ORIGINAL

STATE OF CONNECTICUT

SITING COUNCIL

CONNECTICUT LIGHT & POWER COMPANY AND UNITED ILLUMINATING COMPANY

APPLICATION FOR A CERTIFICATE OF

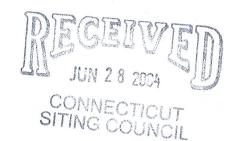
ENVIRONMENTAL COMPATIBILITY AND *
PUBLIC NEED FOR THE CONSTRUCTION *
OF A NEW 345-kV ELECTRIC *
TRANSMISSION LINE AND ASSOCIATED *
FACILITIES BETWEEN THE SCOVILL ROCK *
SWITCHING STATION IN MIDDLETOWN *
AND THE NORWALK SUBSTATION IN *

NORWALK, CONNECTICUT

* * * * * * * * * * * * *

JUNE 17, 2004 (10:07 A.M.)

DOCKET NO. 272



BEFORE: COLIN C. TAIT, ACTING CHAIRMAN

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A PARTY, THE TOWN OF EASTON

A PARTY, THE TOWN OF BETHANY

A PARTY, THE TOWN OF HAMDEN

AN INTERVENOR, THE FIRST DISTRICT WATER COMPANY

AN INTERVENOR, NORWALK ASSOCIATION OF SILVERMINE HOMEOWNERS

A PARTY, ROBERT W. MEGNA, STATE REP. 97th DISTRICT

AN INTERVENOR, MARY G. FRITZ, STATE REP. 90th DISTRICT

AN INTERVENOR, AL ADINOLFI, STATE REP. 103rd DISTRICT

AN INTERVENOR, RAYMOND KALINOWSKI, STATE REP. $100^{\rm th}$ DISTRICT

AN INTERVENOR, THEMIS KLARIDES, STATE REP. 114th

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

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

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

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

1	Verbatim proceedings of a hearing
2	before the State of Connecticut Siting Council in the
3	matter of an application by Connecticut Light & Power
4	Company and United Illuminating Company, held at Central
5	Connecticut State University Institute of Technology &
6	Business, 185 Main Street, New Britain, Connecticut, on
7	June 17, 2004 at 10:07 a.m., at which time the parties
8	were represented as hereinbefore set forth
9	
10	
11	
12	
13	VICE CHAIRMAN COLIN C. TAIT: I'd like to
13 14	VICE CHAIRMAN COLIN C. TAIT: I'd like to call this hearing to order this morning.
14	call this hearing to order this morning.
14 15	call this hearing to order this morning. For the first order of business we have
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14 15 16 17	call this hearing to order this morning. For the first order of business we have I'd like to identify two people who are working with KEMA, Mr. Willem Boone would you please stand up and
14 15 16 17	call this hearing to order this morning. For the first order of business we have I'd like to identify two people who are working with KEMA, Mr. Willem Boone would you please stand up and Johan Enslin. And we'll have resumes for them available
14 15 16 17 18	call this hearing to order this morning. For the first order of business we have I'd like to identify two people who are working with KEMA, Mr. Willem Boone would you please stand up and Johan Enslin. And we'll have resumes for them available to you shortly.
14 15 16 17 18 19 20	For the first order of business we have I'd like to identify two people who are working with KEMA, Mr. Willem Boone would you please stand up and Johan Enslin. And we'll have resumes for them available to you shortly. We will the first order of business is
14 15 16 17 18 19 20 21	For the first order of business we have I'd like to identify two people who are working with KEMA, Mr. Willem Boone would you please stand up and Johan Enslin. And we'll have resumes for them available to you shortly. We will the first order of business is Dr. Ginsberg. I guess take a microphone.

1	DR. GARY GINSBERG: I yes, I've been
2	is this working?
3	A VOICE: Yes.
4	DR. GINSBERG: Yes, I've been sworn. And
5	I appreciate this opportunity to chime in with some
6	comments from what $I^\prime ve$ seen in the last couple of days
7	and weeks of being here. I've learned a lot and have
8	certainly benefited from the discussions.
9	And I just have three points that I'd like
10	to go over that I think may help the Siting Council see
11	the Department of Public Health's perspective on some of
12	the issues that have come up. And I have multiple
13	copies. I made 30 copies just in case anybody wants to
14	have it in front of them now or later on.
15	VICE CHAIRMAN TAIT: Okay.
16	DR. GINSBERG: So if you
17	VICE CHAIRMAN TAIT: Wait a second until
18	we distribute them.
19	DR. GINSBERG: Oh, sure.
20	(Pause)
21	VICE CHAIRMAN TAIT: Dr. Ginsberg, would
22	you like to have this written statement speak for you and
23	just answer questions about it or would you like to make
24	an oral statement in addition?

1	DR. GINSBERG: No, I think I'll just read
2	from it
3	VICE CHAIRMAN TAIT: Okay
4	DR. GINSBERG: and maybe short-circuit
5	one or two places where there's a quote from a paper and
6	I don't need to read the whole quote.
7	VICE CHAIRMAN TAIT: Then let's put a
8	number on this. Fred, what would the number be or we
9	can figure that out?
10	MR. FRED O. CUNLIFFE: Yeah, I'm going to
11	have to look at my program, yeah.
12	VICE CHAIRMAN TAIT: Okay.
13	MR. HAINES: Is this prefiled testimony?
14	VICE CHAIRMAN TAIT: This is prefiled
15	right now.
16	MR. CUNLIFFE: If I recall, it will be No.
17	7.
18	VICE CHAIRMAN TAIT: Subject to
19	correction, we'll call it
20	MR. CUNLIFFE: Subject to correction, yeah
21	
22	VICE CHAIRMAN TAIT: No. 7, yes.
23	(Whereupon, Siting Council Exhibit No. 7
24	was receive into evidence.)

