ORIGINAL

STATE OF CONNECTICUT

SITING COUNCIL

CONNECTICUT LIGHT & POWER COMPANY AND UNITED ILLUMINATING COMPANY

JUNE 2, 2004 (10:00 A.M.)

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

DOCKET NO. 272

SWITCHING STATION IN MIDDLETOWN AND THE NORWALK SUBSTATION IN NORWALK, CONNECTICUT

CONNECTICUT SITING COUNCIL

BEFORE: PAMELA B. KATZ, CHAIRMAN

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AN INTERVENOR, THE FIRST DISTRICT WATER COMPANY

AN INTERVENOR, NORWALK ASSOCIATION OF SILVERMINE HOMEOWNERS

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AN INTERVENOR, JOSEPH CRISCO, JR., STATE REP. 17th SEN. DISTRICT

AN INTERVENOR, LEONARD FASANO, STATE REP. 34^{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 Company and United Illuminating Company, held at Central 4 5 Connecticut State University Institute of Technology & 6 Business, 185 Main Street, New Britain, Connecticut, on 7 June 2, 2004 at 10:00 a.m., at which time the parties 8 were represented as hereinbefore set forth . . . 9 10 11 CHAIRMAN PAMELA B. KATZ: This is the resumption of the 272 hearing. We're going to start off 12 13 with three audio visual presentations. First is on the 14 East Shore route, the second is on the northerly route, 15 and third is a homework assignment by the company in response to Mr. Emerick's questions yesterday concerning 16 17 part of the northerly route. So we're going to start 18 with that and then we will -- the Council will be seated 19 and we'll go and do the OCC. 20 (Pause) 21 MS. ANNE BARTOSEWICZ: All set? Good 22 morning. Today's presentation we're going to walk 23 through the East Shore route, the 387 line on the East 24 Shore Route. We will -- John Prete and myself we will

1 again go back and forth here on the presentation. 2 This really affects Segment 2 from Beseck 3 And yesterday we saw that the proposed to East Devon. 4 route would be on transmission line rights-of-way. 5 blue line -- the right hand of the blue line is the 6 proposed route. We looked at the Cheshire Cook Hill 7 route yesterday. And the second way to get to East Devon 8 is from Beseck through East Wallingford Junction to East 9 And then from East Shore you need to get to East 10 So the dotted line is the under C route, or you Devon. 11 have two other ways, the red dotted line shows you an all 12 underground route, that's basically on Route 1, or a 13 combination route that goes into Orange with a transition 14 station with switching capabilities to the right-of-way 15 into East Devon. 16 Now to meet NERC, NPCC and NEPOOL 17 standards, when we talk about East Shore today, we are talking about a second line on the right-of-way. 18 existing right-of-way has the 387 line that goes from --19 20 it actually goes from Scovill all the way down to East 21 To meet these criteria, we need a second line 2.2 between Beseck and East Devon to make this route 23 acceptable to these reliability criteria. 24 So we've broken this into three pieces.

1	The first piece is the Beseck to East Wallingford route.
2	And we have two alternative routes to get from Beseck to
3	East Wallingford. The second piece is between East
4	Wallingford Junction and East Shore, and we're going to
5	talk about three different ways to get from East
6	Wallingford to East Shore. And the third piece is
7	getting from East Shore to East Devon. And we also have
8	we have two routes that do that for us.
9	From Beseck to East Wallingford we looked
10	at an overhead route and an underground route. The
11	overhead route, it uses the existing right-of-way, which
12	is part of the proposed route. The six miles, the 275-
13	foot right-of-way, today the 387 line is on that right-
14	of-way, it's an H-frame. You'd be putting up the second
15	H-frame along that path. No widening of the right-of-way
16	is needed.
17	Secondly oh, here is to refresh and
18	get a perspective, this is the aerial again from Beseck
19	to East Wallingford. It continues down through
20	Wallingford. And the blue circle again is East
21	Wallingford Junction. To remind you, that is in the
22	middle of Traditions Golf Course.
23	So we looked at how to get from Beseck to
24	East Wallingford via an underground route. And this red

1	dotted line is essentially uses Williams Road in
2	Wallingford. The red square would be a transition
3	station with full switching capabilities and it would be
4	just south of what is Pond Hill School. I think we'll
5	see an aerial of that.
6	The three routes to get from East
7	Wallingford to East Shore would be the transmission
8	right-of-way and the Conrail and Amtrak, which we saw
9	yesterday, which John is going to give us a little more
10	detail and some more photographs on of getting from East
11	Wallingford to East Shore via those routes.
12	Now this transmission right-of-way
13	today on the 387 right-of-way from East Wallingford to
14	East Shore this right-of-way contains 345 H-frame
15	structures. The right-of-way is up to 320 feet wide. It
16	also contains a 115-kV circuit and H-frame structures
17	there as well. These are the same the 345 H-frame is
18	essentially the same structures as we saw in the proposed
19	route from Beseck to East Wallingford, they're the 90
20	feet H-frame structures.
21	Now, we'll start up in Wallingford. As
22	you come south down Wallingford, the red circle there is
23	Pond Hill Elementary School. And the only open space for
24	a potential transition station would be in this block of

1	land down here. There's
2	A VOICE: (Indiscernible) remembers
3	it's an audio tape.
4	MS. BARTOSEWICZ: it is southeast of
5	Pond Hill Elementary School on the eastern side of the
6	right-of-way where the current right-of-way takes the jut
7	to the east.
8	This is Pond Hill Elementary School. You
9	can see today that 345 right-of-way and on the left-hand
10	side of this photograph you can see the actual H-frame
11	structure. You can see the school is adjacent to this
12	right-of-way today.
13	Here are just some other photographs that
14	we took of the 387 line. This one is a house between the
15	387 line and the airline the railroad corridor. It
16	shows the 387 line fairly close to a variety of homes.
17	Going south into North Haven and North
18	Branford uh continue going south, this just takes
19	us south. It happens to be another photograph of Hansen
20	Farm Road in North Haven. It shows a fairly new
21	development. It looks like this house is still under
22	construction here. So folks are building along the 387
23	right-of-way today.

Another view of East Haven. You can see

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1 the right-of-way. The H-frames behind this row of 2 houses. 3 As you go south into East Haven, there is 4 Connecticut Sports Plex. And if you've ever been here, 5 over to this right-hand side is this huge dome facility 6 where it's an indoor facility. This excavation work --7 they are building --8 MR. JOHN PRETE: A paint ball. 9 MS. BARTOSEWICZ: -- paint ball -- a paint 10 ball facility. This parking lot is essentially within 11 the right-of-way today. To the left there are a variety 12 of other facilities, golf -- there's a golf -- a 13 miniature golf --14 MR. PRETE: A driving range. 15 MS. BARTOSEWICZ: -- a driving range. 16 this sports plex has been here and as you can see they've 17 been doing recent construction. The lines, the 345 and 18 the 115's come right through this sports plex today. Go 19 ahead. 20 The line comes south into Branford, and 21 this is the Lake Saltonstall region. The existing 387 22 line crosses Lake Saltonstall to the south of the lake. 23 Between Beseck and East Shore on this right-of-way you

would need to clear about 150 acres of trees in order to

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1 put the second line in. And this whole area is the Lake 2 Saltonstall recreational facility. 3 The next one. This is a view of the existing 387 line as it goes through Lake Saltonstall. 4 5 Coming out of the Lake Saltonstall region, the line 6 crosses -- actually this line here crosses the lake over 7 on this side and it turns to go to the west through East 8 We've identified areas of interests, and this is 9 an elementary school right here. It continues going west 10 to East Haven. As you see as we get into East Haven, 11 there's certainly more development, there's some 12 industrial development here. 13 MR. PRETE: (Indiscernible) -- Park. 14 MS. BARTOSEWICZ: Where -- here? 15 MR. PRETE: Yeah. 16 MS. BARTOSEWICZ: This is Meadow --17 MR. PRETE: Peat Meadow. 18 MS. BARTOSEWICZ: Peat Meadow Park. The 19 right-of-way -- actually, the park was built on the 20 existing right-of-way. Continue through. Here's the --21 here's the park itself. Here's Peat Meadow Park and the 22 345 going through the park. 23 We get closer to New Haven and you 24 certainly get into a more developed area. You can see

1 the line, these lines are actually heading into East 2 Shore here. And these lines come through and this is 3 East Shore Substation -- the current East Shore Substation on the bottom left. 4 5 A summary. What we did is we've been trying to gather some data to help the Council evaluate 6 7 routes. What we did is we looked at how many homes were within 150 feet of the right-of-way. And we also have 9 been looking at the new legislation, which is -- calls 10 for public facilities -- and this -- this particular path 11 on the 387 right-of-way from Beseck to East Shore gives 12 you -- there's 226 homes that are with 150 feet of the 13 right-of-way and it gives you 13 facilities that are with 14 1200 feet. And this gives you -- on the right it gives 15 you an idea of what kind of facilities they are and in 16 which towns they hit. 17 Now as we continue with the presentation, 18 John is going to show the same statistics for the airline 19 We also have the statistics for the proposed 20 route for a comparison. 21 As Anne said, what we'd like MR. PRETE: 22 to do is go through this area here, the Segment 2. 23 talked about three routes. Anne went through what we 24 call the 387 corridor. It is a corridor that has a 345

line today.

2 What I'd like to do is take you through our homework assignment, which is the rails that exists. 3 And this green line that's folded in, that's the Amtrak 4 5 Railroad, so it kind of gives you a geography of where 6 that is. This line that's being drawn here is known as Conrail and/or the Airline. And as you can see, in and 7 8 around the New Haven area they merge. So as we begin 9 talking, we'll talk about the Amtrak in this area and 10 we'll talk about Conrail, but when you get to this area, 11 obviously the Amtrak is the only one that can get you 12 largely to East Shore. So if you can kind of keep that 13 graphic in mind, I think it would be very helpful, okay. 14 So what we'll do now -- you see an A here 15 and a B here. What I'd like to do is talk about this 16 track here, this Amtrak rail, and we'll see some 17 photographs and some numbers as well. We saw this 18 yesterday, this is the Amtrak in the Wallingford area. 19 And this slide points out the fact that there's 20 businesses that are squashed on either side of the rail. 21 They're squashed in the manner that again on a 345 22 construction -- remember the right-of-way needs to be 23 roughly 120 feet, 125 feet in width -- so if the pole is roughly in the middle, you need about 60, 65 feet on 24

1 either side. You can see in these areas they're pinched 2 quite a lot. 3 Similarly coming down through this area, 4 that's where the slide was prior, getting more south in 5 Wallingford. The fact of the matter is that whole Wallingford branch there, there's about 71 businesses as 6 7 we calculated that would have to be removed, condemned, 8 or otherwise acquired to facilitate that line. 9 This gives you a couple of pictures of 10 just some of the congestion. Obviously rails were in 11 existence a long time. And the businesses a long time 12 ago obviously had a lot of economic viability by building 13 close to those. Okay. 14 What I'd like to do now is know of talk 15 about this B area. You can see the small purple section 16 is the right-of-way on our segment from East Wallingford 17 if we were to go to Cook Hill. So that's really the only way we can get to the right-of-way here and the Amtrak. 18 19 And as this slide shows, this section right here there 20 would be 60 -- six homes and 50 businesses that would 21 have to be acquired on that type of construction. 22 see a couple of photographs. 23 As we get kind of out of the Wallingford area up to North Haven, you can see along this line here 24

	Τ	a lot of businesses and residential. We kind of went out
	2	further just to give you an idea of the mix type of
	3	buildings. This is 91 over here and the Wilbur Cross
	4	over in this area.
	5	Yeah. Amtrak is over here and the Conrail
	6	is over here. Remember in that slide prior as you get
	7	closer to New Haven they come into a merged area. And
	8	this photograph here shows again heavy concentration on
	9	the Amtrak and the businesses. As we get into the North
1	.0	Haven area here, it gets into that mixed use and
1	.1	residential. Similarly, the Conrail here is heavy
1	.2	residential development. And in these areas here, these
1	.3	are some of the sensitive areas that are part of the
1	. 4	legislation this right here happens to be a school,
1	.5	Aces, which is here. Right along the rail you can see
1	6	it, right over here this particular school was built.
1	.7	This slide here had North Haven on the
1	8	south end, but you can see kind of the proximity of North
1	9	Haven. And again as we continue on the Conrail Airline,
2	0	you can see a lot of the mixed use, largely residential.
. 2	1	And this must be a conductor's dream over
2	2	here, but this is where Amtrak and Conrail merge. And
2	3	there a number of things that we can see. This is all
2	4	wetlands I'm not sure of the exact definition, I think

we were to use either one of these rails, we would recombined to then continue on this small loop in this area. At that small loop is where this is. So we would continue down on what is now known as the Airline or Conrail. MR. PHILIP T. ASHTON: John, that's main line from to Boston to New Haven, isn't it? MR. PRETE: That's correct.	and nue
that small loop is where this is. So we would conti down on what is now known as the Airline or Conrail. MR. PHILIP T. ASHTON: John, that's main line from to Boston to New Haven, isn't it?	.nue
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6 MR. PHILIP T. ASHTON: John, that's to main line from to Boston to New Haven, isn't it?	
7 main line from to Boston to New Haven, isn't it?	the
,	
8 MR. PRETE: That's correct.	
9 MR. ASHTON: The loop.	
MR. PRETE: The loop. Interesting en	ıough
11 I don't travel the rail that much but there's	a
tunnel here, and those that probably travel know it.	And
so that would pose tremendous difficulties obviously	on on
an overhead route, underground as well.	
Then as that loop continues this	s the
16 387 or 345 corridor that gets into East Shore. You	would
essentially try to launch yourself in a manner to co	me
along this way. And you again see some of the	
19 residential development. A lot of the condo develop	ment
that Anne was talking about is in this area here.	
21 And as Anne said, we'd like to try to)
summarize some of the statistics for the Council and	l
others. So if we take the Amtrak rail as we had jus	it
defined it, you can see by town the houses that are	

1	within 150 feet are 237. And the 5418 bill, in the
2	sensitive areas there's 18. And you can see to the right
3	of that some of the definitions of those areas. And
4	similarly on the Conrail Airline, you can read the
5	numbers. The numbers are roughly the same, about 260
6	houses, 18 facilities that are in the sensitive area.
7	Now, this is clearly just from the Beseck area to East
8	Shore, that's very important to note. Yes?
9	MR. BRIAN EMERICK: I realize you're
10	following a rail corridor. Are you actually within their
11	right-of-way? And how wide is their right-of-way?
12	MR. PRETE: Did everybody hear that
13	question?
14	MR. ASHTON: No. Say it again.
15	MR. PRETE: The question was around you
16	know, what are we assuming as far as placement of an
17	overhead line within the rail vicinity? And there's a
18	couple of things in answering that. If you were to
19	envision the rail, the outermost rail, by clearance
20	standards, the pole itself, and we'll call it the face of
21	the pole, the closest point, needs to be 12 feet away;
22	okay, so if you can envision 12 feet away from the rail a
23	pole being erected. Now, we assumed in a manner that
24	reduces the amount of right-of-way you need, the arms

1	would actually go over the rail. So on a 345 those arms
2	are roughly 20 feet 15 to 20 feet. So those would
3	extend kind of over the rail. And from that point on,
4	from where those wires are, you need roughly 62 feet. In
5	some cases the right-of-way is not nearly wide enough
6	obviously because you're already into businesses. But
7	that's, quite frankly, the geography that we had to
8	contend with.
9	MR. EMERICK: Is there any operational
10	restriction that Conrail or Amtrak would place on you in
11	terms of putting the arms or conductors over the rail
12	line itself?
13	MR. PRETE: Most definitely yeah. I'm
14	sure that if you'd ask that question, it wouldn't be
15	something they would be very favorable on.
16	MR. EMERICK: So that, in fact, you
17	couldn't put the arms, they would have to go on the .
18	outboard side?
19	MR. PRETE: Again, I think those are
20	those are the discussions that need to occur if indeed we
21	would have to go further into this type of proposition.
22	MR. EMERICK: But for your analysis you
23	assumed they would be inward as opposed to outward?
24	MR. PRETE: Quite frankly, the best case.

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1 And again you saw some of the numbers in the acquisition that would have to occur, Mr. Emerick --2 3 MR. EMERICK: Thank you --4 MR. PRETE: -- they would be worse than 5 that. 6 MR. EMERICK: Okay. 7 MR. PRETE: Okay. Now, the chart we just 8 had and the discussion really talked about kind of the 9 Beseck area and the rail that would need to get to East 10 Shore. And as Anne showed prior, the third segment here 11 is East Shore and how do you get to East Devon. whereas we show two routes, the two routes really are 12 13 indicative of overhead and underground or just 14 underground. 15 The first route if I can just trace it, 16 was what we call as a hybrid, which has roughly six miles 17 of underground through this area here to a transition 18 station right north in the Orange/West Haven area. transition station there would have to be two to eight 19 20 acres. And then you'd have overhead. Essentially, the 21 same right-of-way that we talked about yesterday. 22 The other route would be an all 23 underground route. And there's a number of street 24 coordinations that we looked at. Certainly as we go

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1 forward -- or if we go forward, we'd need to talk to the 2 towns' CEOs and cities' CEOs to find out if there is any 3 plans and what else is in the street. But on a high 4 level reconnaissance we have some routes that we have in 5 mind. 6 So taking this whole picture, this whole 7 snapshot, what we tried to do is now all of Segment 2. 8 So going from Beseck to East Devon, that is Segment 2, we 9 have the proposed, which we talked about yesterday, and you can see some of the numbers, the homes that are 10 within 150 feet and the sensitive areas of 26. Remember 11 12 that's that whole right-of-way that exists today. 13 In this particular table here, it has the 14 underground, or the hybrid. So in other words, we're 15 going from Beseck to East Shore, and then we're going 16 from East Shore to East Devon through that Hybrid where 17 you have the underground and overhead combination. And 18 you can see this transmission right-of-way, what Anne talked about, that's that 387 corridor as we call it, and 19 20 you can see some of the numbers lining up as far as the 21 number of homes and the number of sensitive areas along 22 that.

is again the same type of route, but instead of going the

Now if you then take the third look, which

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hybrid from East Shore to East Devon, we go all underground, you can see some of the numbers. The houses drop off roughly 240 and the sensitive areas drop off by about eight. And if you remember just graphically that hybrid station is roughly on the northern part of Orange. And as we walked through Orange yesterday, there's a lot of houses as the picture show. So you can see that the difference of the hybrid is roughly the 240, 250 there. And that's the East Shore presentation.

MS. BARTOSEWICZ: As a homework assignment yesterday, we talked about the northerly route. And we were able to take the aerial photographs of the northerly route to show you today. (Pause). And these are a series of eight -- seven or eight overhead, so you're looking down upon the right-of-way. And we start here at Chestnut Junction. I will tell you the yellow lines are the existing right-of-way. The red lines are the centerlines of the existing 345 within that right-of-way. And today there are three rows, three circuits of 345 on H-frames. The pink line right here or the purple line, that is the alternative if you were to build the new 345 at a monopole, that would be the 40-foot expansion and the four homes. And the blue line is if you were to build another H-frame, that would be the 80-foot

1 expansion and the eight homes. And we will walk you 2 through these slides and I will point out those home 3 locations and you can have -- get a look at what the terrain looks like. And when you are here, you are in 4 5 Middletown and you are going west into Middlefield. 6 this would be going west the first -- the first leg. 7 A VOICE: How long is that leg? 8 MS. BARTOSEWICZ: I forget. I don't have 9 that sheet -- do you have that sheet with the houses --10 (pause) -- I'm just going to try to -- to make sure I 11 identify the houses for you. They're circled, but the 12 circles are going to be hard to see. What we did is we 13 circled them in purple and blue. So you see there's this 14 little blue circle here, that house would be -- would 15 have to be acquired or removed should we go the 80-foot 16 expansion, that's one of the eight. The pink circles are 17 the ones that would be -- would have to be acquired if 18 you did the H-frame or the monopole. So those are the 19 combination. So there are four circles in pink. And 20 there's a blue circle there and another blue circle. So on this piece of the right-of-way you've got 1, 2 --21 22 three homes that are in the right-of-way should you go

with the 80-foot expansion. And you've got one home

there that's in the right-of-way with the 40-foot

23

24

1	expansion.
2	(Pause)
3	MS. BARTOSEWICZ: The town line the
4	town line the town line?
5	MR. PRETE: Right there.
6	MS. BARTOSEWICZ: Okay, here we go. This
7	is so you're still in Middletown here. The
8	Middlefield town line is right here. And we've got a
9	pink circle here, so that would be the monopole house
10	interference. And I think that's the only one on this
11	segment of the right-of-way.
12	We proceed west into Middlefield. We've
13	got house impacts here. This is a pink circle, so this
14	would be the monopole. This is a blue circle, that would
15	impact the 80-foot expansion. So there are two homes in
16	this segment of Middlefield.
17	We continue proceeding west through
18	Middlefield and you see the right-of-way expansion has
19	shifted to the other side, it's now on the northerly
20	portion. You've got a pink circle here and a blue circle
21	down here, so those would be two more impacts.
22	We're still in Middlefield here going west
23	through this section. I do not see any there are
24	there are no impacts along this piece of the right-of-

1 way. 2 And the last segment brings you into what 3 is now Black Pond Junction. You cross from Middlefield 4 into Meriden. This is currently where Black Pond Junction is today. This is the Police Academy here. 5 6 Let me just say a couple of things about 7 this right-of-way. In those locations where you've got 8 home impacts, we certainly talked about not expanding the 9 right-of-way at all and having to build all the lines. You could have an alternative where you would just 10 11 rebuild those lines in the area of the home impact. 12 is just one other solution. 13 Basically the reason why we didn't choose this route is one of the NPCC's criteria is the 14 15 contingency on loss of right-of-way. If you lose this right-of-way between Chestnut and Black Pond, you 16 17 essentially cut eastern Connecticut from western 18 Connecticut. And what you do is you hang Southwest 19 Connecticut on New York. So once you do that, your 20 problem is getting from -- trying to get power into Southwest Connecticut from New York which causes problems 21 22 on that contingency. So this is -- this is the northerly 23 This is one of the reasons -- the reason why we 24 didn't choose this route and we went through -- on the

1 existing right-of-way through Durham.

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23

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2 Now what we also did is -- because you're looking for all routes and anything we can do, we took 3 4 another look at Durham -- and I have another -- one more 5 slide to show you -- we looked at could you go around 6 Royal Oak because it's a neighborhood and that means 7 under the House Bill -- under the bill it's certainly an issue -- and so what we -- what we're going to show you 9 here is another look about could you go around this 10 neighborhood. And we sent our engineers out to the field 11 and we looked at is there enough land between the Royal 12 Oak development down here and the development to the 13 north, which is a fairly new development, through -- this 14 is a hardwood forest today -- is there enough room to actually take the 345 and go around the neighborhood. 15 And as you can see it is possible, but when you -- when 16 17 you change the route, you certainly have to clear this 18 right-of-way to put the new line in and you potentially 19 affect others. 20 And I'll just highlight some of those 21 You have -- certainly you have a home here.

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have to get through -- this is Route 17. You have to get

between these two buildings. There is enough room to get

between them. This is a greenhouse facility and this was

HEADING DE. CLED and UT

1	the old DOT emissions testing, it is now an industrial
2	business, it's there's a business there. You can go
3	through the back of the parking lot. This is also treed
4	area in Middlefield. This is the existing right-of-way.
5	And the goal would be to go around the neighborhood and
6	to link back into this right-of-way. This is one path to
7	get to that right-of-way. You do you do have homes
8	here and here. You certainly could have come out this
9	way and down to try to avoid as many homes as possible.
10	It was just another look that we did as we were doing
11	field work and I just we just wanted to share that
12	with the Council.
13	MR. COLIN C. TAIT: Who owns that land,
14	the forested land?
15	MS. BARTOSEWICZ: This land here?
16	MR. TAIT: Yes. And the other side too?
17	MS. BARTOSEWICZ: I have a list. There
18	are many owners. We can provide you with that list.
19	MR. TAIT: Not one owner, not a public
20	facility
21	MS. BARTOSEWICZ: Uh no, there are I
22	think there were six or seven (mic feedback)
23	different owners.
24	CHAIRMAN KATZ: Can the Council get a copy

1	of that slide?
2	MS. BARTOSEWICZ: Yes.
3	CHAIRMAN KATZ: And on the yellow that you
4	show there where you have I guess doing the two angles
5	of the triangle instead of the hypotenuse, is there an
6	existing right-of-way there now for distribution, or
7	MS. BARTOSEWICZ: No. This is
8	CHAIRMAN KATZ: There's nothing there?
9	MS. BARTOSEWICZ: There's nothing here.
10	CHAIRMAN KATZ: Okay. Yes, if we can get
11	a copy of that slide.
12	MS. BARTOSEWICZ: Yes. We're going to
13	file this entire presentation today, including the
14	northerly and this slide as well. Okay
15	MR. ANTHONY FITZGERALD: (Indiscernible) -
16	- Anne
17	MS. BARTOSEWICZ: Yes?
18	MR. FITZGERALD: At least I didn't I
19	didn't hear the number of owners that you gave in
20	response to Mr. Tait's question. There was a sound a
21	malfunction
22	MS. BARTOSEWICZ: Sure. I believe that
23	there's six different owners. We have that list and we
24	can share that if the Council is interested. We have not

1 contacted any owners at this point.

I think -- next, we have one more

3 presentation. This is the homework assignment. Roger

Zaklukiewicz is going to talk to this.

5 (Pause)

MR. ROGER ZAKLUKIEWICZ: Thank you. Last evening we put together a number of slides to try to answer Mr. Emerick's question. And I'm certain others on the Commission and others at the hearing had some of the same issues, so I don't mean to pick on Mr. Emerick as the only one who didn't understand it. In putting together these slides last night, I had to second-guess my own self a few times.

ourselves and trying to indicate what we have presently on the Connecticut system from east to west, including the 387 line, which goes between Scovill and East Shore across mid-Connecticut. Specifically, we have the 348 line, which goes from Millstone up to Oxbow Junction over to Chestnut Junction on to Southington, and that's the 348 line. We have the 362 line, which goes from Haddam Neck up to Chestnut Junction, Chestnut Junction west to Black Pond Junction to Southington. And the third line we have that goes east/west across this corridor is the

1	line from Scovill Rock to Chestnut Junction to Black Pond
2	Junction, south to East Shore, and that is the 387 line.
3	And that's what we have presently in service. And this
4	has been operating in this mode for a number of years.
5	Of concern to myself and ISO and others at
6	this time is the fact that a single contingency along
7	this corridor basically ends up being a significant
8	contingency for which I think recovery is questionable
9	because we could lose all three lines. That would leave
10	the rest of Southwest Connecticut hanging on or being fed
11	solely from the New York system on the 345-kV lines,
12	which come out of Pleasant Valley over to Long Mountain
13	over to Southington and feed down on the 115-kV systems.
14	Recognize the transfer capability of the 115-kV system
15	along with the 345-kV lines, it's questionable whether we
16	could sustain on even a medium load day the load that's
17	in Southwest Connecticut, and would most likely between
18	medium and high load days end up having to go into some
19	form of load shedding. But we we've had this
20	situation and this is what we have lived with for a good
21	number of years.
22	You can go to the next slide no, the
23	next one. Here's here this slide is it should be
24	in your package, Slide No. 2, which is basically what is

1 being proposed. What is being proposed is we would turn 2 around and add a fourth line east to west. We would take 3 the 348 line and we would open it between Oxbow Junction 4 and Chestnut Junction, physically remove the line between 5 Oxbow and Chestnut Junction and extend it basically to 6 the west, the red line between Oxbow Junction and a new 7 Beseck Substation. 8 We would turn around and the line which 9 goes today from Scovill to the west to Chestnut Junction 10 to Black Pond Junction down to East Shore is untouched, 11 it does not go into Beseck Substation, it bypasses Beseck 12 Substation and provides a direct path between Scovill and 13 East Shore. We then build, construct a new section of 14 345-kV line between Scovill Rock and Chestnut Junction. 15 This would be a brand new line between Scovill and 16 Chestnut. And we pick up the piece that used to be the 17 348 line that we cut here and we extend that directly on 18 to Southington. So we form a new line that goes Scovill 19 Rock to Southington. 20 We then take the Haddam Neck line, which 21 was the 362 line, which went from Haddam to Black Pond 22 Junction over to Southington, we break it at Black Pond

Junction and we extend a leg of the 362 line into Beseck

Substation. And then we come out of Beseck Substation

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24

1 and we tie into the section of the 362 line from Black 2 Pond over to Southington. 3 So when we're all through with the 4 construction as proposed, we have four 345-kV lines which 5 go east to west across the center of Connecticut. 6 What does this do for you? If you 7 remember in the previous slide, I said anytime if we had an aircraft come down and hit one of the conductors, bounce off and get into the other lines, we would lose 9 10 this east/west right-of-way. We will still do that with 11 the proposed route, and we would lose the lines that go 12 from Haddam Neck to Beseck. We would lose the lines that 13 go from Scovill -- excuse me -- we would -- and we would 14 lose the 348 line that go directly from Scovill into 15 Southington and we would lose the line which goes 16 directly from Scovill down to East Shore. What we still 17 have in place is the line which goes from Millstone to 18 Beseck, from Beseck down to the proposed East Devon 19 Station. A major, major improvement than what we have 20 presently today. 21 On file in the -- in part of the documents 22 that were noted is the NPCC Document A2, which is the basic criteria for design and operation of the system. 23 And in 7 -- Section 7 of that document we have to take 24

into account for an extreme contingency, the loss of all 1 2 transmission circuits emanating from a generating 3 station, a switching station, a DC terminal, or a 4 substation. And secondly, we have to take into account 5 the loss of all transmission circuits on a common right-6 of-wav. That is just an extreme contingency for which 7 ISO New England and the operators at CONVEX have to be 8 prepared to deal with that extreme contingency. In this case should that extreme contingency exist, we would have 9 10 a strong transmission path from Millstone to Beseck to 11 East Devon. 12 Can we go back to that previous slide? 13 No, the next one. That one. I probably should have made 14 four slides to incorporate the comments from Anne 15 Bartosewicz a few minutes ago about a fourth transmission line across here, but I'll speak to this one first. One 16 17 option would be to establish a substation at Black Pond. And I think that was the question that Mr. Emerick 18 19 raised yesterday, what does it mean to put a station in 20 at Black Pond Junction. And what you'd have for a 21 configuration if you did this is that we would turn 22 around and have a major switching station at this 23 location where we would break every one of the lines that 24 go into Black Pond Junction. So the system in this

1 configuration would be Millstone to Black Pond Junction. 2 The 348 line then would be -- once it goes through 3 breakers and the bus would continue to Black Pond 4 Junction to Southington. We would turn around and have 5 the 362 line. We would split that at Black Pond 6 Junction. Have breakers at Black Pond Junction, which 7 forms the new line Haddam to Black Pond. And then from 8 Black Pond, it would go Black Pond to Southington on the 9 existing 362 line. We would take the 387 line, which 10 today basically goes directly from Scovill down to East 11 Shore, we would take and place -- and break the 387 line 12 at Black Pond Junction and form a new Scovill Rock to 13 Black Pond, Black Pond down to the East Shore Substation. 14 And we would turn around with the proposal that the 15 companies have put forth and we would now establish a new 16 345-kV line from Black Pond down to East Devon Junction. This -- this still maintains the strong source. 17 18 Anytime I lose two of these three lines, 19 having basically one of the lines out of service and 20 having a failure on the second line, I still maintain a 21 major transmission line from the east and I still have a 22 tie then from Southington back to Black Pond Substation, 23 which is basically the same as what you'd have with the Beseck Substation. You'd have these three lines going 24

into -- basically Beseck coming -- coming out. So that is not jeopardized.

What we do jeopardize with this scheme is that a common failure here of these three components leaves this whole system now tied onto the New York source, solely on the New York source for this common mode failure. And much worse would be what happens if we lost all of this new Black Pond Substation? Basically, it would be a single source feed from New York only, because all of these lines now would be open, we would have to feed the load from the Southington auto, from the Frost Bridge auto, and from the autos at Plumtree, tied on to only the New York source, and under medium to high load conditions, we would be into a load shedding situation.

Anne's comment about what would happen if you were to place a fourth line on this northern right-of-way, my sense would be we would come out of Scovill as was proposed, we would run a line directly from Scovill to Black Pond Junction, not go into the station itself but bypass Black Pond and run that into -- this section of the 362 now would become part of this new line, Scovill to Southington, which would now assist in making that equivalent to what we have basically proposed in

1	establishing a Beseck Substation.
2	So, I hope this helps to clarify the
3	differences between what is being proposed, what is there
4	now, and hopes to answer, Mr. Emerick, your questions. I
5	think Mr. Ashton asked a question yesterday what happens
6	if you tap the 362 line into this station if I remember
7	correctly. I hope it addresses those questions that you
8	have. If not, I'm willing to try to clarify what we're
9	proposing and what's there now if I can with these
10	slides. And if they're not the right ones, we'll make
11	some new slides again tonight and try again tomorrow.
12	Yes, Mr. Tait?
13	MR. TAIT: If you put the fourth
14	MR. ZAKLUKIEWICZ: Maybe you have to get
15	up to the mic.
16	MR. TAIT: If you put the fourth
17	alternative there, you have four lines going east/west,
18	they all would they all be in the same right-of-way
19	and wouldn't one plane take them all out? Isn't
20	MR. ZAKLUKIEWICZ: That that's what you
21	have today and that's a risk. What you do with the
22	fourth line is you eliminate then the loss of the Black
23	Pond Substation. That that failure now goes away.
24	What you still have is a plane coming down basically

	ou're absolutely
2 correct.	
3 MR. TAIT: Or a terro	rist or something
4 else.	
5 MR. ZAKLUKIEWICZ: Or	something else.
6 Yes, Mr. Emerick?	
7 MR. EMERICK: Does th	at slide satisfy the
8 reliability criterias that were up or	n the screen earlier?
9 There were three of them, NEPOOL	
MR. ASHTON: NPCC.	
MR. ZAKLUKIEWICZ: Wo	ould this slide do it?
MR. EMERICK: Yeah.	
MR. ZAKLUKIEWICZ: Ye	es, it would. The
extreme contingency is something that	t we would have to
we would have to live with. And if	FERC changes the
16 rules later on, then you may have to	build a fourth line.
17 It it leaves you with the loss o	f this
18 transmission path and the substation	as severe
19 contingencies that we need to look a	t. Go ahead.
MR. EMERICK: So the	reliability criteria
21 that were up there before do not take	e into account that
22 extreme condition that you're talking	g about?

basically is something that the ISO and we at Northeast

24

1	Utilities and CONVEX look at and prepare for and
2	recognize how we're going to deal with the situation. It
3	does not require us to physically remove that
5	does not require as to physicarry remove that
4	contingency. That's why it's designated severe. It's
5	something to recognize, it's something that you have to
6	be prepared to deal with. It does not require us to take
7	measures or take steps, build infrastructure to minimize
8	the impact. I'm just saying my own experience tells -
9	- says to me that under medium to high loads, the loss of
10	this right-of-way or the loss of Black Pond Substation
11	will end up being into a load shed condition in Southwest
12	Connecticut. Those are part of the risks we have to
13	weigh and say those risks are acceptable, let's not
14	let's not build another line east to west.
15	MR. EMERICK: Okay
16	MR. EDWARD S. WILENSKY: What municipality
17	is Black Pond in?
18	MR. ASHTON: Meriden
19	MR. ZAKLUKIEWICZ: In the Town of Meriden.
20	MR. ASHTON: Meriden (indiscernible)
21	CHAIRMAN KATZ: Let's hold off on we
22	have these handouts. Let's hold off on further questions
23	for Mr. Zak on this and we'll take this up when we're
24	seated at our mics, okay.

