the age of the structures
3	along the railroad are probably from 1900?
4	MR. HARRIS: The catenary system that
5	we're currently in the process of replacing was built
6	between 1902 and 1907.
7	CHAIRMAN KATZ: When will it be replaced
8	by?
9	MR. HARRIS: It's being done in various
10	stages. I think the last stage will be around '09.
11	CHAIRMAN KATZ: And where can you
12	sequentially tell us where you're going to start what
13	parts will be first?
14	MR. HARRIS: We started we started with
15	New York state line to Stamford. That area is nearing
16	completion. We will begin we are doing work in
17	Milford to New Haven right now that's about a year I
18	think away from being completed. Then we will pick up in
19	the Norwalk area and then eventually in the Bridgeport
20	area.
21	CHAIRMAN KATZ: So the Milford/New Haven
22	is definitely going to be done before 2007, correct? If
23	you try to do it next year?
24	MR. HARRIS: I believe the timing has that

1	section completed before 2007.
2	CHAIRMAN KATZ: And when are you I'm
3	sorry to interrupt. When are you going to replace the
4	cat cant cat
5	MR. HARRIS: Catenarys.
6	CHAIRMAN KATZ: catenarys, thank you,
7	with?
8	MR. HARRIS: We're replacing I mean,
9	the catenary is it's a new system, since 1902, new.
10	It is it's a different kind of catenary, but it still
11	will be a catenary system. It'll be state of the art and
12	some of the poles, some of the catenary structures
13	themselves will be replaced, some will be saved, but the
14	wiring itself will be changed.
15	CHAIRMAN KATZ: Could the new catenarys be
16	built strong enough to support a 345 line?
17	MR. HARRIS: No.
18	CHAIRMAN KATZ: And can you tell us why?
19	MR. HARRIS: All the catenarys have been
20	designed and engineered and all the work has been done
21	and construction where it started has not taken that into
22	consideration. It would be having to go back and stop
23	what we're doing and reengineer it to even see if it
24	could be possible. What we're putting up now my people

1	tell me could not support it.
2	CHAIRMAN KATZ: But if you haven't done
3	the Milford to New Haven ones is it possible that they
4	could be reengineered?
5	MR. HARRIS: The Milford to New Haven one
6	is underway and my quick reaction is it would take years
7	to redesign and handle the, you know, the footings and
8	everything else that needs to be done, adding a major new
9	element that would take quite some time to adjust to.
10	MS. RANDELL: Madam Chairman, can I just
11	ask a point of clarification?
12	CHAIRMAN KATZ: Sure.
13	MS. RANDELL: Of whether they are taking
14	out existing catenary structures or just adding new ones?
15	MR. ASHTON: Whether it's just the wire
16	essentially that's being replaced?
17	MR. HARRIS: No. The answer to the
18	question is both. We have where we think the existing
19	catenary structure could support the new wire and
20	everything else we're leaving it in to save money. Where
21	we feel that we need new catenary, you know, structure
22	itself, it's being replaced.
23	MS. RANDELL: Will the total number be
24	increased? I'm still not quite sure I understand.

1	MR. HARRIS: I don't think so, but I can't
2	tell you exactly.
3	MS. RANDELL: Thank you.
4	MR. TATE: Are there any plans to
5	electrify the line north of New Haven?
6	MR. HARRIS: There are no plans currently.
7	There is a study now underway to look at the possibility
8	of developing commuter rail from New Haven to
9	Springfield, Massachusetts. That study will be done
10	within a year or so. I still think it is based upon the
11	assumption that we will continue to have diesel power
12	rather than electrification. However, we are in
13	negotiation discussions with Amtrak on another issue and
14	Amtrak has raised the possibility of their electrifying
15	the line, which is their property. So I can't I can't
16	say that our study would electrify it, but it's not
17	beyond the pale that Amtrak is at least thinking about
18	it.
19	CHAIRMAN KATZ: If they electrified it
20	would it necessarily be overhead or it might be
21	MR. HARRIS: Oh, it definitely would be
22	overhead. It would be similar to what they're doing
23	what they have done from Boston to New Haven.
24	CHAIRMAN KATZ: Okay.