1	VICE CHAIRMAN TAIT: Why don't you read
2	it, Dr. Ginsberg.
3	DR. GINSBERG: Okay, thank you.
4	Supplemental testimony regarding potential health effects
5	of EMF submitted to the Connecticut Siting Council June
6	17 th , submitted by Gary Ginsberg.
7	The purpose of this supplemental testimony
8	is to provide the record with additional information in
9	three areas that have come up repeatedly since DPH's
10	initial testimony in May. The three areas are (1) the
11	weight of evidence provided by the UK study, (2) the
12	relative importance of residential EMF exposure from
13	local sources, such as household appliances, versus
14	exposure from fields emanating from power lines, and (3)
15	possible concern over transients or harmonics that might
16	not be removed if a split phasing approach were used to
17	control EMF levels.
18	Okay, regarding the first point, the
19	United Kingdom study is a large well conducted
20	examination of the potential link between EMF and
21	childhood leukemia with the citations from the years 1999
22	and 2000. It found no association between EMF exposures
23	and childhood leukemia. This finding is not very
24	different from other studies, which also did not find an

1 association because in those studies, whether original 2 study or META analysis, the lower ranges of exposure were 3 not associated with increased disease, while only in the highest exposure category was there a possible link. 4 5 UK study's negative findings are most robust for the low 6 exposure categories in which there are 66 or more 7 children per category when combining across cases and 8 In contrast, and here's the main point, the controls. 9 high-end exposure category, which is greater than or 10 equal to 4 milligauss, had only 17 children. This is out 11 of a total of 45 -- over 4500 children in the study, with 12 a vast majority of children, over 4100, in the low 13 exposure category, which is less than or equal to 1 14 milligauss. Thus, this study has very little statistical 15 power to test whether exposures over 4 milligauss are 16 associated with an increased risk of childhood leukemia. 17 It is noteworthy that in the META analyses of Greenland 18 and Ahlbom both have found a leukemia/EMF association when pooling data across numerous studies, an approach 19 20 which provides sufficient power to begin to assess this 21 relationship. 22 The lack of power of the UK study is 23 further indicated by its small influence in the META 24 analysis of Ahlbom and Wartenberg. When these authors

1 excluded the UK study -- and this is a typical approach 2 in META analyses, you want to see whether there's one 3 study that's particularly influential versus all the 4 others to under what's contributing to your risk 5 estimates -- when you excluded the UK study, it had very 6 little influence on the overall odds ratio, suggesting 7 that again because of the small number of children in the 8 high exposure group, that it doesn't add a lot of 9 statistical weight. 10 The authors of the UK study themselves 11 acknowledge its limited power by stating -- and I have a 12 couple of quotes here in my written -- the full quotes 13 are here -- but just in acknowledging that it doesn't add 14 a lot of power or information about the greater than 4 15 milligauss range and also that there were very few 16 children that were living close to power lines in their 17 studies, so that they really can't comment on those high 18 more intense exposures. And I give the page numbers for 19 those quotes so you can, you know, have a full look at 20 those later. I'm just trying to save some time. 21 This problem of low statistical power to 22 detect EMF effects seems to be common to a number of 23 European as opposed to North American studies due to generally lower EMF exposures in Europe. And some of 24

1 your panelists from Europe may be able to instruct the 2 Siting Council more on this. I can only go by what I read in the Greenland study, which they point out the 3 4 distributions in North American studies tend to be -- and 5 this is power distributions -- tend to much higher than 6 those in the European studies, probably reflecting 7 differences in power systems, for example more overhead 8 wires and lower household voltage in North America, per 9 capita electricity consumption and grounding practices 10 which are different between North America and Europe. 11 So overall, our perspective on the UK 12 study that is informed by these considerations is that 13 while it is an overall and excellent study, it lacked the 14 power to test whether childhood leukemia could be 15 associated with EMF exposures that occur when living 16 close to a power line, for example 4 milligauss and over. 17 However, this is exactly the question we are confronted 18 with in the current application. Therefore, the UK study while valuable in a general sense, is not as useful as 19 20 the larger pooled META analysis data sets. Given the 21 suggestive positive findings for exposures above 3 or 4 22 milligauss in the Greenland and Ahlbom META analyses, DPH 23 finds that a prudent avoidance is warranted in this 24 uncertain zone above 3 milligauss, which that is not new,

that just reiterates our position we've already put on the record.

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Okay, regarding local EMF within the home versus power field -- power line EMF sources, there's much uncertainty as to which type of EMF exposure might be most relevant to leukemia, whether it's acute high dose exposure versus average low -- time weight average type exposure. Short-term peak exposures may be of greatest concern if the cancer mechanism -- and we're assuming EMF does cause cancer when I'm talking about this now -- if the EMF cancer mechanism involves a threshold. The recent study evaluating DNA damage and EMF exposure in rats by Lei and Singh 2004 -- and that's already on the record a couple of times -- suggests that the mechanism may involve free radicals. This mechanism would be consistent with the threshold since there are cellular defenses against free radicals and these defenses would need to be overcome -- in other words, the dose would have to be high enough for DNA damage to occur. Peak exposures around the home may occur when a child sits and plays near a refrigerator, a washing machine, a computer, or other home appliance. peaks may not on their own be sufficient to overcome cellular defenses. However, a possibility is that if one

1 begins with a high baseline exposure due to nearby power 2 lines and then adds to this exposure that which comes 3 from appliances in the home, the additive EMF levels may 4 be more likely to exceed cellular thresholds and lead to 5 genetic effects. Given that the toxicological effects of 6 EMF are still under investigation, this hypothesis is 7 speculative. However, it is based upon the very 8 plausible and rather obvious assumption that adverse 9 effects from EMF would be increased by the additive 10 effect of EMF from power lines together with EMF from in-11 home appliances. 12 Decreasing children's EMF exposures from 13 in-home appliances would be a complex and difficult 14 public education and communication task with no quarantee 15 of success in changing personal behaviors. In other 16 words, it might be hard to instruct parents to keep their 17 kids away from such appliances. You can't trust that 18 kind of behavior modification. Therefore, controlling 19 the external fields entering homes may be the best 20 approach to minimizing children's EMF exposures if the 21 Council in the long-run does deem that that prudent avoidance is warranted. 22 23 And finally, the split phasing versus 24 distance issue and which is the best way to try to

1 achieve a prudent avoidance type approach. Increasing 2 the buffer zone to potential receptors is a guaranteed 3 way to lower EMF exposure. However, technological 4 approaches such as split phasing may also have a benefit, 5 and in certain cases may be more practical. The concern has been raised that split phasing may succeed in 6 7 lowering milligauss readings on average but may not avoid 8 peak exposures due to transient or harmonic currents. 9 DPH does not have the expertise to judge the likelihood 10 that this could occur. During the course of these 11 hearings there has been a lack of actual measurement data 12 documenting the effectiveness of split phasing and 13 lowering EMF. Therefore, it may be prudent for the 14 Siting Council to request a limited field trial of split 15 phasing that would take place over the course of days to 16 weeks of power transmission. This may determine whether 17 split phasing is a consistent and reliable EMF reduction 18 method or whether there are transient episodes of higher 19 fields. Such a study may provide a greater comfort level 20 to all parties. 21 And just to follow up, I assume that there would be post-construction if this split phasing is put 22 23 in place. Post-construction confirmatory sampling, one 24 may want to get some, you know, pilot data before one