1	MR. ZAKLUKIEWICZ: Thank you very much for
2	your time.
3	MR. EMERICK: Thank you.
4	(Pause)
5	CHAIRMAN KATZ: We'll resume. At this
6	point, Mr. Johnson, both your witnesses are sworn,
7	correct?
8	MR. BRUCE JOHNSON: That's not correct,
9	Chairman Katz.
10	CHAIRMAN KATZ: Okay, let's take care of
11	that. Why don't you introduce who needs to be sworn.
12	MR. JOHNSON: Is this mic on? Good
13	morning. I'm Bruce Johnson, attorney with the Office of
14	Consumer Counsel.
15	We're presenting our two witnesses here
16	today. Mr. Montalvo submitted testimony earlier in this
17	docket and was sworn at that time. We also have brought
18	forward another witness, Mr. Torben Aabo, who needs to be
19	sworn before we proceed.
20	MR. ROBERT L. MARCONI: Would you have him
21	Attorney Johnson, could you have him spell his name
22	give his full name and spell it for the court reporter.
23	MR. TORBEN AABO: My name is Torben Aabo.
24	And it's spelled T-o-r-b-e-n. The last name is Aabo, A-

1	a-b-o.
2	MR. MARCONI: Well thank you. So only one
3	witness needs to be sworn, correct?
4	MR. JOHNSON: That's right.
5	MR. MARCONI: Okay. Sir, could I ask you
6	to please please rise and please raise your right
7	hand.
. 8	(Whereupon, Torben Aabo was duly sworn
9	in.)
10	MR. MARCONI: Please be seated, sir.
11	CHAIRMAN KATZ: Mr. Johnson, according to
12	my notes, I have here that you have four additional
13	exhibits which need to be verified?
14	MR. JOHNSON: Indeed. And that's what I
15	would like to proceed with
16	CHAIRMAN KATZ: Yes
17	MR. JOHNSON: at this time.
18	CHAIRMAN KATZ: Please.
19	MR. JOHNSON: Mr. Montalvo, are you
20	familiar with a document filed in this proceeding from
21	OCC dated May 25, '04, labeled as the Supplemental
22	Testimony of yourself, a document about 28 pages long,
23	exclusive of attachments?
24	MR. MARC MONTALVO: I am.

1	MR. JOHNSON: Did you prepare or supervise
2	the preparation of that document?
3	MR. MONTALVO: I did.
4	MR. JOHNSON: Do you have any changes or
5	corrections to that document at this time?
6	MR. MONTALVO: No, I don't.
7	MR. JOHNSON: Also, Mr. Montalvo, are you
8	familiar with the document filed in this proceeding from
9	OCC on May 26 th , interrogatory answers under labeled
10	with yourself as a witness, labeled CL&P 001 through 005?
11	MR. MONTALVO: I am.
12	MR. JOHNSON: Did you prepare or supervise
13	the preparation of those items?
14	MR. MONTALVO: I did.
15	MR. JOHNSON: Do you have any changes or
16	corrections to those materials at this time?
17	MR. MONTALVO: No, I don't.
18	MR. JOHNSON: Do you swear or affirm that
19	both the written testimony of May 25 and the
20	interrogatory answers of May 26 th are true and correct to
21	the best of your information and belief?
22	MR. MONTALVO: I do.
23	MR. JOHNSON: Mr. Aabo, are you familiar
24	with a document filed on May $25^{\rm th}$ in this proceeding from

1	OCC labeled Testimony of Torben Aabo, a document
2	approximately 17 pages long, exclusive of attachments?
3	MR. AABO: Yes, I am.
4	MR. JOHNSON: Did you prepare or supervise
5	the preparation of that document?
6	MR. AABO: Yes, I did.
7	MR. JOHNSON: Do you have any changes or
8	corrections to that document at this time?
9	MR. AABO: No, I do not.
10	MR. JOHNSON: Also, Mr. Aabo, are you
11	familiar with a document filed in this proceeding from
12	OCC on May 26^{th} labeled with yourself as a witness and
13	also numbered as CL&P 1 through 5 being interrogatory
14	answers?
15	MR. AABO: Yes, I am.
16	MR. JOHNSON: Did you prepare or supervise
17	the preparation of those documents?
18	MR. AABO: Yes, I did.
19	MR. JOHNSON: Do you have any changes or
20	corrections to those materials at this time?
21	MR. AABO: No, I do not.
22	MR. JOHNSON: Do you adopt both the
23	testimony of May 25 th and the interrogatory answers of May
24	26^{th} as your testimony and answers in this proceeding and

1	as true and correct to the best of your information and
2	belief?
3	MR. AABO: Yes, I do.
4	MR. JOHNSON: Chairman Katz, our two OCC
5	witnesses are available for cross-examination.
6	CHAIRMAN KATZ: Is there any objection to
7	making these full exhibits? Hearing none, they are full
8	exhibits.
9	(Whereupon, OCC Exhibit No. 4 and No. 5
10	were received into evidence as full exhibits.)
11	CHAIRMAN KATZ: Okay. First the
12	Applicant, cross for these witnesses?
13	MR. FITZGERALD: If it's acceptable to the
14	Council, these witnesses have each filed separate
15	testimony and the subject matter is also separable, and
16	so what we thought what we would do is that I would take
17	the lead on questioning Mr. Montalvo and then Miss
18	Randell will do Mr. Aabo.
19	CHAIRMAN KATZ: Fine.
20	MR. FITZGERALD: One or the other of us
21	might have a cleanup question or two after hearing the
22	other, but that's okay. Thank you. Mr. Montalvo, good
23	morning.

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MR. MONTALVO: Good morning.

24

1	MR. FITZGERALD: I'd like to ask you a few
2	questions first about the testimony that you recently
3	filed concerning the East Shore alternative as you refer
4	to it. And just so everybody is clear, the you
5	examined some thermal load flow studies that related to a
6	potential East Shore configuration?
7	MR. MONTALVO: That is correct.
8	MR. FITZGERALD: Yeah. And the
9	configuration that was studied in those load flow studies
10	was not the one that was assumed in the presentation here
11	today, which assumed the addition of a second 345-kV line
12	along the existing East Shore right-of-way, right?
13	MR. MONTALVO: Yes I think that's
14	correct, yes.
15	MR. FITZGERALD: Which you the load
16	flow studies that you examined looked at upgrading the
17	existing 387 line within the existing right-of-way by
18	reconductoring the line, thus increasing its capacity
19	somewhat but not adding a second line?
20	MR. MONTALVO: That is correct.
21	MR. FITZGERALD: Okay. And your review of
22	those load flow studies demonstrated to you that that
23	type of East Shore route would violate thermal loading
24	standards required by NERC and the other reliability

1	bodies unless something more were done?
2	MR. MONTALVO: That is correct.
3	MR. FITZGERALD: Okay. And you noticed
4	that the scenarios in which the generating capacity of
5	New Haven Harbor Generating Station was out of service
6	were particularly problematic for that configuration?
7	MR. MONTALVO: Yeah, that appeared to be a
8	key contingency.
9	MR. FITZGERALD: And so that suggested to
10	you that there might be an alternative that would involve
11	a one-line East Shore alternative plus generation, is
12	that right?
13	MR. MONTALVO: Yes. The basic
14	configuration of the East Shore alternative relying on
15	the 387 line as opposed to the construction of an
16	additional 345 as in the proposal between Beseck and East
17	Devon plus some quick start generation sited at strategic
18	locations may actually serve to resolve many of the
19	thermal overloads observed.
20	MR. FITZGERALD: Okay. And your
21	suggestion is that the Council study such an alternative,
22	that is to say an alternative that would include an East
23	Shore configuration plus strategically sited new
24	generation, as well as other potential mixes of

1	generation and transmission to see if there is an optimal
2	package that would be more cost effective than the
3	proposed line, is that right?
4	MR. MONTALVO: Yeah, either, you know,
5	more cost effective or have superior performance, some
6	combination thereof. I do want to stress though that the
7	East Shore alternative, as I describe it in my testimony,
8	does include key components from the proposed project,
9	particularly much of the looping that happens northeast
10	of Beseck and the Middletown and Middlefield area. That
11	was kind of discussed a little bit this morning. I think
12	those are important improvements for those to be
13	incorporated. But on its face without some kind of study
14	at least to determine the technical merits, whether or
15	not the alternative that I proposed is technically
16	feasible, it's difficult for me to rule it out.
17	MR. FITZGERALD: But you you haven't
18	proposed anything, you in other words, you haven't
19	proposed an alternative, you've proposed
20	MR. MONTALVO: A recommended course of
21	study
22	MR. FITZGERALD: more study
23	MR. MONTALVO: yes, yes.
24	MR. FITZGERALD: Okay. And in order to

1	enable that study to go forward in the way you envision
2	it, you suggest that the Council should issue a notice
3	denying a certificate for the proposed project, is that
4	right?
5	MR. MONTALVO: I was not sure that
6	well, I think within the context of this proceeding, I
7	think it's within the Council's purview to ask the
8	Applicants to study an additional case. And if that case
9	proves to be technically feasible and have economic
10	merits, then I'm not a hundred percent sure that the next
11	steps can happen if the instant proposal is at the same
12	time approved in total. If you understand my meaning?
13	MR. FITZGERALD: No, actually I don't.
14	MR. MONTALVO: Well, the I think that
15	the Council can ask NU and UI to study an additional case
16	that they think is important for them to understand
17	MR. FITZGERALD: Well, we've seen that.
18	MR. MONTALVO: Right. I think they can do
19	that. They don't need to deny the proposal in order to
20	ask for an additional case.
21	MR. FITZGERALD: Oh.
22	MR. MONTALVO: Should that case prove to
23	have merit, then the next steps where I say that it might
24	be appropriate for them to deny this application either

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- in part or in whole depending on what is allowed in this instant would have to be considered.

 MR. FITZGERALD: So when you said at page
- 4 10 that the urgency of Southwest Connecticut's mood
- 4 10 that the urgency of Southwest Connecticut's need
- 5 dictates that the Council consider issuing an interim
- 6 decision, indicating that it cannot approve the proposed
- 7 project absent formal analysis of the feasible
- 8 alternatives, you were talking about something other than
- 9 a denial of the application?
- 10 MR. MONTALVO: Give me a moment to review
- 11 that.
- MR. TAIT: Mr. Fitzgerald, aren't we
- getting a little bit legalistic here as to --
- MR. FITZGERALD: Yes --
- MR. TAIT: Why --
- MR. FITZGERALD: -- but I'm trying to find
- out what his testimony is.
- 18 MR. TAIT: Well maybe we could stick to
- the merits of his testimony rather than the legal posture
- of the case, I don't know.
- 21 MR. FITZGERALD: Okay. Well it's
- 22 difficult when you testify about the legal --
- MR. MONTALVO: Well --
- MR. FITZGERALD: -- proceedings.

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1 MR. MONTALVO: Right. Well, I think -- I 2 -- thank you, Mr. Tait, I appreciate you stepping in 3 there, but -- you know, I am not an attorney, so 4 obviously I'm trying to give my best interpretation of 5 the rules of procedure here as it makes sense to me and 6 what would be a reasonable way forward. And clearly the 7 Council better understands the procedures that, you know, 8 kind of bind its decision-making process than I do. 9 to the extent an additional analysis is requested along 10 the lines that I recommend and this analysis proves to be 11 technically feasible, that is it resolves the problems 12 and also seems to have some economic merit, then the next 13 question is, okay, what do we do. We have now another --14 now we have another competing proposal on the table. 15 MR. FITZGERALD: Okay, let's -- I'll try 16 and stay away from procedure and just briefly identify 17 what it is that you think might be precipitated as a 18 solution from the procedures I'm not going to ask you 19 about, and that is that you think that this further study 20 might show, for instance, that an East Shore alternative plus strategically sited new generation could provide an 21 22 optimal solution that would be better than the proposal 23 either from an economic or a performance standpoint? 24 MR. MONTALVO: That is correct.

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1	MR. FITZGERALD: Okay. And you suggest
2	that because it's clear that the market has not produced
3	generation so far, that in order to induce the generation
4	that it determines to be optimal to be built, that it may
5	be necessary to provide for a supplemental income stream
6	to support that generation beyond what the generator
7	would obtain through bidding into the market?
8	MR. MONTALVO: That may be the case.
9	MR. FITZGERALD: Alright. And you leave
10	open how that supplemental income stream could be
11	generated. It could come from taxpayers, it could come
12	from the load in Southwest Connecticut, through ISO, it
13	could come as a subsidy from the Applicants
14	MR. MONTALVO: It's distinctly possible
15	MR. FITZGERALD: right?
16	MR. MONTALVO: yeah.
17	MR. FITZGERALD: Okay, all three all
18	three possibilities.
19	MR. JOHNSON: Mr. Fitzgerald, if you could
20	refer specifically to where subsidy from the Applicants
21	is suggested by Mr. Montalvo, I'd appreciate it? I'm not
22	sure that's what he said.
23	MR. FITZGERALD: Well, I
24	A VOICE: I thought that's just what

1	MR. FITZGERALD: I thought that's what
2	he said now.
3	MR. TAIT: I thought that's just what he
4	agreed to
5	MR. MONTALVO: Yeah, I think that
6	MR. TAIT: whether or not it's in his
7	prefiled.
8	MR. JOHNSON: Okay.
9	MR. FITZGERALD: We could we could say
10	at page 16 but to answer your question, sir, at
11	page 16, the second paragraph of the answer says the
12	second option for cost recovery would shift to
13	Connecticut's investor owned utilities, the cost of
14	supporting the supplemental revenue stream to generation
15	owners that are successful in the CEAB solicitation. I
16	think the Applicants are the two Connecticut investor
17	owned utilities.
18	MR. MONTALVO: Right. And exactly how
19	that would look and the structure of that is to be
20	determined.
21	MR. FITZGERALD: Okay. Now given that,
22	how could the Council determine now as a result of any
23	amount of study that is done, that this hypothetical
24	combination of generation and transmission would be the

1	economically optimal solution? They wouldn't they
2	wouldn't be able to know what the supplemental revenue
3	stream that's going to be required in the future is,
4	would they?
5	MR. MONTALVO: Down to the last dollar
6	probably not, but I think that fair estimates could be
7	made. I think the in this in this instance,
8	however, I think it's important that you know,
9	pursuant to my reading anyway of is it Public Act
10	03140 that with the Connecticut Energy Advisory Board
11	and their responsibility to determine what the proper
12	resource planning future of the State is, that, you know,
13	the coordinated efforts of the Siting Council and that
14	body to ensure that happens, I think it includes the
15	evaluation of such things and not simply the evaluation
16	of this proposal assuming that nothing else is possible -
17	_
18	MR. FITZGERALD: Alright
19	MR. MONTALVO: just because an exact
20	cost recovery mechanism hasn't yet been developed.
21	MR. FITZGERALD: Alright. I'm not going
22	to follow up that answer with questions about legalities
23	or procedure
24	MR. MONTALVO: Um-hmm

1 MR. FITZGERALD: -- but I will ask you for 2 an answer to the question -- I'm going to try once more -- isn't it true that in this proceeding -- now in this 3 4 proceeding the Council has no way of determining what the 5 cost of the supplemental revenue stream that would be 6 required to induce a generator to locate generation that 7 would make the East Shore alternative viable -- they have 8 no way of evaluating -- of making a reliable estimate of 9 that figure in this proceeding? 10 MR. MONTALVO: Prior to the issuance of 11 the required RFPs and the signing of contracts, I think 12 you're correct. But I do point out this point, the costs 13 of the proposed project are still yet estimates, and the -- you know, the costs there and how much that's going to 14 15 cost the State, you know, those are to a certain extent 16 open questions. The socialization of costs, those are 17 still open questions. So, I think that as it regards the issue of costs, there's sufficient uncertainty on all 18 19 sides that to take a step back and let's look at 20 alternatives that at least may have technical merits and 21 then see if we can't do some additional economic analysis 22 to make at least best estimates. And you can exclude

things that -- you know, you can exclude things that

clearly end up outside the pail, if you will,

23

24

1	economically I think through proper study. I mean
2	MR. FITZGERALD: Let me let me ask you
3	in conclusion just a question or two about cost sharing -
4	_
5	MR. MONTALVO: Um-hmm
6	MR. FITZGERALD: since you mentioned
7	that. At page 25 of your testimony you in discussing
8	FERC's December 18, 2003 order you say costs that are
9	excluded from regional cost support would include
10	localized costs
11	MR. MONTALVO: Um-hmm
12	MR. FITZGERALD: which you characterize
13	as including the costs of constructing underground
14	transmission lines when such construction is not
15	justified?
16	MR. MONTALVO: That's correct.
17	MR. FITZGERALD: What based on your
18	understanding of these rules to which you testified in
19	your direct testimony, what justifies the additional cost
20	of underground construction?
21	MR. MONTALVO: To the extent that it is a
22	line or a set of lines determined necessary in order to
23	support either the reliable performance or improve the
24	overall market efficiency, which are kind of two the

1	two of FERC's kind of broad principles and the only
2	way to put those lines into service is to underground
3	them, then I think that that broadly meets the criterion
4	of justification. To the extent that those lines are
5	being underground solely for aesthetic reasons or reasons
6	not you know, a reason such as that, then now there is
7	a question as to whether or not those costs should be
8	supported by the entire region where it is a smaller
9	group of people who actually are desiring such treatment.
10	MR. FITZGERALD: Okay. I have I have
11	nothing further for this witness. Thank you.
12	CHAIRMAN KATZ: Just one follow-up
13	question. When you were engaged, were you was it
14	indicated to you that the Council was looking at having a
15	solution in place by 2007 for Southwest Connecticut? Was
16	that one of your criteria when you were looking at
17	solutions?
18	MR. MONTALVO: The the time at which
19	the time the Council wanted to have this proposal or some
20	other proposal constructed and in service?
21	CHAIRMAN KATZ: Yes.
22	MR. MONTALVO: I proceeded from the
23	assumption that the Council hoped to have whatever
24	solution was deemed best in service as soon as possible.

	·
1	CHAIRMAN KATZ: Okay. But you were not
2	given the 2007 date?
3	MR. MONTALVO: No.
4	CHAIRMAN KATZ: Thank you.
5	MS. LINDA RANDELL: I have very brief
6	follow-up. Mr. Montalvo, you talked about the looping in
7	Middletown
8	MR. MONTALVO: Yes.
9	MS. RANDELL: I'm if I'm
10	understanding correctly, then you're talking about
11	bringing the 387 line into Beseck as part of what you're
12	assuming as a given here?
13	MR. MONTALVO: Yes, I think that's
14	correct.
15	MS. RANDELL: And just so I'm clear,
16	you're not changing or disagreeing with any of your
17	testimony from March, you're just adding to it today?
18	MR. MONTALVO: That's right, this is
19	supplemental.
20	MS. RANDELL: And for the purpose of this
21	testimony you're assuming that the CEAB, the Connecticut
22	Energy Advisory Board, and this Council have the
23	authority to do what you're proposing in your testimony,
24	correct?

1	MR. MONTALVO: Yes.
2	MS. RANDELL: Now, the CEAB has no
3	authority to award contracts, does it?
4	MR. MONTALVO: As far as the yeah, the
5	as I understand it, they have they have the
6	authority to issue RFPs, but as far as the award of
7	contracts, it's somewhat problematic because they have
8	my understanding is they have no authorization to fund
9	those contracts. So you know, so the next step then is
10	who actually holds the contracts, thus the section of my
11	testimony that deals with cost recovery, and that becomes
12	the next kind of issue of contention. And that's why I
13	lay out several possible paths that the various agencies
14	in the State might pursue.
15	MS. RANDELL: And in fact, Section 19 of
16	Public Act 03140 provides that what happens at the end of
17	the RFP process is that the CEAB issues a report?
18	MR. MONTALVO: Yeah, essentially. It's a
19	recommendation, yeah.
20	MS. RANDELL: And with respect to the
21	permitting of any generation you're talking about, you
22	haven't addressed the issue of community support or
23	opposition?
24	MR. MONTALVO: Right. But I do say that,

1	you know, the issues of siting and permitting of these
2	facilities will have to return to the various agencies
3	responsible for those things. For example, the siting of
4	the generation will return to the Siting Council for
5	ultimate determination whether they should be sited, but
6	that as a starting point since it's determined that the
7	siting of these generation as a general matter meets kind
8	of a technical and economic test, that there are merits
9	to their siting, and that should at least theoretically
10	expedite the process.
11	MS. RANDELL: And you would add
12	environmental tests?
13	MR. MONTALVO: There would have to
14	obviously it would have to comply with all regulations of
15	the State, yes.
16	MS. RANDELL: And that would include not
17	only the environmental considerations of this Council but
18	also air permitting requirements of the Connecticut
19	Department of Environmental Protection?
20	MR. MONTALVO: Yes.
21	MS. RANDELL: And are you familiar with
22	recent actions by the Connecticut Department of
23	Environmental Protection rejecting air permits for a
24	generator located in New Haven?

1	MR. MONTALVO: I am not, no.
2	MS. RANDELL: No further questions.
3	CHAIRMAN KATZ: Thank you
4	MR. ASHTON: Do do you have any feel
5	for how long the permitting process would take for a
6	generating station of some significance?
7	MR. MONTALVO: What I'm suggesting might
8	be kind of the appropriate scale of generation is a set
9	of 25 or 50 megawatt generators, some combination, and
10	they may be all at one location or maybe at several
11	locations depending on what works best in the power
12	system for the studies. And so if everything is at one
13	location, the siting process might actually be faster and
14	easier. If there are several locations that are required
15	or make the most sense, it might take a bit longer. As a
16	general matter you know, it's difficult to handicap.
17	You know, it could take it could take a couple of
18	years, it could take, you know, a year. I don't I
19	just don't know.
20	MR. ASHTON: Let me just back up a little
21	bit. You mentioned 25 to 50 megawatt units. In
22	aggregate what would the total generation block that you
23	would contemplate be assuming it was going in one
24	location?

1	MR. MONTALVO: Something on the order of
2	200 megawatts.
3	MR. ASHTON: A 200-megawatt
4	MR. MONTALVO: Right. It may be a little
5	less, maybe a little more. Again, I think the total
6	number and the locations would be determined by study.
7	MR. ASHTON: Um-hmm. Have you done any
8	studies to see how that fits in the load curve for
9	optimizing economic dispatch at all? You know, would
10	they be a very simple gas turbine or would they be a
11	combined cycle unit
12	MR. MONTALVO: No, I
13	MR. ASHTON: or what's what are you
14	thinking
15	MR. MONTALVO: Yeah, I'm suggesting the
16	use of quick start gas turbines, simple cycle. And you
17	know, these facilities would provide a good peaking
18	resource for the region, for Southwest Connecticut. And
19	so I think they they wouldn't be I think they would
20	dispatch economically in Southwest Connecticut. Most of
21	the time they would be needed. That's my that's my
22	best guess. There could be times however when that's not
23	the case where for precontingency posturing of the system
24	they might have to be run where they otherwise wouldn't

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1 be economic, and that's why they might require subsidy 2 payments of some sort. 3 MR. ASHTON: You mentioned the word guess. 4 Have you done any studies to see --5 MR. MONTALVO: I have -- I have not 6 performed a study --7 MR. ASHTON: So you have no idea whether 8 there's a surfeit or a deficiency of peaking in Southwest 9 Connecticut already, do you? 10 MR. MONTALVO: Well, I'm familiar with the 11 set of generating facilities that are in Southwest 12 Connecticut. I'm familiar with the fact that most of the 13 generating facilities in Southwest Connecticut are in 14 fact not peaking resources, and that there are many 15 facilities actually in the region that are seeking 16 retirement from service. And so I think as part of the 17 overall power supply of the region, I think the addition 18 of peaking resources makes sense. Additional base load 19 resources are likely to be required also in the not too 20 distant future and I think part of the goal of the 21 solution is to facilitate the addition of those types of 22 resources too. 23 MR. ASHTON: Okay, thank you. 24 Thank you. Let's go to CHAIRMAN KATZ:

1 the list. Next is Representative Al Adinolfi. Absent. 2 The Town of Middlefield. Attorney Knapp, questions for 3 this witness? 4 MR. ERIC KNAPP: I have no questions of 5 this witness. 6 CHAIRMAN KATZ: Mr. Knapp says no 7 questions. The Towns, Wallingford, Durham, Woodbridge. Attorneys -- (pause) -- could you just start off with which towns you're speaking to at this point for. 9 10 MR. MONTE FRANK: Sure. Madam Chairman, 11 Monte Frank for the Town of Woodbridge. 12 MS. JULIE DONALDSON KOHLER: Julie 13 Donaldson Kohler for the City of Milford. 14 CHAIRMAN KATZ: Okay. 15 MR. FRANK: I have some very limited 16 cross-examination for Mr. -- is it pronounced Aabo? 17 I get that right? 18 MR. AABO: Yes, Aabo. 19 MS. RANDELL: Madam Chairman, we thought 20 we were just dealing with Mr. Montalvo and then we were 21 going to do this again with Mr. Aabo. We do have

questions for Mr. Aabo. I have no problem if Mr. Frank

and Miss Kohler would like to start now and just do that,

but I don't want you to think that we had nothing for Mr.

22

23

24

1	Aabo.	
2	CF	HAIRMAN KATZ: Oh, okay. What's your
3	ME	R. FRANK: And I don't have any I do
4	not have anything	g for Mr. Montalvo.
5	CF	HAIRMAN KATZ: Okay, let's
6	MS	S. KOHLER: Nor do I.
7	MS	S. RANDELL: We're cool if you want to
8	just go ahead	
9	MS	S. KOHLER: No
10	MS	S. RANDELL: and do it this way.
11	MF	R. FITZGERALD: I
12	CF	HAIRMAN KATZ: Go away. (Laughter).
13	А	VOICE: See you soon.
14	CH	HAIRMAN KATZ: Okay, why don't we proceed
15	then with your qu	uestions for the other witness Mr. Aabo,
16	and then we'll go	o through the list. How's that?
17	MS	S. RANDELL: Sure. I'm going to start
18	and then Mr. Fitz	zgerald will pick up. Good morning.
19	MF	R. AABO: Good morning.
20	MS	S. RANDELL: Mr. Aabo, on page 8 of your
21	prefiled testimon	ny you spoke of recent HPFF cable system
22	problems. And to	owards the bottom of my page you speak of
23	several failures	have occurred over the last few years.
24	Let's just take t	them one at a time. At the bottom of

1	page 8 you talk about in one instance a 345-kV HPFF
2	splice failed. What project was that?
3	MR. AABO: These are these are failures
4	that there are no official records on these failures.
5	And I will hesitate to tell you what systems that they're
6	on because what I have what I am telling you here, and
7	I think I say that up front, that these are information I
8	have learned as a participant in industrial in
9	industry meetings and so on. So, I I would prefer not
10	to point to what failures they are.
11	MS. RANDELL: Mr. Aabo, I don't think you
12	have that option here
13	MR. AABO: I don't?
14	MS. RANDELL: let's try again
15	MR. AABO: Well, these are
16	MS. RANDELL: you were you were
17	provided some other information other than there was a
18	failure somewhere, sometime, on something?
19	MR. AABO: Um-hmm yes yes, ma'am.
20	MS. RANDELL: Okay. Then let's let's
21	try again. What project is this one you were speaking of
22	where the splice failed?
23	MR. AABO: These these are failures on
24	345-kV feeders in the ConEdison system in New York City.

1	MS. RANDELL: And how many?
2	MR. AABO: There were one failure and a
3	repair and then there was another failure on this
4	particular line. I I could not tell you what the
5	feeder number is.
6	MS. RANDELL: Do you know how the failure
7	was determined? How was it determined that there was a
8	failure?
9	MR. AABO: Well, I guess the breaker
10	opened.
11	MS. RANDELL: Okay. How long did it take
12	to determine where the problem was?
13	MR. AABO: That information I do not have
14	available.
15	MS. RANDELL: On any of these instances?
16	MR. AABO: I have I have no, I do
17	not I do not know these kind of details.
18	MS. RANDELL: Okay. And then you don't
19	know how long it took to repair?
20	MR. AABO: I I know it took several
21	several months for this system to be repaired and go back
22	in service. Several months. Maybe even maybe even
23	half a year, maybe even longer than that. I do not have
24	those numbers.

1	MS. RANDELL: And is that also the case
2	with respect to the splice that failed when problems
3	occurred with pressurization of the cable pipe?
4	MR. AABO: I do not know how long it took
5	to get it back in service, no, I do not.
6	MS. RANDELL: And do you know the cause of
7	the failure?
8	MR. AABO: Well, the the hearsay was
9	that there were
10	CHAIRMAN KATZ: Well, that's that's
11	enough.
12	MR. AABO: Thank you.
13	CHAIRMAN KATZ: Sir, if you don't have
L 4	direct knowledge, just feel free to say that you don't.
L5	MR. AABO: I will.
L 6	MS. RANDELL: Just a technical question.
L7	On page 3 of your prefiled testimony, your Point 4 states
L8	there appears to be no technical reason at this time to
L9	favor under-grounding the segments of the project between
20	Norwalk and Middletown. Did you mean to say Milford and
21	Middletown Segments 1 and 2? Your testimony
22	distinguishes between 1 and 2 and 3 and 4. I just want
23	to be clear on what you are saying.
24	MR. AABO: Well, these are the two

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- 1 sections, Section 1 and 2, that's the one -- that's the
- 2 two sections that I'm referring to.
- MS. RANDELL: Okay. And subject to check,
- 4 you'd agree with me then if that's between Milford and
- 5 Middletown, that's what you intended to say there?
- 6 MR. AABO: From Middletown to -- I'll have
- 7 to -- I'll have to check. But if you're saying Section 1
- 8 and 2 goes between -- what do you say Milford and
- 9 Middletown?
- MS. RANDELL: Yes.
- MR. AABO: Then that's -- that's the ones
- that I was referring to.
- MS. RANDELL: We thought so. Thank you.
- With respect to your testimony on page 4 with respect to
- 15 HPFF cable and XLPE for crossing rivers, creeks and
- brooks -- are you with me?
- MR. AABO: Yes.
- MS. RANDELL: And you say that the XLPE
- system would eliminate the potential for water
- 20 contamination. Are you assuming that the cable is just
- 21 laid on the bottom?
- MR. AABO: No, I'm not assuming that at
- 23 all.
- MS. RANDELL: Okay. So you took into

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- 1 account that the cable would be installed through HDD,
- 2 directional drilling or jack and bore?
- MR. AABO: That is correct.
- 4 MS. RANDELL: So the leaking would not --
- if it occurred, would not be into the water system?
- 6 MR. AABO: Well, it could be. It could
- 7 be. I mean where would it leak? It does come up to the
- 8 surface.
- 9 MS. RANDELL: Eventually --
- MR. AABO: Eventually --
- MS. RANDELL: -- but it's buried -- HPFF -
- the HPFF would be buried substantially below the water
- 13 bed, right?
- MR. AABO: That's correct.
- MS. RANDELL: On page 5 you had another
- 16 technical issue where you state the volume of dielectric
- fluid in the cable pipe is on the order of one gallon per
- foot. It's actually one and a half gallons per foot,
- 19 isn't it --
- 20 MR. AABO: Well, I --
- MS. RANDELL: -- just for technical
- 22 accuracy --
- MR. AABO: Since I -- since I do not have
- the design of the cable, I couldn't tell you.

1	MS. RANDELL: Okay. With respect to the
2	manholes for splicing of XLPE, you state on page 6 that
3	manholes would be installed 2,000 to 2500 feet apart,
4	correct?
5	MR. AABO: That's correct.
6	MS. RANDELL: Did you take into account
7	that the reel length or standard reel for non-special
8	permits is limited to 600 meters, which that's about 1900
9	feet?
10	MR. AABO: No, I did not take that into
11	consideration. But since I do not have the size of the
12	cable, then it's very difficult to say what how long
13	lengths you can have on a standard reel.
14	MS. RANDELL: But whatever your number is
15	then for placement of manholes, it would be whatever you
16	can put on the reel?
17	MR. AABO: And whatever you can put on the
18	reel and whatever you can pull into that conduit.
19	MS. RANDELL: Staying with your prefiled
20	testimony, you state that ConEd has several long, and you
21	define that to be 20 plus miles, 345-kV underground
22	cables connected to long overhead lines at the
23	substations. How many of those do they have of 20 plus
24	miles?