1	MR. ASHTON: And New Haven to Boston.
2	CHAIRMAN KATZ: I can visualize that, yes.
3	MR. HARRIS: And New Haven to Boston.
4	CHAIRMAN KATZ: Yes.
5	MR. FITZGERALD: Getting back to the new
6	catenarys, are you removing some of the catenary
7	structures that currently have the bonnets that support
8	the 115 kV lines?
9	MR. HARRIS: My assumption is yes, but I
10	can't
11	MR. FITZGERALD: And what happens to the
12	lines?
13	MR. HARRIS: they're they're as
14	they're replaced that's all taken into consideration and
15	handled.
16	MR. FITZGERALD: This is an interesting
17	experience.
18	CHAIRMAN KATZ: That's why you have junior
19	staff members to hold them up during question
20	MR. ASHTON: It's an assignment for junior
21	lawyers.
22	CHAIRMAN KATZ: Did you have further
23	follow-up on that or are we back to Mr. Cunliffe?
24	MR. FITZGERALD: We're back to Mr.

1	Cunliffe.
2	CHAIRMAN KATZ: Okay.
3	MR. CUNLIFFE: My follow-up would be was -
4	- is United Illuminating informed of the upgrades and did
5	they take part in the design process?
6	MR. HARRIS: I would assume so. United
7	Illuminating has been involved in building substations to
8	handle our additional power requirements that we're
9	putting into the New Haven yard with all the work that we
10	did in the yard. There is a lot of discussion that goes
11	back and forth between UI personnel and ours on all the
12	things that we do. So I would assume without personal
13	hand knowledge that there was a lot of discussion with UI
14	people and other in the whole planning of this process.
15	CHAIRMAN KATZ: Well, if the catenarys had
16	been designed to be 345 friendly is there a problem with
17	that type of an electrical force near the train lines?
18	MR. HARRIS: No one knows, but the
19	assumption is yes. In our discussions with Metro North
20	engineering they basically said the same thing that was
21	told to you before that no one really has studied it, but
22	they believe there probably would be problems with the
23	signal systems, the communications systems and everything
24	else, but have nothing that it can specifically point to.

1	But their electrical engineers in the department is
2	quite concerned.
3	MR. CUNLIFFE: No questions further for
4	me.
5	CHAIRMAN KATZ: Mr. Emerick?
6	MR. EMERICK: No questions.
7	CHAIRMAN KATZ: Mr. Heffernan?
8	MR. HEFFERNAN: No questions. Mr. Tate
9	took mine. Thank you.
10	CHAIRMAN KATZ: Mr. Wilensky?
11	MR. WILENSKY: No questions.
12	CHAIRMAN KATZ: Mr. Murphy?
13	MR. JERRY MURPHY: I just have one in
14	reference to Mr. Harris' affidavit. The opinion from the
15	Attorney General's Office that we need to get permission
16	for the upgrade first, could you provide us with a copy
17	of that opinion?
18	MR. HARRIS: I'm sorry?
19	MR. MURPHY: In your affidavit you
20	indicated that you received an opinion from the Attorney
21	General's Office that until we gave permission to upgrade
22	to the 345 kV
23	CHAIRMAN KATZ: Mr. Harris, we'll refer
24	you to your supplemental testimony.

1	MR. HARRIS: Right. Now I'm following
2	him.
3	MR. MURPHY: okay. If you could just
4	provide us with a copy of that opinion?
5	MR. HARRIS: I will talk to the person
6	that heads up our right of way. I'm not sure that that
7	was a written opinion or a verbal opinion. But I will
8	check on it. There was definitely we were definitely
9	told that's not within our purview, but I don't know if
10	it was writing or verbal.
11	MR. MURPHY: Well, it really strikes me as
12	being unusual that you would turn down this kind of a
13	request just on a verbal. But follow-up on that and
14	respond?
15	MR. HARRIS: Yes sir.
16	MR. MURPHY: Thank you.
17	MR. ASHTON: About when did those
18	discussions occur that you refer to on the bottom of the
19	page of your April 22 nd statement? Roughly how old are
20	those?
21	MR. HARRIS: I believe within the last
22	half dozen years, but I'll have to verify the exact
23	dates.
24	MR. ASHTON: Okay. That's good enough.