1 gets to that level of final implementation before one 2 would go that far with split phasing if there are 3 legitimate questions about it. 4 VICE CHAIRMAN TAIT: I'll go through the 5 list. Does the Applicant have questions of Dr. Ginsberg? 6 MS. LINDELL RANDELL: Mr. Tait, as you 7 know, Mr. -- Dr. Bailey is not here today. I'd like to 8 reserve on behalf of the Applicants. 9 VICE CHAIRMAN TAIT: Do other applicants -10 - or other intervenors and parties wish to also -- would 11 they prefer to cross-examine now or have Dr. Ginsberg 12 back for cross-examination? Can I hear from the Towns' 13 attorneys? 14 MR. DAVID BALL: I have no problem with 15 Attorney Randell's suggestion. 16 COURT REPORTER: Your name please. 17 MR. BALL: David Ball for the Town of 18 Woodbridge. 19 VICE CHAIRMAN TAIT: You're welcome to ask 20 questions now if you -- if that's what you'd like. 21 MR. BALL: No, I don't believe that we have questions now. If the Applicant chooses to cross-22 23 examine at a later date, then we certainly would as well. 24 VICE CHAIRMAN TAIT: I think it might be

1	wise for everybody to go home and look at this,
2	particularly the suggestion of a field study, and if the
3	Applicant could respond to that. I don't know when we'll
4	get back to him, but this is the last day of this set of
5	hearings.
6	MS. RANDELL: We did catch that and I
7	thought we'd probably address that in July.
8	VICE CHAIRMAN TAIT: Okay.
9	MS. RANDELL: I do have a question however
10	just on what Dr. Ginsberg said versus what's in the
11	paper.
12	VICE CHAIRMAN TAIT: Okay.
13	MS. RANDELL: One of our people, Mr.
14	Zaklukiewicz, who is a much better reader than I am,
15	suggests that in Line 4, the first numbered paragraph, we
16	believe you said other studies which did not find an
17	association, whereas the written document says which did
18	find an association. We just need to be clear on what
19	was intended?
20	DR. GINSBERG: Oh, yeah, I meant to say
21	which did find an association.
22	MS. RANDELL: Which did find?
22	MS. RANDELL: Which did find? DR. GINSBERG: Yes. Thank you for that

1	MS. RANDELL: So it's right in writing.
2	And if you said not, the transcript will just reflect
3	DR. GINSBERG: Right
4	MS. RANDELL: now that you didn't
5	intend to
6	DR. GINSBERG: The way it's written is
7	accurate.
8	MS. RANDELL: Okay, thank you.
9	VICE CHAIRMAN TAIT: Any other questions
10	for Dr. Ginsberg? Not cross-examination but on what he
11	did say? Council or Fred, anybody?
12	MR. PHILIP T. ASHTON: I have
13	MR. CUNLIFFE: No.
14	MR. ASHTON: I have I have one
15	question.
16	VICE CHAIRMAN TAIT: Phil.
17	MR. ASHTON: In numbered item
18	COURT REPORTER: A microphone please.
19	MR. ASHTON: Thank you
20	MR. GERALD J. HEFFERNAN: Can't you get
21	that right
22	MR. ASHTON: After 40 days of hearings,
23	you would think I would. In numbered paragraph 3 on the
24	third page, the fifth line, the words at the end of the

1	line talking about split phasing say but may not avoid
2	peak exposures due to transient or harmonic currents.
3	Can you help me out with what the basis for that is?
4	DR. GINSBERG: That is based upon some of
5	the concerns that I heard from some of the other parties
6	to the hearings I believe yesterday, who raised the issue
7	that we don't know exactly about this technology, that
8	I mean it may reduce milligauss readings but that there
9	may be electrical pulses that are not fully cancelled out
10	was what I was what I was picking up. And since we at
11	the health department don't really know the physics of
12	this and haven't seen data that confirms that these types
13	of concerns would be fully addressed by split phasing,
14	we're just looking for some confirmatory data.
15	MR. ASHTON: Okay, you're simply repeating
16	your understanding of what you heard rather than based on
17	knowledge specifically, is that fair?
18	DR. GINSBERG: We don't have specific
19	knowledge about that, that's correct.
20	MR. ASHTON: Okay.
21	VICE CHAIRMAN TAIT: Thank you, Dr.
22	Ginsberg. I guess we'll see you in July.
23	DR. GINSBERG: Right. Just give us some
24	lead time on the date.

1	VICE CHAIRMAN TAIT: Yes. I guess ISO New
2	England it's your call.
3	MR. ANTHONY MACLEOD: Are we on, sir?
4	VICE CHAIRMAN TAIT: You're on.
5	MR. MACLEOD: Okay.
6	VICE CHAIRMAN TAIT: Okay, where is ISO
7	New England
8	A VOICE: Page
9	VICE CHAIRMAN TAIT: What page?
10	A VOICE: 22.
11	VICE CHAIRMAN TAIT: Page 22.
12	(Pause)
13	COURT REPORTER: Can you have the
14	witnesses reintroduce themselves.
15	VICE CHAIRMAN TAIT: Mr. MacLeod, have all
16	of your witnesses been sworn?
17	MR. MACLEOD: No, they have not, Mr.
18	Chairman.
19	VICE CHAIRMAN TAIT: Why don't we do that
20	first
21	MR. MACLEOD: We have a new witness.
22	VICE CHAIRMAN TAIT: Yeah. Why don't we -
23	- which ones which is the new witness?
24	MR. MACLEOD: I'd like to introduce David

1	Hackwell of PE	B Power.
2		VICE CHAIRMAN TAIT: Okay.
3		COURT REPORTER: Before they're sworn,
4	could you have	e them state their names.
5		MR. MACLEOD: Certainly. Starting from my
6	left would eac	ch of you please identify yourselves.
7		MR. RICHARD KOWALSKI: Richard Kowalski.
8		COURT REPORTER: Spell your last name
9	please.	
10		MR. KOWALSKI: K-o-w-a-l-s-k-i.
11		MR. STEPHEN WHITLEY: Stephen Whitley, W-
12	h-i-t-l-e-y.	
13		COURT REPORTER: Stephen with a p, right?
14		MR. WHITLEY: Yes.
15		VICE CHAIRMAN TAIT: And an H.
16		MR. DAVID HACKWELL: David Hackwell, H-a-
17	c-k	
18		AUDIO TECHNICIAN: Mr. Hackwell, hold on a
19	second	
20		MR. HACKWELL: w-e-l-l
21		MR. MACLEOD: Wait just a second.
22		AUDIO TECHNICIAN: Would you mind
23	repeating	
24		MR. HACKWELL: David Hackwell, H-a-c-k-w-