- 1 MR. AABO: I do not know the number, but 2 they have several as I say -- 2, 4, 6 -- I do not know. 3 MS. RANDELL: And it's your testimony that 4 each one of those is 20 miles or longer? 5 MR. AABO: Several of them are 20 miles or 6 longer. 7 MS. RANDELL: But you can't provide me the 8 lengths? 9 MR. AABO: No, I did not -- I did not go 10 in and find the length. 11 MS. RANDELL: Or the terminal substations 12 of any one of these? 13 MR. AABO: No, I did not do that. 14 MS. RANDELL: So you couldn't tell me when 15 they were installed? 16 MR. AABO: They were installed in the 60's, late -- they started to install 345-kV cables in 17 18 the -- 1964. And so they were installed after -- after 19 that. 20 MS. RANDELL: And the vintage of those 21
- cables in the 60's then would be such that they would be using different insulation than would be used for this
- 23 project?
- MR. AABO: Yes. These cables have paper

1	whereas you would be probably using paper
2	polypropylene paper.
3	MS. RANDELL: You discuss also
4	transmission cable circuit installation in tunnels.
5	Would you agree with me that installation in tunnels is
6	different than installation when you bury the cable?
7	MR. AABO: Yes.
8	MR. BRIAN O'NEILL: Excuse me. It would
9	be helpful if you referred to the question or the page
10	number
11	MS. RANDELL: Oh, certainly. On page
12	MR. O'NEILL: when going back and forth
13	
14	MS. RANDELL: Sure.
15	MR. O'NEILL: Thank you.
16	MS. RANDELL: On page 18, the top of my
17	page, the question is what are the longest installed
18	MR. JOHNSON: I don't
19	MS. RANDELL: transmission cable
20	circuits of which you are aware.
21	MR. JOHNSON: I don't think page 18 is
22	possible since that's
23	MS. RANDELL: I'm sorry, page 8. I
24	apologize. Page 8 of 17. And staying on page 8, you say

1	you are not aware of any operating problems that these
2	circuits have experienced?
3	MR. AABO: That's correct.
4	MS. RANDELL: And yet earlier in your
5	testimony you reference the CCI report from December
6	2001. Do you recall that?
7	MR. AABO: Yes, I do.
8	MS. RANDELL: And that report talks about
9	several cable failures, doesn't it, at 345-kV or above?
10	MR. AABO: Yes. But what I'm referring to
11	are the cable circuits that's listed above.
12	MS. RANDELL: Okay. So then there's a
13	whole other body of information that talks about other
14	cable failures and that's contained in the CCI report?
15	MR. AABO: That's correct.
16	MS. RANDELL: Turning to page 9 of your
17	testimony, you talk about it's at the bottom of my
18	page in France 225 kilovolt XLPE cables are installed
19	in ducts?
20	MR. AABO: Yes.
21	MS. RANDELL: That's only been for the
22	last few years, isn't it?
23	MR. AABO: That has been since the 1990's
24	in 1990 I believe the first one was installed in

1	1990.
2	MS. RANDELL: Before whatever date that
3	is, tunnels or direct burial was used, correct?
4	MR. AABO: Correct.
5	MS. RANDELL: Moving all the way along,
6	Mr. Aabo, to page 14 of your testimony, you reference in
7	the first answer the question is can the transmission
8	system be designed to minimize threats. And this is with
9	underground installation. In your answer five lines
10	down, you talk about compensation equipment. Do you see
11	that?
12	MR. AABO: Yes, I do.
13	MS. RANDELL: By that by compensation
14	equipment, I take it you mean shunt reactors?
15	MR. AABO: That's correct.
16	MS. RANDELL: And shunt reactors may take
17	care of VARs, but they don't address transients, correct?
18	MR. AABO: Now you are outside of the area
19	of my expertise.
20	MS. RANDELL: And the computer based
21	monitoring systems you're referencing in that answer, is
22	that SCADA systems?
23	MR. AABO: It could be a type of SCADA
24	system that will that would look at the system and

1	control the system.
2	MS. RANDELL: And what's the approximate
3	cost of a SCADA system?
4	MR. AABO: I do not know.
5	COURT REPORTER: One moment please.
6	(Pause).
7	MS. RANDELL: Would you agree with me, Mr.
8	Aabo, that transition stations are subject to transients?
9	MR. AABO: Yeah, I I I guess you're
10	correct.
11	MS. RANDELL: And transition stations are
12	subject to vandalism?
13	MR. AABO: Like any other thing, that's
14	correct.
15	MS. RANDELL: And terminations are less
16	reliable than the cable?
17	MR. AABO: That's correct.
18	MS. RANDELL: I have no further questions.
19	MR. FITZGERALD: I do have a few simply
20	directed to the preference you expressed in your prefiled
21	testimony for the use of XLPE cable over 345 HPFF cable.
22	First of all, as I read your testimony, I gathered that
23	that preference is based on the elimination of a
24	potential for water contamination. Is that right?

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1	MR. AABO: Well, from the environmental
2	issues that the dielectric fluid can have, that that's
3	the issue.
4	MR. FITZGERALD: You do not claim that
5	XLPE would be a more reliable alternative than HPFF?
6	MR. AABO: I'm not saying more reliable,
7	but I would say that to date I don't have information
8	that shows it's less reliable.
9	MR. FITZGERALD: Okay, but well but
10	the reason for your preference for XLPE is not a
11	reliability reason, it is an environmental reason?
12	MR. AABO: That is correct.
13	MR. FITZGERALD: Okay. You mentioned at
14	page 7 of your testimony that there is a 230-kV
15	underground XLPE line being installed in California now
16	or soon. It's true, isn't it, that the voltage stresses
17	on the insulation of a 230-kV XLPE cable are
18	significantly less than the voltage stresses on the
19	insulation of a 345 XLPE line?
20	MR. AABO: Not necessarily, because
21	there's more there's more insulation on that 345-kV
22	cable than there is on that 230-kV cable. It's the
23	matter of the design that you select to use, so
24	MR. FITZGERALD: Well

1	MR. AABO: from a material point of
2	view, you you will have maybe slightly higher stresses
3	on the 345 than that on the 230.
4	MR. FITZGERALD: What is the reason why
5	115-kV underground XLPE cables have been found to be
6	quite reliable in their performance, oh, for a
7	considerable period of time, whereas problems at the
8	joints, at the splices and terminations have been
9	experienced with 345-kV XLPE lines?
10	MR. AABO: The reasons for that is the
11	development of reliable designs of the splices and
12	terminations.
13	MR. FITZGERALD: And
14	MR. AABO: Uh
15	MR. FITZGERALD: and does that have
16	anything to do with the stress on the insulation from the
17	cable voltage?
18	MR. AABO: It has to do with the control
19	of the electrical stress at these devices at the
20	splices and at the terminations.
21	MR. FITZGERALD: And the and the stress
22	that is imposed on whatever amount of insulation that's
23	used is a factor of the cable voltage, isn't it?
24	MR. AABO: That is that is a factor

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1	that	must	be	taken	into	consideration	for	the	design	of

- 2 these devices.
- MR. FITZGERALD: And that factor is much
- 4 higher for a 345 line than it is for a 115 line?
- MR. AABO: The -- the factor is -- it's --
- 6 it's a matter of controlling that stress. And if you
- 7 look at the --
- MR. FITZGERALD: Well before you get to
- 9 how you deal with it --
- MR. AABO: Okay --
- 11 MR. FITZGERALD: -- with how you deal with
- it -- I mean isn't it -- isn't there a mathematical or
- physical calculation -- first of all, how do you express
- 14 the voltage stress on insulation from a cable? And --
- MR. AABO: Well, it's --
- MR. FITZGERALD: -- what is the unit of
- 17 stress?
- 18 MR. AABO: You usually use the volts per
- mil, which is the volts along one-thousandths of an inch
- 20 --
- MR. FITZGERALD: Right, and --
- 22 MR. AABO: -- and --
- MR. FITZGERALD: Okay. And the volts per
- 24 mil for 115-kV cable are what?

1	MR. AABO: The volts per mil?
2	MR. FITZGERALD: Yes.
3	MR. AABO: Well, you've got to you've
4	got to define where are you looking, because there's
5	different places that you will need to look. If you're
6	looking at the average across the insulation, it's a lot
7	less than if you're looking at near the conductor. I
8	mean now you're getting into the technical issues of
9	designing a cable and designing an accessory, and
10	MR. FITZGERALD: Let's well, I would
11	let's talk about at the on the face of the conductor,
12	on the outer edge of the conductor, what is the what
13	is the volts per mil that the cable that the
14	insulation has to be designed to deal with?
15	MR. AABO: Well, there's there's
16	certain specifications that you use. And I will hesitate
17	to give numbers because I do not I do not have the
18	specification values listed in my head, so I don't really
19	want to give you numbers. I can tell you though that the
20	values for a 345-kV cable is slightly higher than that
21	for a 230, which is again slightly higher than that for a
22	115-kV.
23	MR. FITZGERALD: Slightly higher? Are we
24	talking about a factor are we talking about

1	percentages such as 50 percent higher?								
2	MR. AABO: No.								
3	MR. FITZGERALD: No. Okay. You reference								
4	in your testimony the CCI Engineering Report 117,								
5	correct? That's at page 7, the first line of the answer								
6	to the question								
7	MR. AABO: Yes, I do, um-hmm.								
8	MR. FITZGERALD: Okay. Madam Chairperson,								
9	that report was CL&P Exhibit 6C in Docket 217, but it has								
10	not been separately marked in this proceeding. I know								
11	that the Council has taken								
12	CHAIRMAN KATZ: We've taken administrative								
13	notice of the entire docket, so we'll note that.								
14	MR. FITZGERALD: Thank you. You note that								
15	the 345 cables of HPFF were first installed about 1964,								
16	right? And after about seven years of operation, several								
17	splices failed because the thermal movement of the cables								
18	had pushed some cable into the splicing area. Is that								
19	MR. AABO: That's correct.								
20	MR. FITZGERALD: right yeah, okay.								
21	And that problem was solved eventually after extensive								
22	research that led to retrofitting of many of the joints								
23	of the cables that had been installed up to that time,								
24	right?								

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1	MR. AABO: That's correct.
2	MR. FITZGERALD: And concerns regarding
3	movement into the pipe led EPRI to perform extensive
4	research on the cables. And that research defines
5	specific HPFF manufacturing parameters that were prone to
6	failure. Right? Yes?
7	MR. AABO: It it yes. It
8	showed some some of the parameters.
9	MR. FITZGERALD: So the work necessary to
10	identify and fix the design flaws that caused those
11	initial failures in the first seven years of operation
12	has now been done, isn't that right?
13	MR. AABO: That's correct.
14	MR. FITZGERALD: And 345 HPFF cables have
15	been operating reliably for the last 20 years, right?
16	MR. AABO: Except for the occasional
17	failure that we have.
18	MR. FITZGERALD: Okay right. Now,
19	isn't the technology for 345 XLPE cables today about
20	where that for 345-kV HPFF cables was in 1964?
21	MR. AABO: Could you repeat that question?
22	MR. FITZGERALD: Sure. Isn't the
23	technology for XL isn't the technology for XLPE at 345
24	today just about where that for 345 HPFF technology was

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1	in 1964? It's been proven in the lab, but it doesn't
2	have a proven operating history, and in fact there are
3	early failures, right?
4	MR. AABO: No, sir.
5	MR. FITZGERALD: Why not?
6	MR. AABO: Because as I point out in my
7	testimony that it took about seven years for these
8	failures in the pipe cable to occur. We have had several
9	early failures in the XLPE system. So if you want to
10	compare where we are with XLPE and you want to use 1964
11	as a benchmark, I would say that we are in the range of
12	1980 the quality of the cable, of the pipe type in 1980,
13	because we have already weeded out the initial design
14	problems that was in the accessories of the XLPE system.
15	MR. FITZGERALD: Mr. Aabo, for the 345
16	HPFF cables, a lot of those failures didn't even occur
17	for seven years, isn't that right?
18	MR. AABO: That that's correct.
19	MR. FITZGERALD: Alright
20	MR. AABO: But
21	MR. FITZGERALD: We we don't we
22	don't have seven years of operating experience for 345
23	HPFF cable anywhere, do we?
24	MR. AABO: We have 400-kV operating

1	experience since 1999
2	MR. FITZGERALD: Okay, let's see, this is
3	
4	MR. AABO: since 1997
5	MR. FITZGERALD: this is this is
6	MR. AABO: I'm sorry, 1997
7	MR. FITZGERALD: You just subtracted
8	MR. AABO: So so
9	MR. FITZGERALD: Where's that?
10	MR. AABO: It's not quite there yet.
11	MR. FITZGERALD: Yeah, it's not quite.
12	And that and that cable that you're referring to for
13	1997?
14	MR. AABO: I'm sorry?
15	MR. FITZGERALD: That cable that you're
16	referring to at 500-kV from 1997 is
17	MR. AABO: 400 400.
18	MR. FITZGERALD: 400 is?
19	MR. AABO: The one in Copenhagen.
20	MR. FITZGERALD: And that's had failures?
21	MR. AABO: No, it hasn't.
22	MR. FITZGERALD: Oh, is that the one in
23	the tunnel?
24	MR. AABO: No, it's not. It's the one

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1	direct buried.
2	MR. FITZGERALD: Direct buried, okay.
3	(Pause). Oh, okay. I've just it's just been pointed
4	out to me that I made a mistake in a question. You
5	understood the question the way I asked it, but so the
6	record is straight what I meant to say is that we don't
7	have seven years of experience in operation of 345 XLPE
8	cables. And your response to that was well we do have
9	one at 400-kV. Right? Okay. That's just to keep the
10	record straight.
11	You would agree that there are no U.S.
12	manufacturers of XLPE cable at 345-kV?
13	MR. AABO: That's correct.
14	MR. FITZGERALD: And there are no U.S.
15	based companies that are qualified to provide support and
16	maintenance for 345-kV HPFF I'm sorry, 345-kV XLPE?
17	MR. AABO: I'm not sure I understand what
18	you what you mean by support.
19	MR. FITZGERALD: Fix them when they break.
20	MR. AABO: There are companies that can
21	fix XLPE cable systems. There are companies that has
22	installed XLPE 345-kV systems. So, I I would assume
23	that if they can install it, they can also fix it, U.S.
24	companies.

1	MD EITTCEDNID. That/ a an accumption?
	MR. FITZGERALD: That's an assumption?
2	MR. AABO: Well
3	MR. FITZGERALD: Okay.
4	MR. O'NEILL: Excuse me. Does ConEd have
5	any experience fixing these type of cables to your
6	knowledge
7	MR. AABO: Not
8	MR. O'NEILL: at 345?
9	MR. AABO: Not at 345. They have not
10	installed any 345 XLPE cables as yet.
11	MR. O'NEILL: Do you know what companies
12	in the United States have had experience with these
13	cables and doing maintenance on these cables?
14	MR. AABO: I know the companies that have
15	installed the cables, but I since we haven't had any
16	failures, I do not know of any companies that has
17	actually done repair on the system.
18	MR. ASHTON: Do you
19	CHAIRMAN KATZ: How about what American
20	companies do the installation of the 345 XLPE?
21	MR. AABO: Well, there were a company
22	from California that did installation on of 345-kV
23	here in Boston.
24	MR. ASHTON: In what, I'm sorry?

1	MR. AABO: In Boston.
2	CHAIRMAN KATZ: For the N-STAR system?
3	MR. AABO: No, it was on a on a
4	generator. It was a generator, it was a very short
5	section.
6	MR. ASHTON: There are
7	CHAIRMAN KATZ: So it was not a
8	transmission per say, it was part of a generation
9	facility?
10	MR. AABO: It's part of a generation
11	facility, so it's a very short system. It's only
12	terminations, there's no splices.
13	MR. O'NEILL: How short a system are you
14	talking about?
15	MR. AABO: A few hundred feet. I believe
16	that the longest one is a thousand feet. There was about
17	I think nine nine cables ranging from 300 feet to a
18	thousand feet.
19	CHAIRMAN KATZ: Back to you, Mr.
20	Fitzgerald.
21	MR. FITZGERALD: Thank you. Mr. Aabo, it
22	has been said in another proceeding that if the company
23	were to install a length such as 24 miles of 345-kV XLPE
24	cable, that would be the longest installation of that

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1 cable at that voltage in the world, and the companies who 2 did it would be famous. Do -- do you agree with that? 3 MR. AABO: At the time of that proceeding, 4 I don't know when that was, but I think that might have 5 changed since then. There are longer lengths that has 6 been installed or are in the process, in the planning 7 stage. 8 MR. FITZGERALD: There are lengths longer 9 than 24 miles of 345-kV XLPE cable that have been 10 installed, is that -- let's take it one at a time -- is 11 that your testimony? 12 MR. AABO: You -- you -- you are 1.3 talking about 345-kV --14 MR. FITZGERALD: Yes, I am. 15 MR. AABO: Yeah. And -- then, I must -- I 16 must agree with you that -- if you could say 345 or 17 higher, if you could say that, but -- then I would 18 disagree with you. 19 MR. FITZGERALD: And what higher than 345 20 and XLPE has been installed? 21 MR. AABO: In Japan they have -- I believe 22 it's a 500-kV system that they --

MR. FITZGERALD: And is that the one in

23

24

the tunnel?

1	MR. AABO: Uh it may be, but I believe
2	some of it may be direct buried as well.
3	MR. FITZGERALD: Alright. Now, let me go
4	back and I to the second part of my question, 24
5	miles of XLPE cable installed in ducts would be the
6	longest installation of any extra high voltage XLPE cable
7	installed in ducts, isn't that right?
8	MR. AABO: That is correct.
9	MR. FITZGERALD: Alright. Thank you.
10	CHAIRMAN KATZ: Does that conclude your
11	cross-examination?
12	MS. RANDELL: Yes.
13	CHAIRMAN KATZ: We'll bring Attorneys
14	Frank and Kohler back up and I apologize for bringing you
15	up too soon. Just roughly how long would you do you
16	have, just so we can time things?
17	MR. FRANK: I have about five minutes
18	CHAIRMAN KATZ: Okay
19	MR. FRANK: if that.
20	CHAIRMAN KATZ: That's perfect.
21	MR. FRANK: Mr. Aabo again Monte Frank
22	for the Town of Woodbridge.
23	Mr. Aabo, on page 16 of your prefiled
24	testimony you state that you do not believe that there is

1	a justification for under-grounding in Segments 1 and 2
2	because there are large sections of the line in rural
3	areas which pass over pastures and through wooded lots.
4	Other than looking at the photographs in Volume 8 of the
5	application and the aerial photographs in Volume 9 of the
6	application, did you do anything else to assess the
7	current or future land use in Milford and Woodbridge?
8	MR. AABO: No, I did not.
9	MR. FRANK: Okay. Did you visit Milford
10	or Woodbridge to review the current land uses along the
11	right-of-way?
12	MR. AABO: No, I did not. As I point out
13	I the only thing I reviewed were the photographs that
14	I saw in these documents in the docket.
15	MR. FRANK: Are you aware of any pastures
16	in the right-of-way in Woodbridge?
17	MR. AABO: I'm not aware the pictures
18	that I looked if that was Woodbridge or what town it
19	was, but there were certain quite a few pages where
20	there were areas of forest, trees, and pastures, and
21	yeah, areas like that.
22	MR. FRANK: As you sit here today, you're
23	not you do not know whether those pastures you looked
24	at are in Woodbridge or in some other town?

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1	MR. AABO: That's correct. I my
2	statement is a general statement for looking at these
3	pictures.
4	MR. FRANK: I understand. Are you aware
5	of the number of homes currently adjacent to the right-
6	of-way in Milford and Woodbridge?
7	MR. AABO: No, sir.
8	MR. FRANK: Are you aware of the number of
9	elementary schools located near the right-of-way in
10	Woodbridge?
11	MR. AABO: No, I'm not.
12	MR. FRANK: Would your opinion change if
13	the current land use near the right-of-way in Woodbridge
14	alone included 80 homes, two elementary schools, a day
15	care facility, a camp and a community center?
16	MR. AABO: I guess you would have to
17	specify when you say near or what's the what's the
18	distances that you are looking? Are you looking at being
19	at the right-of-way, or
20	MR. FRANK: Assume for my question that
21	these land uses that I've described are adjacent to the
22	right-of-way.
23	MR. AABO: You would you will certainly
24	have to evaluate what effect that would have on the area.

1	MR. FRANK: On page 16 of your prefiled
2	testimony you state that if future uses of the land
3	include more intensive development for homes or industry,
4	this could be the basis for considering additional under-
5	grounding. Do you see that testimony?
6	MR. AABO: Yeah yes, I do.
7.	MR. FRANK: Do the land uses that I've
8	just described as being current along the right-of-way in
9	Woodbridge amount to those future uses that may provide
10	the basis for considering additional under-grounding in
11	your opinion?
12	MR. AABO: It it sounds like what you
13	are saying that there are schools and businesses and
14	homes within the right-of-way or very close to the right-
15	of-way. I would certainly think that you should evaluate
16	possibly under-grounding those sections.
17	MR. FRANK: Nothing further.
18	MS. KOHLER: Mr. Aabo, as Mr. Frank just
19	noted you've testified that intensive development of
20	homes or commercial, industrial areas might justify
21	additional under-grounding. Are you familiar with the
22	significant residential density along the proposed 345-kV
23	line in Milford?
24	MR. AABO: No, I'm not.

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1	MS. KOHLER: Are you familiar with the
2	significant commercial and industrial density along the
3	proposed 345-kV line in Milford?
4	MR. AABO: No, I'm not.
5	MR. FITZGERALD: Just I can't
6	MS. KOHLER: I just said the first
7	question was about residential and the second was about
8	commercial, industrial.
9	MR. FITZGERALD: I beg your pardon.
10	MS. KOHLER: Would your opinion about
11	under-grounding in Segment 2 change if the current land
12	use within or abutting the proposed 345-kV right-of-way
13	included the largest open space and recreation area in
14	the city?
15	MR. AABO: We did see some pictures where
16	there were recreational areas very close to the line.
17	And it appeared that they had been there for a while. So
18	if you are
19	CHAIRMAN KATZ: Mr. Aabo, pull your mic a
20	little closer.
21	MR. AABO: So if you're if you're
22	referring to those areas you are not you would not
23	be changing the current use if you have the overhead
24	lines there already.

1	MS. KOHLER: If you were adding addition
2	345-kV lines?
3	MR. AABO: That's a very a very
4	difficult question for me to answer. You you will
5	have to do the studies now we have seen studies that
6	show that there could be some systems problems with more
7	under-grounding. And if that's the case and that would
8	add to that difficulty, you will have to justify it even
9	more than just from the aesthetic point of view.
10	MS. KOHLER: We're not we're not
11	discussing aesthetics. We're simply discussing your
12	testimony in which you represent the fact that
13	residential density and industrial density could justify
14	additional under-grounding
15	MR. AABO: That's correct
16	MS. KOHLER: and what I'm asking the
17	question is if there's an open space recreational area
18	that would be bisected by the 345-kV line, would that in
19	your opinion be something to consider in additional
20	under-grounding?
21	MR. TAIT: You mean by an additional line?
22	MS. KOHLER: Well there's an existing 115-
23	kV line, but
24	MR. TAIT: The question to the witness is

if we put an additional one there
MS. KOHLER: With with the additional -
- with the new thank you, Mr. Tait
MR. TAIT: There's already one there
MS. KOHLER: With the
MR. TAIT: there's already one there
CHAIRMAN KATZ: (Indiscernible) one
there. A new 345-kV
MS. KOHLER: Correct
CHAIRMAN KATZ: crossing a large park.
MR. ASHTON: As a matter of fact replacing
an existing one.
MR. AABO: I would have a tough time I
A VOICE: Don't answer
MR. AABO: From a technical point you can
do it, you don't have to do it, you can do it, whatever,
but
MS. KOHLER: I'm not sure what that means.
MR. AABO: No, but I I'm not I'm not
sure what your what your goal here is? I mean if you
have an open space and you already have a transmission
line there, so putting the additional 345-kV line on that
property would not seem to me to alter the use of the

1	property. So, I
2	MS. KOHLER: Is
3	MS. RANDELL: Madam Chairman, I tried not
4	to interrupt but here I just did. I'm informed that in
5	that location there's actually three structures and four
6	lines there now, and that it would go to two structures
7	under the proposal. So, I think if the witness is going
8	to be asked
9	CHAIRMAN KATZ: So Miss Kohler, do you
10	just want to reframe your question with that information.
11	MS. KOHLER: I I'm not sure my question
12	is about necessarily the structures that are involved. I
13	think there are impacts that are associated with the 345-
14	kV line that may not necessarily be associated with
15	simply the number of structures within the line.
16	MR. ASHTON: Well, I think it's important
17	to accurately portray in words what is there in asking
18	your question.
19	MS. KOHLER: Okay. Mr. Aabo
20	MR. AABO: Yes?
21	MS. KOHLER: would would your
22	opinion about under-grounding in Milford change if there
23	were significant density of residences along the proposed
24	345-kV line, including a residential subdivision like

1	Lexington Green that has 250 houses that immediately
2	abuts the line?
3	MR. AABO: It would certainly change in
4	the sense that you're talking about future use now and
5	but and what effect that has of the future use of
6	the area if it should be under-grounding. And that
7	certainly should be evaluated very careful.
8	MS. KOHLER: Okay. Thank you, Mr. Aabo.
9	CHAIRMAN KATZ: Does that conclude
10	MR. FRANK: Yes.
11	MS. KOHLER: Yes, it does.
12	CHAIRMAN KATZ: We are adjourned until
13	1:00 o'clock. At that time we will resume with the
14	remaining town attorneys.
15	(Whereupon, a luncheon recess was taken.)
16	CHAIRMAN KATZ: Great, okay. Let's
17	resume. Mr. Fitzgerald, you had we had taken
18	administrative notice of Docket 217. But in I think -
19	- as I've been advised by counsel, it would probably be
20	better to give that CCI report a separate exhibit number.
21	And we'd like to give that Mr. Cunliffe, number
22	Applicant's 100?
23	MR. FRED O. CUNLIFFE: Yes, you can do
24	that, Chairman. And you may also want to take in the

1	East route visual presentation as Exhibit 101. And Mr.
2	Zaklukiewicz's presentation of Black Pond Junction as
3	102.
4	CHAIRMAN KATZ: Okay. We'll verify those
5	others in a minute, but let's
6	MR. CUNLIFFE: Okay
7	AUDIO TECHNICIAN: Mr. Fitzgerald, a
8	microphone.
9	CHAIRMAN KATZ: While we're at
10	MR. FITZGERALD: You
11	CHAIRMAN KATZ: while we have these
12	witnesses - okay
13	MR. FITZGERALD: You skipped one
14	CHAIRMAN KATZ: Uh
15	MR. FITZGERALD: it was the the
16	second
17	CHAIRMAN KATZ: The northerly route.
18	MR. FITZGERALD: the northerly route
19	and then and then Mr. Zaklukiewicz's Black Pond
20	slides.
21	CHAIRMAN KATZ: Okay.
22	MR. FITZGERALD: So we make the northerly
23	route AV presentation 102. 103 is the is Mr. Zak's

24 Black Pond slides. Okay.

1	CHAIRMAN KATZ: And when your witnesses
2	are up, we'll have those verified though I guess we
3	could probably take administrative notice of the CCI
4	report, correct
5	MR. FITZGERALD: Yeah
6	CHAIRMAN KATZ: or have you take
7	administrative notice
8	MR. FITZGERALD: Uh
9	CHAIRMAN KATZ: instead of an exhibit?
10	MR. FITZGERALD: Well
11	MS. RANDELL: I think an exhibit would be
12	more appropriate
13	CHAIRMAN KATZ: Okay.
14	MR. FITZGERALD: But but we
15	CHAIRMAN KATZ: But it's been previously
16	verified and the Council
17	MR. FITZGERALD: Right.
18	CHAIRMAN KATZ: Okay. Okay, I've got to
19	step out for a moment. What I want to do is we'll get
20	resumption of
21	MR. MARCONI: Why can't this be an exhibit
22	too?
23	(Pause)
24	CHAIRMAN KATZ: Yeah, go ahead.

1	MR. MARCONI: We've received a letter
2	dated June 2, 2004 from Assistant Attorney General
3	Michael Wertheimer, and that simply advises us in writing
4	that the that Kema (phonetic) had been a consultant in
5	Docket 217 I believe, or Mike can describe that a bit
6	more.
7	CHAIRMAN KATZ: Mr. Wertheimer.
8	MR. MARCONI: Mr. Wertheimer.
9	MR. MICHAEL WERTHEIMER: (Indiscernible) -
10	- it's going to be sent to everybody, but Kema was not
11	involved in 217. The Attorney General's Office hired
12	Whitfield Russell Associates in Docket 217
13	MR. MARCONI: Okay
14	MR. WERTHEIMER: Sedena Eric (phonetic)
15	was associated with Whitfield Russell at that time
16	CHAIRMAN KATZ: Okay, so
17	MR. WERTHEIMER: the Siting Council has
18	now hired Rathan (phonetic) Kema. She is now associated
19	with Kema
20	MR. MARCONI: I'm sorry that I misspoke
21	I'm sorry that I misspoke then, Assistant Attorney
22	General Wertheimer
23	A VOICE: (Indiscernible)
24	MR. MARCONI: The gentleman who spoke was

1	Assistant Attorney General Michael Wertheimer.
2	What we are going to be asking Kema to do
3	is submit a letter to us indicating their consulting
4	history with the with Northeast utilities. And we
5	will get that distributed to the service list too so that
6	for the record anybody who sees any reason to object can
7	do so, whatever. And can we list this as an exhibit?
8	CHAIRMAN KATZ: An AG exhibit, yes.
9	MR. MARCONI: Uh
10	CHAIRMAN KATZ: AG exhibit number Mr.
11	Cunliffe?
12	MR. MARCONI: Mr. Wertheimer, do you have
13	any problem with this being an AG exhibit number just for
14	the record?
15	MR. WERTHEIMER: I don't really I'm not
16	prepared I'm not offering evidence. It's a
17	disclosure. I don't think it needs to be
18	MR. MARCONI: Okay. We don't we don't
19	need this in as an exhibit.
20	CHAIRMAN KATZ: Okay, good. Okay, let's
21	move on. Can I just have a show of hands of parties and
22	intervenors who wish to cross-examine the OCC witnesses.
23	(Pause). Okay, that's attorney okay, let's go in
24	order then. Then we'll have attorneys for Wallingford,

1	Durham, followed by Orange, followed by Cheshire. Yes?
2	MS. RANDELL: While they're coming to the
3	table to cross-examine, I have an accuracy correction
4	along the lines of my earlier one with respect to
5	Eisenhower Park. This correction relates to Miss
6	Kohler's question before the lunch break on Lexington
7	Green. I believe in her question she asked Mr. Aabo to
8	consider a situation where there were about 250 or 275
9	houses in Lexington Green abutting the right-of-way. I'm
10	told that there are about a dozen houses in Lexington
11	Green abutting the right-of-way. So just in the interest
12	of clarifying the record, I'd like that to be noted. And
13	if Miss Kohler wants to, you know, rephrase her question,
14	we'd have no objection to that either.
15	CHAIRMAN KATZ: Fine. I guess I heard it
16	the way I think it was intended, is that the subdivision
17	has so many houses, not that they all abut
18	A VOICE: Some of which abut.
19	CHAIRMAN KATZ: some of which abut,
20	thank you. Okay, so I'm going to step out for a moment.
21	And Mr. Boucher, you have the floor.
22	MR. PETER BOUCHER: Thank you, Madam
23	Chairman. For the record, I'm Peter Boucher and my
24	clients are the Towns of Durham and Wallingford. I have

1	a very brief set of questions and I believe they're
2	primarily going to be directed to Mr. Aabo.
3	Mr. Aabo, in your prefiled testimony you
4	make reference to what portions of the proposed facility
5	you've actually visited and walked or otherwise went to.
6	And my question is to what extent you walked through any
7	segments of the proposed project that lie within
8	Wallingford or Durham?
9	MR. AABO: I I have not visited that
10	section of the line at all.
11	MR. BOUCHER: Okay. Then I'd like to ask
12	you if you would accept, subject to check, that in
13	Wallingford on Segment Map No. 19 in Volume 9 that there
14	is depicted on that map condominiums abutting the
15	existing right-of-way?
16	MR. AABO: I do not I do not recall
17	seeing that particular map.
18	MR. BOUCHER: But would you accept that
19	MR. AABO: I will accept
20	MR. BOUCHER: subject to check?
21	MR. AABO: upon check, yes.
22	MR. BOUCHER: And I would also ask whether
23	with regard to Segment Map 6, whether you would
24	accept, subject to check, that

1	MR. TAIT: Mr. Boucher
2	MR. BOUCHER: I'm sorry?
3	MR. TAIT: All this is a matter of record.
4	Is there a question somewhere? What's all this subject
5	to check? We know all this.
6	MR. BOUCHER: I'm I'm attempting to get
7	the witness to agree to those facts.
8	MR. TAIT: He doesn't know those facts.
9	MR. BOUCHER: Well then I will ask him if
10	he would be willing to agree to those facts.
11	MR. TAIT: For what purpose?
12	MR. BOUCHER: Because it deals with the
13	credibility of his testimony.
14	MR. TAIT: Is it just a matter of
15	credibility or are you saying would he change his opinion
16	if he knew this?
17	MR. BOUCHER: I'll be happy to ask that.
18	MR. TAIT: Well, I think that might be a
19	more productive question than confirming what's in the
20	record.
21	MR. BOUCHER: Then I would return to
22	Wallingford, if I may, briefly, and ask whether your
23	testimony relative to under-grounding and the
24	justification for under-grounding in Segments 1 and 2

1	would be different if you were aware that in Wallingford
2	there are condominiums located in the that are
3	abutting the existing right-of-way?
4	MR. AABO: I believe in my testimony I
5	point out that the use the land or the property use
6	and future property use should be evaluated for the areas
7	that are where the route is going to be or the
8	proposed route. So, I I believe that I am telling
9	that if there are areas where there are structures that
10	could be affected by the overhead line, that that should
11	be considered or studies should be made to consider it
12	for under-grounding
13	MR. BOUCHER: Okay
14	MR. AABO: that's what that's what I
15	was trying to do in my testimony.
16	MR. TAIT: And Mr. Aabo, the reason for
17	that is why? Aesthetics?
18	MR. AABO: Well, it's it's it could
19	be aesthetics, but it could also be that the future use
20	of this property or this land are may be jeopardized
21	if you have an overhead line. And therefore, it should
22	be considered to under-grounding at this point.
23	MR. TAIT: For future land use?
24	MR. AABO: For future, yes.

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1	MR. BOUCHER: May I ask, sir, if if you
2	have reviewed the legislation that was recently adopted?
3	I'm referring now to Public Act 04-246 and the standards
4	that that legislation imposes on the subject of under-
5	grounding?
6	MR. AABO: I have I have seen the I
7	have seen some information on that on that yes, on
8	that law.
9	MR. BOUCHER: I I looked without
10	finding any reference in your testimony to that law.
11	Does that mean you did not in any way consider the impact
12	of that law on your in the preparation of your
13	testimony?
14	MR. AABO: I believe that in my Section 7
15	I talk about EMF in Connecticut law. That's on page 14.
16	And that you're talking I assume you're talking
17	about House Bill Public Act 04-246?
18	MR. BOUCHER: That's correct.
19	MR. AABO: That's I have a little
20	address on that on page 15.
21	MR. JOHNSON: For the record, I would
22	indicate that Mr. Aabo answered what we designated as
23	CL&P Question 3, describing what he reviewed in order to
24	prepare the testimony that's now before the Council. And

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1 one of the items mentioned in it -- the answer to that 2 question was Public Act 04-246. 3 MR. BOUCHER: Thank you. Then Mr. Aabo, 4 you're aware that there is a presumption in the 5 referenced public act to the -- there is a presumption that an aerial configuration is inconsistent with the 6 7 purpose of that law? 8 MR. TAIT: Mr. Boucher, I'm again having 9 problems of where you're going with this witness on 10 Public Act 246. 11 MR. BOUCHER: The witness is indicating he's -- in some -- to some extent factored that public 12 13 act into his testimony and $I^{\prime}m$ asking him questions about 14 that. 15 MR. ASHTON: The answer is right here. 16 MR. AABO: Please -- please repeat your 17 question. 18 MR. BOUCHER: Are you aware that there is 19 a presumption in that public act that an aerial 20 configuration is inconsistent with the purposes of the 21 public act? 22 MR. AABO: Yes.