1	I'm just trying to get a sense for it. Thank you.
2	CHAIRMAN KATZ: Okay. So my understanding
3	is from counsel that we'll get a copy of that, or if
4	there is a copy we'll get one?
5	MR. WALSH: If one exists. I would tend
6	to echo Mr. Harris' belief that I don't believe that
7,	anything was written formally.
8	CHAIRMAN KATZ: Well, if you could trace
9	it back to the
10	VOICE: Oral statement.
11	CHAIRMAN KATZ: oral statement and then
12	we'll perhaps have to pursue it through Mr. Wertheimer.
13	MR. FITZGERALD: What you will see is in
14	the agreement that was just filed there is actually a
15	page and a half of text that covers the 345 upgrade issue
16	and all the work that would have to be done to do the
17	studies that have just been mentioned that have never
18	been done. And you'll see that it's although the
19	agreement is signed, but that page and a half is crossed
20	out and and the Attorney General's approval is on
21	there too. And Mr. Zak's testimony is that's the way the
22	agreement was signed, but then before it got approved by
23	the Attorney General the strike out was made.
24	CHAIRMAN KATZ: Okay.

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1	MR. FITZGERALD: So that could reflect
2	when you put that together with his opinion that gets you
3	to an inference of what the Attorney General's opinion
4	was I guess.
5	CHAIRMAN KATZ: Well, I
6	MR. MURPHY: My problem really is like the
7	chicken and the egg. What comes first, us or them? Or
8	how do you work it out?
9	MR. FITZGERALD: That's right.
10	CHAIRMAN KATZ: plus I guess at the end
11	of this Docket when we get to final briefs I'd like DOT
12	and others to comment, does a Siting Council decision
13	trump DOT's policies as opposed to construction on
14	highways and limited access highways.
15	MR. FITZGERALD: Is that a rhetorical
16	question or are you asking for
17	CHAIRMAN KATZ: No, I'm going to ask that
18	you address that in briefs.
19	MR. FITZGERALD: oh, okay.
20	CHAIRMAN KATZ: Do we does a Siting
21	Council decision trump DOT policies? Where are we? Mr.
22	Murphy, does that conclude your question?
23	MR. MURPHY: Yes, that was it Madam
24	Chairman.

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HEARING RE: CL&P and UI APRIL 22, 2004

1	CHAIRMAN KATZ: Mr. Lynch?
2	MR. LYNCH: No questions.
3	CHAIRMAN KATZ: Okay. Are there any final
4	questions from anyone in the room of these witnesses
5	before we excuse them?
6	MR. WALSH: May I just ask
7	CHAIRMAN KATZ: You want some redirect?
8	MR. WALSH: if I could just ask him to
9	take a look at the document that was submitted into
10	evidence, a copy of the agreement?
11	CHAIRMAN KATZ: It's just Mr.
12	Fitzgerald, the agreement that we have here is not signed
13	by the Attorney General, it's left blank. Do we have a
14	real signed one?
15	MR. MARCONI: If I may show the page to
16	Attorney Fitzgerald?
17	CHAIRMAN KATZ: Yes. Off the record.
18	(Off the record)
19	MR. WALSH: Mr. Harris, I'd like to direct
20	your attention to the signatory page?
21	MR. HARRIS: Um-hmm.
22	MR. WALSH: Could you tell me the date
23	that this agreement was signed by yourself?
24	MR. HARRIS: September 24 th , 2002.