1	e-l-1.
2	MR. HAINES: He's the new witness?
3	VICE CHAIRMAN TAIT: Yes.
4	MR. HAINES: Mr. Hackwell, would you
5	please stand and raise your right hand please to be
6	sworn.
7	(Whereupon, David Hackwell was duly sworn
8	in.)
9	MR. HAINES: Thank you. Be seated.
10	VICE CHAIRMAN TAIT: Mr. MacLeod, would
11	you prepare some little cheat sheets for names so that we
12	know who we're talking to that the other folks have
13	supplied us with not immediately, but maybe somebody
14	could
15	MR. MACLEOD: Yes, I'll ask by talking
16	into the microphone, I'll ask the ISO folks in the back
17	if they would please find something to bend in half and
18	put the names of each witness on
19	VICE CHAIRMAN TAIT: Thank you
20	MR. MACLEOD: and display them in front
21	of you.
22	VICE CHAIRMAN TAIT: I have a bunch of
23	numbered exhibits in front of me. I think we're down to
24	No. 8, is that true

1	MR. MACLEOD: I believe we are
2	VICE CHAIRMAN TAIT: and 9.
3	MR. MACLEOD: Exhibit No. 8, which I'd
4	like to offer for identification is the Supplemental
5	Prefiled Testimony of Mr. Whitley dated June 7, 2004.
6	VICE CHAIRMAN TAIT: We'll number that No.
7	8 for identification.
8	MR. MACLEOD: The next item is the resume
9	of David Hackwell.
10	VICE CHAIRMAN TAIT: And we'll number that
11	No. 9 for identification.
12	MR. MACLEOD: The next item would be the
13	PB Power Report, which is entitled Engineering Services
14	Transients/Harmonics Study Review Southwestern
15	Connecticut Reliability Project Final Report, 15 June
16	2004.
17	VICE CHAIRMAN TAIT: That will be No. 10.
18	MR. MACLEOD: And the final item is a
19	homework item and I'm not sure that the Council has it.
20	I'll distribute it it's on the table there. It's a
21	homework assignment which complies with your request that
22	we let you know what underground facilities in New
23	England have received cost socialization.
24	VICE CHAIRMAN TAIT: Do you want to

1	distribute those now or
2	MR. MACLEOD: I will do that.
3	VICE CHAIRMAN TAIT: Yeah.
4	(Pause)
5	VICE CHAIRMAN TAIT: Mr. Johnson
6	MR. MACLEOD: I will send them around.
7	MR. BRUCE JOHNSON: Okay. Hi. Bruce
8	Johnson for the OCC. I just wanted to verify that copies
9	of the underground in New England exhibit that was just
10	mentioned will be available to those participating in the
11	docket.
12	VICE CHAIRMAN TAIT: Of course.
13	MR. MACLEOD: They certainly will.
14	MR. JOHNSON: Thank you.
15	MR. MACLEOD: And I apologize for the fact
16	that they have not been distributed yet.
17	VICE CHAIRMAN TAIT: I guess we're due to
18	verify Exhibits 8 through 11.
19	MR. MACLEOD: Okay. Mr. Whitley, do you
20	have in front of you the document marked for
21	identification No. 8, which would be your supplemental
22	prefiled testimony?
23	MR. WHITLEY: Yes, dated June the 7 th ,
24	correct.

1	MR. MACLEOD: And is that testimony which
2	you prepared or caused to be prepared?
3	MR. WHITLEY: Yes.
4	MR. MACLEOD: And are you familiar with
5	the facts alleged in that testimony?
6	MR. WHITLEY: Yes, I am.
7	MR. MACLEOD: And to the best of your
8	knowledge and information are they true and accurate?
9	MR. WHITLEY: Yes.
10	MR. MACLEOD: And would you like to adopt
11	that as your testimony, supplemental testimony in this
12	proceeding and offer it as an exhibit?
13	MR. WHITLEY: Yes, I would.
14	MR. MACLEOD: I would offer that as a full
15	exhibit.
16	VICE CHAIRMAN TAIT: Hearing no objection,
17	it's a full exhibit.
18	(Whereupon, ISO New England Exhibit No. 8
19	was received into evidence as a full exhibit.)
20	MR. MACLEOD: Mr. Hackwell, do you have a
21	professional resume that you have submitted in front of
22	you there?
23	MR. HACKWELL: Yes, I do.
24	MR. MACLEOD: Okay. And that is your

1	professional resume and it's true and accurate to the
2	best of your knowledge?
3	MR. HACKWELL: It is, yes.
4	MR. MACLEOD: Okay. And would you like to
5	offer that as an exhibit in this proceeding?
6	MR. HACKWELL: I would yes.
7	MR. MACLEOD: Okay.
8	VICE CHAIRMAN TAIT: Hearing no objection,
9	I will admit Exhibit 9.
10	(Whereupon, ISO New England Exhibit No. 9
11	was received into evidence as a full exhibit.)
12	MR. MACLEOD: And Mr. Hackwell, staying
13	with you, have you prepared or caused to be prepared a
14	report, which has been marked as Exhibit No. 10
15	VICE CHAIRMAN TAIT: 10.
16	MR. MACLEOD: in this proceeding?
17	MR. HACKWELL: Yes, I have.
18	MR. MACLEOD: Okay. And you are familiar
19	with the contents of that report?
20	MR. HACKWELL: I am.
21	MR. MACLEOD: And would you like to
22	sponsor that as an exhibit in this proceeding?
23	MR. HACKWELL: Yes, I would.
24	MR. MACLEOD: And Mr. Kowalski, have you

1	prepared the item that is marked for identification as
2	Exhibit No. 11
3	VICE CHAIRMAN TAIT: Why don't we finish
4	off No. 10.
5	MR. MACLEOD: I'm sorry, did I not offer
6	that?
7	VICE CHAIRMAN TAIT: Is there any
8	objection to admitting
9	MR. MACLEOD: I'm sorry
10	VICE CHAIRMAN TAIT: Item No. 10 as a
11	full exhibit? It's a full exhibit.
12	(Whereupon, ISO New England Exhibit No. 10
13	was received into evidence as a full exhibit.)
14	MR. MACLEOD: I violated the Navajo rule.
15	I apologize. (Laughter).
16	Mr. Kowalski, do you have in front of you
17	the document which has been marked as Item No. 11 for
18	identification, which is entitled ISO Interrogatory
19	Summary Underground PTF Facilities?
20	MR. KOWALSKI: Yes.
21	MR. MACLEOD: And did you prepare or cause
22	that to be prepared?
23	MR. KOWALSKI: Yes, I did.
24	MR. MACLEOD: And do you believe the

29

1	contents of that are true and accurate to the best of
2	your knowledge?
3	MR. KOWALSKI: Yes, I do.
4	MR. MACLEOD: And would you like to offer
5	that as an exhibit in this proceeding?
6	MR. KOWALSKI: Yes, I would.
7	VICE CHAIRMAN TAIT: Hearing no objection,
8	it will be full Exhibit No. 11.
9	(Whereupon, ISO New England Exhibit No. 11
10	was received into evidence as a full exhibit.)
11	MR. MACLEOD: Thank you, Mr. Tait.
12	VICE CHAIRMAN TAIT: Is your panel ready
13	for cross-examination?
14	MR. MACLEOD: Well, they are, but with
15	your indulgence, I would like to have Mr. Whitley make a
16	statement first, a brief statement just in the nature of
17	opening things and then we can proceed.
18	VICE CHAIRMAN TAIT: Please proceed, Mr.
19	Whitley.
20	MR. WHITLEY: Thank you, sir. ISO New
21	England is here today because we are committed to working
22	with the Siting Council and Connecticut stakeholders to
23	develop a comprehensive long-term energy solution to
24	reliability problems for Connecticut and the New England

1 region.