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MR. ASHTON: Mr. Boucher, I'm a little bit

MR. BOUCHER: Okay.

23

24

1	uncertain as to where you're going either. We're on page
2	15 of 17 of the prefiled testimony of Mr. Aabo, there is
3	an explicit question on are you familiar with this act
4	and he said, yes, I reviewed material on the bill, it
5	appears to favor underground construction of transmission
6	lines. Hasn't this been asked and answered?
7	MR. TAIT: Are you offering him as an
8	expert on the act and the interpretation of the act?
9	MR. BOUCHER: The witness refers to he
10	actually uses the term favors under-grounding and
11	indicates on page 3 that there appears to be no technical
12	reason at this time to favor under-grounding segments of
13	the project, then he go on to discuss. And my question -
14	- my question is whether when he uses the term there's no
15	reason to favor under-grounding, how do you reconcile
16	that with the presumption against aerial configurations
17	that is now part of the law?
18	CHAIRMAN KATZ: Didn't you just say a
19	technical reason? And the public act is not really a
20	technical act, it's a policy act.
21	MR. TAIT: Yeah.
22	CHAIRMAN KATZ: So
23	MR. TAIT: Maybe it's quicker to have him
24	answer it, but it it's

1	CHAIRMAN KATZ: Yeah
2	MR. TAIT: but his interpretation of
3	whether the act favors it or not is not relevant.
4	MR. BOUCHER: Do you understand the
5	question, sir?
6	MR. AABO: Not not in full I must
7	confess. However, if you could if you could ask me
8	about what you talk about on page 3 what was your
9	question there about technical
10	MR. BOUCHER: On page 3 you state that
11	there appears to be no technical reason at this time to
12	favor under-grounding the segments of the project between
13	Norwalk and Middletown. And I'm focusing on your use of
14	the term favor and I'm asking you how do you reconcile
15	that with the presumption that's now in the legislation
16	that we've been discussing?
17	MR. AABO: As it was pointed out, the
18	public act is a political act and what $I^\prime m$ talking about
19	is for technical reasons. There's no there's no
20	technical reason why that section should be undergrounded
21	
22	MR. BOUCHER: Okay
23	MR. AABO: now then the public act
24	has come into play where, as I say, in favor of under-

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- grounding. However, it does also allow for overhead use depending on what the Council decides.
- MR. BOUCHER: Okay, thank you. I have
- 4 nothing further.
- 5 CHAIRMAN KATZ: Thank you. Next is Mr.
- 6 Stone.
- 7 MR. BRIAN STONE: Thank you. Good
- 8 afternoon. For the record, I am Attorney Brian Stone and
- 9 I represent the Town of Orange.
- 10 Mr. Aabo, I'm going to be very brief. Am
- I correct in assuming that with respect to your review of
- 12 the Town of Orange that you did no more investigation
- than you did with the Towns of Woodbridge and Milford and
- 14 Wallingford?
- MR. AABO: That's correct.
- MR. STONE: Okay. And you didn't check
- either any future plans of development -- either the plan
- of conservation or development of the Town of Orange or
- any demographic studies to determine what the projected
- 20 potential future development would be in these areas
- 21 along the line?
- MR. AABO: That's correct.
- MR. STONE: Mr. Aabo, you are aware that,
- I assume, one of the reasons for favoring under-grounding

1	is concern over the health risks from EMF?
2	MR. AABO: Yeah, I'm aware of that.
3	MR. STONE: Whether you agree with it or
4	not, you're aware that that is
5	MR. AABO: I'm aware
6	MR. STONE: certainly one of the basis
7	of it. And in fact the act that Mr that Attorney
8	Boucher was questioning you on, that's specifically
9	referenced in that act, isn't that correct?
10	MR. AABO: That's correct.
11	MR. STONE: If you were aware that in the
12	record before this commission that what some consider to
13	be elevated levels of EMF, that there are a hundred and
14	eleven houses and a community center which would have
15	elevated levels of EMF in the proposed location of the
16	overhead 345-kV line, would that affect your conclusion
17	as to whether under-grounding should be proposed in
18	Orange?
19	MR. AABO: I'm looking at the under-
20	grounding from a technical point of view. I'm not
21	looking at the under-grounding from any health effect
22	point of view. So, I I really could not answer your
23	question.
24	MR. STONE: I have nothing further.

1	CHAIRMAN KATZ: Thank you, Mr. Stone.
2	Your brevity is appreciated. Next is Attorney Burturla.
3	Is there anyone after the Town of Cheshire who wishes to
4	cross-examine these witnesses? Thank you.
5	MR. RICHARD BURTURLA: For the record,
6	Richard Burturla on behalf of the Town of Cheshire.
7	Mr. Aabo, I just want to follow up where
8	Mr. Stone left off. I take it your analysis with respect
9	to Cheshire was no different than the analysis you
10	performed in terms of Wallingford, Durham, Milford and
11	Orange, is that true?
12	MR. AABO: That is correct.
13	MR. BURTURLA: And you're not aware of how
14	many homes are located within 150 feet of the right-of-
15	way in Cheshire, is that right.
16	MR. AABO: That's correct.
17	MR. BURTURLA: Nor are you aware of how
18	many areas of concern are within 1200 feet of the right-
19	of-way, is that right?
20	MR. AABO: That's correct.
21	MR. BURTURLA: And you're not familiar
22	with the Old Farm Lane neighborhood in Cheshire, is that
23	right?
24	MR. AABO: That's correct.

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1	MR. BURTURLA: Alright.
2	MR. AABO: The only thing I've seen is
3	pictures
4	MR. BURTURLA: Photos?
5	MR. AABO: Yeah, photos.
6	MR. BURTURLA: So to a great extent your
7	opinion with regard to under-grounding is supported by
8	your analysis of photos?
9	MR. AABO: Of the area, that is correct.
10	MR. BURTURLA: And and would it be fair
11	to say that almost solely your opinion with regard to
12	under-grounding is based upon your analysis of those
13	photos?
14	MR. TAIT: I'm afraid that
15	MR. AABO: That's correct
16	MR. TAIT: His question was on technical
17	feasibility. I believe your first question of that line
18	was all you really needed to ask.
19	MR. BURTURLA: Well to be fair, Mr. Tait,
20	I respectfully differ with you on that. My take on it is
21	I heard his testimony on cross by Attorney Kohler and he
22	stated that he relied upon photos and I was just
23	following up on that. It sounds to me that and if I
24	may just to follow-up, your opinion in terms of under-

1 grounding to a great extent is affected -- if I heard 2 your answers correctly to Attorney Kohler's line of 3 questioning, based upon the residential density of a particular neighborhood, is that right? The more dense, 4 5 the less you would be in favor of supporting overhead 6 lines? 7 COURT REPORTER: One moment please. 8 (Pause). 9 MR. AABO: It -- as I was trying to say in 10 my testimony that the use of the land must be a consideration for if it should be overhead and 11 underground. And I tried to stress that in my testimony 12 13 and I'm trying to stress it here as well. Now, I have --14 I have looked at aerial photographs and I had found that 15 there were many areas where -- that was wooded land where 16 there was no homes in the direct vicinity of the line, 17 and that's what I'm basing my statement on. 18 MR. BURTURLA: Thank you. I have nothing 19 further. Thank you. 2.0 CHAIRMAN KATZ: Thank you. That concludes 21 everyone who indicated they wished to cross-examine these 22 witnesses. Mr. Johnson, anything else? 23 MR. JOHNSON: Thank you, Chairman Katz. 24 We would I believe have some very brief redirect.

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we have about a two or three-minute break to -- for me to caucus with my witnesses on that point.

- 3 CHAIRMAN KATZ: Yes, you may. We'll take 4 a two-minute break. I would like to ask in the future if 5 the town attorneys perhaps could pool their questions of a similar nature. This Council would not have a problem 6 7 if one attorney asked the same question that, you know, was meant for like five or six towns. I think that might 8 9 be helpful to the process. We'll take a two-minute 10 break.
- 11 (Whereupon, a short recess was taken.)
- 12 CHAIRMAN KATZ: We will resume. Mr.
- Johnson.
- MR. JOHNSON: Thank you, attorney -- I'm
- 15 Attorney Johnson -- Chairman Katz.
- 16 CHAIRMAN KATZ: An engineer and proud of
- 17 it.
- MR. JOHNSON: The -- Mr. Montalvo, do you
- recall the discussion this morning prompted in part by
- questions from Chairman Katz, the engineer -- (laughter)
- 21 -- regarding the 2007 deadline and its significance in
- this docket?
- MR. MONTALVO: Yes, I do.
- MR. JOHNSON: Do you any -- anything to

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1	add to clarify that discussion?
2	MR. MONTALVO: Yeah, I just wanted to add
3	that as I mentioned at the end of my supplemental
4	testimony, I'm of the opinion that 20 December 2007,
5	which in some instances have been listed as a certain
6	drop dead date where, you know, cost sharing after which
7	is and the risks of cost sharing are greatly
8	increased, that I'm not too sure that that in fact is the
9	case, and that the materials available rulings out of
10	FERC, for example, seem to suggest that although there
11	will be certain new risks and certain new uncertainties,
12	FERC's general pricing guidelines and guidance on whether
13	or not transmission facilities meet the burden of being
14	regional facilities with regional benefit would still
15	seem to be met materially by a project of this sort since
16	it does have broad since it would have broad
17	reliability benefits for the New England market and also
18	economic benefits for the New England market. And so I
19	think that where there is a certain amount of
20	uncertainty, I think that, you know, when considering
21	2007 as kind of a cliff, I don't think it is in fact a
22	cliff. And so if the project is materially in service by
23	that time materially complete by that time or in
24	service six months later than that time, I think that

1	there is a material likelihood that some part of the
2	project, and probably a material part of the project will
3	receive regional funding through the tariff.
4	CHAIRMAN KATZ: But you're not
5	guaranteeing that, correct?
6	MR. MONTALVO: No one can
7	CHAIRMAN KATZ: Isn't that isn't that
8	expensive if you're wrong?
9	MR. MONTALVO: Well, let me tell you I
10	can't guarantee it, but I think we are as likely to see
11	FERC change its mind on how cost allocation for
12	transmission happens in the meanwhile as we are to have
13	the project be completed along this timeline. So you
14	know, there are numerous uncertainties and so I don't
15	think that this is an overwhelming, kind of an overriding
16	uncertainty in my mind.
17	MR. GERALD J. HEFFERNAN: But you don't
18	know.
19	CHAIRMAN KATZ: Thank you.
20	MR. O'NEILL: (Indiscernible) past
21	precedent
22	MR. MONTALVO: Excuse me?
23	MR. O'NEILL: Is there any past precedent
24	that you're referring to on your part suggesting that

1 that isn't a certain date? Have they bent and shifted 2 their timetables before to accommodate an application of 3 this kind? MR. MONTALVO: Well, we are -- we are kind 5 of walking at a certain level into uncharted territory and FERC has left open a lot of things largely because 6 7 there are many projects not just in New England but in 8 many places that are in various places of development and 9 issues of cost allocation and cost sharing are -- loom 10 large on people's concern. 11 So, I think that as far as your particular 12 question is concern, you know, there is no real precedent 13 because it's -- a lot of this -- there's not a lot of 14 history, alright. But I think that FERC has also 15 recognized that when dealing with large infrastructure 16 projects which involve numerous parts, a lot of 17 logistical issues, that it's not really practical to say 18 if the project isn't in service in two years and it 19 takes, you know, say two and a half years instead, tough. 20 I mean, I think that there's a certain pragmatism at the 21 commission. And you know, I would be -- honestly, I would 22 be terrifically surprised if anything other than that would be the case. And I think that there would be --23 24 that -- that you know, a very strong case be made before

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1	the commission that it would be appropriate to go forward
2	with socialization of material parts of this project
3	MR. O'NEILL: Are you
4	MR. MONTALVO: I would argue for it.
5	MR. O'NEILL: Are you suggesting this
6	Council set aside this application and study this
7	proposal further before we make any determination?
8	MR. MONTALVO: No, I'm not I'm not
9	suggesting that. I I just want to I just I
LO	guess my only my only point here is that the
L1	overriding reason in my mind for the Council to act
L2	expeditiously towards finding a good solution for
13	Southwest Connecticut's reliability problems is in fact
L 4	the reliability problem and the pressing nature of that
15	problem, not how the costs will get recovered.
16	MR. O'NEILL: Do you think the need has
L 7	been exaggerated or the need has
L8	MR. MONTALVO: I don't believe the need
19	has been exaggerated. I think the need is severe.
20	MR. O'NEILL: Isn't the need enough of a
21	reason to go forward in expeditious fashion on this
22	project?
23	MR. MONTALVO: Well, I my the
24	purpose of my testimony is to suggest that I think in

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1 parallel with the work that's being done to prepare this project, additional analysis can be done that I don't 2 think ultimately delays the implementation of this 3 4 project as a backstop should those other things not prove 5 fruitful. 6 And, so that you know, ultimately we can 7 work towards a solution that has the best overall 8 benefits for Southwest Connecticut. And if it is this 9 project, build the project. You know, that in my mind is 10 the rebuttal assertion, that this is not the right project, if you see my meaning. I'm not suggesting, you 11 12 know, that NU and UI have come forward with a project 13 that is, you know, absurd on its face. I'm just saying that there are additional -- there are additional 14 15 approaches, integrated approaches and things to think 16 about, solutions to the Southwest Connecticut reliability 17 problem on a power system basis as opposed to simply a 18 transmission basis that may be equal if not better 19 ultimately for the long-term development of Southwest 20 Connecticut. 21 CHAIRMAN KATZ: Thank you. Mr. Johnson, 22 any other redirect? 23 MR. JOHNSON: Yes. Mr. Aabo, do you 24 recall the discussion this morning mostly engaged with

1	Attorney Fitzgerald about the some of the differences
2	between XLPE and HPFF?
3	MR. AABO: Yes, I do.
4	MR. JOHNSON: Do you have anything to add
5	to that discussion at this time?
6	MR. AABO: I'd like to point out to the
7	Council that we had some discussions on the reliability
8	of these two different cable systems. And my belief is
9	that the XLPE system at 230 and above has been in service
10	for a substantial amount of time and that the reliability
11	is very very good for these systems, combine that with we
12	do not have the environmental risks that we have with the
13	high pressure fluid filled system.
14	MR. JOHNSON: Also, Mr. Aabo, do you
15	recall the discussion more recently in the hearing with
16	some of the attorneys from the Towns about the basis upon
16 17	some of the attorneys from the Towns about the basis upon which you discussed under-grounding or aerial
17	which you discussed under-grounding or aerial
17 18	which you discussed under-grounding or aerial construction of the projects?
17 18 19	which you discussed under-grounding or aerial construction of the projects? MR. AABO: Yes, I do.
17 18 19 20	which you discussed under-grounding or aerial construction of the projects? MR. AABO: Yes, I do. MR. JOHNSON: Do you have anything to add
17 18 19 20 21	which you discussed under-grounding or aerial construction of the projects? MR. AABO: Yes, I do. MR. JOHNSON: Do you have anything to add to that discussion at this time?

1 the aerial photos that were presented to me. 2 that -- I pointed out in my testimony that the actual and 3 future use of the land surrounding the right-of-way should be evaluated very careful. I also point out that 4 5 some of these locations that was mentioned already were 6 existing right-of-ways. Thank you. 7 MR. JOHNSON: The -- that's all we have by way of redirect, Chairman Katz. 8 9 CHAIRMAN KATZ: Thank you, Mr. Johnson. 10 Mr. Ashton has one question. 11 MR. ASHTON: One question. Given a choice of under-grounding high voltage versus lower voltage, 345 12 versus 115, what to your knowledge is the practice in the 13 14 world as to which one goes underground first? 15 MR. AABO: Are you talking about the 16 voltage level --17 MR. ASHTON: Yeah --18 MR. AABO: -- which goes underground 19 first? 20 MR. ASHTON: Yeah. If you have -- if 21 there's an issue that there's going to be under-22 grounding, what is the general practice throughout the 23 world in the choice of under-grounding first? Do you 24 underground the highest voltage first or do you

1	underground the lower voltage first?
2	MR. AABO: Well, you you underground
3	the voltage that needs to be undergrounded
4	MR. ASHTON: I didn't say that
5	MR. AABO: No, but I'm trying to answer
6	your question
7	MR. ASHTON: My question was given a
8	choice, A or B, which one do you choose?
9	MR. AABO: I don't know
10	MR. ASHTON: Okay
11	MR. AABO: because the under-grounding
12	
13	MR. ASHTON: Nothing further.
14	CHAIRMAN KATZ: Thank you.
15	MR. EMERICK: Chairman
16	CHAIRMAN KATZ: Mr. Emerick.
17	MR. EMERICK: Yes. Mr. Aabo, you just
18	indicated a preference for XLPE because it avoids
19	environmental risks. Could you explain those risks
20	please?
21	MR. AABO: We were talking about that in
22	the high pressure fluid filled we have a certain amount
23	of dielectric fluid that has the potential it's under
24	pressure it's under about 200 psi of pressure. And if

1	for some reason we if the pipe develops a hole, we
2	will have a leak of dielectric fluid, which could be
3	environmental unpleasant.
4	MR. EMERICK: Earlier in this proceeding
5	we had an extensive amount of testimony regarding
6	dielectric fluid, polybutene. Have you had an occasion
7	to review the record of that hearing?
8	MR. AABO: No, I have not I have not
9	seen the records of that.
10	MR. EMERICK: Are you aware of the
11	formulation of polybutene that's proposed to be used in
12	this project?
13	MR. AABO: No, I'm not.
14	MR. EMERICK: Are you aware of how many
15	different formulations there are of polybutene?
16	MR. AABO: Many.
17	MR. EMERICK: And do they cover a wide
18	spectrum in terms of environmental characteristics?
19	MR. AABO: Absolutely. Yes, sir.
20	MR. EMERICK: But you're not aware of what
21	out of the multitude of fluids that are out there are
22	there some that are shall we say more friendly than
23	others?
24	MR. AABO: Yes, sir.

1 MR. EMERICK: I'll let it go there. Thank 2 you. 3 CHAIRMAN KATZ: Thank you. I think that concludes cross-examination -- Mr. Murphy. 4 5 MR. JAMES J. MURPHY, JR.: Mr. Montalvo, 6 you had talked briefly about the cost sharing and what have you. And I think in a prior appearance you referred 7 8 to it as gold-bricking or something along those lines. 9 Let me ask you this hypothetical question. You're aware 10 I assume of the legislation that gives some presumption 11 to under-grounding. What if the General Assembly in 12 Connecticut and it became law mandated this entire 13 project to be underground, would there still be the same 14 evaluation as to what was necessary and whether parts of 15 the under-grounding or all of the under-grounding might 16 not qualify for cost sharing even though it's mandated by 17 law? 18 MR. MONTALVO: When the -- when the issue of this project as part of the RTEP came before the FERC 19 and whether -- and what aspects of the project were going 20 21 to be requested for socialization, there was a question 22 as to the amount of under-grounding associated with the 23 project that FERC asked ISO New England and I believe the 24 companies also to address. And ISO New England and

1 NEPOOL refrained to address it simply because they didn't 2 want to kind of bias the outcome. And so it's quite 3 uncertain in my mind as to how FERC is going to view that 4 issue, whether or not they will defer to the State's 5 judgment and say alright the State has decided that it 6 should all go underground, thus we will allow it to 7 receive socialized treatment, or say well no we're going 8 to apply a different standard or a different test, a 9 technical test of our own creation, or that perhaps the 10 NEPOOL participants themselves as stakeholders will say 11 well it's all well and good Connecticut wants it that way 12 but we and the balance of the five New England states 13 don't care for that outcome, so it -- I can't give you a 14 firm answer. 15 I do believe that the decisions of the 16 Legislature of the State of Connecticut will have some 17 bearing on the ultimate treatment of the various 18 components as far as cost allocation is concerned. But 19 whether or not there is a 100 percent difference or some 20 kind of partial difference, I can't say for certain. 21 MR. MURPHY: Thank you. 22 CHAIRMAN KATZ: Thank you. Does that 23 conclude cross-examination? Thank you, Mr. Johnson. 24 Thank you, gentlemen.

1	At this time, I'd like the companies'
2	witness panel to come up and we will go into East Shore
3	and the northerly route and other alternatives. Off the
4	record.
5	(Off the record)
6	CHAIRMAN KATZ: On the record. Mr.
7	Fitzgerald, let's identify the new exhibits that need to
8	be verified.
9	MR. FITZGERALD: Thank you. Mr. Prete and
10	Miss Bartosewicz, I call your attention to Exhibit 101,
11	which are the slides exhibited today as the East Shore
12	Audio Visual Presentation, and to Exhibit 102, the slides
13	exhibited today as part of the so-called Northerly Route
14	Audio Visual Presentation. Is the information in those
15	slides true and correct to the best of your knowledge?
16	MS. BARTOSEWICZ: Anne Bartosewicz. Yes,
17	they are.
18	MR. PRETE: John Prete. Yes, they are.
19	MR. FITZGERALD: I offer Exhibits 101 and
20	102 as full exhibits.
21	CHAIRMAN KATZ: Any objection to making
22	them full exhibits, 101 and 102? Hearing none, they're
23	full exhibits.
24	(Whereupon, Applicants' Exhibit No. 101

I call

1	and No. 102 were received into evidence as full
2	exhibits.)
3	MR. FITZGERALD: Mr. Zaklukiewicz, I cal
4	your attention to what has been marked Exhibit 103, or

- 5 what has been given that number, those are the three
- slides you presented earlier today to illustrate the 6
- 7 Black Pond alternative to Beseck. Is the information in
- 8 those slides true and correct to the best of your
- 9 knowledge?
- 10 MR. ZAKLUKIEWICZ: Roger Zaklukiewicz.
- 11 Yes, it is.
- 12 MR. FITZGERALD: I offer Exhibit 103 as a
- 13 full exhibit.
- 14 CHAIRMAN KATZ: Oh, I'm sorry. Yes, is
- 15 there any objection to making 103 a full exhibit?
- 16 Hearing none, it's a full exhibit.
- 17 (Whereupon, Applicants' Exhibit No. 103
- 18 was received into evidence as a full exhibit.)
- 19 MR. FITZGERALD: Now, Mr. Zaklukiewicz,
- Miss Bartosewicz, Mr. Prete, Mr. Welter, Mr. Hogan, I 20
- 21 call your attention to what was yesterday marked Exhibit
- 22 91, your direct testimony regarding the East Shore route.
- 23 And before I ask you to adopt it, let me ask whether any
- of you have any corrections to the prefiled testimony? 24

1	MS. BARTOSEWICZ: Yes, I do.
2	MR. FITZGERALD: And Miss Bartosewicz,
3	what is that correction?
4	MS. BARTOSEWICZ: Page 7, there is a
5	series of bullets, the first bullet should read and
6	I'm inserting this at the beginning to say 329 line
7	between Southington and Frost Bridge Substation (345-kV;
. 8	12.7 miles) semicolon. And the last three bullets in
9	that same section should be deleted.
10	MR. ASHTON: (Indiscernible) 91 001
11	MS. BARTOSEWICZ: Then the 1990 line
12	the two 1990 lines and the 91 001 line.
13	MR. FITZGERALD: And we will submit
14	MR. BRUCE McDERMOTT: We have.
15	MR. FITZGERALD: We have we've already
16	Mr. McDermott points out we've already submitted an
17	errata sheet for page 7.
18	CHAIRMAN KATZ: Was that today?
19	MR. McDERMOTT: Yesterday.
20	CHAIRMAN KATZ: Yesterday's errata sheet,
21	this is on it?
22	MR. McDERMOTT: This is the last page of
23	yesterday's errata sheet.
24	CHAIRMAN KATZ: Got it. Thank you.

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1	MR. FITZGERALD: Okay. As corrected, do
2	you members of the panel swear that the information
3	contained in Exhibit 91 is true and correct to the best
4	of your knowledge?
5	MR. ZAKLUKIEWICZ: Roger Zaklukiewicz.
6	Yes.
7	MS. BARTOSEWICZ: Anne Bartosewicz. Yes.
8	MR. PRETE: John Prete. Yes.
9	MR. JIM HOGAN: Jim Hogan. Yes.
10	MR. CYRIL WELTER: Cyril Welter. Yes.
11	MR. FITZGERALD: I offer I ask that it
12	be admitted as a full exhibit.
13	CHAIRMAN KATZ: Any objection to making it
14	a full exhibit? Hearing none, it's a full exhibit.
15	(Whereupon, Applicants' Exhibit No. 91 was
16	received into evidence as a full exhibit.)
17	CHAIRMAN KATZ: So
18	MR. FITZGERALD: And Madam Chairman,
19	before the cross proceeds, I'd like to just note that
20	since this testimony does not bear Miss Mango's name, we
21	haven't put her up here as part of this panel, however
22	she she is, as some would say of Elvis, in the
23	building. She's doing other she's doing other work.
24	So if questions come up that are appropriate for her, we

1	can bring her in here from the other room.
2	CHAIRMAN KATZ: Thank you, Mr. Fitzgerald,
3	we'll
4	A VOICE: She's here.
5	CHAIRMAN KATZ: She's here. Okay. What
6	I'm going to do any other procedural matters before we
7	open this for cross? What I'm going to do is ask the
8	parties that come up to cross, that they cover all the
9	topics that have been noted, East Shore, the northerly
10	route and other alternatives. We're not going to break
11	them up. And let me see, where are we
12	A VOICE: Louise is out in the corridor
13	CHAIRMAN KATZ: First on the list is
14	Representative Al Adinolfi. Absent. Next, the Town of
15	Middlefield, Attorney Knapp. Mr. Knapp, I see you
16	brought the boss.
17	MR. ERIC KNAPP: Yes, I did.
18	CHAIRMAN KATZ: Welcome, Mr. First
19	Selectman.
20	A VOICE: Thank you, Chairperson Katz.
21	(Voices in background)
22	CHAIRMAN KATZ: I'm sorry, Mr. Fitzgerald,
23	is there any procedural problems?
24	MR. FITZGERALD: It was called to my

1	attention that I had meant to ask you to swear in another
2	witness in case Mr. Scarfone, who is to some extent a
3	substitute for Mr. Brandien. And so
4	CHAIRMAN KATZ: There is no substitute
5	MR. FITZGERALD: I know. So that he might
6	there might be some questions that we would want him
7	to answer, so
8	CHAIRMAN KATZ: Okay, do you want to do
9	that now?
10	MR. FITZGERALD: Sure.
11	CHAIRMAN KATZ: Okay.
12	MR. FITZGERALD: Al, could you
13	MS. RANDELL: Might we suggest that Mr.
14	Knapp move over here and then Mr. Scarfone
15	CHAIRMAN KATZ: Yeah, Mr. Knapp
16	MR. ERIC KNAPP: I'd be happy to do that.
17	(Pause)
18	MR. MARCONI: Could the witness please
19	state his name into the microphone and spell his name for
20	the court reporter's benefit.
21	MR. ALLEN SCARFONE: Allen Scarfone, A-1-
22	l-e-n, S-c-a-r-f-o-n-e.
23	MR. MARCONI: Now sir, if you could please
24	raise your right hand.

1	(Whereupon, Mr. Allen Scarfone was duly
2	sworn in.)
3	MR. MARCONI: Please be seated, sir.
4	CHAIRMAN KATZ: Do we need to have him
5	verify anything?
6	MR. FITZGERALD: No.
7	CHAIRMAN KATZ: Okay, thank you. Mr.
8	Knapp, were you given a copy of this yellow great,
9	thank you. I just wanted to make sure you have what we
10	have. Please identify yourself for the record and
11	proceed.
12	MR. KNAPP: Thank you, Madam Chairman.
13	Attorney Eric Knapp on behalf of the Town of Middlefield.
14	Actually, I have just three or four questions, and I
15	apologize if some of these are in the prefilings.
16	In listening to this morning's testimony,
17	I understood that there was a blue line and a pink line.
18	I have previous evidence regarding how many acres of
19	takings the blue line required. It's something over 70
20	acres if I'm correct. Could you just verify how many
21	acres that would be?
22	MS. BARTOSEWICZ: Yes. For the 80-foot
23	for the H-frame structure you would need 80 feet or about
24	75 acres between Chestnut and Black Pond.

1	MR. KNAPP: And for the pink line, the
2	monopole?
3	MS. BARTOSEWICZ: That would be for a
4	monopole at 40 feet. It's approximately 34 acres.
5	MR. KNAPP: Thirty-four acres. This is
6	also a longer route than the route that has been
7	proposed?
8	MS. BARTOSEWICZ: That's correct. It's
9	about almost three miles longer.
10	MR. KNAPP: Have you been in contact with
11	the property owners along this route?
12	MS. BARTOSEWICZ: I have not.
13	MR. KNAPP: You have not been in contact.
14	Do you know approximately how many property owners are
15	along that route?
16	MS. BARTOSEWICZ: I do not know the number
17	of property owners. We would have to do further
18	investigation.
19	MR. KNAPP: Okay. Are there any other
20	locations in the State of Connecticut where you have
21	presently three 345 cables running parallel to one other
22	besides Middlefield and Middletown?
23	MR. ZAKLUKIEWICZ: No.
24	MR. KNAPP: So this is the one location in

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1	the State you already have the third
2	MR. ZAKLUKIEWICZ: Oh, excuse me. The
3	answer to that is, yes, there are other locations, and
4	they're right out of Millstone.
5	MR. KNAPP: Okay.
6	MR. ZAKLUKIEWICZ: Millstone a
7	significant portion or the lower southern portion of the
8	lines out of Millstone are on a common right-of-way up to
9	where they branch to the lines that go off to Montville.
10	And then after that there are three transmission lines
11	on that right-of-way all at 345,000 volts.
12	MR. KNAPP: Okay. Are there any present
13	locations where you have four 345's running together or
14	is that
15	MR. ZAKLUKIEWICZ: Yes. Right outside of
16	Millstone heading north there are for I believe
17	approximately five or six miles there are four
18	transmission lines on that right-of-way
19	MR. KNAPP: Okay
20	MR. ZAKLUKIEWICZ: all at 345,000
21	volts.
22	MR. KNAPP: For about how long a length is
23	that?
24	MR. ZAKLUKIEWICZ: Well, it depends on

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1	what sections you're talking about. The Millstone to
2	where they are parallel in other words, where there
3	are four 345 lines?
4	MR. KNAPP: Yes
5	MR. ZAKLUKIEWICZ: I believe I'd say
6	approximately five miles.
7	MR. KNAPP: Okay. As I understood your
8	testimony this morning, as a policy matter do you prefer
9	the concentration or the dispersal of the power line
10	system?
11	MR. ZAKLUKIEWICZ: Clearly from a pure
12	planning standpoint, the dispersal of transmission lines
13	quite clearly minimize the amount of what a single
14	contingency could impact on the system, so a dispersal of
15	the facilities.
16	MR. KNAPP: Are there any perceived
17	technical advantages to the northerly route versus the
18	route you're proposing?
19	MR. ZAKLUKIEWICZ: The the northerly
20	route you mean forming a new Black Pond Substation as
21	opposed to the proposed Beseck Substation?
22	MR. KNAPP: Yes, that's correct.
23	MR. ZAKLUKIEWICZ: Clearly the Black Pond
24	Substation alternative or option has not been studied to

1	any extent. This was as a result of trying to respond to
2	questions raised by Commissioner Emerick yesterday. We
3	had looked at this prior to putting together our proposal
4	and had discounted that because of the reasons of the
5	single contingencies having such an impact on the system.
6	MR. KNAPP: Thank you. I have no further
7	questions at this time.
8	CHAIRMAN KATZ: Thank you, Mr. Knapp.
9	Next, Attorney Boucher.
10	MR. DAVID BALL: If I may, I'll be
11	conducting cross-examining on behalf of the Towns,
12	Chairman Katz.
13	CHAIRMAN KATZ: Oh, on all the Towns?
14	MR. BALL: Uh
15	CHAIRMAN KATZ: Great, thank you
16	MR. BALL: Except for
17	MR. MARCONI: Which one?
18	CHAIRMAN KATZ: Well, Durham is the one I
19	called next.
20	MR. BALL: Do you Peter, do you care?
21	MR. BOUCHER: I'm sorry?
22	MR. BALL: Do you want to go first?
23	CHAIRMAN KATZ: Unless you people have a
24	preference. I'm flexible.