1	MR. WALSH: And it was also signed by the
2	Vice President of Transmission Engineering Operations of
3	CL&P, is that true?
4	MR. HARRIS: That is correct.
5	MR. WALSH: And can you give me the date
6	that he signed it also?
7	MR. HARRIS: September 24 th , 2002.
8	MR. WALSH: Thank you. No further
9	questions.
10	CHAIRMAN KATZ: And we're going to get a
11	copy with all the signatures for the record at some
12	point?
13	MR. WALSH: We could provide it if the
14	Applicants don't have a copy of it.
15	MR. FITZGERALD: Well, let's leave it that
16	we will each pursue that.
17	CHAIRMAN KATZ: Pursue that? Okay.
18	MR. FITZGERALD: Yeah. Let's make it a
19	divided responsibility.
20	CHAIRMAN KATZ: That's fine. At some
21	point in the record I'd like to get a copy with all the
22	signatures.
23	MS. MESKILL: Can I just clarify something

24

1	CHAIRMAN KATZ: Yes.
2	MS. MESKILL: that came up earlier with
3	respect to the Council's questions, because I tried to
4	clarify it earlier in the testimony? With respect to the
5	one issue that was crossed out on that lease agreement
6	that legal issue our office had thought that that was
7	needed to be decided by this Council and therefore wasn't
8	allowed in that agreement. Not getting into the broader
9	issues of authority, but with respect to that. So I hope
10	that clarifies whether, you know, what comes first. That
11	was the Office's opinion that it had to come here first.
12	CHAIRMAN KATZ: Okay.
13	MS. MESKILL: With respect to that one
14	issue of the line.
15	MR. MARCONI: Can I just clarify that that
16	this is that was the determination by the
17	Transportation Division of the Attorney General's Office
18	not by Mr. Blumenthal himself.
19	MR. WERTHEIMER: I believe it was a
20	decision of the Office of the Attorney General.
21	MR. MARCONI: Oh, okay.
22	CHAIRMAN KATZ: Mr. Wertheimer, do you
23	want to be recognized?
24	MR. WERTHEIMER: It's a very simple issue

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1	as I understand it. It is the Attorney General's advice
2	to DOT that the Siting Council approval comes first.
3	Once that comes that legal issue prohibition will go
4	away. There will no longer be that impediment, there may
5	be others from DOT from others, but that one goes away.
6	I don't think that this issue requires anymore inquiry.
7	It's fairly straight forward. Thanks.
8	CHAIRMAN KATZ: Okay. But again, and I
9	would invite you where if the Siting Council were to make
10	a decision and part of that decision would be going
11	against something that is normal DOT policy we need to be
12	briefed on what people's understanding is.
13	MR. WERTHEIMER: I understand that. I
14	think my understanding of the policy that came from our
15	office was that there would not be an agreement approving
16	345's before there's Siting Council approval. If there's
17	Siting Council approval our office will not hold that
18	contract up for legal sufficiency on that particular
19	ground. So that issue goes away.
20	CHAIRMAN KATZ: Mr. Walsh?
21	MR. WALSH: No Madam Chairman.
22	CHAIRMAN KATZ: Okay. I think we are
23	MS. RANDELL: We have just a few
	110. Tambibi. We have just a lew

1	CHAIRMAN KATZ: yes.
2	MS. RANDELL: We have 40 copies of UI's
3	agreement with CDOT. I did check, it is fully signed.
4	CHAIRMAN KATZ: Thank you. We'll put that
5	one in the record.
6	MS. RANDELL: I talked to Mr. Cunliffe
7	about just including it within Exhibit 67?
8	CHAIRMAN KATZ: Is that good?
9	MR. CUNLIFFE: Yes.
10	MS. RANDELL: And then Mr. McDermott has a
11	new exhibit, just resumes.
12	CHAIRMAN KATZ: Of our two new witnesses?
13	MR. BRUCE McDERMOTT: They're the resumes
14	of Mr. Pinto, Mr. Kleimer Kleiman and Cyril Welter who
15	testified this morning.
16	CHAIRMAN KATZ: And are they still in the
17	room? Are they still in the room?
18	MR. McDERMOTT: Mr. Pinto and Mr. Welter
19	are. Mr. Kleiman has left.
20	CHAIRMAN KATZ: Why don't we have them
21	come up and verify their and we'll get that in the
22	record? Mr. McDermott, if you'll lead them through that?
23	What number are we giving these?
24	MR. McDERMOTT: 68, 69 and 70 I believe.