2 This solution includes building both 3 phases of the proposed 345-kV loop, but it is important 4 to get the job done right. It must be technical 5 feasible. These projects are needed to ensure a reliable 6 supply of power not only for Connecticut but for all of 7 New England. New England's system is interconnected. 8 What happens in one area of New England can impact other 9 If Connecticut builds a new transmission loop 10 with built-in reliability problems, it can have an impact 11 on the regional system. With that in mind, we are 12 raising reliability concerns about the specific 13 configuration proposed by NU and UI for the second phase 14 of the transmission project. ISO New England is mindful 15 of the desire of the residents in Southwest Connecticut 16 and the clear direction from the Legislature to put high 17 voltage transmission lines underground. We also agree 18 with the Legislature that transmission should not be 19 placed underground if based on reliability considerations 20 it would not be technically feasible. While ISO New 21 England has certain concerns with the proposal before the 22 Council, we are confident that these concerns do not 23 preclude a solution that includes some underground 24 transmission lines.

1	The transmission projects in Southwest
2	Connecticut represent the largest investment in energy
3	infrastructure in all of New England. These projects
4	need to serve New England and Connecticut residents and
5	the region's economy reliably for years to come. With an
6	estimated price tag of 800 million dollars for both
7	phases, we want to make sure it will fix the problem.
8	This configuration does not.
9	Time is a concern as a solution that we
10	can all have confidence in. We are hopeful that we can
11	work with the timeframe outlined by the Siting Council
12	and reach a resolution for the end of the year. However,
13	we would rather get it done right than get it done fast.
14	We do not believe a delay in the approval process would
15	delay when the loop could be put into service. It takes
16	far longer to construct an underground system than
17	overhead lines. A transmission upgrade that is 40
18	percent underground will take longer to construct, will
19	be much more expensive, and may not provide the reliable
20	electricity system that Connecticut residents and
21	businesses expect and deserve. Thank you.
22	VICE CHAIRMAN TAIT: Fred, are you ready
23	to start cross-examination?
24	MR. CUNLIFFE: Thank you, Chairman. Does

1	the ISO perform its own transmission planning studies?
2	MR. WHITLEY: Yes, we do. And we do that
3	in an open environment involving the participants, the
4	transmission owners and the other stakeholders through
5	the Transmission Expansion Advisory Committee, TEAC.
6	MR. CUNLIFFE: Have you done your own
7	study on the proposed project, Phase 2?
8	MR. WHITLEY: We have done a number of our
9	own studies involving load flow stability, short-circuit
10	type analysis. The transient analysis that was done here
11	was performed by GE for the Applicants, and we have
12	reviewed those studies. And we have had our consultant
13	from PB Power here review those studies for us.
14	MR. CUNLIFFE: What is the role of the ISO
15	Southwest Connecticut Working Group and the significant
16	of the comparison study?
17	A VOICE: Rich, you might want to
18	MR. KOWALSKI: The Southwest Connecticut
19	Working Group is a group that is chaired and directed by
20	ISO. It's a task oriented group that's composed of ISO
21	New England, Northeast Utilities and United Illuminating.
22	It's more of task sharing, looking at the expertise from
23	the groups. The Working Group functions to divvy up the
24	work, to perform studies and the studies and the scope

1	of the studies are directed and coordinated by ISO New
2	England, discussed with the TEAC stakeholder advisory
3	committee. So it's more of a work management effort,
4	assembly report materials. That's the function of the
5	group.
6	MR. CUNLIFFE: What's the consistent
7	what's what are the members of the group?
8	MR. KOWALSKI: The members of the group
9	are ISO Transmission Planning staff senior member,
10	Northeast Utilities Planning staff and UI Planning staff.
11	There's no formal makeup.
12	MR. CUNLIFFE: Have those load flow
13	studies and short-circuit studies been provided in this
14	proceeding that Mr. Whitley just testified to?
15	MR. KOWALSKI: I believe that material has
16	all been provided. The comparison study was submitted I
17	believe earlier in earlier testimony.
18	MR. CUNLIFFE: Okay. If you could just
19	check and identify that. Thanks.
20	MR. ASHTON: Just to help Mr. Cunliffe
21	out, if I may, the load flow and short-circuit studies
22	are not involved in any dispute they're not involved
23	in any dispute, are they? So that everybody, ISO and the
24	Applicants all are satisfied with the results of the load

1	flow studies?
2	MR. KOWALSKI: Yes.
3	MR. WHITLEY: We certainly are, yes.
4	MR. ASHTON: Thank you.
5	MR. CUNLIFFE: In the comparison study
6	there was some modeling dispatch scenarios that assumed
7	Devon and the Milford units were simultaneously out of
8	service. In addition to that, they also modeled that the
9	New Haven Harbor unit would be out of service. Does ISO
10	New England consider that an acceptable interpretation of
11	the NEPOOL planning criteria?
12	MR. KOWALSKI: Yes. The all of the
13	conditions that have been modeled from the beginning of
14	the design of the study are consistent with the NEPOOL
15	and NPCC planning criteria.
16	MR. CUNLIFFE: Would all the units
17	operating in Southwest Connecticut alleviate the need of
18	a 345-kV line if you had all the units operating?
19	MR. KOWALSKI: As a matter of fact, having
20	all of the units operating is precluded by not having the
21	project.
22	MR. CUNLIFFE: Thank you. Is other
23	modeling dispatch scenarios applied like other utilities,
24	