1	MR. BALL: We'd just assume that I go
2	first
3	CHAIRMAN KATZ: Okay
4	MR. BALL: if that's okay.
5	CHAIRMAN KATZ: That's okay. I'm just
6	going in the order of the hearing program, but so Mr.
7	Ball and Miss Kohler, I'm going to assume that you're
8	handling Woodbridge, Milford uh Orange? Everybody
9	but Durham and Wallingford?
10	MR. BALL: Yeah is that okay?
11	MS. KOHLER: Yeah.
12	MR. BALL: That's correct.
13	MS. KOHLER: Correct.
14	CHAIRMAN KATZ: Okay, thank you. I don't
15	want to inadvertently not call a town.
16	MR. BALL: I'm sure if we don't cover
17	something, one of them will jump up, but hopefully we
18	will.
19	Good afternoon, panel. David Ball. I
20	represent the Town of Woodbridge. I'm going to ask a
21	number of questions relating to the studies that you
22	looked at for the East Shore route. Now, when you
23	studied the East Shore route, you commissioned PowerGEM
24	to run thermal load flow studies for you to determine

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1	whether the system could run reliably, is that correct?
2	MR. ZAKLUKIEWICZ: That is correct.
3	MR. BALL: And PowerGEM didn't
4	independently decide what the route was going to be, that
5	was something that you provided to PowerGEM?
6	MR. SCARFONE: That's correct.
7	MR. BALL: So I'm sorry, was that on
8	the record?
9	AUDIO TECHNICIAN: Repeat it
10	MR. SCARFONE: That's correct.
11	MR. BALL: So it's not as if you
12	commissioned PowerGEM to come up with the optimal East
13	Shore route, they simply studied what you told them to
14	study, isn't that right?
15	MR. SCARFONE: They were studying a
16	configuration that the Mayor of Wallingford had given us.
17	MR. BALL: Alright, but the specifics of
18	the configuration of the route you passed on to PowerGEM,
19	you didn't ask them to exercise discretion in coming up
20	with the best route, isn't that right?
21	MR. SCARFONE: The 387 line is the
22	existing route, so we assumed that they were putting the
23	same line down the existing 387 right-of-way.
24	MR. BALL: No, I understand that. What

1	I'm asking you is whether they came up with
2	MR. FITZGERALD: We can we can
3	stipulate to that.
4	MR. BALL: Okay. And in your in your
. 5	testimony you refer to seven different PowerGEM studies
6	that were performed, is that right?
7	MR. SCARFONE: I believe so. That's
8	correct.
9	MR. BALL: Okay. And ultimately you
10	concluded in Addendum No. 3, which is dated February $20^{\rm th}$,
11	that based on I'll just quote from it "based on the
12	ISO New England Southwest Connecticut Working Group
13	Comparison Study, the companies have concluded that the
14	East Shore Alternate studied has been disqualified from
15	further consideration so that further thermal studies are
16	not required". Right? That's in Addendum No. 3?
17	MR. SCARFONE: That's correct.
18	MR. BALL: So as of February 20 th you made
19	the decision that an East Shore route was not viable
20	based on the results of the PowerGEM studies that you
21	were looking at, right?
22	MR. ZAKLUKIEWICZ: We need to clarify
23	which East Shore route we're speaking of because there
24	appears to be two or three different routes depending on

1	whose testimony we're referring to and who's asking the
2	questions
3	MR. BALL: Okay
4	MR. ZAKLUKIEWICZ: and clearly there's
5	there's the East Shore route which is the present
6	route, Scovill to East Shore, there is
7	CHAIRMAN KATZ: Which we're calling 287,
8	correct?
9	MR. ZAKLUKIEWICZ: Which is the 387 line.
10	CHAIRMAN KATZ: 387.
11	MR. ZAKLUKIEWICZ: There is the
12	alternative I believe and some testimony that basically
13	has a reconfiguration of the system and it goes the
14	387 line somehow ends at a bus in Beseck. And then
15	there's a line from Beseck down to East Shore. And then
16	there's what we believe is the only viable solution, is
17	two 345-kV lines down to East Shore, and one of those
18	would be the existing 387 line which goes direct from
19	Scovill to East Shore, and then a second line from Beseck
20	down to East Shore. So these have been used
21	interchangeably in my reading the questions and other
22	testimony. So we just need to make certain when we speak
23	here of which one we're talking about. And I apologize
24	for the confusion, but I didn't write some of this

1	testimony or add other things here. So, I I just want
2	to make certain, because you could get totally different
3	answers depending on which one we're talking about, so
4	CHAIRMAN KATZ: Okay
5	MR. BALL: Thank you and
6	MR. ZAKLUKIEWICZ: and if we can get
7	that clarified, that will help both ourselves responding
8	to the questions and the commission.
9	MR. BALL: And indeed I will ask questions
10	that I think will hopefully clarify that. The seven
11	thermal load flow studies that I was referring to and
12	that I was asking questions about are listed on pages 5
13	and 6 of the testimony, okay. Let me know when you see
14	that.
15	MR. SCARFONE: And page 7.
16	MR. BALL: Alright. Now earlier there was
17	a slide presentation where you presented the fact that
18	you believe that the only viable East Shore route would
19	contain a second line along the 387 right-of-way?
20	MR. SCARFONE: Right. A second line,
21	that's correct.
22	MR. BALL: Okay.
23	MR. SCARFONE: If I could just clarify
24	that, that would be a second line that originated from

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1	Beseck and went to East Shore. I think what we showed in
2	the slide presentation was three or four different routes
3	to get there, one of which was the existing 345-kV
4	corridor that exists.
5	MR. BALL: Right. Now, the seven power
6	flow PowerGEM load flow studies that are listed on
7	pages 5 and 6 of your testimony, in none of those studies
8	was a second line included in the study, isn't that
9	right?
10	MR. SCARFONE: That's correct. It was the
11	existing 387 line and a sensitivity with partial
12	reconductoring of the 387 line.
13	MR. BALL: Okay. So essentially, the
14	elements of those studies included a new 345-kV line from
15	the East Devon Substation to the East Shore Substation?
16	MR. SCARFONE: That's correct.
17	MR. BALL: Alright. Some portion of the
18	387 line being reconductored?
19	MR. SCARFONE: Yes.
20	MR. BALL: And reconfiguration of the East
21	Shore Substation?
22	MR. SCARFONE: Yes.
23	MR. BALL: That's generally what those
24	seven load flow studies looked at?

1	MR. SCARFONE: That's correct.
2	MR. BALL: Okay. Now I'm going to ask
3	questions about those studies, those seven studies.
4	We've heard a lot of testimony over the last couple of
5	days about the importance of creating a strong source in
6	Beseck, correct?
7	MR. SCARFONE: That's correct.
8	MR. BALL: And in fact your application
9	the primary route that you're proposing includes a number
10	of enhancements, including the construction of a new
11	substation at Beseck, correct?
12	MR. SCARFONE: A switching station, that's
13	correct.
14	MR. BALL: Okay. And in addition a new
15	line from Oxbow Junction to Beseck?
16	MR. SCARFONE: Yes.
17	MR. BALL: A new 345-kV line I should say.
18	MR. SCARFONE: Yes.
19	MR. BALL: And a new 345-kV line from
20	Black Pond Junction to Beseck?
21	MR. SCARFONE: Yes.
22	MR. BALL: Alright. And as we've
23	discussed already, there's also the proposal of an
24	additional 345-kV line between Scovill Rock switching

_	
1	station and Chestnut Junction, correct?
2	MR. SCARFONE: Correct.
3	MR. BALL: And as you've testified, all of
4	those elements are important in creating that strong
5	source at Beseck. Is that a fair statement?
6	MR. SCARFONE: Yes.
7	MR. BALL: Alright. Now getting back to
8	the seven PowerGEM thermal load flow studies that I was
9	talking about on pages 5 and 6 of the testimony. In
10	those studies, the studies did not include a new
11	substation at Beseck, isn't that right?
12	MR. SCARFONE: That's correct.
13	MR. BALL: Alright. And they also did not
14	include the new line from Black Pond to Beseck, correct?
15	MR. SCARFONE: That's correct.
16	MR. BALL: And they didn't include the
17	line from Oxbow Junction into Beseck?
18	MR. SCARFONE: That's correct.
19	MR. BALL: They didn't include the new
20	line from Scovill Rock to Chestnut Junction, correct?
21	MR. SCARFONE: That's correct.
22	MR. BALL: And in terms of reconductoring
23	of the 387 line to the extent that it was looked at in
24	the studies, the assumption was that only 10 miles of the

1	387 line would be reconductored, correct?
2	MR. SCARFONE: The limiting 2156, yes, was
3	reconductored
4	MR. BALL: Alright. And
5	MR. SCARFONE: matched the bundled 954.
6	MR. BALL: Right. And to be more precise
7	about that, there's a stretch of the 387 line from
8	Scovill Rock to Black Pond that's about 10 miles, right?
9	MR. SCARFONE: Ten, yes.
10	MR. BALL: Okay. And that is the portion
11	of the 387 line that you modeled as being reconductored,
12	correct?
13	MR. SCARFONE: Yes.
14	MR. BALL: So the remainder of the 387
15	line going from Black Pond all the way done to East Shore
16	you did not assume any reconductoring?
17	MR. SCARFONE: That's correct. We left
18	bundled 954
19	MR. BALL: Okay
20	MR. SCARFONE: because it has a higher
21	rating than 2156.
22	MR. BALL: Alright. And what is the
23	entire length of the 387 line from Scovill Rock to East

24 Shore?

1	MR. SCARFONE: It's about 10 miles from
2	Scovill Rock to Black Pond and about 22 miles from Black
3	Pond to East Shore.
4	MR. BALL: Now, you testified today as
5	part of your slide presentation that you believe that for
6	there to be a viable East Shore route a second 345-kV
7	line would have to be constructed along the 387 right-of-
8	way, is that right?
9	MR. SCARFONE: Yes, we did.
10	MR. BALL: And in fact this is something
11	that appears in the application on page G-18. You state
12	studies of this potential alternative determined that it
13	would not substantially reduce new 345-kV line
14	construction because in order to meet national and
15	regional reliability standards a second 345-kV line would
16	have to be built on separate structures on the Beseck to
17	East Shore right-of-way. You recall that?
18	MR. SCARFONE: That's correct.
19	MR. BALL: Alright. Now, the application
20	was filed October 9, 2003?
21	MR. SCARFONE: I believe so.
22	MR. BALL: In October when shortly
23	after the application was filed, the Towns in discovery
24	asked for the studies on which you based the conclusion

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1	that a second line was needed in that corridor. And the
2	initial response to and I'll give you the specific
3	interrogatory so you'll have it in front of you, it's DW-
4	16 (pause) let me know when you have it in front of
5	you (pause)
6	A VOICE: You all set?
7	A VOICE: Yeah, go ahead.
8	MR. SCARFONE: Yes, we have it.
9	MR. BALL: Okay. The initial response to
10	Question 16-A was that this decision was based on the
11	preliminary results of a draft ISO New England study, ISO
12	New England has not authorized release of the draft. Do
13	you see that?
14	MR. SCARFONE: Yes, I do.
15	MR. BALL: Okay. What ISO study are you
16	referring to?
17	MR. SCARFONE: I believe that was a
18	preliminary study done by ISO New England. I don't
19	recall what the status of that study is right now.
20	MR. BALL: That study is not a part of the
21	record?
22	MR. SCARFONE: I (pause) no, to my
23	knowledge the study was not released. It was just part
24	of an alternative study done by the ISO

1	MR. BALL: Alright, so
2	MR. SCARFONE: it was I do not think
3	it's part of this docket.
4	MR. BALL: Alright. So prior to the
5	application being filed, ISO conducted some sort of study
6	relating to the need for a second line, but you haven't
7	produced it to us?
8	MR. SCARFONE: ISO has not produced that
9	study for this docket.
10	MR. BALL: Help me understand why that is
11	not capable of being produced?
12	MR. SCARFONE: I would I think you
13	would have to ask the ISO.
14	MR. BALL: Alright. Is the study complete
15	now, do you know?
16	MR. SCARFONE: I do not know.
17	CHAIRMAN KATZ: But the study said that
18	this East Shore route would work if you had a second
19	line, correct?
20	MR. SCARFONE: I believe so. And I think
21	from our collective knowledge at CL&P, we believed that
22	the second line would be needed because if you had lost
23	the existing 387 line, you would overload the 329 line,
24	which is from Frost Bridge to Southington and underlying

1	one 115-kV lines. So from our collective knowledge of
2	the company, we believed that a second line from into
3	East Shore would be required.
4	CHAIRMAN KATZ: Okay, so did you get
5	comments from the Towns about how they felt about the
6	second line? Anybody?
7	MR. FITZGERALD: Well, I think it's
8	it's a matter of record that
9	CHAIRMAN KATZ: Yeah, just point we where
10	
11	MR. FITZGERALD: that the you will
12	see in the application that an East Shore route was not
13	identified as an environmentally, technically, and
14	whatever the third word is practical
15	A VOICE: Economical
16	MR. FITZGERALD: economically practical
17	alternative. And so it was not it was not presented
18	in the application as an alternative, and so it was not
19	part of the municipal consultation process
20	CHAIRMAN KATZ: But the municipal
21	consultation process has been ongoing, wouldn't you
22	agree, Mr. Fitzgerald? And apparently since this matter
23	has risen and my understanding was if you look at this
24	as the two legs of the triangle, that the problem wasn't

1	the north/south leg, your problem was the east/west leg
2	from East Shore over toward East Devon. And didn't we
3	just get testimony that this north/south leg works if you
4	have two lines?
5	MR. FITZGERALD: Technically it works, yes
6	
7	CHAIRMAN KATZ: Yes. Well, that's a good
8	start.
9	MS. BARTOSEWICZ: Let me add that the
10	municipal consultation process was primarily done prior
11	to the application being filed
12 .	CHAIRMAN KATZ: Understood
13	MS. BARTOSEWICZ: and as this was not
14	an alternative presented by the companies, we did not go
15	to those towns to ask their
16	CHAIRMAN KATZ: But did they come to you
17	and say
18	MS. BARTOSEWICZ: There are the towns
19	that are affected by the 387 right-of-way are not one and
20	the same towns that are affected by our proposal. So
21	where you have the Town of Wallingford in particular who
22	asked us to re-look at this, there are other towns on
23	that right-of-way that had not participated to date in
24	this application since they were not part of the towns

1	that we went to see in municipal consultation. So you've
2	got several towns that are Branford I believe there
3	are three towns that have not been consulted prior to the
4	application being filed.
5	CHAIRMAN KATZ: Understood. But have you
6	heard from the Town of Wallingford that says that we have
7	a problem if it's two lines on the 387 or we don't have a
8	problem?
9	MR. FITZGERALD: Okay, now I understand
10	the question
11	MS. BARTOSEWICZ: I I have not heard
12	from the Town of Wallingford well, I shouldn't say
13	that, let me I'd have to go back to the records
14	there's an awful lot of correspondence between the
15	municipalities and the company, I would have to go back
16	and look at all of the Wallingford correspondence in
17	order to tell you their opinion of one line versus two
18	lines
19	COURT REPORTER: One moment please.
20	(Pause).
21	MR. BALL: Obviously, I can't speak for
22	any of the Towns as to whether or not a second line is
23	acceptable, but in the apparently, this was some sort
24	of study upon which this conclusion was drawn that you

1 have to have a second line. And not to have seen this 2 study and not to have it a part of the record, obviously makes it difficult for everyone to evaluate the issue. 3 4 So --5 CHAIRMAN KATZ: Well, what's frustrating 6 for me is that people aren't asking the right questions 7 and here we are already in June. I mean, God, we've been 8 locked up in the same room for how many months. How long 9 is it going to take before you people communicate with 10 each other. 11 MR. BALL: But we specifically asked for 12 the production of the study and it hasn't been provided, 13 so --14 MR. ZAKLUKIEWICZ: I -- I think it's fair to say, Mr. Ball, that ISO conducts many, many, many 15 studies, and a number of them where the engineers look at 16 17 the solution and say this won't work, is there a formal 18 report prepared for which it's just more than here's the data sheets, here's the a formal final report? 19 20 answer is yeah, we look at hundreds of alternatives. 21 we file a formal report for every single alternative? 22 The ISO does not have the time to do that. And -- and 23 these discussions are taking place at all of the TEAC 24 meetings for which are totally open to the public, to all

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1 disciplines, including the -- anyone who wants to 2 participate. And so to turnaround and characterize this as someone is hiding information, it's just not the case. 3 It's a -- the fact of the matter is, is that that 4 specific aspect of it was demonstrated, it didn't work. 5 Is there a formal report of that, I guess my answer is 6 no, because if there had been a formal report, we would 7 have submitted it as part of the testimony in this 8 9 hearing. And -- and I believe ISO will be here the second week in June and you can ask them specifically why 10 they did not continue on formally and present a formal 11 12 report. 13 MR. TAIT: But do I understand right now 14 you just have said whether or not you had a report from 15 ISO, this was your company's opinion and that you have 16 submitted a study that you've been referring to of these 17 to work over? What are you lacking? 18 MR. BALL: No, no. Apparently, there is 19 some sort of study upon which the conclusion that a 20 second line was needed was based. 21 MR. TAIT: And that's in the control of ISO, which they will be here in June that you can ask 22 23 them about.

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MR. BALL: Okay -- well, I -- I mean I --

24

1	I thought what I just heard was that it was a public
2	record, a public document, so I'm still
3	MR. TAIT: I did not
4	MR. BALL: struggling to understand why
5	
6	MR. TAIT: I did not hear it was
7	MR. BALL: I was not able to get a copy
8	of it
9	MR. TAIT: I did not hear that. If you
10	think there's an ISO document you would like to see, I
11	think you will have a chance
12	MR. BALL: Okay
13	MR. TAIT: and you can ask ISO ahead of
14	time.
15	MR. BALL: Alright, I'll move on.
16	CHAIRMAN KATZ: Just to extend my analogy
17	from yesterday, we're here to paint a picture of a
18	solution. While there's a role in this world for art
19	critics, at some point we've got to pick up the brush and
20	paint the solution. And please, we're hoping to get the
21	testimony that shows us what that solution is.
22	MR. BALL: The seven load flow studies
23	that you asked PowerGEM to run that you referred to in
24	the testimony, pages 5 and 6, none of those studies

1	included a second line in the 387 corridor. That's
2	correct?
3	MR. SCARFONE: That's correct. They
4	showed that we needed a second line in that corridor.
5	MR. ASHTON: Just as a just as a matter
6	of clarification, the term study here, is that correctly
7	used or are these cases, load flow cases?
8	MR. SCARFONE: These are the load flow
9	cases based on the twenty-seven seven.
10	MR. ASHTON: Okay. So, I want to be sure
11	you understand the difference between a study which may
12	be the aggregation of the results of a lot of cases and a
13	case which is the response of the system to one set of
14	parameters, a line in service, a generator in service, a
15	generator out of service, what have you. And so Mr.
16	Zak has Mr. Zaklukiewicz has said that they may take a
17	look at a case and just say this ain't going to work and
18	throw it in a wastebasket and the fact they never pursue
19	it any further, so there is no study per say, there is a
20	case or was a case.
21	MR. BALL: Thank you, I appreciate that
22	clarification. And the reason I was using studies is
23	because that's how it was used in the Applicants'
24	testimony. But thank you

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1	MR. ASHTON: That's I think there was a
2	little bit of confusion on that.
3	MR. BALL: Okay. Now, eventually ISO did
4	in fact perform a reliability study dated February 18,
5	2004, correct?
6	MR. SCARFONE: Is this the comparison
7	study you are referring to?
8	MR. BALL: It was attached to Addendum No.
9	3.
10	MR. SCARFONE: I have it.
11	MR. BALL: Okay. And essentially what ISO
12	did was they compared your proposed route from Middletown
13	to Norwalk with the various East Shore routes that you
14	had asked PowerGEM to look at. Isn't that right?
15	MR. SCARFONE: Yes.
16	MR. BALL: Okay. And based on that
17	comparison of what you had asked PowerGEM to look at, ISO
18	concluded that your preferred route from Middletown to
19	Norwalk was a more reliable route, isn't that right?
20	MR. SCARFONE: That's correct.
21	MR. BALL: Okay. But again ISO was
22	looking at these seven PowerGEM studies, which did not
23	include any of the enhancements at the Beseck Substation,
24	the two lines going into Beseck, the line from Scovill

1	Rock to Chestnut Junction or the reconductoring of a
2	portion of the 387 line?
3	MR. SCARFONE: That's correct.
4	MR. BALL: Actually, I misstated the last
5	there was a review of a portion a reconductoring of
6	a portion of the 387 line but certainly not the entire
7	387 line?
8	MR. SCARFONE: That's correct
9	MR. BALL: Okay
10	MR. SCARFONE: from Scovill to Black
11	Pond.
12	MR. BALL: And those were the studies that
13	they looked at and formed the basis of the February 18,
14	2004 reliability study, right?
15	MR. SCARFONE: Yes.
16	MR. BALL: Okay.
17	CHAIRMAN KATZ: When we say study, are we
18	talking about the GE model at all?
19	MR. BALL: The
20	MR. ZAKLUKIEWICZ: No
21	MR. BALL: No.
22	CHAIRMAN KATZ: No, okay.
23	MR. BALL: No. These are
24	CHAIRMAN KATZ: That's separate?

1	MR. BALL: the thermal load flow
2	studies that PowerGEM was commissioned
3	CHAIRMAN KATZ: Okay, just the load flow,
4	not harmonics
5	MR. BALL: Exactly
6	CHAIRMAN KATZ: and transients okay.
7	MR. BALL: That's right. Now, yesterday I
8	received another PowerGEM, if not a study at least an
9	analysis that did model a second line along the 387
10	corridor, is that and that's dated May 24 th . You're
11	aware of that document?
12	MR. SCARFONE: Just a minute, I have to
13	get a copy of that
14	MR. BALL: That was filed in bulk
15	CHAIRMAN KATZ: Do we have an exhibit
16	number, Mr. Ball?
17	MR. BALL: Yes, I do. It was a supplement
18	to Question DW-16, and it's Exhibit No. 94-A.
19	MR. SCARFONE: I have it.
20	MR. BALL: Alright. Now in that document
21	actually before I ask that, is this the last PowerGEM
22	study that has been commissioned or are there others that
23	are ongoing that you know of?
24	MR. SCARFONE: I believe this might be the

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1	last	PowerGEM	study.	Ι'm	not	sure	on	that,	it	depends	on

- 2 what other scenarios people want us to look at.
- MR. BALL: Alright. Now in this study the
- 4 Beseck improvements were included, is that right -- or
- 5 perhaps you can tell me what improvements were looked at?
- MR. SCARFONE: Yes, we have Beseck in
- 7 there.
- MR. BALL: So did you have the Beseck
- 9 Substation and all of the transmission lines going into
- 10 Beseck --
- MR. SCARFONE: Yes, we did --
- MR. BALL: -- that are in your
- 13 application?
- MR. SCARFONE: Yes, we did --
- MS. RANDELL: Just to clarify, that's the
- 16 Beseck Switching Station.
- MR. BALL: Thank you. The Beseck
- 18 Switching Station. And --
- 19 CHAIRMAN KATZ: You just want to say
- 20 Beseck.
- 21 MR. BALL: I just -- I will say Beseck.
- But to date you have not studied an East Shore route that
- includes these Beseck improvements and the reconductoring
- of the entire 387 line, isn't that right?

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1	MR. SCARFONE: That's correct. With the
2	existing 387 line if you tie that into Beseck, the
3	strength the strong source of Beseck would probably
4	overload the 387, similar to the Power the existing
5	PowerGEM studies that you have.
6	MR. BALL: Okay, but again, you simply
7	haven't studied that to date, that particular
8	configuration
9	MR. FITZGERALD: Well
LO	MR. BALL: where the entire 387 line
L1	would be reconductored?
L2	MR. FITZGERALD: Well, I'm I'm going to
L3	sorry to mince words, but again we're using the term
L 4	study. And if you you may get a different answer
L5	depending on whether you're asking if they run load
L6	flows, whether he's analyzed it, whether they've
L7	commissioned a study. And so I I would just say the
L8	question as asked could be ambiguous.
L9	MR. BALL: Have you thank you have
20	you performed any load flow analyses which include the
21	reconductoring of the entire 387 line as well as the
22	Beseck improvements?
23	MR. SCARFONE: We've performed some
24	sensitivities. We have not completed what we call a

1 study. We have done some sensitivities based on some of the -- what we've heard in the Siting Council hearings. 2 3 MR. BALL: Well -- I'm sorry, what are 4 sensitivities? 5 MR. SCARFONE: What we did is we took a look at bringing -- constructing Beseck Switching Station 6 7 and tying the 387 line -- the existing 387 line into Beseck then into East Shore. And then from East Shore 8 9 going down to East Devon, Singer, then on to Norwalk. 10 Those results showed that we still continued to overload the 387 line and would -- and we would require a second 11 12 line from Beseck down to East Shore or East Devon. 13 MR. BALL: And presumably there are some 14 documents that you have that you'd be willing to produce 15 if asked? 16 MR. SCARFONE: Yes. 17 MR. BALL: Okay. And one other question, 18 the most recent PowerGEM document dated May 24th, we would ask that the data that you have underlying that report be 19 20 produced to us in SAB format if that's -- if we could get 21 that. 22 MR. SCARFONE: Okay --23 MR. FITZGERALD: What we've given you for 24 all the other studies --

1	MR. BALL: Correct
2	MR. FITZGERALD: sure.
3	MR. BALL: Now on the seven thermal load
4	flow studies of PowerGEM, in each of those load flow
5	studies was the Plumtree to Norwalk line that was
6	approved in Docket 217 assumed to be in service?
7	MR. SCARFONE: Yes, it was.
8	MR. BALL: Okay. Is there another
9	PowerGEM report dated April 14th that you're aware of?
10	MR. SCARFONE: Yes, I have it.
11	MR. BALL: Okay. Well, not having seen
12	it, again I'd simply ask that that be produced. We
13	haven't I don't believe that was produced to us.
14	MR. FITZGERALD: Just a minute, I have no
15	idea what anybody is talking about
16	A VOICE: I don't believe it's part of the
17	record either
18	CHAIRMAN KATZ: Off the record for a
19	minute. Do you want to confer
20	(Off the record)
21	CHAIRMAN KATZ: Do you want to re-ask the
22	question, Mr. Ball.
23	MR. BALL: Well, I simply asked if the
24	document dated April 14, 2004 that was apparently

1	produced by PowerGEM could be produced. We simply
2	haven't seen it
3	CHAIRMAN KATZ: And Mr. Fitzgerald said?
4	MR. FITZGERALD: And I said I'm not
5	assuming that it hasn't been produced, which I will
6	accept as a preface
7	CHAIRMAN KATZ: Yes
8	MR. FITZGERALD: I also know it's been
9	asked for, but we we'll produce it in any event. It
10	apparently does exist, so
11	CHAIRMAN KATZ: We'll take that as a yes.
12	MR. FITZGERALD: Yes.
13	MR. BALL: Let me shift back to the ISO
14	study that was dated February 18, 2004 that I had asked
15	you about. There are a number of tables in this study in
16	which the various PowerGEM documents were compared to
17	your Middletown to Norwalk route and there appears to be
18	a comparison of overloads, is that right?
19	MR. SCARFONE: That's correct.
20	MR. BALL: Alright. Now both the East
21	Shore configurations and the Middletown to Norwalk route
22	contain overloads when examined under certain conditions,
23	isn't that right?
24	MR. SCARFONE: That's correct.

1	MR. BALL: Now, I'm just looking at Table
2	4 and noticed that under the Middletown to Norwalk column
3	in a few instances there are the letters NC rather than a
4	number. Can you tell me what NC means?
5	MR. SCARFONE: That means the case did not
6	converge, it was not an acceptable solution. The PTI
7	load flow package didn't come up with an acceptable
8	solution.
9	MR. BALL: Alright. So to the extent that
10	the tables indicate NC, that's actually a worse
11	performance than some of the numerical ratings that
12	appear in those columns?
13	MR. SCARFONE: Yes, sir. However, I'd
14	like to point out to you where that location is. That
15	basically is the Plumtree to Triangle, really a radial
16	loop out of Plumtree. It really serves only local load
17	in the Danbury area. There are three transmission lines
18	that serve that area, Triangle to Middle River. It is
19	not it's a very localized area. And that in
20	consideration of what happens at Triangle and Middle
21	River really shouldn't influence your comparison of the
22	Middletown or East Shore alternative. And we do state
23	that indeed in the report itself.
24	MR. BALL: Okay. To shift gears

1	MR. ZAKLUKIEWICZ: I think one other
2	factor one other factor here is the EPRO software
3	package that is used is different than the PowerGEM
4	package when it comes to this, so it's what you see
5	here is slightly different. The fact that you come up
6	with NC is just indicative of the software package that
7	is used by EPRO in their studies relative to what the
8	PowerGEM is.
9	MR. SCARFONE: It's the same load flow
10	package, it's a different solution technique. Mr
11	Roger is correct, it's just a different solution
12	technique.
13	MR. BALL: Alright. I will shift gears,
14	if I can, to reconductoring.
15	CHAIRMAN KATZ: Just before we leave that
16	
17	MR. BALL: Yeah?
18	CHAIRMAN KATZ: Mr. Ball, have the
19	Towns identified an overhead route that they can live
20	with that you want PowerGEM to look at?
21	MR. BALL: I I certainly cannot speak
22	for all 16 towns on that, but that's certainly a
23	worthwhile question
24	CHAIRMAN KATZ: Thank you

1	MR. BALL: that we will undertake to
2	answer. If I may, I'll just switch topics to
3	reconductoring.
4	MR. PRETE: Chairman.
5	CHAIRMAN KATZ: Mr. Prete.
6	MR. PRETE: Reflecting on your question,
7	in hearing your line of questioning and your testimony,
8	are you not asking for a thermal load flow that assumes
9	Segment 1 in place and just the 387 line between East
10	Shore and East East Shore and Beseck, and then East
11	Shore to East Devon? Isn't that what you're asking?
12	MR. BALL: We have, I think, already
13	indicated the East Shore route that our consultants are
14	looking at, which would not include a second line, which
15	would have a new 345-kV line from East Devon to East
16	Shore, the reconductoring of the 387 line as well as all
17	the Beseck improvements.
18	CHAIRMAN KATZ: Okay, so you have a
19	scenario that the Towns are happy with that PowerGEM has
20	not yet run a load analysis on?
21	MR. BALL: That's right. And
22	CHAIRMAN KATZ: And you're going to give
23	that to them?
24	MR. BALL: We are conducting our own load

1	flow analyses on it. We have also provided that route
2	with specificity to them.
3	CHAIRMAN KATZ: Okay. But you might
4	A VOICE: We haven't looked
5	A VOICE: When
6	A VOICE: Do you have a timetable
7	MR. TAIT: I thought the East Shore we
8	would have East Shore your East Shore today?
9	MR. BALL: No
10	CHAIRMAN KATZ: No, that's July. This is
11	part of what
12	MR. BALL: This is part in addition.
13	And I think we're about
14	CHAIRMAN KATZ: In addition to the GE
15	model
16	MR. BALL: In addition to the GE studies,
17	we are also conducting our own load flow studies as part
18	
19	CHAIRMAN KATZ: Well, it might be valuable
20	to the Council if both your expert and their expert does
21	the same thing, the same scenario. And then if there are
22	differences, we can talk about it.
23	A VOICE: We will commission PowerGEM
24	immediately

1	CHAIRMAN KATZ: Thank you
2	MR. FITZGERALD: Well wait
3	A VOICE: Go ahead
4	CHAIRMAN KATZ: Your client has spoken
5	MR. FITZGERALD: No, no, the
6	A VOICE: Yes
7	MR. FITZGERALD: He hasn't completed the
8	sentence though. We don't know at least we don't know
9	yet maybe we'll know before the end of the day exactly
10	what they're talking about.
11	MR. TAIT: That's what we need, we need
12	proposals before us that will work, not proposals that
13	won't work. We ask all of you if you have some that will
14	work or you think will work that we can look at it and
15	the Applicant can say it will or it won't work.
16	CHAIRMAN KATZ: Okay. So Mr. Ball, I'm
17	going to assume that the Towns are going to provide that
18	scenario to the companies.
19	MR. BALL: Of course.
20	CHAIRMAN KATZ: Thank you.
21	MR. TAIT: And I'm going to ask Durham to
22	do the same on the northern routes, what they think will
23	work if we have to have a line
24	CHAIRMAN KATZ: Thank you

1	MR. TAIT: so the Applicant can look at
2	it.
3	MR. BALL: Thank you. I'll if I may,
4	I'll go on reconductoring.
5	CHAIRMAN KATZ: Yes.
6	MR. BALL: You tell me what
7	reconductoring is?
8	MR. SCARFONE: Reconductoring is the
9	replacement of existing conductors on the structures.
10	MR. BALL: And what's the purpose of it?
11	MR. SCARFONE: The purpose is to increase
12	the thermal capacity of the line.
13	MR. BALL: Now, you indicated that you
14	modeled the reconductoring of the 10 miles along the 387
15	line from Scovill Rock to Black Pond, correct?
16	MR. SCARFONE: Yes.
17	MR. BALL: But not the remaining 22 miles
18	I believe you testified from Black Pond down to East
19	Shore?
20	MR. SCARFONE: That's correct.
21	MR. ZAKLUKIEWICZ: Correct.
22	MR. BALL: Okay. Now, the 10-mile segment
23	from Scovill Rock to Black Pond has single conductors
24	called Blue Bird conductors, is that right?

1	MR. ZAKLUKIEWICZ: Correct.
2	MR. BALL: And the remaining distance of
3	the 387 line from Black Pond to East Shore has a bundled
4	pair of conductors, they're referred to as Rail
5	conductors, is that right?
6	MR. ZAKLUKIEWICZ: That's correct.
7	Bundled 954 ACSR.
8	MR. BALL: Alright. So in the East Shore
9	studies that you looked at, you modeled the
10	reconductoring of the 10 miles between Scovill Rock and
11	Black Pond using the same bundled Rail conductors as
12	exist on the remaining length of the line, of the 387
13	line?
14	MR. SCARFONE: That's correct. To match
15	the thermal capacity of the bundled 954.
16	MR. BALL: Alright. Now, separate from
17	Blue Bird and Rail conductors there is another conductor
18	that is called Genesee. Are you familiar with that type?
19	MR. ZAKLUKIEWICZ: Yes, we are.
20	MR. BALL: Alright. That that
21	conductor has the capacity to carry more power, is that
22	accurate?
23	MR. ZAKLUKIEWICZ: That's correct.
24	MR. ASHTON: Just to just to clarify

1	things so we get the mystery out of this, the various
2	names that are applied are names that are applied by the
3	cable manufacturer that relates to a specific size, is
4	that correct?
5	MR. ZAKLUKIEWICZ: That is correct.
6	MR. ASHTON: So a 2156 MCM ACSR means
7	2,156,000 circular mils and aluminum conductor steel
8	reinforced and that has a name for sales purposes by
9	Alcoa of Blue Bird, is that correct?
10	MR. ZAKLUKIEWICZ: That is correct.
11	MR. ASHTON: And so on down the line.
12	MR. BALL: Would it be okay if we referred
13	to it as Blue Bird going forward?
14	CHAIRMAN KATZ: I'm with Mr. Ball.
15	(Laughter).
16	MR. BALL: Alright. Now on May 24 th you
17	filed with the Siting Council a feasibility study
18	prepared by Burns and McDonnel relating to
19	reconductoring. Do you recall that?
20	MR. FITZGERALD: Where's
21	MS. RANDELL: Yes
22	MR. ZAKLUKIEWICZ: Yes, we did.
23	MR. BALL: Okay. This is response to
24	Towns' 66. Correct?

1	A VOICE: Yes.
2	MR. ZAKLUKIEWICZ: Yes, it is.
3	MR. BALL: Alright. I'd like to ask a few
4	questions about that study. I don't know who I should
5	direct the questions to, but
6	MR. ZAKLUKIEWICZ: Mr. Hogan will respond
7	to those specific studies since Burns and McDonnel
8	conducted the study.
9	MR. BALL: Alright. If in the back of
10	the study is an appendix, Appendix B is the page I want
11	to just focus on for a moment.
12	MR. HOGAN: I have it in front of me.
13	MR. BALL: Alright. Now, looking at the
14	chart there appears to be two columns, one is, depending
15	on the conductor type, the summer normal rating and the
16	other is the summer long-term emergency rating?
17	MR. HOGAN: That's correct.
18	MR. BALL: Can you describe what the
19	meaning of those two columns is? What's a normal rating?
20	MR. ZAKLUKIEWICZ: Normal rating is is
21	where the conductor can carry that many amperes 24 hours
22	a day, 365 days a year without damage to the conductors.
23	MR. BALL: And emergency rating?