1	Is that right Mr. Cunliffe?
2	MR. CUNLIFFE: 68, 69 and 70.
3	CHAIRMAN KATZ: Thank you gentlemen very
4	much for your participation. We'll see you in June.
5	MR. GRUHN: Thank you.
6	MR. ASHTON: Have a nice spring.
7	MR. GRUHN: We'll try.
8	VOICE: Hopefully no more burning
9	highways.
10	MR. McDERMOTT: Mr. Pinto, I've showed you
11	a copy of your resume. Is that a true and accurate copy
12	of your resume?
13	MR. PINTO: Yes, it is.
14	MR. McDERMOTT: And you verify it as being
15	accurate?
16	MR. PINTO: Yes, I do.
17	MR. McDERMOTT: And Mr. Welter, same
18	question to you. Is that a true and accurate copy of
19	your resume?
20	MR. WELTER: Yes, it is.
21	MR. McDERMOTT: And do you verify it as
22	being accurate?
23	MR. WELTER: I do.

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CHAIRMAN KATZ: Any objection to making

24

1	these two full exhibits? Hearing none we'll make them
2	full exhibits.
3	(Whereupon, Applicant's Exhibits No. 68
4	and 69 were received into evidence as full exhibits.)
5	CHAIRMAN KATZ: And who is the third one?
6	MR. McDERMOTT: Mr. Kleiman from or
7	Kleimer from ESS.
8	CHAIRMAN KATZ: Okay. We can
9	MR. MARCONI: If everybody is willing to
10	stipulate that the other resume is accurate then that's
11	fine. We can certainly admit it into evidence.
12	CHAIRMAN KATZ: Is there any objection
13	from any party from making Mr. Kleiman's resume a full
14	exhibit? Hearing none we will take it in on that
15	understanding.
16	(Whereupon, Applicant's Exhibit No. 70 was
17	received into evidence as a full exhibit.)
18	MR. McDERMOTT: Thank you.
19	CHAIRMAN KATZ: Any other housekeeping
20	matters by any party, intervenor, applicant, prior to
21	adjourning today's session? I'll just remind everybody,
22	May 12^{th} and 13^{th} are EMF exclusively and are we all set on
23	pre-filed and all you working that among yourself and all
24	that?

1	MR. FITZGERALD: Well, we've read the
2	dates for pre-filed.
3	CHAIRMAN KATZ: Okay.
4	MR. FITZGERALD: And certainly we intend
5	to observe them. I think we will have a few additional
6	things. You asked for some
7	CHAIRMAN KATZ: I'm asking that nothing be
8	dropped on our laps that morning for us to read.
9	MR. FITZGERALD: you can be sure that
10	we will not be guilty of that. Everything that you've
11	asked us for will be
12	CHAIRMAN KATZ: I'm asking all parties and
13	intervenors not to drop anything on our lap the morning
14	of May 12 th and expect us to read it and please respect
15	all deadlines according to pre-filing. Ms. Randell?
16	MS. RANDELL: Could we ask to the extent
17	possible people email the pre-filed testimony?
18	CHAIRMAN KATZ: Yes.
19	MS. RANDELL: It cuts off several days on
20	our receipt.
21	CHAIRMAN KATZ: Yes. That we'll make
22	that request.
23	MR. FITZGERALD: One report that you asked
24	for this morning we have. This relates to the two

1	substation sites, the McNeil or Blacktite site.
2	CHAIRMAN KATZ: Yes.
3	MR. FITZGERALD: And the Beard site.
4	Today we've delivered a proposed access agreement to Ms.
5	Kohler, who is serving as an intermediary since Mr.
6	McNeil choose to go to the town and we have advised her
7	to advise him and we advise you that if we get that back
8	with a signature we will immediately proceed to do the
9	due diligence work to see if that's a viable site.
10	CHAIRMAN KATZ: In fact we may take that
11	up briefly during the May session if that has been
12	resolved by May 12 th , we might briefly just start off with
13	that before we do EMS if that's all been
14	MR. FITZGERALD: We'll let you know if
15	there's anything to report.
16	CHAIRMAN KATZ: yes. That's all we'll
17	ask. Any other procedural matters? We are adjourned.
18	(Whereupon, the hearing adjourned at 3:30
19	p.m.)

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CERTIFICATE

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In witness whereof I have hereunto set my hand and do so attest to the above, this 28th day of April, 2004.

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