1	MR. KOWALSKI: Very typically the NPCC
2	criteria is not that different from other regional
3	criteria and it really centers around reasonably
4	postulated unplanned and potentially scheduled outages in
5	combination with known or anticipated potential risk
6	conditions.
7	MR. CUNLIFFE: And do you expect the
8	recent FERC decision on reliably must run units, the one
9	issued on June 2, 2004 in response to the Devon filing,
10	will provide an incentive to generation in Southwest
11	Connecticut?
12	MR. WHITLEY: Well, let me let me
13	answer that. I think the the incentives for new
14	generation in Southwest Connecticut aren't being provided
15	just by having must run contracts for existing units. So
16	there are some market rules that are being investigated
17	to put in a locational capacity market into New England,
18	install capacity market. There are other market
19	initiatives for putting in full reserve markets into the
20	region that may provide some more incentive. But those
21	must run contract orders to keep units alive simply are
22	there to keep units alive and not to provide additional
23	units into the system.
24	MR. CUNLIFFE: So you don't think this

1	will provide an incentive?
2	MR. WHITLEY: No.
3	MR. CUNLIFFE: On page 5 of your
4	testimony, line 105, it states FERC has recently given
5	the ISO additional guidance on how to implement Schedule
6	12C, directing the ISO that any costs incurred above
7	these basic costs, which include the costs necessary to
8	maintain safe, reliable, and adequate transmission
9	infrastructure should be borne by the locality that will
10	benefit from them. Based on your current understanding,
11	what system configuration would conform basic costs?
12	MR. WHITLEY: Well, I don't have all of
13	the information presented to me at this point. There's a
14	process that this 12C calls for for the Applicants to
15	bring forward data to show the costs of the proposal and
16	the cost of the modifications that have been made to the
17	proposal and why they're justified. The original
18	proposal approved in RTEP was for two overhead 345-kV
19	lines. So when the project actually comes back through
20	the ISO and the NEPOOL Reliability Committee, the
21	Applicants will bring forward facts to show why certain
22	changes were made to the design, to demonstrate that
23	those were technically feasible, and that here's the
24	justification for those changes, here's the cost of those

1	changes, here's why they're required, are they required
2	for engineering reasons, and what are the costs of making
3	that change. And at that point when the evidence is
4	presented to us, we'll make a decision on what should be
5	rolled in and what should not be rolled in.
6	MR. CUNLIFFE: What proposal was totally
7	overhead?
8	MR. WHITLEY: The original plan in the
9	RTEP that was approved in RTEP, the Regional Transmission
10	Expansion Plan was for a 345-kV loop that was all
11	overhead.
12	VICE CHAIRMAN TAIT: You're talking
13	you're talking about 217 Docket 217 and Docket 272?
14	That's the plan you're talking about?
15	MR. MACLEOD: Well, I believe that Mr.
16	Whitley is talking about the plan that was actually in
17	RTEP-02. RTEP-02 is an exhibit in both of those dockets.
18	But that was approved through the stakeholder process.
19	VICE CHAIRMAN TAIT: But those were in
20	effect 217 and 272 all overhead?
21	A VOICE: Yes
22	MR. ASHTON: Let's be specific. In 217
23	the line went from Bethel Plumtree Substation to Norwalk.
24	In this docket we're going from Norwalk to Devon to

1	Middletown. And that all of those circuit sections
2	were overhead in RTEP-02?
3	MR. KOWALSKI: That's correct.
4	VICE CHAIRMAN TAIT: That's what I was
5	asking. So Phase 2 coming in or Docket 272 has not
6	included some under-grounding which you didn't look at
7	before
8	A VOICE: Right
9	VICE CHAIRMAN TAIT: or at least it
10	wasn't looked at before.
11	MR. CUNLIFFE: Were those overhead
12	proposals proposed by the individual utility in the
13	territory or was that a general thought process that
14	these proposals would be overhead?
15	MR. WHITLEY: Yeah, those were proposed by
16	the Applicants at the time.
17	VICE CHAIRMAN TAIT: When did you first
18	know that under-grounding was being proposed in Docket
19	272? (Pause). I assume it was before 272 was filed last
20	October?
21	MR. KOWALSKI: Shortly before the filing
22	we were aware that the proposal had been made to put
23	sections of the line underground.
24	VICE CHAIRMAN TAIT: Can you put a date on

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1	that?
2	MR. KOWALSKI: I I do not have an exact
3	date
4	VICE CHAIRMAN TAIT: The summer the
5	summer of 2003?
6	MR. KOWALSKI: Somewhere between the
7	summer and the fall.
8	VICE CHAIRMAN TAIT: Okay. At that point
9	what did you do?
10	MR. KOWALSKI: At
11	VICE CHAIRMAN TAIT: Did you write CL&P?
12	Did you write NU? Did you write UI saying, hey, boys, we
13	have doubts? Boys and girls.
14	MR. KOWALSKI: The well the approach we
15	took was the information that we were getting from
16	CL&P and UI at the time was it encountered some
17	difficulty in the right-of-ways, and the preliminary
18	estimate, cost estimates were suggesting that for some
19	for the sections that were being proposed, that it was
20	comparable costs. So the approach we took was there
21	were two things going on at the time. The first is we
22	were reviewing the Phase 1 proposal, the Bethel to
23	Norwalk section, in the what finally came out of the
24	commission, to review the impact and each functionality.

1	We then incorporated that into this revised
2	overhead/underground plan for the Middletown to Norwalk
3	section
4	VICE CHAIRMAN TAIT: And when did that
5	occur?
6	MR. KOWALSKI: That that would have
7	been sometime in the summer/fall period that we began
8	studying it to assure that the proposal would actually
9	function, and to look at what refinements might have to
10	be made in order to make it a functioning project.
11	VICE CHAIRMAN TAIT: And did you send any
12	warning flag to CL&P and UI that you had doubts?
13	MR. KOWALSKI: At the time, we had the
14	issues that we uncovered and I believe that we
15	discussed these in our March testimony our earliest
16	findings were because of the difference in the
17	underground cable technology in parallel with the
18	overhead, that we had lower capacity facilities, natural
19	of underground, that more power naturally wanted to flow
20	on. So we were finding that we had to mitigate, try and
21	come up with means to buck the flow off these lines to
22	try and get the whole 345-kV loop back into some kind of
23	a balance without creating additional problems. So we
24	spent a considerable amount of effort trying to do that

1	in conjunction with trying to determine ways to now
2	regulate voltage in the area over a wide period of time.
3	The introduction of the cables introduces a large amount
4	of capacitance
5	VICE CHAIRMAN TAIT: We realize that now -
6	-
7	MR. KOWALSKI: Okay
8	VICE CHAIRMAN TAIT: we have your
9	report of June 7 th . UI and CL&P said they had an hour's
LO	notice before they got that. The parties themselves had
L1	no notice until that same time. At this point we now are
L2	faced with ISO's statement that this won't work. I'm
13	just amazed that we have to wait until June when you knew
L 4	the problem back in the summer of 2003 and didn't work
15	with CL&P and UI or did you?
16	MR. WHITLEY: Well, let me comment that
17	the focus of our early studies and investigations were on
18	the security aspects of the project, will it meet the
19	needs, will it provide the power to the locations that
20	it's needed in a reliable manner, will the voltage be
21	maintained within criteria, will thermal overloads be
22	prevented, will stability be maintained, and those are
23	the focus of studies in these stages of the planning
24	process. And when you get into issues of switching