1	long-term emergency rating is basically a load cycle
2	rating that allows by compliance with ISO New England the
3	loading of the line over a load cycle, which in the
4	summertime could be for 10, 12, 14 hours. The following
5	load cycle you have to return down below and be within
6	the normal rating of the conductor.
7	MR. BALL: Alright. Now, when you perform
8	load flow studies to test the reliability of a line, you
9	test the system at stressed conditions, isn't that right?
10	MR. ZAKLUKIEWICZ: That is correct.
11	MR. BALL: And in that context would the
12	emergency rating of the conductors become particularly
13	important because it would reflect the ability of the
14	conductors to carry more power at extreme conditions?
15	MR. ZAKLUKIEWICZ: The when we say
16	stressed conditions, we are using a generation dispatch,
17	which increases the flows on the lines, but it is not
18	it is following a contingency that you are then allowed
19	to go and exceed the normal rating of the conductor but
20	cannot exceed the long-term emergency rating of the
21	conductor because if you had that dispatch day in and day
22	out and the load was the same level, you would be
23	operating into the long-term emergency rating day in and
24	day out, and that is not allowed by the reliability and

1	operating standards.
2	MR. BALL: Alright. Now going back to
3	Appendix B, the thermal ratings are measured in amps, is
4	that right?
5	MR. HOGAN: Yes.
6	MR. BALL: So if you look at the normal
7	rating and you're looking at Blue Bird, which is the
8	single conductor we talked about before, the number there
9	is 2075, right?
10	MR. HOGAN: Yes.
11	MR. BALL: And if you use two Genesee
12	conductors, it increases to 2770 under normal rating?
13	MR. HOGAN: That's correct.
14	MR. BALL: Alright. So for that 10-mile
15	stretch between Black Pond and Scovill Rock, if you were
16	to reconductor that stretch of the line with Genesee
17	conductors rather than the existing Blue Bird conductors,
18	the capacity to carry power would increase by whatever
19	that percentage is, approximately a third, is that right?
20	MR. ZAKLUKIEWICZ: Can you can you ask
21	that question again? I think you made a technical error,
22	so I would like clarification.
23	MR. BALL: Okay. I'm sure you'll correct
24	me, but the I'm asking about the 10-mile stretch

1	MR. ZAKLUKIEWICZ: Yes
2	MR. BALL: from Black Pond to Scovill
3	Rock, okay, which currently has the single Blue Bird
4	conductors. If you were to reconductor that segment of
5	the 387 line using the two Genesee conductors, my
6	question was whether the capacity to carry power would
7	increase by approximately a third?
8	MR. ZAKLUKIEWICZ: For that for that
9	section of the line in your hypothetical question, the
10	answer is yes, recognize the rest of the line with two
11	954 kcmil ACSR only has a rating of 2490, so you'd have
12	to do something with the remaining portion of that line
13	since it's basically a radial line.
14	MR. BALL: Alright.
15	MR. ZAKLUKIEWICZ: But on that section, in
16	theory the answer would be yes.
17	MR. BALL: And similarly if you were to
18	reconductor the remaining 22 miles from Black Pond to
19	East Shore and instead of using the two Rail conductors
20	you were to use the two Genesee conductors, the capacity
21	to carry power would increase by approximately 10 or 15
22	percent, isn't that right?
23	MR. HOGAN: That's correct.
24	MR. BALL: Okay. And in terms of the

1	emergency rating, if you were to use the Genesee
2	conductors in that 10-mile segment between Black Pond and
3	Scovill Rock, the capacity to carry power would increase
4	using going from Blue Bird to Genesee would increase
5	by about 55 percent, would it not?
6	MR. ZAKLUKIEWICZ: Subject to doing the
7	math, the difference between 4,170 and 2,685, and if
8	that's 55 percent, I would agree with that.
9	MR. BALL: And the capacity to carry power
10	on the remaining 22 miles between Black Pond and East
11	Shore under an emergency rating would increase by about
12	30 percent if you reconductored to use the Genesee
13	conductors, isn't that right?
14	MR. HOGAN: Yes.
15	A VOICE: From Rail conductors
16	MR. BALL: Alright. Now and just to be
17	clear, to date you have not modeled any East Shore route
18	that includes the reconductoring of the entire 387 line
19	using two Genesee conductors, right?
20	MR. HOGAN: That's correct.
21	CHAIRMAN KATZ: If if you reconductored
22	those lines, would East Shore work without a second line?
23	MR. SCARFONE: It would not work without a
24	second line.

1	MR. BALL: But you haven't studied it yet?
2	CHAIRMAN KATZ: Yes, how do you know that?
3	MR. SCARFONE: How do we know that? The
4	PowerGEM analysis has shown that if you lost the existing
5	387 reconductored or existing line, we would overload
6	other lines, specifically the Southington to Frost Bridge
7	line and the 1610 line from Southington to the $115-kV$
8	line from Southington to Mix Avenue, and the I believe
9	the Bochum to Green Hill. So there are other 115-kV and
10	345-kV lines that overload. Indifferent to what size
11	conductor you put on the 387, you could put the biggest
12	conductor on it, we still have to design the system to
13	protect for the loss of that line.
14	MR. BALL: Let me ask you a question about
15	the 329 line, that's the line between Southington and
16	Frost Bridge, right?
17	MR. SCARFONE: Yes.
18	MR. BALL: Okay, which you just referred
19	to. One of the things that appears on a page of one of
20	the feasibility study is that a system analysis of the
21	alternative determined that reconductoring would be
22	necessary on the 329 line if you were to reconductor the
23	387 line, right?
24	MR. SCARFONE: Could you repeat that

1	question please?
2	MR. BALL: The well, I'll just read the
3	sentence. It says systems analysis of this alternative
4	determined that reconductoring the 387 line would impact
5	the existing 345-kV line, the 329 line between
6	Southington and Frost Bridge Substation, so similar
7	reconductoring would be necessary on the 329 line.
8	MR. SCARFONE: Correct
9	MR. BALL: Alright
10	MR. SCARFONE: amongst others.
11	MR. BALL: So I suppose the next
12	question is have you modeled any load flow studies that
13	include the reconductoring of the entire 387 line using
14	Genesee conductors and the 329 line using Genesee
15	conductors?
16	MR. SCARFONE: No, we have not. And I
17	believe Mr Roger has testified that assuming our
18	Section G-1 of our application of all that criteria that
19	we've included in that section, that the second line
20	would be required into East Shore.
21	MR. BALL: Alright. On the second page of
22	the feasibility study, it says that if more than 50
23	percent of the structures have to be replaced when you
24	reconductor, that would not be considered good utility

1	practice as a replacement of more than 50 percent would
2	necessitate the reevaluation of all the structures using
3	the heavier extreme wind loading case of the latest NESC
4	addition. Do you see that on page 2?
5	MR. HOGAN: Yes.
6	MR. BALL: Alright. First of all, what's
7	the NESC addition?
8	MR. HOGAN: It's the National Electric
9	Safety Code. And there were earlier editions, 1961 and -
10	- that I guess the original design occurred under. And
11	under reconductoring we did not use the newer code.
12	You're not required to go up and use the newer code
13	unless you're replacing out structures.
14	MR. BALL: Can you tell me what the
15	extreme wind loading case is that you refer to?
16	MR. HOGAN: The National Electric Safety
17	Code has increased the wind loading that's in the 2002
18	code. Essentially in 1961 it was 79 miles an hour. And
19	in 2002 it went up to 112. And those are safety codes
20	that I guess transmission lines are designed according
21	to.
22	MR. BALL: Is that the same as heavy
23	conditions which is a phrase you use later on in the
24	feasibility study?

180

1	MR. HOGAN: No, there's another case in
2	the National Electric Safety Code for, if you will, a
3	district loading, and that's where it's heavy, medium, or
4	light, and that's another criteria that has to be met.
5	MR. BALL: Alright. So the notion is that
6	obviously if you reconductor, there will be certain
7	structures that will need to be replaced?
8	MR. HOGAN: Yes.
9	MR. BALL: Okay. And if you exceed that
10	50 percent threshold, it becomes more problematic because
11	you have to look at all the structures on the line?
12	MR. HOGAN: That's our feeling, yes.
13	MR. BALL: When you took a look at the
14	Genesee conductors, you determined that you would not
15	have to you would not exceed that 50 percent
16	threshold, right?
17	MR. HOGAN: Yes, that's correct.
18	MR. BALL: So, it and in fact, I
19	believe it's on page 9 of the study, that if you were to
20	use Genesee conductors on the 387 line, approximately 24
21	percent of the structures would have to be replaced?
22	MR. HOGAN: Uh
23	MR. BALL: On page 9 it says the failure
24	rates

1	MR. ZAKLUKIEWICZ: What paragraph
2	MR. BALL: for the structures were 24
3	percent
4	MR. HOGAN: Yes
5	MR. BALL: for the loads from the
6	Genesee
7	MR. HOGAN: Yes.
8	MR. BALL: So that would equate with 47
9	structures out of the total 267 structures on the 387
10	line that would have to be replaced?
11	MR. HOGAN: Yes.
12	MR. BALL: Alright. And you also took a
13	look at using Genesee conductors on the 329 line between
14	Southington and Frost Bridge, right?
15	MR. HOGAN: Yes, we did.
16	MR. BALL: And similarly if you were to
17	reconductor using Genesee conductors, you would not have
18	to you would not exceed that 50 percent threshold of
19	structures that would have to be replaced, correct?
20	MR. HOGAN: Correct.
21	MR. BALL: Is it typically the older wood
22	structures that have to be replaced when you take a look
23	at the analysis in reconductoring?
24	MR. HOGAN: It depends. You know, what we

1	find is that once computers got into the design, people
2	were able to give more accuracy and less margin if you
3	will. And so it seems like before computers there
4	generally was more capacity by the old hand techniques
5	than what we see now, people design things closer to the
6	limits.
7	MR. BALL: The when were the structures
8	constructed on the 387 line, do you know?
9	MR. HOGAN: I know it was in the timeframe
10	that the 61 National Electric Safety Code was in effect,
11	so in the 60's.
12	MR. BALL: In the 60's. And what about
13	the 329 line, do you know?
14	MR. HOGAN: I believe that was more
15	let's see the 70's vintage (pause) 387 was in
16	the 70's and 329 was more in the late 50's.
17	MR. BALL: Alright. I want to follow up
18	on a question that I believe Mr. O'Neill asked yesterday
19	
20	MR. ASHTON: Excuse me for one second.
21	The 329 line is the Frost Bridge/Southington line?
22	MR. HOGAN: Yes.
23	MR. ZAKLUKIEWICZ: Yes.
24	MR. ASHTON: Would you agree that the

first 345-kV in New England began service in November or 1 2 late fall of 1965 from the Pleasant Valley supply? 3 CHAIRMAN KATZ: He probably has a picture 4 of him on a pole to prove it. (Laughter). 5 MR. ZAKLUKIEWICZ: Subject to check, we 6 will agree to that. 7 MR. ASHTON: So, I don't think it's the 8 1950's. 9 MR. BALL: I'm going to start asking Mr. 10 Ashton these questions. 11 MR. ASHTON: That's one advantage of white 12 hair or a little white hair. 13 MR. BALL: Now, the --14 MR. ASHTON: Could I ask also one other 15 question here that gets into bearing on philosophy. Mr. 16 Zaklukiewicz, if you saw a 345-kV circuit loaded up to 17 the vicinity of 800 to 1,000 megawatts, regardless of the 18 conductor size, would you be looking to rebuild the 19 circuit, or would you be looking more likely to add a 20 separate additional circuit along that path? 21 MR. ZAKLUKIEWICZ: Flows of that 22 magnitude, you would be looking to replace -- not 23 replace, reconductor, but to add a second circuit because

basically the amount of availability between a normal

24

1	rating and emergency rating is just not there.
2	MR. ASHTON: And also would that apply
3	the idea apply that you don't like to see too many eggs
4	in one basket or electrical watts in one structure, one
5	line?
6	MR. ZAKLUKIEWICZ: That is correct.
7	MR. ASHTON: Thank you.
8	MR. BALL: Getting back to I believe
9	this was a question that Mr. O'Neill had touched on
10	yesterday at some point is there a limited I assume
11	there's a limited life span for the structures
12	themselves? Whoever
13	MR. HOGAN: Yeah, but it varies though
14	depending on different applications.
15	MR. BALL: And
16	MR. HOGAN: I mean there are some lines
17	that are awfully old. You know, 1920's vintage that are
18	still up and running, but
19	MR. ZAKLUKIEWICZ: Are you speaking are
20	you speaking of wood structures or are you speaking of
21	steel lattice? They they would have two different
22	life spans.
23	MR. BALL: Tell me the distinction if you
24	would?

1	MR. ZAKLUKIEWICZ: Well a lattice
2	structure would especially if the lattice structure
3	has a concrete foundation to it, those we have a
4	number of lattice structures that are near 60 or 70 years
5	today.
6	Wood pole structures, depending on the
7	treatment it's given at the pole line, where you get the
8	bug infestation is at the ground level and up to a foot
9	below the ground level, if properly treated, it should
10	last 45 to 50 years, if not more.
11	MR. BALL: And that that was my
12	question in fact. So if you're talking about the wood
13	structures, at some point, 45, 50 years, at some point
14	you look to make to replace them, isn't that right?
15	MR. ZAKLUKIEWICZ: Yes.
16	MR. HOGAN: Yes.
17	MR. BALL: And in fact, many of the
18	structures that would fail using the Genesee conductors,
19	are they likely to be among the first that would have to
20	be replaced anyway?
21	MR. ZAKLUKIEWICZ: No, I think the 320
22	the 387 line was built somewheres in the late 70's, so
23	that has got a number of years before we would be looking
24	to change out those poles.

1	MR. BALL: But the 387 line, which was
2	constructed in the 60's, by my math, takes us pretty
3	close to 40 years
4	MR. ZAKLUKIEWICZ: The 329 or the 387?
5	MR. BALL: The 387 line. The structures,
6	I believe the testimony was were constructed largely in
7	the 60's. (Pause).
8	MR. ZAKLUKIEWICZ: Excuse me, could you
9	ask that question again.
10	MR. BALL: The the 387 line, the
11	structures were constructed largely in the 1960's
12	MR. ZAKLUKIEWICZ: On the northern on
13	the northern piece that you're talking about between
14	Scovill and Black Pond
15	MR. BALL: Okay, so
16	MR. ZAKLUKIEWICZ: Black Pond south was
17	in the late in the late 70's.
18	MR. BALL: Alright, so separate and apart
19	from reconductoring, at some point, particularly with
20	those older wooden structures, you would be looking to
21	replace them, isn't that right?
22	MR. ZAKLUKIEWICZ: I think I testified
23	that I would expect it to last 40 to 50 years with proper
24	with proper bug treatment. And we have been

1	performing that maintenance religiously. So since we
2	haven't gotten there yet, I can't tell you whether the
3	345 poles are going to last 60 years or 70 years with the
4	treatment we've been providing.
5	CHAIRMAN KATZ: If you did a second line,
6	would you want to do it replace the H-frames with
7	steel poles and put them on both?
8	MR. ZAKLUKIEWICZ: Visually, I think we
9	would have to turn around and determine there may be
10	locations where it would be preferable to do it with an
11	H-frame to keep the profiles down lower
12	CHAIRMAN KATZ: H-frame next to H-frame?
13	MR. ZAKLUKIEWICZ: H-frame next to H-
14	frame, which would end up being to low of structures as
15	opposed to having an H-frame and a delta or a vertical to
16	get around areas. So, I think in answering your
17	question as briefly as I can, I think it would be
18	determined area by area. We would try to work with the
19	towns to make it most compatible to the people living in
20	close proximity to the line.
21	CHAIRMAN KATZ: Mr. Ball, if you've
22	already asked them what a second line would look like,
23	just point me in the right direction and I won't waste
24	time pursuing it?

1	MR. BALL: I I did not ask that
2	question
3	CHAIRMAN KATZ: Okay
4	MR. BALL: so
5	MR. ZAKLUKIEWICZ: I just want to make
6	certain we understand, we can't put both circuits on a
7	single structure that's all.
8	CHAIRMAN KATZ: Okay. So but if you
9	if a second line was required to make East Shore work,
10	and you're not agreeing that it does I understand, but it
11	would be an H-frame next to an H-frame, so you'd have to
12	acquire more right-of-way or is the right-of-way wide
13	enough there?
14	MR. ZAKLUKIEWICZ: The right-of-way is
15	wide enough from where we already have easements.
16	CHAIRMAN KATZ: Thank you.
17	MR. HOGAN: One point of clarification
18	might be worth noting. With the higher wind loads there
19	is a chance that it may be more economical to go to a
20	steel H-frame as opposed to the wood. And that at this
21	point isn't really
22	CHAIRMAN KATZ: But the height would be
23	the height would not change?
24	MR. HOGAN: That is correct.

1	MR. BALL: This might be a good time for a
2	break recognizing that it's 3:00 o'clock, at least in my
3	examination, unless you want Attorney Kohler to go on
4	CHAIRMAN KATZ: But this is a good time
5	for you?
6	MR. BALL: It's a good time for me.
7	CHAIRMAN KATZ: And are you finished or
8	are you going to come back and have more?
9	MR. BALL: I might have a couple of more
10	questions.
11	CHAIRMAN KATZ: Okay. We will take a 10-
12	minute recess.
13	MR. BALL: Thank you.
13 14	MR. BALL: Thank you. (Whereupon, a short recess was taken.)
	<u>-</u>
14	(Whereupon, a short recess was taken.)
14 15	(Whereupon, a short recess was taken.) CHAIRMAN KATZ: Let us resume. Mr. Ball,
14 15 16	(Whereupon, a short recess was taken.) CHAIRMAN KATZ: Let us resume. Mr. Ball, I just want to start with a procedural question to you.
14 15 16 17	(Whereupon, a short recess was taken.) CHAIRMAN KATZ: Let us resume. Mr. Ball, I just want to start with a procedural question to you. If this Council wanted to know how the Towns felt about
14 15 16 17 18	(Whereupon, a short recess was taken.) CHAIRMAN KATZ: Let us resume. Mr. Ball, I just want to start with a procedural question to you. If this Council wanted to know how the Towns felt about an East Shore route that included two lines 345 lines
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14 15 16 17 18 19 20 21	(Whereupon, a short recess was taken.) CHAIRMAN KATZ: Let us resume. Mr. Ball, I just want to start with a procedural question to you. If this Council wanted to know how the Towns felt about an East Shore route that included two lines 345 lines on the 387 right-of-way, how would you suggest that we do that? MR. BALL: Other than the fact that you've

1	I'm not sure that all 16 towns that have been grouped
2	to some extent would be able to answer that question the
3	same, but certainly we can all undertake to answer that
4	question for you.
5	CHAIRMAN KATZ: Great. If all the
6	affected towns who wish to weigh in, we'd I think we'd
7	appreciate under our mantra of no stone unturned, we'd
8	appreciate hearing that.
9	MR. BALL: Yes.
10	CHAIRMAN KATZ: Okay, let's proceed with
11	cross uh Mr. Prete.
12	MR. PRETE: Yes. I think Anne pointed out
13	that North Branford, East Haven and New Haven are not
14	part of those 16 towns at all.
15	CHAIRMAN KATZ: Hmm
16	MR. PRETE: And I know I have had
17	conversations with New Haven and I won't characterize
18	exactly what they said, but it wasn't of interest at all.
19	CHAIRMAN KATZ: It was probably not polite
20	enough to be repeated.
21	MR. PRETE: That would probably be an
22	understatement.
23	CHAIRMAN KATZ: An interesting dilemma.
24	Okay, why don't we we'll note that for the record.

1	But let's for the towns that are part of this docket,
2	let's get some comments.

- MR. PRETE: Would you like us to proceed and ask questions to North Branford and East Haven about
- 5 their feelings? We'll be happy to do so.
- 6 CHAIRMAN KATZ: Oh, yes, if you're
- 7 volunteering.
- MR. TAIT: I think that would be very
- 9 helpful.
- 10 CHAIRMAN KATZ: Yes.
- MR. FITZGERALD: Is that the only two?
- 12 Aren't there -- aren't there more?
- MR. PRETE: Of the towns that are not in
- this particular proceedings --
- MR. FITZGERALD: Right --
- MR. PRETE: -- my understanding is North
- 17 Branford, East Haven and New Haven.
- A VOICE: (Indiscernible) -- Branford --
- MR. PRETE: I'm sorry, and Branford.
- A VOICE: New Haven is part of this
- 21 proceeding.
- MR. TAIT: Mr. Fitzgerald, this is a
- procedural question, and I guess it's for all counsel, I
- assume if we seriously consider an East Shore

1	alternative, we will need to hold hearings on that
2	particular alternative, as well as the alternate north
3	route? I mean giving some thoughts on it, not tonight,
4	but if we decide to incorporate any of these alternatives
5	that were not part of the original application, what do
6	we do?
7	CHAIRMAN KATZ: Yes, we'd like all
8	attorneys to give that some thought.
9	MR. TAIT: Do we need to hold new hearings
10	on the East Shore alternative if it's a viable
11	alternative, the north route, and the route that you
12	talked triangular around Royal Oaks, does that require
13	a reopening for that particular section?
14	MR. FITZGERALD: Well, I
15	MR. TAIT: Don't answer me now, just think
16	about it everybody.
17	MR. FITZGERALD: I've been thinking about
18	it (laughter) I've been thinking, not a whole lot -
19	_
20	MR. TAIT: Good, I have been too.
21	CHAIRMAN KATZ: Mr. Emerick.
22	MR. EMERICK: I think something else to
23	think about is if we were to locate a switching station
24	at Black Pond in the realm of it wasn't really advertised

1	
2	MR. TAIT: The neighbors
3	CHAIRMAN KATZ: Right.
4	MR. TAIT: the towns.
5	CHAIRMAN KATZ: I think when it comes
6	and I hate to say this word September, but if we end up
7	choosing other than the proposed route, we probably would
8	have to do a limited reopening in September to fully
9	flesh out
10	MR. TAIT: Yeah
11	CHAIRMAN KATZ: that alternative piece.
12	MR. TAIT: But at some point we're going
13	to have to call this on because of darkness (laughter)
14	
15	CHAIRMAN KATZ: Yes
16	MR. TAIT: it's evening.
17	CHAIRMAN KATZ: Right.
18	MR. TAIT: Another analogy.
19	CHAIRMAN KATZ: Yes.
20	A VOICE: (Indiscernible) no power.
21	CHAIRMAN KATZ: Just food for thought.
22	Let's proceed. Mr. Ball, you have further cross?
23	MR. BALL: I have no further questions.
24	CHAIRMAN KATZ: Miss Kohler.

1	MS. KOHLER: For the record, Julie
2	Donaldson Kohler for the same towns. I actually do have
3	a couple of questions for Miss Mango, so if she is in
4	fact like Elvis in the building.
5	A VOICE: She was
6	A VOICE: She was and just like Elvis she
7	
8	MR. FITZGERALD: I'm sorry, I thought
9	she'd be back.
10	MS. KOHLER: No, that's okay.
11	CHAIRMAN KATZ: Would you prefer to wait
12	for her
13	MS. KOHLER: No, I can
14	CHAIRMAN KATZ: or would you prefer to
15	do the other witnesses
16	MS. KOHLER: I can just do the non-
17	environmental
18	CHAIRMAN KATZ: Okay, let's do the other
19	witnesses and then we'll get to her.
20	(Pause)
21	MS. KOHLER: I'm sorry, most of it
22	actually is environmental just let me flip through
23	MR. FITZGERALD: Here she is.
24	MS. KOHLER: Oh. Just a couple of

1	questions about the environmental impacts of East Shore.
2	Mr. Ball dealt with the complex technical aspects of the
3	East Shore route and I'd just like to focus on the non-
4	technical aspects of East Shore. And for the purposes of
5	this entire line of questioning, we're going to focus on
6	East Shore along the existing 387 corridor, so none of
7	the railroad right-of-ways or the marine routing.
8	In the prefiled testimony is it true the
9	conclusions regarding the clearing proximity to
10	residential areas and a school are based upon the
11	assumptions that a second line would need to be
12	implemented in the right-of-way?
13	MS. LOUISE MANGO: Yes.
14	MS. KOHLER: And if it was determined that
15	a second line was necessary to make this routing feasible
16	I mean you've articulated concerns regarding clearing
17	and the proximity to certain sensitive receptors.
18	MS. MANGO: Is that a question?
19	MS. KOHLER: Such as a yes. Have you?
20	MS. MANGO: We have generally identified
21	those issues.
22	MS. KOHLER: And I think Chairman Katz
23	mentioned this earlier, but is it true that the right-of-
24	way, the existing 387 corridor ranges from 275 to 320

1	feet wide and no further widening of the right-of-way
2	would be necessary?
3	MR. PRETE: That is correct.
4	MS. KOHLER: And that no private property
5	would need to be acquired?
6	MS. MANGO: That's correct as I understand
7	it.
8	MR. PRETE: Except for the transition
9	station that would be needed in East Shore.
10	CHAIRMAN KATZ: How much room is there on
11	the East Shore property now? You have that little Cross
12	Sound station down there near there, correct?
13	MR. PRETE: There's adequate land. It's
14	owned by somebody other than the utility.
15	CHAIRMAN KATZ: Okay.
16	MS. BARTOSEWICZ: I
17	CHAIRMAN KATZ: Or a different utility
18	maybe.
19	MS. BARTOSEWICZ: Miss Kohler, let me add
20	one more statement. In Wallingford as you come down
21	Tradition Golf Course, there would have to be essentially
22	a swapping of property with the Tradition Golf Course for
23	the piece of property they own between the golf course
24	and the railroad and the highway.

1	MS. KOHLER: Okay. And you've raised a
2	concern about the extent of clearing necessary for the
3	second line?
4	MS. MANGO: Correct.
5	MS. KOHLER: Okay.
6	MR. ASHTON: (Indiscernible) I assume
7	that you're postulating a second circuit that would match
8	the first circuit, be it an H-frame, there's no
9	restrained conductors, it's not a delta configuration or
10	anything like that, is that correct?
11	MS. MANGO: That's correct.
12	MR. ASHTON: So if there were, you could
13	take steps if whether they were merited or not is not
14	I'm not debating but you could take steps to make
15	it a more compact construction than the original line?
16	MS. MANGO: That's correct, with a taller
17	structure.
18	MR. ASHTON: Um-hmm.
19	CHAIRMAN KATZ: On June 16 th can you be
20	prepared to discuss EMFs on a right-of-way with two
21	lines?
22	MR. PRETE: I believe that might be very
23	difficult since we would have to do load flows on an
24	assumption of a design of an electrical system that we

1	don't have. We don't know how much power would be going
2	on the line, the new line until such time as we have a
3	design of exactly what the electrical configuration is.
4	CHAIRMAN KATZ: Okay.
5	MR. ASHTON: Didn't you look at a second
6	circuit on there in your load flows? You said the first
7	circuit wouldn't work, you needed a second circuit. Did
8	you look at a second circuit as a load flow case?
9	MR. PRETE: We looked at a second circuit
10	assuming Segment 1 was in place is that what you're
11	asking me?
12	MR. ASHTON: Well, I'm not I'm not
13	quite sure what I'm asking
14	CHAIRMAN KATZ: My concern is that I just
15	don't want to shift the EMF
16	MR. ASHTON: Insofar as you have a
17	different
18	CHAIRMAN KATZ: just to a different
19	group of people.
20	MR. ASHTON: Insofar insofar as you
21	have a load flow which shows a second circuit on the 380
22	paralleling the 387 line, I assume that load flow
23	could be a basis for EMF calculation?
24	MR. ZAKLUKIEWICZ: I think we can do some

1 quick studies to come up with some approximations. Ι 2 think the second big piece that needs to give us some 3 guidance on is whether from East Shore to East Devon is all underground or it's a composite underground/overhead. 4 5 That piece means all the difference in the world over the 6 flow that flows down the two circuits that would go one 7 from Beseck to East Shore and one that goes from Scovill 8 to East Shore --9 CHAIRMAN KATZ: Yeah, that's fair --10 MR. ZAKLUKIEWICZ: -- that other leg in 11 So can you give us some guidance if we do that? 12 I think the worst case scenario would be an all 13 underground from -- with three cables from East Shore to 14 East Devon. That would give you I believe the worst case 15 as opposed to using numbers which would be -- because the 16 flow will want to go down that leg. 17 MR. PRETE: If I can interject, Roger, 18 just for a second as we're thinking out loud, would you 19 tend to agree that our cross-section 5 in our proposed 20 route today, which of course shares the 387 right-of-way 21 between Beseck and East Wallingford Junction, would be a 22 similar proxy to the right-of-way if we were to use the 23 assumption the Chairwoman had asked, which is a line from 24 Beseck to East Shore?

1	CHAIRMAN KATZ: Nice redirect, Mr. Prete,
2	you should get a percentage. (Laughter).
3	MR. PRETE: I've been after that for a
4	while.
5	MR. ZAKLUKIEWICZ: I I I believe
6	well, I believe it will be close. I'm not going to
7	testify that that would be the worst case. That's the
8	issue.
9	CHAIRMAN KATZ: Okay. I'm going to have
10	you all think on that one.
11	MR. TAIT: Because our danger here is
12	we're talking without people in the room
13	CHAIRMAN KATZ: Right.
14	MR. TAIT: and we're just switching
15	EMFs from one side of the State to the other and not
16	gaining any ground unless we are gaining ground. And
17	we're talking in a vacuum and it bothers me.
18	MR. ZAKLUKIEWICZ: Can we can we
19	discuss this in more detail tonight
20	CHAIRMAN KATZ: Yes
21	MR. ZAKLUKIEWICZ: and then first thing
22	tomorrow morning
23	CHAIRMAN KATZ: Yes
24	MR. ZAKLUKIEWICZ: maybe we can report

1	back to you, the Commission, and we'll give you our
2	thoughts as to what we can and can't do
3	CHAIRMAN KATZ: That would be an excellent
4	idea
5	MR. ZAKLUKIEWICZ: as opposed to making
6	promises here
7	CHAIRMAN KATZ: Yes
8	MR. ZAKLUKIEWICZ: and having to sit
9	here and say we didn't deliver.
10	MR. ASHTON: Just one other question.
11	We've used the term right-of-way pretty indiscreetly.
12	Some of the right
13	MR. TAIT: Indiscriminately.
14	MR. ASHTON: Indiscriminately, thank you -
15	- (laughter) it's also indiscreetly
16	MR. ZAKLUKIEWICZ: I'm glad you don't
17	correct my English (laughter) we wouldn't have time
18	for any other testimony.
19	MR. TAIT: I was tempted one or two times.
20	MR. ASHTON: I want you to know it's tough

fee owned outright?

21

22

24

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being a Council member at times. The right-of-way from

Beseck to East Shore, is that a right-of-way or is that

MR. ZAKLUKIEWICZ: To the best of my

1	knowledge that is a that is an easement.
2	MR. ASHTON: It's an easement and not fee
3	owned?
4	MR. ZAKLUKIEWICZ: That's to the best
5	of my knowledge, but I will double check that.
6	CHAIRMAN KATZ: Great, we'll expect that
7	report
8	MR. ASHTON: How about
9	CHAIRMAN KATZ: tomorrow morning too.
10	MR. ASHTON: How about the right-of-way
11	from Beseck to well if you go to Haddam Substation all
12	the way, that's a right-of-way, is it not, an easement?
13	MR. ZAKLUKIEWICZ: I believe the answer to
14	that is yes.
15	MR. ASHTON: And how about from Black Pond
16	Junction to Scovill, is that an easement or fee owned?
17	MR. ZAKLUKIEWICZ: I'd have to double
18	check it
19	MR. ASHTON: Okay
20	MR. ZAKLUKIEWICZ: and get you an
21	answer on that.
22	MR. ASHTON: There is a difference in the
23	title in the degree of control of the land, is there

not between the two, fee owned and easement?

24

1	MR. ZAKLUKIEWICZ: We that is correct.
2	And we will we will get a few answers to those in the
3	morning.
4	MR. ASHTON: Thank you.
5	CHAIRMAN KATZ: Mr. O'Neill.
6	MR. O'NEILL: Yes. While we're in the
7	area of conductors, I was wondering if the Company has
8	done any analysis of a type of of a new type of
9	conductor called an ACCC conductor, which I understand
10	uses aluminum and a composite core, thereby reducing EMFs
11	significantly and creating a lighter conductor? If it's
12	possible, if you haven't studied this, would you please
13	give us some kind of report on this new technology?
14	MR. ZAKLUKIEWICZ: I believe I believe
15	we've looked at those, Mr. O'Neill, and we can provide
16	you with a document as to our sense of where the industry
17	is
18	CHAIRMAN KATZ: Thank you
19	MR. ZAKLUKIEWICZ: but my understanding
20	is that most of the industry is still focused on smaller
21	conductor sizes, meaning the 556's and 336's as opposed
22	to into the 1272's and those larger conductors
23	MR. O'NEILL: Well
24	MR. ZAKLUKIEWICZ: but we we will

1	clarify that.
2	MR. O'NEILL: And if you could reflect
3	upon it in the aspect of the 115 as well as the 345, it
4	would be appreciated.
5	MR. ZAKLUKIEWICZ: We will try to do that,
6	Mr. O'Neill.
7	MR. O'NEILL: Thank you.
8	CHAIRMAN KATZ: Thank you. Back to you,
9	Miss Kohler.
10	MS. KOHLER: Thank you. Miss Mango, back
11	to our discussion about the environmental impacts along
12	the East Shore route, in fact one of the basis for
13	finding the East Shore route to be unacceptable was the
14	vegetative clearing required. Is that accurate?
15	MS. MANGO: Well, my understanding is that
16	there were reliability issues and other issues associated
17	with it. And also the fact that once one gets to East
18	Shore, one has to go west and there's some issues there,
19	how to go west. But the vegetative clearing was a thing
20	that was one factor environmentally that immediately
21	stands out because although the right-of-way as an
22	easement we think is wide, there is no other line as
23	there is say for example from Cook Hill Junction to East
24	Devon where there's two existing lines three existing

1	lines in fact that would be nemeral and a line
	lines in fact that would be removed and replaced by two.
2	Here and that Cook Hill Junction to East Devon is
3	maintained already. In the case of the 387 line there's
4	only one H-frame and we would have to add another
5	structure of some type. So clearing would definitely be
6	required, including this whole wooded area around Lake
7	Saltonstall.
8	MS. KOHLER: So the answer to my question
9	is yes
10	MS. MANGO: Yes
11	MS. KOHLER: clearing was one of the
12	basis
13	MS. MANGO: that would be a long
14	answer, yes. But it wasn't the only factor.
15	MS. KOHLER: I think we might be in the
16	period of the crisp answer/crisp question point of the
17	day.
18	Yesterday we talked about the distinction
19	between vegetative clearing and forested or woody
20	clearing. And it was my understanding from our dialogue
21	that vegetative clearing was sort of a global term and
22	forested or woody clearing was a more specific term. Is
23	that accurate?