1	transients and harmonics, which have been uncovered under
2	this later phase of design, those are studies that
3	typically don't come up in front-end planning studies.
4	And really we weren't aware of the significance of this
5	problem until much later, until we really first started
6	looking at the result of the GE
7	VICE CHAIRMAN TAIT: When were you first
8	aware of the problem?
9	MR. WHITLEY: When the GE studies came
10	out.
11	VICE CHAIRMAN TAIT: Which is what date?
12	MR. WHITLEY: Rich?
13	MR. KOWALSKI: In the fall we became aware
14	of the potential for the harmonics issue. And that's
15	when we started exploring it. And we did refer to that
16	also in our March testimony. We were still trying to
17	enhance our understanding of the problem. As Steve
18	points out, it's not normally an issue that needs to be
19	dealt with in the primary planning of the system. It's -
20	- typically harmonics and transients are typically a
21	nominal concern that can be dealt with after the fact in
22	engineering and design. As we developed our
23	appreciation, explored the issue more fully is when we
24	realized that we needed to pursue outside consultants in

1 addition to our own review of the GE report. So we were 2 aware that there was a concern. We continued our 3 explorations. Unfortunately, the timing was such that 4 the --5 VICE CHAIRMAN TAIT: Well, you can 6 understand the frustration of this Council and all 7 parties as to your conclusions that arrive on our desk on June 7th. Mr. Ashton. 8 9 MR. WHITLEY: We -- we certainly, you 10 know, wish we would have had a better understanding 11 sooner than we did. I would point out though when we 12 testified to this Council in March, both Rich and I 13 testified that we had serious concerns about the level of 14 under-grounding that had already been approved and that 15 we were now talking about even more. We were really, you 16 know, beginning to -- beginning to understand how serious 17 this was, but really needed outside help to investigate 18 it. 19 MR. ASHTON: Mr. --20 COURT REPORTER: One moment please.

21 (Pause). Thank you.

22 MR. ASHTON: Mr. Whitley, ISO was a party

to Docket 217, were they not? 23

24 MR. WHITLEY: Yes.

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1	MR. ASHTON: I'm sorry, I didn't hear.
2	MR. KOWALSKI: Yes
3	MR. WHITLEY: Yes, we were.
4	MR. ASHTON: Did when did you did
5	you read the final decision and descending opinion that
6	came out of that?
7	MR. WHITLEY: Yes.
8	MR. ASHTON: Were there comments in that
9	descending opinion that there was cause for concern over
10	switching transients and over-voltages and things like
11	that?
12	MR. WHITLEY: I don't recall. Do you
13	recall?
14	MR. KOWALSKI: I don't recall.
15	MR. WHITLEY: We don't recall.
16	MR. ASHTON: When were you aware that
17	the Applicant was filing for a significant underground
18	portion in Docket 272?
19	VICE CHAIRMAN TAIT: I thought that
20	testimony was the summer of 2003.
21	MR. WHITLEY: Right.
22	MR. ASHTON: And yet that didn't cause you
23	to say stop everything and let's do something let's do
24	some studies before we get irrevocably committed?

1	MR. KOWALSKI: We immediately began, as
2	Steve pointed out, focusing on the basic security and
3	reliability analyses
4	MR. ASHTON: What what comments did you
5	have to the Applicant when that filing when you found
6	that they were going to file with a Phase 1 underground?
7	MR. KOWALSKI: Well at that point our
8	objective was to try and come up with a plan that would
9	function. That was what we were trying to do
10	MR. ASHTON: Did you tell the Applicant,
11	whoa, we've got a problem potentially here, let's
12	let's stop and not proceed until we know what we're
13	dealing with?
14	MR. KOWALSKI: Well, our again, the
15	objective was we realized that we had
16	MR. ASHTON: I understand your objective.
17	I want to know what the action was?
18	MR. KOWALSKI: The action was to try and
19	pursue the studies to make the plan work. We were not
20	aware of the transient issues at the time.
21	MR. ASHTON: But wasn't that isn't that
22	a red flag immediately when you see the amount of cable
23	system that's being proposed?
24	MR. KOWALSKI: I suppose in retrospect it

1	should have been. Our experience in New England, we have
2	not had anywhere we have not been anywhere near this
3	type of a problem
4	MR. ASHTON: But you haven't had anywhere
5	near this significant a cable system, have you?
6	MR. KOWALSKI: This is true.
7	MR. WHITLEY: Well, it's a combination of
8	the cable system and the weak system in Southwest
9	Connecticut, that the very reason we need infrastructure
10	in Connecticut is because we have such a weak system.
11	And when you integrate this much capacitance in a weak
12	system, it's after working with our consultant, it's
13	very difficult to mitigate. I think we had hopes
14	working with the Applicants and doing those studies back
15	in those months that mitigative actions could be
16	developed
17	MR. ASHTON: What
18	MR. WHITLEY: that might solve this
19	problem.
20	MR. ASHTON: Was the Applicant involved
21	with the studies that I guess are embodied in Exhibit 10?
22	MR. KOWALSKI: No.
23	MR. ASHTON: Why not?
24	MR. KOWALSKI: The Applicant was involved

1	in the General performed the General Electric study.
2	Our effort really focused on our consultant reviewing the
3	General Electric study and providing feedback to us.
4	VICE CHAIRMAN TAIT: Was CL&P aware that
5	you had retained an independent person to review GE?
6	MR. KOWALSKI: They were not.
7	VICE CHAIRMAN TAIT: So they didn't know
8	about the power study, that you had such significant
9	things that you had asked for an independent review of
10	GE? Did CL&P know you had retained PB Power to review
11	their GE studies?
12	MR. KOWALSKI: No, they did not.
13	VICE CHAIRMAN TAIT: Why didn't you tell
14	them? (Pause). We're having too much fun. Maybe we
15	ought to back off and just get on with what you have put
16	before us.
17	MR. HEFFERNAN: May I ask one question
18	VICE CHAIRMAN TAIT: Yeah. Gerry and then
19	
20	MR. HEFFERNAN: The one question I have is
21	as a member of the Council, I sit here and as the
22	Applicant puts forth their application and we're going to
23	come to some conclusions about the configuration, I've
24	always had some confidence that we wouldn't reach a