MS. MANGO: Yes.

24

1	MS. KOHLER: Okay. And your testimony
2	states that 150 acres of clearing would be necessary for
3	the entire East Shore route. And you note that this
4	amount includes tree clearing in the Lake Saltonstall
5	area. However, in this morning's presentation it was
6	indicated that 150 acres of trees would be removed
7	specifically in the area of Lake Saltonstall.
8	MS. MANGO: I think Mr. Welter can answer
9	this better
10	MS. BARTOSEWICZ: No, let me clarify that
11	presentation. The number we use in that presentation was
12	for the entire 387 route, not just for Lake Saltonstall.
13	So, I apologize if it appeared that that was the case.
14	MS. KOHLER: So in the testimony that
15	talks about 150 acres of vegetative clearing including
16	tree removal, this morning's presentation talked about
17	150 acres of tree removal?
18	MS. MANGO: We're talking about 150 acres
19	of forestland comparable to the 97 or some acres of
20	forestland that we've identified as estimated to be
21	removed along the proposed route, the entire proposed
22	route. So it's not shrub/scrub vegetation, this is
23	based on the aerial review that we've done, forested
24	vegetation only.

1	MS. KOHLER: Okay, so in the testimony
2	when it talks about 150 acres of clearing including tree
3	removal
4	MS. MANGO: Including tree removal around
5	Lake Saltonstall, these are the trees. We're not talking
6	about a Blueberry Bush, you know, habitat, you know
7	Dogwood habitat. We're talking about tall trees.
8	CHAIRMAN KATZ: So if there was a second
9	line next to the 387, more trees near Lake Saltonstall
10	would have to be removed?
11	MS. MANGO: More trees in general
12	CHAIRMAN KATZ: Okay
13	MS. MANGO: 60 more acres of trees or,
14	you know, 53 more, or whatever it was 157 minus 97, or
15	whatever it was 150 minus 97
16	CHAIRMAN KATZ: And some of those would be
17	on the watershed lands?
18	MS. MANGO: Yes. The forested area around
19	Lake Saltonstall was simply called out in the prefiled
20	testimony as an example because that particular area is
21	all mature forest.
22	CHAIRMAN KATZ: Okay. Mr. Lord is in the
23	room. If you could just tell your witness and we'll
24	explore that tomorrow. Thank you.

1	MS. KOHLER: If if you could just look
2	at your because now I'm a little confused if you
3	could just look at the prefiled testimony on page 15, the
4	very last answer, the description of clearing talks about
5	the existing right-of-way and not just the Lake
6	Saltonstall area. At the very bottom of page 15, it says
7	because the existing right-of-way only accommodates one
8	345-kV line and one 115-kV line, additional vegetation
9	clearing would be required.
10	MS. MANGO: Yes, I see that. And I guess
11	I would have to say that that was slightly poorly
12	written, because my understanding from the calculations
13	that Burns and McDonnel has done was that it would be 150
14	acres of forestland, which is the comparison that we made
15	to the information we have in the application for the
16	proposed route, the 97 acres of forestland.
17	MS. KOHLER: Okay. Some of the criteria
18	that you found to be a valid basis for concerns about
19	this East Shore route is its proximity to certain
20	sensitive receptors. One of the reasons that were cited
21	as the basis for the East Shore route being objectionable
22	is the result in proximity of the new 345-kV line to a
23	school. Is an is opposing an East Shore route, you
24	agree, that proximity to a school is a valid basis not to

1	construct a transmission
2	MR. FITZGERALD: I'm going to I'm going
3	to object to the premise to that question. There was a
4	presentation made that provided data. I think it's an
5	unfair characterization of the record to say that we have
6	voiced or that anybody in that presentation stated an
7	objection to the East Shore route based on any of that
8	proximity data. That was data that is statutorily
9	relevant and it was provided, but I think the only
10	objection to the East Shore route that has been expressed
11	by the companies is one related to reliability.
12	CHAIRMAN KATZ: Why don't we
13	MS. KOHLER: Maybe
14	CHAIRMAN KATZ: rephrase the question -
14 15	CHAIRMAN KATZ: rephrase the question -
	CHAIRMAN KATZ: rephrase the question - - MS. KOHLER: maybe my characterization
15	
15 16	- MS. KOHLER: maybe my characterization
15 16 17	MS. KOHLER: maybe my characterization of objection is I can rephrase it, but on page 28 of
15 16 17 18	MS. KOHLER: maybe my characterization of objection is I can rephrase it, but on page 28 of the prefiled testimony it talks about three reasons that
15 16 17 18 19	MS. KOHLER: maybe my characterization of objection is I can rephrase it, but on page 28 of the prefiled testimony it talks about three reasons that reasons that it perhaps should not be constructed. It
15 16 17 18 19 20	MS. KOHLER: maybe my characterization of objection is I can rephrase it, but on page 28 of the prefiled testimony it talks about three reasons that reasons that it perhaps should not be constructed. It says that a 345-kV line could be constructed along the
15 16 17 18 19 20 21	MS. KOHLER: maybe my characterization of objection is I can rephrase it, but on page 28 of the prefiled testimony it talks about three reasons that reasons that it perhaps should not be constructed. It says that a 345-kV line could be constructed along the 387 right-of-way between Beseck and East Shore, however

1	So if the forested vegetation clearing was one basis for
2	concern, the second another basis for concern was the
3	alignment that would abut at least one school?
4	MS. MANGO: I think what we were trying to
5	explain here is that the 387 line has many
6	characteristics that are not completely unlike the
7	proposed route. So it's not as though we looked at this
8	route and it was all prairie land and it was so startling
9	different than the proposed route. The proposed route
10	has some residential areas, the 387 line has residential
11	areas. You know, the 387 line goes into New Haven. You
12	know, the proposed route goes into some developed
13	portions of other areas. We have forested areas, we have
14	some schools that are in proximity. So, I think all
15	we're trying to say here is, you know, not that schools
16	were an ultimate criteria, they were certainly one that
17	the companies looked at, but just simply to give the
18	Council and the other parties an idea that this route is
19	just not startling different on sort of a surrounding
20	land use basis from the proposed route, so that's
21	that's all.
22	MS. KOHLER: But but back to my
23	question about because you've cited it
24	MR. TAIT: (Indiscernible) show a chart

1	
2	MS. KOHLER: as being a basis for
3	concern, do you agree that proximity to a school is an
4	area of concern for a 345-kV line?
5	MS. MANGO: Well
6	MR. FITZGERALD: Objection
7	MS. MANGO: I don't think I could say
8	that.
9	MR. TAIT: It's a statutorily required
10	indicator. Didn't you folks put on a chart of comparing
11	do we have that in hard copy yet?
12	A VOICE: No
13	MR. PRETE: It's being printed.
14	MR. TAIT: Okay. Because that tells us
15	A VOICE: Yes
16	MR. TAIT: because that's my problem,
17	Miss Kohler, is that we're having a whole new route that
18	has similar problems to the old route, and you're asking
19	us to choose somebody else's route, and they aren't here.
20	MR. PRETE: Mr. Tait, I think the basis of
21	our decision in October not to have the 387 line, the
22	route as a viable alternative stands clear here as well,
23	that when you look in comparison, as Miss Mango has
24	stated, there's 50 percent more wooded vegetation, trees

1	that need to be cleared. In addition, there are
2	operational and reliability issues as you get to East
3	Shore and even to get to East Devon because you have to
4	go underground, you can't simply go, as you know, across
5	New Haven. And thirdly, the cost is approximately twice
6	as much. And the companies in looking at the balances
7	that we're statutorily required to look at do not see any
8	benefits that over-weigh on a balance basis a doubling of
9	costs. And that's all we're trying to present.
10	CHAIRMAN KATZ: Let's
11	MR. TAIT: A chart to that effect
12	including the costs might be of interest to the Council.
13	MR. PRETE: Yes, sir.
14	MR. TAIT: This morning's was just the
15	physical comparison.
16	MR. PRETE: Right.
17	CHAIRMAN KATZ: Why don't we note the
18	proximity to the school and move on.
19	MS. KOHLER: The the all of this
20	last discussion is assuming that the second line would be
21	required. Let's assume that the second line is not
22	required, is it true to say that the 150 acres of
23	forested removal would not be required?
24	MS. MANGO: I would imagine so. I mean

1	it's not something that I looked at.
2	MS. KOHLER: Even if you were simply
3	reconductoring the existing line?
4	MS. MANGO: One would imagine that that
5	would be the case.
6	MS. KOHLER: Okay.
7	MR. ZAKLUKIEWICZ: I would
8	MS. KOHLER: And
9	MR. ZAKLUKIEWICZ: I would want to make
10	certain we clearly understand. When you say simply
11	reconductoring the existing line, the magnitude and the
12	time it's going to take to reconductor and change out
13	structures on the 387 line, which is the only source feed
14	down to that area, and the uplift costs that are going to
15	be incurred by Connecticut ratepayers has not been
16	estimated. And it is far going to surpass in my judgment
17	the cost of building the second 345-kV line.
18	You know, it's like pumping \$9,000.00 into
19	an 18-year-old vehicle. Which are you better off doing,
20	buying a brand new vehicle with a 100,000-mile warranty
21	or pumping all of that money into it. And all I'm saying
22	is to reconductor as you're proposing the 387 line from
23	Scovill to Black Pond, and in addition, as I hear it, you
24	want to reconductor the 387 line from Black Pond down to

East Shore, while that is taking place there is no 345 1 2 connection any longer down to the New Haven area. 3 already strapped presently because of overloads and now you're taking out another 345 line for months upon end to 4 reconductor. And when you're all through, we still have 5 6 a single line that's loaded at 85 or 82 percent, you can 7 argue the difference of whether it's 82 or 97 because 8 I've reconductored now, but I've got a line that when it 9 fails, I have to reconductor another 60 miles or so of 10 345 and 115-kV lines to make this work. 11 So, I -- I just want to jump in here with 12 the statement that we need to look at what was filed in the testimony -- and I think if you go into the Southwest 13 14 Connecticut studies that were -- which -- what's the date 15 on that one -- that Mr. Ball spoke to --February 18th --16 A VOICE: 17 MR. ZAKLUKIEWICZ: -- the February 18th Southwest Connecticut study and you go look at some of 18 19 the tables that Mr. Ball led us to -- I think he led us to tables 3 and 4 -- well, 3 and 4 have a New England 20 21 transfer to New York of zero. That is not realistic, 22 folks. The transfer limit between New York and New England is approximately 900 megawatts today from New 23 24 England to New York. And from New York back to New

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1 England it's in the 13 to 1400-megawatt range. And those tables that reflect the overloads are shown I believe in 3 Table 6. And we ought to be looking at what is the realistic flows on those lines. And when you look at those, you see the loading on the 387 line go up 6 significantly. And we need to not only put in a line 7 that's going to last you the twenty-seven seven case we spoke to could reach twenty-seven seven in New England and 205 and 206, with the slowest growth rate it would be 210, 211 -- and that's the ISO forecast -- so we're going to build a line that when you get all through spending all of this money and all of the uplift charges, it's not going to be capable any longer and we're going to be building another 60 or 70 miles of 115-kV line and other 15 345-kV lines because they also overload now.

> I think what we're trying to do here when we're all through is come up with a solution that myself and my predecessors, and hopefully my predecessors all the time are not before this Council looking to build additional 345 and 115-kV lines, because every time we go in now and we say we need to rebuild this 115 line from location A to location B, we're going to be going through all of this all over again. And clearly the majority of our 115 lines are closer to residents and other areas of

1	concern, and some of the 345 lines, and we're going to
2	have the EMF issues on every one of these reconductoring
3	or replacement of structures and upgrades. So, I think
4	we also need to keep in the back of our minds what are we
5	what are we trying to do here with a solution. And I
6	hope we all are in agreement we're looking for a long-
7	term solution and not a solution where we're going to be
8	back here before the line is even constructed to build
9	other sections of the line to make it work. So sorry for
10	the interruption.
11	MR. PRETE: I agree with Roger.
12	MS. KOHLER: I think that's
13	MS. RANDELL: And just at the risk of
14	being accused of being too picky, I think, Mr. Zak, you
15	meant successors.
16	CHAIRMAN KATZ: Yes.
17	MR. TAIT: I refrained
18	MR. ZAKLUKIEWICZ: I don't know what they
19	are
20	MR. TAIT: I refrained, Miss Randell
21	(laughter)
22	MR. PRETE: I still agree with Roger.
23	MS. KOHLER: That's
24	MR. ASHTON: I got a kick under the table.

1	MS. KOHLER: That's the last time I use
2	the word simply. (Laughter).
3	MR. ZAKLUKIEWICZ: I I apologize.
4	MS. KOHLER: In the from East Shore to
5	East Devon under-grounding the 345-kV line is described
6	as challenging. Is it feasible?
7	MR. ZAKLUKIEWICZ: Feasible to construct
8	or feasible to operate after it's built?
9	MS. KOHLER: I apologize. Feasible to
10	construct?
11	MR. ZAKLUKIEWICZ: I think in all the
12	cases we've laid out some routes which we have not turned
13	around and spoken specifically with the chief elected
14	officials in each one of those towns. We selected some -
15	- what we thought were straight routes. I believe Mr.
16	Prete testified yesterday that there has been no
17	communications. We are not aware of some of the
18	infrastructure that is beneath the macadam on all of
19	those streets. And I'm not certain we can answer that at
20	this time of whether it's feasible or not feasible to
21	build some of the underground even under the routes that
22	we've looked at and said from a routing standpoint here's
23	where there's four lanes, here's where we think we could
24	build the cable. So, I'm not even certain we can say

1	with certainty of how you would get from East Shore to
2	East Devon. And I think we would want the input from the
3	chief elected officials in those towns for which
4	underground would be constructed in those towns.
5	MR. PRETE: I would add that in my
6	experience in digging in New Haven, which I was before
7	the Council about four years ago, New Haven being as old
8	as it is has infrastructure that dates a hundred years
9	back. And in the pipe type cable project that we had,
10	oftentimes we were digging 12, 15 feet deep just to get
11	under tunnels and things of that nature. So to say
12	challenging and feasible, I would say it's going to be
13	very difficult at the very, very best. And as Mr. Zak
14	has stated, I think we'd have to go almost entirely
15	around New Haven to get there, and we do not have a route
16	that we've talked with the appropriate officials of the
17	city at this point in time.
18	CHAIRMAN KATZ: How about the Route 95
19	corridor?
20	MR. PRETE: I would say that that would
21	approach infeasible. The corridor on 95 through New
22	Haven and West Haven is, quite frankly, raised. In a lot
23	of cases raised to the point where many roads go
24	underneath them. Our conversations with C-DOT in

1	attaching to an exiting bridge, quite frankly have gone
2	no where and for the right reasons, they haven't designed
3	the bridge to accommodate the weight. The pipe itself
4	expands to unbelievable degrees absent that of the bridge
5	itself. So, I would say that that would probably border
6	on infeasible.
7	CHAIRMAN KATZ: Miss Kohler, have the
8	towns given the companies a possible underground route
9	that you'd like them to look at?
10	MS. KOHLER: I believe we've given the
11	companies an itemization of what we've asked GE to study,
12	which
13	CHAIRMAN KATZ: No, I mean an actual route
14	to get from East Shore to East Devon?
15	MR. PRETE: Like I say, I haven't received
16	anything.
17	MS. KOHLER: We we can I believe we
18	can look at it, but I think it's fair to say that it's
19	along under Route 1
20	CHAIRMAN KATZ: Okay
21	MS. KOHLER: is the route.
22	MR. ASHTON: Mr. Prete, perhaps you know,
23	insofar as you build a three-cable a three-circuit
24	cable system, if you will, what kind of width and I'd

1	assume it would be all side-by-side rather than stacked
2	because of heat transfer issues, what kind of width would
3	that involve, roughly?
4	MR. PRETE: Roughly, I would say the width
5	would approach 12 feet. And I would probably be in the
6	position to say that will be two separate trenches when
7	you get to a design of that nature going through city
8	streets
9	MR. ASHTON: In other words, it would be
10	kind of hard to cut a 12-foot wide trench through any of
11	these city streets, is that your feeling what you're
12	saying?
13	MR. PRETE: Without losing many cars and
14	things of that nature, that would be very difficult.
15	CHAIRMAN KATZ: Well, let's just for the
16	sake of overturning stones, let's assume Route 1 is the
17	underground route from East Shore to East Devon, can we
18	get something from the companies that indicate the pros
19	and cons of that?
20	MR. ASHTON: And the town?
21	CHAIRMAN KATZ: And the towns?
22	MR. FITZGERALD: And perhaps the
23	Department of Transportation.
24	CHAIRMAN KATZ: And perhaps excellent.

1	Route 1, I think that's an excellent idea.
2	MS. KOHLER: Yeah.
3	CHAIRMAN KATZ: This is June, people. We
4	need to start nailing things down here.
5	MR. PRETE: We will approach the City of
6	New Haven since that's the area that is most in question
7	
8	CHAIRMAN KATZ: Thank you
9	MR. PRETE: and find out what their
10	views are
11	CHAIRMAN KATZ: Okay
12	MR. PRETE: I think they supported our
13	project just to go on record.
14	CHAIRMAN KATZ: Okay. But I mean if there
15	are ideas that don't work and we should be tossing them,
16	let's determine that. If there are ideas that may work,
17	let's flesh them out.
18	MS. KOHLER: From the testimony that was
19	presented in Segments 3 and 4, it's evident that the
20	companies have found some suitable ways to overcome
21	challenging construction issues. Is it true that the
22	same creativity could be employed in constructing the
23	East Shore route?
24	MR. PRETE: I'll answer that question by

1 just looking back over the last six weeks, so that would 2 be yes. 3 MS. KOHLER: Based upon your presentation 4 this morning, under the proposed route 436 houses would be within 150 feet of the proposed 345-kV line. And the 5 6 proposed route would also impact 26 sensitive areas as 7 designated by the recent legislation that are within 1200 8 feet of the proposed 345-kV line. 9 MR. FITZGERALD: I would object to the 10 term impact. The -- the -- what has been stated is that 11 they would be within a certain proximity. We -- we do 12 not accept the verb impact. 13 CHAIRMAN KATZ: Okay, let's go with 14 proximity. 15 MS. KOHLER: That -- however, from the 16 presentation it seems clear that the East Shore route 17 that implements the all underground East Shore to East 18 Devon -- I was going to say significantly less impact -but is in significantly less proximity to homes and 19 20 sensitive areas. Is it true that the number of impacted -21 - the number of homes in proximity to the 345-kV line 22 would be cut in half from 436 to 226? 23 MR. PRETE: Those were the numbers that 24 were provided.

1	MS. KOHLER: And in the East Shore
2	using the East Shore route, the number of sensitive areas
3	is also cut in half from 26 to 13?
4	MR. WELTER: Yeah, those were the numbers,
5	but this is Cyril Welter
6	MR. TAIT: This is the document we don't
7	yet have
8	AUDIO TECHNICIAN: Hang on a second
9	MS. KOHLER: This was the presentation
10	this morning.
11	CHAIRMAN KATZ: Yes.
12	MR. WELTER: The only comment is that that
13	was quantified for overhead. There would still be
14	businesses and facilities and residences along all these
15	underground routes that would be affected during the
16	construction of the line.
17	MR. PRETE: And I have to add that the
18	numbers in what you're providing is fine, and they are
19	numbers, and we need to keep in mind the fact that this
20	adds a minimum of six miles of underground even in the
21	hybrid situation, which would be considered porpoising.
22	In addition to the fact that if it was all underground,
23	it would be an additional 13. And when we talk about
24	constructibility, the fact of the matter is we must

1	always	talk	about	the	reliability	and	operability	of t	he
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- 2 system. So again just a statement to make sure that we're
- 3 ---
- 4 MR. FITZGERALD: But that's -- but that's
- for another day, Mr. Prete.
- MS. KOHLER: Right. That's -- that's all
- 7 the questions I have.
- 8 CHAIRMAN KATZ: Thank you. Next, Mr.
- 9 Boucher.
- MR. EMERICK: Madam Chairman.
- 11 CHAIRMAN KATZ: Yes, Mr. Emerick, while
- we're changing out the table.
- MR. EMERICK: Mr. Prete, just very
- 14 quickly, in terms of the configuration of under-grounding
- from East Shore to Devon, what would that be, what would
- the configuration look like?
- MR. PRETE: When you're talking about the
- configuration, it would have to include three cable
- 19 systems, cable lines, three-phase cables between East
- 20 Shore and East Devon.
- MR. EMERICK: The difference between Devon
- 22 and Norwalk?
- MR. PRETE: Yes, Devon to Norwalk, as Mr.
- 24 Zak had testified yesterday, would be two.

1	MR. EMERICK: Two.
2	MR. ZAKLUKIEWICZ: The transfer between
3	East Devon and East Shore, or East Devon and Beseck,
4	requires the same 1200-megawatt capability taking into
5	account a contingency of one of those cables, so you need
6	three cables, Mr. Emerick.
7	MR. EMERICK: Three cables, okay. Thank
8	you.
9	CHAIRMAN KATZ: Mr. Boucher.
10	MR. BOUCHER: Thank you, Madam Chairman.
11	I'd like to start with the loop around Royal Oak that was
12	the subject of the presentation this morning.
13	CHAIRMAN KATZ: Is that loop entirely in
14	Durham or does that cross the town line, the jog around
15	Royal Oak?
16	MS. BARTOSEWICZ: It's not a loop. It's -
17	- I was going to call it a bypass.
18	CHAIRMAN KATZ: A bypass.
19	MS. BARTOSEWICZ: And is it your
20	question is, is it all in Durham?
21	CHAIRMAN KATZ: Yes.
22	MS. BARTOSEWICZ: No. Actually, the Royal
23	Oak neighborhood is kind of split in half with the

1	Middletown. North of the Royal Oak neighborhood is where
2	there is the mature hardwood forest, that would be in
3	Middletown. I believe it is this entire bypass would
4	be in Middletown.
5	CHAIRMAN KATZ: Okay, thank you.
6	MR. BOUCHER: Thank you
7	MR. ZAKLUKIEWICZ: Middlefield
8	MS. BARTOSEWICZ: I'm sorry. And once you
9	cross once you cross 17
10	MR. ZAKLUKIEWICZ: You're in Middlefield -
11	-
12	MS. BARTOSEWICZ: you're in
13	Middlefield.
14	CHAIRMAN KATZ: Okay, understood.
15	COURT REPORTER: One moment.
16	(Pause)
17	A VOICE: Madam Chairman, do you want us
18	to do it on the wall or something, so when you talk about
19	it
20	CHAIRMAN KATZ: No, we're going to
21	A VOICE: you guys can see it?
22	CHAIRMAN KATZ: We're going to ask you for
23	a little more on this, so that's alright.
24	MR. BOUCHER: Alright. Has the company or

1	the Applicants determined how many homes would be passed
2	or that would be abutted by that particular route?
3	MS. BARTOSEWICZ: I guess I would need ask
4	you what you mean by abut before I can answer your
5	question.
6	MR. BOUCHER: Well to the extent the route
7	has been delineated, has the company figured out how many
8	lots it would either cross or homes it would be nearby?
9	MS. BARTOSEWICZ: From the from the
10	aerial photograph, the in Middletown it goes through a
11	hardwood forest, through the middle of that forest.
12	Certainly there are properties in Royal Oak that also
13	abut the hardwood forest. I would have to do a scale to
14	tell you how many feet their property line edge is from
15	where we might be able to put this bypass in, but the new
16	right-of-way area that we're looking at
17	MR. FITZGERALD: I think you in the
18	presentation this morning you spoke of forget about
19	property lines, the question is I think Mr. Boucher is
20	asking about structures, and what can you say from what
21	you know so far about the proximity of structures to what
22	would be the new right-of-way?
23	A VOICE: Maybe less than half a dozen.
24	MS. BARTOSEWICZ: Less than half a dozen.

1	And they might be structures.
2	MR. TAIT: Are these residential
3	structures or structures are these structures or are
4	these residential structures?
5	MR. ZAKLUKIEWICZ: Two are commercial,
6	four are residential.
7	MS. BARTOSEWICZ: Right. Two are
8	commercial and four would be residential.
9	MR. TAIT: Thank you.
10	MR. BOUCHER: Now is this is this
11	bypass something the companies are now currently taking a
12	look at?
13	MS. BARTOSEWICZ: In an effort to answer
14	Chairman Katz's questions, we started thinking out of the
15	box and this is one of the alternatives, one of the
16	routes that we looked at. And we will provide with
17	today's presentation will be an aerial photograph of just
18	what we showed this morning. And to answer Chairman
19	Katz's question, there's a couple of modifications on the
20	west end to answer the Chairman's questions from this
21	morning.
22	MR. BOUCHER: Okay. Now is that
23	presentation something that's going to be submitted
24	MS. BARTOSEWICZ: It will be filed in the

1	morning.
2	MR. BOUCHER: Okay.
3	CHAIRMAN KATZ: Mr. Boucher, the Council
4	staff is developing interrogatories on the Royal Oak
5	bypass and we'll be getting into that in the July
6	probably the July hearings
7	MR. BOUCHER: Alright
8	CHAIRMAN KATZ: we'll take some time.
9	MR. BOUCHER: Thank you.
10	MS. BARTOSEWICZ: Excuse me, I've been
11	told that the data file for this electronic filing is too
12	big to e-mail, so that we would ask we can provide a
13	disk to anyone who would like these aerial photographs.
14	CHAIRMAN KATZ: Understood.
15	MR. BOUCHER: Thank you.
16	MR. ASHTON: Can I ask one more question
17	in that vein? In laying out the bypass, you had the
18	bypass returning to the existing right-of-way more or
19	less parallel to Route 17 and immediately west of it
20	behind those structures that are on west that are on
21	the west side of 17. If the bypass was continued to just
22	where roughly where the greenhouse is as you
23	characterized it, a little further to the west, wouldn't
24	that leave a little wouldn't that make it so it's not

1	right up against the structures, the old former mission
2	station and so forth, there would be a little clearance
3	between the line
4	MR. ZAKLUKIEWICZ: Yes
5	MS. BARTOSEWICZ: Correct
6	MR. ASHTON: and those structures
7	lining 17?
8	MS. BARTOSEWICZ: In the drawing that we
9	will file tomorrow, we'll include that exact
10	configuration.
11	MR. ASHTON: Okay, thank you.
12	CHAIRMAN KATZ: Great. So we will get the
13	the Council staff will get those interrogatories out
14	on the Royal Oak bypass. And I highly encourage Durham,
15	Middlefield and Middletown to respond to those and tell
16	us what you think of that concept.
17	MR. BOUCHER: Thank you, Madam Chairman.
18	I would I be correct in assuming that that bypass from
19	a reliability standpoint would be just as reliable as the
20	preferred route?
21	MS. BARTOSEWICZ: That's correct.
22	MR. ZAKLUKIEWICZ: Yes.
23	MR. BOUCHER: Okay. I have a few
24	questions about the northerly route that was also the

Τ	subject of this morning's presentation. My first
2	question is whether that so-called northerly route that
3	was discussed, is that basically leaving what's there
4	there, the same number of conductors?
5	MS. BARTOSEWICZ: Leaving what where
6	where? (Laughter). Sorry.
7	MR. BOUCHER: I was hoping you wouldn't
8	ask that. My understanding is that that the so-called
9	northerly route is an alternative to what the proposed
10	route is comprised of as it goes through Durham?
11	MS. BARTOSEWICZ: Both both this Durham
12	bypass and use of the northerly route would not change
13	the existing 115 structures that exist in Durham and
14	Middlefield today.
15	MR. BOUCHER: Okay, okay. And and
16	that's very helpful for me to understand. Now is that
17	configuration you've just described what was indicated as
18	being something which would be would meet the
19	pertinent reliability criteria? I'm referring to a
20	question from Council Member Emerick, who I believe asked
21	the question as to whether that configuration would meet
22	the pertinent or applicable reliability criteria, and I
23	thought the answer was yes.
24	MR. ZAKLUKIEWICZ: The answer is still

1	yes.
2	MR. BOUCHER: Thank you. With regard to
3	the East Shore presentation that was done this morning as
4	well, the I understand that the presentation materials
5	only presented that configuration from the Beseck
6	Substation and south in terms of the presentation
7	materials themselves, it didn't it didn't include
8	anything north of the Beseck Substation?
9	MS. BARTOSEWICZ: That's correct, because
10	north of Beseck Substation would not change from the
11	proposed route.
12	MR. BOUCHER: Alright.
13	CHAIRMAN KATZ: Switching station.
14	(Laughter).
15	MS. BARTOSEWICZ: Excuse me. Thank you.
16	MR. PRETE: Beseck.
17	MR. BOUCHER: Okay. My my request is
18	that could we have a representation of that material that
19	would include the northerly segment that was not included
20	but that would reflect the same data information, meaning
21	the number of homes within one to one hundred and fifty
22	feet, and the data that's presented in that presentation
23	for Beseck on south, so it would include the whole it
24	would include the entire Segment 1 and 2 presented as the

1	East Shore alternative?
2	MR. FITZGERALD: Well
3	CHAIRMAN KATZ: So you're looking for the
4	same tables but for Segment 1 that they did for Segment
5	2?
6	MR. BOUCHER: I'm not sure if that's the
7	same thing.
8	MR. FITZGERALD: Well, I think we've said
9	that we're going to provide that information for the
10	proposed route, right?
11	MR. PRETE: On Segment 2 that's correct,
12	Mr. Fitzgerald.
13	CHAIRMAN KATZ: So
14	MR. BOUCHER: And I'm looking for what the
14	MR. BOUCHER: And I'm looking for what the companies what the company sees as the East Shore
15	companies what the company sees as the East Shore
15 16	companies what the company sees as the East Shore route, as what was presented this morning, but in fact it
15 16 17	companies what the company sees as the East Shore route, as what was presented this morning, but in fact it also includes the companies' preferred route north of
15 16 17 18	companies what the company sees as the East Shore route, as what was presented this morning, but in fact it also includes the companies' preferred route north of where the northern terminus is of
15 16 17 18 19	companies what the company sees as the East Shore route, as what was presented this morning, but in fact it also includes the companies' preferred route north of where the northern terminus is of MR. PRETE: So any of the East Shore
15 16 17 18 19 20	companies what the company sees as the East Shore route, as what was presented this morning, but in fact it also includes the companies' preferred route north of where the northern terminus is of MR. PRETE: So any of the East Shore alternatives that we oh, boy, I slipped too any of
15 16 17 18 19 20 21	companies what the company sees as the East Shore route, as what was presented this morning, but in fact it also includes the companies' preferred route north of where the northern terminus is of MR. PRETE: So any of the East Shore alternatives that we oh, boy, I slipped too any of the East Shore routes that we had presented assumes

1	Segment 1
2	CHAIRMAN KATZ: So you want
3	MR. PRETE: on any of those
4	CHAIRMAN KATZ: an assumption that a
5	northerly Segment 1 plus an East Shore route?
6	MR. BOUCHER: If that gets the information
7	that was presented this morning to also include Durham,
8	which is what my primary concern is, the same information
9	relative to homes within the specified distances that
10	were included in this morning's presentation
11	MS. BARTOSEWICZ: Let me see if I
12	understand. We provided today some charts for Segment 2.
13	And I think you're asking for those same charts to be
14	done on Segment 1. That information has not been
15	collected
16	MR. BOUCHER: Right
17	MS. BARTOSEWICZ: and it is not a
18	simple task.
19	MR. BOUCHER: When was it done for Segment
20	2?
21	MR. PRETE: It took the last two and a
22	half to three weeks.
23	MR. BOUCHER: Right. Well, I think for
24	the same reason that that information was important for

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1	Segment 2, it's important for the Council to have and the
2	parties to have for Segment 1, so I'd request it.
3	CHAIRMAN KATZ: Response?
4	MR. FITZGERALD: I need we need to talk

- 5 before we can respond.
- 6 CHAIRMAN KATZ: How about if we -- Mr.
- Boucher, you're going to be here tomorrow morning?
- 8 MR. BOUCHER: I'm sorry?
- 9 CHAIRMAN KATZ: You're going to be here
- 10 tomorrow morning?
- MR. BOUCHER: Yes.
- 12 CHAIRMAN KATZ: How about if we let them
- think about that overnight and we take that up tomorrow
- morning?
- MR. BOUCHER: That's fine.
- 16 CHAIRMAN KATZ: I'm putting that on the
- morning homework list of reports.
- MR. BOUCHER: Okay. With regard to the
- 19 East Shore presentation this morning there was a
- denomination of, quote/unquote, "public facilities".
- 21 Could I understand what the definition that was used for
- 22 that term is?
- MR. PRETE: Actually, the column heading
- 24 was HB 5418, it is the sensitive areas that were listed

1	in the
2	MR. BOUCHER: In the public act?
3	MR. PRETE: Correct.
4	MR. BOUCHER: Okay.
5	MR. FITZGERALD: Except for residential
6	areas, which were not separately house numbers of
7	houses were given as a total to provide kind of a feel
8	for that, but we did not make the effort to say this many
9	houses is one residential area, this many houses is
10	another.
11	MR. BOUCHER: Thank you. The there's
12	been several exhibits and presentations that have
13	measured distances of residential structures from the
14	line. Is there a standard means by which those
15	measurements have been consistently undertaken as they've
16	been filed in the various exhibits, including what came
17	in this morning or the presentation rather which came
18	in this morning?
19	MR. PRETE: Yes. Actually, there's two
20	ways that I can recall. The first way was a request of
21	the Council on the proposed route to give them a house
22	count given a 3 milligauss and a 6 milligauss line in
23	parallel to both sides of the right-of-way through
24	Segment 1 and 2 of the proposed route. That was one

1	listing that we had given in a summary form and followed
2	up in a heroic effort on a detailed basis before the
3	hearing started this week. The one that we just did,
4	given no definition in the bill and no EMF line so to
5	speak, we put in a 150 proxy adjacent to the right-of-way
6	for the various East Shore routes that we had presented
7	in the presentation today. And those were the two ways
8	that were done.
9	MR. BOUCHER: So
10	MR. FITZGERALD: Maybe it would help if
11	you explain what you meant by a proxy and why why you
12	picked the 150 feet as a proxy?
13	MR. PRETE: The 150 foot was arrived at in
13 14	MR. PRETE: The 150 foot was arrived at in looking at the 3 milligauss and 6 milligauss lines of the
14	looking at the 3 milligauss and 6 milligauss lines of the
14 15	looking at the 3 milligauss and 6 milligauss lines of the proposed route. It appeared and there's no science
14 15 16	looking at the 3 milligauss and 6 milligauss lines of the proposed route. It appeared and there's no science here it appeared that the 150 was a legitimate
14 15 16 17	looking at the 3 milligauss and 6 milligauss lines of the proposed route. It appeared and there's no science here it appeared that the 150 was a legitimate distance given all the sections and right-of-ways that
14 15 16 17 18	looking at the 3 milligauss and 6 milligauss lines of the proposed route. It appeared and there's no science here it appeared that the 150 was a legitimate distance given all the sections and right-of-ways that were in both Segment 1 and 2, all cross-sections 1
14 15 16 17 18 19	looking at the 3 milligauss and 6 milligauss lines of the proposed route. It appeared and there's no science here it appeared that the 150 was a legitimate distance given all the sections and right-of-ways that were in both Segment 1 and 2, all cross-sections 1 through 8. So as you look down there, the 150 appeared
14 15 16 17 18 19 20	looking at the 3 milligauss and 6 milligauss lines of the proposed route. It appeared and there's no science here it appeared that the 150 was a legitimate distance given all the sections and right-of-ways that were in both Segment 1 and 2, all cross-sections 1 through 8. So as you look down there, the 150 appeared to be kind of the average so to speak or majority, and
14 15 16 17 18 19 20 21	looking at the 3 milligauss and 6 milligauss lines of the proposed route. It appeared and there's no science here it appeared that the 150 was a legitimate distance given all the sections and right-of-ways that were in both Segment 1 and 2, all cross-sections 1 through 8. So as you look down there, the 150 appeared to be kind of the average so to speak or majority, and that's where the 150 came from.

1	of what?
2	MR. TAIT: 3 milligauss, 6 milligauss
3	MR. PRETE: Three the 3 milligauss.
4	MR. BOUCHER: So are there are there
5	indications in what you submitted either today or prior
6	to today in which what you've measured are the distances
7	to the right-of-way from the structures that are nearest
8	by it?
9	MR. FITZGERALD: I don't understand that.
10	MR. PRETE: I'm not sure I understand your
11	question totally.
12	MR. BOUCHER: In other words, if if the
13	Council wanted to know either within the Durham proposed
14	or preferred route or whatever, or along the East Shore,
15	or along the northerly route, how close to the right-of-
16	way that would be occupied by the line the structures are
17	physically, is that information in the record?
18	MR. PRETE: No. That would that would
19	be an effort that I'm not sure we could do anytime this
20	year. What we did is tried to count the houses that fall
21	within a one foot to 150 foot line from the right-of-way
22	itself.
23	MR. BOUCHER: Okay.
24	A VOICE: The edge of the right-of-way.

1	MR. PRETE: From the edge of the right-of-
2	way.
3	A VOICE: Correct.
4	MS. BARTOSEWICZ: I would like to add that
5	our 400 scale maps are accurate maps and that provides
6	you some way of looking at structures and edge of right-
7	of-way and what's adjacent to that as your right-of-way.
8	MR. BOUCHER: Okay. Thank you, that's all
9	I have at the moment.
10	CHAIRMAN KATZ: Thank you, Mr. Boucher.
11	Mr. Stone.
12	MR. STONE: No questions.
13	CHAIRMAN KATZ: Mr. Stone says no
14	questions. Mr. Burturla I believe left.
15	A VOICE: He left, he had no questions.
16	CHAIRMAN KATZ: Thank you. Mr. Burtula
17	had no questions. The Town of Westport? Absent. The
18	City of Meriden? They should have been here. Assistant
19	Attorney General Michael Wertheimer?
20	MR. WERTHEIMER: No questions.
21	CHAIRMAN KATZ: Mr. Wertheimer has no
22	questions. The City of Bridgeport? Absent. The
23	Communities for Responsible Energy, any questions?
24	A VOICE: No questions.

1	CHAIRMAN KATZ: No questions they said.
2	OCC, any questions? Absent. Woodlands Coalition, Mr.
3	Golden?
4	A VOICE: No questions.
5	CHAIRMAN KATZ: Mr. Golden said no
6	questions. ISO New England, Mr. Macleod? Absent. DOT,
7	Mr. Walsh?
8	MS. EILEEN MESKILL: I have no questions.
9	CHAIRMAN KATZ: Miss Meskill? No
10	questions. The Town of Fairfield? No questions. I
11	believe Wilton and Weston we're all set on. Mr. Lord,
12	any questions?
13	MR. ANDREW LORD: No questions.
14	CHAIRMAN KATZ: No questions. The Town of
15	North Haven?
16	A VOICE: No questions.
17	CHAIRMAN KATZ: They said no questions.
18	Ezra Academy, et al? No questions. Mr. Cunliffe.
19	MR. CUNLIFFE: If you were to construct a
20	new line adjacent to the 387 line, would that affect the
21	operation of 387?
22	MR. ZAKLUKIEWICZ: I do not believe it
23	would. There may be a couple of angle structures where
24	we would have to take day-to-day clearances to construct,

1	but on the whole the answer would be no.
2	MR. CUNLIFFE: Thank you. And are you
3	aware of
4	MR. ZAKLUKIEWICZ: And that's with the
5	exception of what we build coming into the substations,
6	we would have cut-overs at that point.
7	MR. CUNLIFFE: Have you ever lost service
8	to any of the three 345-kV lines between Chestnut
9	Junction and Black Pond Junction?
10	MR. ZAKLUKIEWICZ: Are you asking have we
11	ever lost service at one time all of the lines or are you
12	asking
13	MR. CUNLIFFE: All at the same time?
14	MR. ZAKLUKIEWICZ: Not to my knowledge.
15	MR. CUNLIFFE: How about two of them?
16	MR. ZAKLUKIEWICZ: I I would have to
17	check on that to see whether we had two faults basically
18	at approximately the same time. I cannot answer that off
19	the top of my head, Mr. Cunliffe. We will try to get you
20	that answer.
21	MR. ASHTON: Mr. Zaklukiewicz, if a if
22	there was a fire in a pasture or brush land crossed by
23	these lines, is there any risk to the line? Has there
24	been any industry experience of fire knocking these

1	transmission lines out?
2	MR. ZAKLUKIEWICZ: Anytime we've had a
3	fire under the lines, we have been notified by the fire
4	departments and we have we have removed the lines from
5	service. In particular, we've done that a couple of
6	times the lines coming out of Millstone.
7	MR. ASHTON: Can the products of
8	combustion cause a line trip?
9	MR. ZAKLUKIEWICZ: Yes, they can. They
10	contaminate the insulators and you are subject to flash-
11	over.
12	MR. RICHARD REED: Mr. Ashton, we have had
13	experience
14	CHAIRMAN KATZ: Just
15	MR. REED: the tanker crash on I-95 in
16	Bridgeport did take out the transmission line to the
17	Resco Plant
18	MR. ASHTON: Thank you
19	MR. REED: and it was combustible gas
20	that we believe tripped the line out.
21	MR. ZAKLUKIEWICZ: As a matter of fact, as
22	you remind me of that, if you recall, I think it was
23	about '91, the Life Star helicopter hit the transmission
24	lines

1	MR. ASHTON: In Meriden
2	MR. ZAKLUKIEWICZ: in 362 and 342, they
3	bounced off the west line, landed into the east line, and
4	both lines were tripped out, shield wires pulled down.
5	So to answer your question, two of the three lines were
6	permanently removed with that and they were out for
7	close to close to a day as a result of that.
8	CHAIRMAN KATZ: ISO doesn't require you to
9	in your reliability standards to have a plan for
10	having something hit and having all the lines go out
11	between Chestnut and Black Pond?
12	MR. ZAKLUKIEWICZ: That that would end
13	up being a severe contingency
14	CHAIRMAN KATZ: Right, which you're
15	allowed, correct? Not recommended, but you're allowed?
16	MR. ZAKLUKIEWICZ: Not recommended, but
17	allowed. And you then have to study for and be prepared
18	to act on that contingency and have systems in place to
19	dump loads such that we do not impact the rest of New
20	England or the rest of the northeast utility the
21	Northeast electric power grid.
22	CHAIRMAN KATZ: Understood.
23	MR. CUNLIFFE: What types of actions could
24	you take under that extreme scenario?

1	MR. ZAKLUKIEWICZ: Basically, the only
2	thing the only choice you have is load shedding.
3	MR. CUNLIFFE: No other operational
4	MR. ZAKLUKIEWICZ: Not not in the
5	timeframe that's required for that severe a loss of the
6	transmission system.
7	MR. ASHTON: And in fact a lot of that
8	would be automatic, would it not, or probably?
9	MR. ZAKLUKIEWICZ: Yes, it would. I think
10	what I meant by the statement, Mr. Ashton, was that we
11	would have to make certain for that contingency that we
12	have the load shedding in the proper locations. It
13	doesn't do you any good to load shed up in the Stafford
14	Springs area where I've got the deficiency in Southwest
15	Connecticut. So we'd have to make certain we have the
16	proper load shedding in the area of the state that would
17	be most affected, which would be the loss of those
18	transmission lines to the load in the southwest
19	Connecticut part of the state.
20	CHAIRMAN KATZ: But to load shed to
21	have the scenario where you had to load shed, you'd have
22	to lose all the lines, correct? If you kept one or two
23	of the lines and lost one, then you wouldn't have to do
24	load shedding?

1	MR. ZAKLUKIEWICZ: I believe the answer to
2	that would be we would be overloading other lines, we
3	would be putting on gas turbines, quick start generation.
4	And as long as it's not a peak load day where other
5	generation is not available in Southwest Connecticut
6	CHAIRMAN KATZ: Right
7	MR. ZAKLUKIEWICZ: that would be a
8	basis where we would have the 30 minutes to evaluate the
9	system and pick it back up. We would not have an
10	automatic overloading and a severe voltage depression,
11	which would take out and initiate the load shedding for a
12	total loss of the
13	CHAIRMAN KATZ: Okay, so if
14	MR. ZAKLUKIEWICZ: of the interface.
15	CHAIRMAN KATZ: If the plane crashes in
16	and takes out all the lines, it shouldn't do it on a peak
17	day (laughter) ideally?
18	MR. ZAKLUKIEWICZ: That's correct
19	CHAIRMAN KATZ: Thank you
20	MR. ZAKLUKIEWICZ: we would be into a
21	voltage collapse situation.
22	CHAIRMAN KATZ: Thank you. Mr. Emerick.
23	MR. EMERICK: Mr. Zak, just to clarify, in
24	terms of existing conditions, we have three lines, if you

1	were to lose all those three lines today, you have those
2	it would represent a severe contingency and you
3	already have plans in place to address that?
4	MR. ZAKLUKIEWICZ: That is correct.
5	MR. EMERICK: Thank you.
6	MR. CUNLIFFE: Is the common rights-of-way
7	line outage an operating or a planning criteria?
8	MR. ZAKLUKIEWICZ: It's a planning
9	criteria.
10	MR. CUNLIFFE: And has NU used this
11	planning criteria in the past?
12	MR. ZAKLUKIEWICZ: Yes. We're all
13	required to as ourselves, along with CONVEX, along with
14	the ISO, to study it and make certain we understand it in
15	the planning phase and be prepared to operate under those
16	conditions.
17	MR. CUNLIFFE: You testified earlier about
18	the loss of the East Shore/Scovill Rock line. Has that
19	ever been tripped or overloaded?
20	MR. ZAKLUKIEWICZ: It has tripped I can
21	I can swear that it has tripped a number of times in
22	the past
23	MR. REED: Yes, the line has tripped a
24	number of times due to lightning or miss-operation of

1	relays. It has tripped a number of times.
2	MR. CUNLIFFE: Has a study been done to
3	a load flow case study been done to confirm the Frost
4	Bridge/Southington line outage if the East Shore/Scovill
5	Rock line was overloading?
6	MR. SCARFONE: I don't understand that
7	question concerning the Southington to Frost Bridge line.
8	MR. CUNLIFFE: Okay. If you lose the East
9	Shore/Scovill Rock, there's testimony saying that the
10	Frost Bridge/Southington line would be overloaded, is
11	that right?
12	MR. SCARFONE: That's correct.
13	MR. CUNLIFFE: Okay. Has there been a
14	study done to confirm that?
15	MR. SCARFONE: Yes, that's part of the
16	PowerGEM studies.
17	MR. CUNLIFFE: It's part of the PowerGEM
18	studies?
19	MR. SCARFONE: That's correct.
20	MR. CUNLIFFE: Alright, thank you.
21	MR. SCARFONE: I also want to point out
22	also, sir, that in addition to the 329 line, there's also
23	additional 115-kV lines that overload in those cases too,
24	such as the Green Hill/Bochum line and the Southington to

1	Mix Ave line.
2	MR. CUNLIFFE: And those are identified in
3	the prefiled testimony, is that right?
4	MR. SCARFONE: Yes, they are
5	MR. CUNLIFFE: Thank you
6	MR. SCARFONE: they are in the prefiled
7	testimony.
8	MR. CUNLIFFE: Those are my questions,
9	Chairman.
10	CHAIRMAN KATZ: Thank you. I'm also
11	contemplating doing interrogatories on the concept of the
12	Black Pond Substation and getting more information on
13	that alternative
14	MR. FITZGERALD: Okay
15	CHAIRMAN KATZ: and again we would take
16	that up in July. Mr. Emerick.
17	MR. EMERICK: No further questions, thank
18	you.
19	CHAIRMAN KATZ: Mr. Heffernan.
20	MR. HEFFERNAN: No questions.
21	CHAIRMAN KATZ: Mr. Murphy.
22	MR. MURPHY: No questions.
23	CHAIRMAN KATZ: Mr. Tait.
24	MR. TAIT: From this from this

1	morning's presentation, that northern route, at a minimum
2	you'll be taking four homes? As a maximum you'll be
3	taking eight homes?
4	MS. BARTOSEWICZ: Well, it depends. For
5	the eight homes the impact of eight homes is if you
6	were to place a structure similar to what's there today -
7	_
8	MR. TAIT: If you widen it 80 feet?
9	MS. BARTOSEWICZ: Correct.
10	MR. TAIT: If you widen it 40 feet, it's
11	four
12	MS. BARTOSEWICZ: Four homes. If you
13	if you do if you rebuild the entire right-of-way
14	MR. TAIT: Oh, okay
15	MS. BARTOSEWICZ: it's a different
16	story. Now as another configuration choice, some of
17	these homes are indeed grouped in close proximity to one
18	another, and one thing you might do is look at rebuilding
19	the three lines only for a few structures to eliminate
20	having to acquire those homes.
21	MR. TAIT: Would you look into that
22	alternative?
23	CHAIRMAN KATZ: We'll put that in with the
24	Black Pond Substation interrogatory.

1	MS. BARTOSEWICZ: Certainly.
2	MR. TAIT: No further questions.
3	CHAIRMAN KATZ: Mr. Ashton.
4	MR. ASHTON: A couple of questions. Mr.
5	Prete, this morning when you were talking about the
6	railroad, as I recall it, you said you had the
7	structures had to be placed 12 foot off the outside rail,
8	is that correct?
9	MR. PRETE: The closest face of the pole,
10	correct.
11	MR. ASHTON: Yeah, okay. And I may have -
12	- I heard something, I hope I got it right, and that is
13	that you said there needs to be a 62-foot clearance from
14	the conductor to the edge of the to the nearest
15	structure on either side, is that correct?
16	MR. PRETE: That's pretty close, yes.
17	MR. ASHTON: And that's not using any
18	compact construction or anything like that, is it?
19	MR. PRETE: It is not.
20	MR. ASHTON: And is 62 foot consistent
21	with the clearance to structures on other rights-of-way?
22	I thought we were down in the 52-foot range.
23	MR. PRETE: Could you point me where the
24	52 might be, where your recollection is, because

1 MR. ASHTON: Well, I -- well, I'm -- I'm 2 going from memory on the two -- the 362 and 348 circuits 3 as they cross north of Meriden near where the Life Star 4 helicopter crashed. My recollection is that there's 52 5 or 50 -- 50 or 55 clearance from the conductor to the 6 edge of the right-of-way on those. I don't know whether 7 there's a slightly different standard between CL&P and UI 8 in their construction practices. 9 MR. WELTER: Maybe I can inject something. Mr. Welter. Do you recall the vertical configuration we 10 used when we were discussing the Route 15 study --11 12 MR. ASHTON: Yes --13 MR. WELTER: -- which is the standard 130-14 foot tall vertical with the arms on one side with a 120-15 foot wide or a 125-foot wide corridor, that's what we're talking about here. The centerline is defined by the 16 17 conductors themselves --18 MR. ASHTON: Okay --19 MR. WELTER: -- so going from that if you 20 had 125-foot wide corridor that you wanted, it's 62 and a 21 half to either side. 22 MR. ASHTON: Okay. 23 MR. WELTER: And most of those railroads 24 are around 60 -- 60, 70 feet based on --

1	MR. ASHTON: I recognize the railroad
2	right-of-way is much narrower
3	MR. WELTER: Yeah
4	MR. ASHTON: than what is normally
5	required for a high voltage line, but I was a little bit
6	surprised by the 62, I thought it was lower than that.
7	Mr. Zaklukiewicz, in your second diagram,
8	which is the one that has the loop as proposed, in just
9	staring at it, I wondered why you chose not to bring the
10	387 line and switch it at Beseck Substation also? It
11	bypasses Beseck.
12	MR. ZAKLUKIEWICZ: Sure. One of one of
13	the reasons for that was the was the total loss of
14	Beseck Substation
15	MR. ASHTON: No, I think
16	MR. ZAKLUKIEWICZ: as one option from a
17	severe contingency. If I do that, I still have the
18	Scovill to East Shore path
19	MR. ASHTON: Total loss I can understand,
20	but that was a that was a
21	MR. ZAKLUKIEWICZ: A second
22	MR. ASHTON: $$ a criterion that I'm not
23	familiar with. Is that's something that's popped up
24	recently, a total loss of a substation?

1	MR. ZAKLUKIEWICZ: No, that's been since
2	I've been with NPCC for, I don't know, the last 15 years
3	or more
4	MR. ASHTON: Okay
5	MR. ZAKLUKIEWICZ: that been part of A2
6	
7	MR. ASHTON: Okay
8	MR. ZAKLUKIEWICZ: the planning
9	criteria
10	MR. ASHTON: Okay. So that would explain
11	
12	MR. ZAKLUKIEWICZ: Mr. Ashton, for that
13	one. The second item is that as you make as you put
14	in the Beseck to East Shore line, if you were to tap it
15	in at that point, I think what we'll what we'll see or
16	we saw on preliminary studies is that the overloads that
17	occur on some of the cable systems were on the faults
18	because you made East Shore now so strong
19	MR. ASHTON: Okay
20	MR. ZAKLUKIEWICZ: and you have a line
21	now between East Shore and Beseck that creates additional
22	problems.
23	MR. ASHTON: Does the loss of substation -
24	- the loss of an entire substation dependent upon the

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- 1 configuration of breakers in the substation? For
- 2 example, would a breaker and a half scheme be looked at
- in the same light as a ring bus scheme?
- 4 MR. ZAKLUKIEWICZ: A breaker and a half
- 5 scheme is, in my mind, much more reliable than an ring
- 6 bus scheme.
- 7 MR. ASHTON: Would a loss -- a total loss
- of a substation apply in a case of a breaker and a half
- 9 scheme?
- MR. ZAKLUKIEWICZ: I think we need to look
- at it from a planning standpoint. The probability of the
- 12 event occurring would be small.
- MR. ASHTON: So is -- I don't mean to
- 14 pressure you, but would that then not -- the criterion of
- a total loss of a station not apply for that instant, for
- that type of design?
- MR. ZAKLUKIEWICZ: I -- I hate to say
- never is never after I saw Twixberry go down two years
- 19 ago.
- MR. ASHTON: Okay. I think -- no, I have
- 21 nothing further. Thank you.
- 22 CHAIRMAN KATZ: Mr. Wilensky -- oh, gone -
- Mr. Lynch.
- MR. LYNCH: No questions.

1	CHAIRMAN KATZ: Mr. O'Neill.
2	MR. O'NEILL: No questions, Madam
3	Chairman.
4	CHAIRMAN KATZ: Okay. My inclination is -
5	- first, have have I called on everybody for cross-
6	examination, did I miss anybody? Okay. My inclination
7	is to do this, is to on Synapse swear in the witnesses
8	and get the exhibits in and call it a day and start
9	tomorrow morning with homework assignments and then
10	cross-examination of Synapse. Is there any reason anyone
11	can think of why we shouldn't do that? Mr. Fitzgerald?
12	MR. FITZGERALD: No reasons why
13	CHAIRMAN KATZ: With Mr. Johnson out, so
14	you're replacing him (laughter)
15	MR. FITZGERALD: No, I'm not this is
16	this is in the nature of a friendly amendment rather than
17	rather than an objection. The Synapse testimony has
18	basically got two components to it, one of those
19	components deals with the GE studies, okay. And my
20	thought and I just want to make sure that I'm not
21	getting it wrong my thought is that that whole subject
22	is yet to come, so that the cross of Synapse
23	CHAIRMAN KATZ: Yes
24	MR. FITZGERALD: should just deal with

1	the rest of the testimony, which actually deals with East
2	Shore.
3	CHAIRMAN KATZ: I think that's a plan.
4	Does anyone have an objection to that plan? Okay. So
5	let's do this, why don't we go away and bring down
6	Synapse
7	A VOICE: Don't go away mad.
8	CHAIRMAN KATZ: Yeah, don't go away mad,
9	just
10	A VOICE: Just go away.
11	CHAIRMAN KATZ: bring down Synapse,
12	we'll get them sworn in, and we will verify their
13	exhibits, and do well, we can verify all the exhibits,
14	correct, since and who what attorney is going to be
15	helpful for us on this? Miss Kohler, is this your

- MS. KOHLER: Mr. Lanzalotta and Mr.
- 19 Schlissel are actually the Towns' witnesses.
- 20 CHAIRMAN KATZ: Yes, but which attorney is

witnesses? Who -- are these -- are these going to be

going to be --

your people?

- MS. KOHLER: I believe Mr. Ball is going
- 23 to --

16

17

24 CHAIRMAN KATZ: Thank you. And they are

1	coming
2	MR. BALL: They're coming.
3	CHAIRMAN KATZ: Well while you're getting
4	settled in, I had a suggestion from a Council member and
5	please consider this, that where we're doing maps and
6	things, you might want to consider in the future doing
7	some type of base map and transparencies to show
8	different scenarios. Just something to think about.
9	A VOICE: I'm sorry, are you talking to
10	us?
11	CHAIRMAN KATZ: Everybody. Just something
12	to consider. Okay, Mr. Ball, do you want to introduce
13	your witnesses.
14	MR. BALL: Thank you, Chairman Katz.
15	Sitting next to me is Mr. Schlissel. And next to him is
16	Mr. Lanzalotta from Synapse. I believe there are two
17	exhibits that they can authenticate, which are exhibits -
18	-
19	CHAIRMAN KATZ: First, let's
20	MR. BALL: $$ 7 and 8.
21	CHAIRMAN KATZ: First, let's swear them
22	in.
23	MR. MARCONI: Well could I ask first both
24	of them, first of all, before they rise even is to state

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1	their full names and spell them for the courtesy of the
2	court reporter. Go ahead, sir.
3	MR. DAVID A. SCHLISSEL: My name is David
4	Alan Schlissel, D-a-v-i-d, A-l-a-n, S-c-h-l-i-s-s-e-l.
5	MR. MARCONI: And you, sir?
6	MR. PETER J. LANZALOTTA: Peter J.
7	Lanzalotta. And that's L-a-n-z-a-l-o-t-t-a.
8	MR. MARCONI: Okay, thank you. Now now
9	you can stand. Okay. And please raise your right hand.
10	(Whereupon, David Schlissel and Peter
11	Lanzalotta were duly sworn in.)
12	MR. MARCONI: Please be seated.
13	MR. BALL: Gentlemen, let me first direct
14	your attention to what is listed as Towns' Exhibit No. 7,
15	which is the Towns' Responses to Applicants'
16	Interrogatories, Set 1, dated May 25, 2004. Did you
17	participate in the preparation of that document?
18	MR. SCHLISSEL: Yes
19	CHAIRMAN KATZ: I'm sorry, what number
20	exhibit?
21	MR. BALL: This is Exhibit 7.
22	CHAIRMAN KATZ: 7, thank you.
23	MR. LANZALOTTA: Yes.

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MR. BALL: Is the document true and

24

1	correct to the best of your knowledge?
2	MR. SCHLISSEL: Yes.
3	MR. LANZALOTTA: Yes.
4	MR. BALL: I'll offer that.
5	CHAIRMAN KATZ: Is there any objection to
6	making No. 7 a full exhibit? Hearing none, it's a full
7	exhibit.
8	(Whereupon, Towns' Exhibit No. 7 was
9	received into evidence as a full exhibit.)
10	MR. BALL: And gentlemen, Exhibit No. 8 is
11	the Prefiled Direct Testimony of David Schlissel and
12	Peter Lanzalotta, dated May 25, 2004. Did you each
13	participate in the preparation of that document?
14	MR. SCHLISSEL: Yes.
15	MR. LANZALOTTA: Yes.
16	MR. BALL: Do you have any revisions or
17	corrections to that testimony?
18	MR. SCHLISSEL: We've got two small typos.
19	The first one is on page 6, lines 3 and 4, the word
20	between is between the wrong words (laughter). The
21	line 3, it currently says between Black Pond and between
22	Beseck. It should be between Black Pond and Beseck and
23	then the word between should be inserted before Scovill.
24	So the sentence should continue and between Scovill Rock

1	and Chestnut Junction.
2	MR. BALL: And subject to those
3	MR. SCHLISSEL: No, there's one there's
4	one more
5	MR. BALL: There's another one
6	MR. SCHLISSEL: one more small one.
7	Page 17, line 14, the first two words on it, that line
8	currently says this line and it should be the plural, it
9	should be these lines. And those are the two typos.
10	MR. BALL: Are there any other
11	corrections? Subject to those revisions is the testimony
12	true and correct to the best of your knowledge and
13	belief?
14	MR. SCHLISSEL: Yes.
15	MR. LANZALOTTA: yes.
16	MR. BALL: I will offer the testimony as
17	corrected.
18	
10	CHAIRMAN KATZ: And this is 8, correct?
19	CHAIRMAN KATZ: And this is 8, correct? MR. BALL: That's Exhibit 8, yes.
19	MR. BALL: That's Exhibit 8, yes.
19 20	MR. BALL: That's Exhibit 8, yes. CHAIRMAN KATZ: Any objection to making 8
19 20 21	MR. BALL: That's Exhibit 8, yes. CHAIRMAN KATZ: Any objection to making 8 a full exhibit? Hearing none.

1	like to handle some of the other Town exhibits which are
2	basically Town comments on various items in this record?
3	MR. BALL: I'll let Miss Kohler speak in
4	one second. The Exhibit No. 10 is we characterize
5	the Town of Woodbridge characterizes the supplement to
6	the municipal consultation filing. And I believe in the
7	instance of what the Town of Milford had done it was
8	treated accordingly as part of the Applicants' exhibits
9	if I'm not mistaken.
10	CHAIRMAN KATZ: Mr. Fitzgerald, any
11	objection to grouping it with the Applicants' municipal
12	consultation filing?
13	MR. FITZGERALD: No.
13 14	MR. FITZGERALD: No. CHAIRMAN KATZ: Okay, we'll do that.
14	CHAIRMAN KATZ: Okay, we'll do that.
14 15	CHAIRMAN KATZ: Okay, we'll do that. (Whereupon, Towns' Exhibit No. 10 was
14 15 16	CHAIRMAN KATZ: Okay, we'll do that. (Whereupon, Towns' Exhibit No. 10 was received into evidence and attached to the Applicants'
14 15 16 17	CHAIRMAN KATZ: Okay, we'll do that. (Whereupon, Towns' Exhibit No. 10 was received into evidence and attached to the Applicants' Municipal Filing.)
14 15 16 17 18	CHAIRMAN KATZ: Okay, we'll do that. (Whereupon, Towns' Exhibit No. 10 was received into evidence and attached to the Applicants' Municipal Filing.) CHAIRMAN KATZ: How about 1 through 5,
14 15 16 17 18	CHAIRMAN KATZ: Okay, we'll do that. (Whereupon, Towns' Exhibit No. 10 was received into evidence and attached to the Applicants' Municipal Filing.) CHAIRMAN KATZ: How about 1 through 5, plus 9, how would you like to handle those?
14 15 16 17 18 19 20	CHAIRMAN KATZ: Okay, we'll do that. (Whereupon, Towns' Exhibit No. 10 was received into evidence and attached to the Applicants' Municipal Filing.) CHAIRMAN KATZ: How about 1 through 5, plus 9, how would you like to handle those? MS. KOHLER: I would say that number if
14 15 16 17 18 19 20 21	CHAIRMAN KATZ: Okay, we'll do that. (Whereupon, Towns' Exhibit No. 10 was received into evidence and attached to the Applicants' Municipal Filing.) CHAIRMAN KATZ: How about 1 through 5, plus 9, how would you like to handle those? MS. KOHLER: I would say that number if I could just deal with them individually because they

1	this, this is simply in regard to the comments to the use
2	Route 15, and that perhaps could also be included in the
3	municipal supplementation.
4	There's also No. 2 is the Town of
5	Woodbridge's comments on the Route 15 alternative
6	CHAIRMAN KATZ: Well, they're all Town
7	comments. Is there any problem, Mr. Fitzgerald
8	MR. FITZGERALD: Could somebody give me a
9	page reference
10	MS. KOHLER: Sorry. It's
11	CHAIRMAN KATZ: We are on Hearing Program
12	page 21, we are talking about Towns' Exhibits 1, 2, 3, 4,
13	5, and 9.
14	MS. KOHLER: I think it's 1 through 4
15	are the Towns' comments to the Route 15
16	CHAIRMAN KATZ: Right
17	MS. KOHLER: route or alternative.
18	CHAIRMAN KATZ: Let's take
19	MR. FITZGERALD: Yes, 1 through 4 1
20	through 4 are all comments. They could be just put in
21	CHAIRMAN KATZ: Okay, we will group them
22	under the Applicants' municipal consultation.
23	(Whereupon, Towns' Exhibits Nos. 1, 2, 3
24	and 4 were received into evidence and attached to the

1	Applicants' Municipal Consultation Filing.)
2	CHAIRMAN KATZ: How about No. 5?
3	MS. KOHLER: 5 and 6 will be verified
4	tomorrow by the Land Tech witnesses.
5	CHAIRMAN KATZ: Uh okay. So 5 is Land
6	Tech even though it doesn't say Land Tech, 5 is Land
7	Tech?
8	MS. KOHLER: Correct.
9	CHAIRMAN KATZ: Understood. We will do
10	that tomorrow. And 9 is Land Tech?
11	MS. KOHLER: Yes
12	CHAIRMAN KATZ: Fine.
13	MS. KOHLER: And then we're adding 11,
14	which is the City of Milford's Prefiled Testimony of Land
15	Tech Consultants, Inc.
16	CHAIRMAN KATZ: Okay. And we will do that
17	tomorrow also.
18	MS. KOHLER: Correct.
19	CHAIRMAN KATZ: Okay. So tomorrow there
20	will be four Land Tech exhibits, correct?
21	MS. KOHLER: Yes.
22	CHAIRMAN KATZ: Okay. So we have verified
23	all the exhibits for your witnesses and tomorrow we will
24	take up cross-examination on all non-GE modeling issues,

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1	and that will be right after the companies' homework
2	assignments. Okay, thank you.
3	Okay, this is how I see tomorrow and
4	please tell me if I'm we won't need a prehearing
5	conference tomorrow
6	MS. RANDELL: Madam Chairman, before we
7	close up today, we had Mr. Kleiman here from ESS to
8	discuss a possible marine aspect of the East Shore route.
9	CHAIRMAN KATZ: Yes.
10	MS. RANDELL: There were no questions and
11	we're not going to bring him back.
12	CHAIRMAN KATZ: Okay. And we do have the
13	DOA letter.
14	MR. FITZGERALD: We do
15	MS. RANDELL: Fine. I just wanted to be
16	clear.
17	MR. FITZGERALD: We we haven't we
10	hammed the area of the

- 18 haven't seen it.
- 19 CHAIRMAN KATZ: Well, we have it and
- you're invited to read it. 20
- 21 MR. TAIT: It's a DOA letter.
- 22 CHAIRMAN KATZ: Yeah, DOA is DOA.
- 23 (Laughter). But if we need -- if you'd like to have a
- 24 DOA witness here, anyone, to cross-examine on that

1	letter, then just let us know and we will unturn that
2	stone.
3	MS. RANDELL: It was so much fun the first
4	time
5	CHAIRMAN KATZ: Yes
6	MS. RANDELL: that I think we'll just
7	stop
8	CHAIRMAN KATZ: But I wanted to make that
9	offer to the Towns, if you want to cross-examine a DOA
10	witness, let us know and we'll take care of that.
11	Okay, so tomorrow the way I envision it,
12	and please let me know if this doesn't work, is that
13	we'll start with a report on the homework assignments by
14	the companies, then we'll do cross-examination of
15	Synapse, then we will do the RWA direct case, and then we
16	will do Land Tech. Any objections, problems? Great.
17	Any other procedural matters we need to
18	cover before we adjourn? Great. We are adjourned for
19	today.
20	
21	(Whereupon, the hearing adjourned at 4:40
22	p.m.)

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And T. Aabo

5/26/04

Supplemental Interrogatory Responses

CERTIFICATE

I, Paul Landman, a Notary Public in and for the State of Connecticut, and President of Post Reporting Service, Inc., do hereby certify that, to the best of my knowledge, the foregoing record is a correct and verbatim transcription of the audio recording made of the proceeding hereinbefore set forth.

I further certify that neither the audio operator nor I are attorney or counsel for, nor directly related to or employed by any of the parties to the action and/or proceeding in which this action is taken; and further, that neither the audio operator nor I are a relative or employee of any attorney or counsel employed by the parties, thereto, or financially interested in any way in the outcome of this action or proceeding.

In witness whereof I have hereunto set my hand and do so attest to the above, this 9th day of June, 2004.

Paul Landman President

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