1	conclusion where there was no reliability. I mean the
2	cost might be a factor. So if I'm hearing this
3	correctly, you're saying that, gees, you better watch out
4	reaching an agreement with the Applicant because even
5	though they think it's reliable, it might not be?
6	VICE CHAIRMAN TAIT: Or because they think
7	it's reliable and you don't think it's reliable, they
8	can't go if it's your opinion it's not reliable.
9	MR. HEFFERNAN: Yeah.
10	VICE CHAIRMAN TAIT: It says on page 2
11	it says upon notice by ISO that it's to not proceed.
12	They can't do anything besides engineering studies. Have
13	you sent them that notice now? Is your testimony of
14	June 7 th this notice to stop?
15	MR. WHITLEY: We have we have talked to
16	them, yes.
17	VICE CHAIRMAN TAIT: No, no, your
18	testimony says if the participants proposing transmission
19	receives notice from ISO that it will have a significant
20	adverse they must stop.
21	MR. WHITLEY: That's correct.
22	VICE CHAIRMAN TAIT: So you've just told
23	them that.
24	MR. KOWALSKI: And they haven't they

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1	haven't pursued an application
2	MR. WHITLEY: Explain it to them
3	MR. KOWALSKI: The I believe you're
4	referring to some of the terms in Section 18.4 of the
5	NEPOOL agreement, which goes towards implementation. The
6	the approach should be and would be that we've
7	identified an issue, albeit late in the game, and we want
8	to pursue working with the Applicant to find remedies
9	VICE CHAIRMAN TAIT: I just look at page 2
10	and 3 particularly page 3, Mr. Whitley, which it says
11	may not proceed say for preliminary engineering work. I
12	think we're well past preliminary engineering work.
13	We've been at this for
14	MR. WHITLEY: Well, the other thing that
15	we have here is we have a moving target
16	VICE CHAIRMAN TAIT: Yes
17	MR. WHITLEY: we have a moving target.
18	We talk about X miles of line and then the next week we
19	talk about X plus Y miles of line, and then X plus Y plus
20	Z miles of line
21	VICE CHAIRMAN TAIT: But you're looking at
22	the proposal that has 24 miles and that's always been in
23	the application since last fall. That's not a moving
24	target.

1	A VOICE: Colin
2	MR. MACLEOD: Mr. Chairman, perhaps
3	(Multiple voices overlapping,
4	indiscernible)
5	MR. HEFFERNAN: Are you saying that the
6	Applicant would agree to do something if they weren't
7	sure of the reliability of it?
8	MR. WHITLEY: I'm not I'm saying what
9	we're - I'm not speaking for the Applicant at all
10	MR. HEFFERNAN: Oh, okay, so
11	MR. WHITLEY: I'm speaking for ISO New
12	England
13	MR. HEFFERNAN: so what
14	MR. WHITLEY: all I'm going to say
15	COURT REPORTER: One at a time please
16	MR. WHITLEY: is ISO New England sees
17	that there is a serious problem with this proposal and we
18	cannot accept it period.
19	VICE CHAIRMAN TAIT: We appreciate that
20	analysis. It's just this late date means that to
21	accommodate those comments and to work with you and
22	I'm glad you offered to work with us and the Applicant to
23	make a solution, that's what we need now to address.
24	MR. WHITLEY: Then we need to start

1	looking at some alternatives.
2	VICE CHAIRMAN TAIT: That's correct. And
3	I think
4	MR. ASHTON: Mr. Whitley, just to help
5	VICE CHAIRMAN TAIT: I'd like to turn to
6	those comments now
7	MR. ASHTON: Just to help me out a little
8	bit here to get the full perspective, in Docket 217 it
9	was originally an overhead proposal. And you were a
10	party to that in fact you testified
11	MR. WHITLEY: Right
12	MR. ASHTON: as I recall at the
13	hearing. Were you consulted by the Applicant in 217 as to
14	the proposed configuration X that became a basis for the
15	final certification. Before that was filed was ISO
16	consulted as to whether this was a feasible alternative?
17	VICE CHAIRMAN TAIT: Phil, is this
18	necessary?
19	MR. KOWALSKI: Prior to it being
20	suggested, no, we were not.
21	MR. ASHTON: So you learned did you
22	learn of it after it had been filed?
23	MR. KOWALSKI: Yes, we did.
24	VICE CHAIRMAN TAIT: I'd I'd like to

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1	now turn our attention to solutions rather than problems.
2	Danny, you had one question
3	MR. MACLEOD: Professor Tait
4	MR. DANIEL P. LYNCH, JR.: Yeah
5	MR. MACLEOD: Mr. Chairman, if
6	perhaps I can offer something that since it's a little
7	bit legal, I have I have an opening to offer that
8	might clarify the process that has taken place to date.
9	I think you were asking about the notice that was
10	referred to in the testimony. That notice arises in the
11	context of 18.4. And my understanding is that the 18.4
12	process is perhaps not concluded and maybe not started
13	VICE CHAIRMAN TAIT: Okay
14	MR. MACLEOD: so it would not under the
15	terms of the agreement be appropriate
16	VICE CHAIRMAN TAIT: Okay
17	MR. MACLEOD: to send that written
18	notice yet.
19	VICE CHAIRMAN TAIT: But it would sound
20	like it's imminent.
21	MR. MACLEOD: I don't know where they are
22	in the process and I can't testify.
23	VICE CHAIRMAN TAIT: Okay. Thank you for
24	the clarification. Mr. Lynch.

1	MR. LYNCH: I'm going to complicate the
2	issue a little bit more and add a moving target, and that
3	if you had serious concerns, which you have expressed
4	to us in 217 and again this March, my thought or thinking
5	is we've been under the General Assembly they passed a
6	law that says the Connecticut Siting Council must look at
7	under-grounding in residential areas, recreational areas,
8	churches and schools. Why weren't your concerns
9	expressed to the Legislature to help them in formulating
10	this law? I mean again this is something that could have
11	probably helped in the long-run knowing the concerns that
12	you've had for the last couple of years.
13	MR. WHITLEY: I believe we did provide
13 14	MR. WHITLEY: I believe we did provide some input to those folks. I don't have the specific
14	some input to those folks. I don't have the specific
14 15	some input to those folks. I don't have the specific documents, but I believe we did express some concerns.
14 15 16	some input to those folks. I don't have the specific documents, but I believe we did express some concerns.
14 15 16 17	some input to those folks. I don't have the specific documents, but I believe we did express some concerns. VICE CHAIRMAN TAIT: You're aware of the -
14 15 16 17 18	some input to those folks. I don't have the specific documents, but I believe we did express some concerns. VICE CHAIRMAN TAIT: You're aware of the - A VOICE: Tony has them
14 15 16 17 18	some input to those folks. I don't have the specific documents, but I believe we did express some concerns. VICE CHAIRMAN TAIT: You're aware of the - A VOICE: Tony has them VICE CHAIRMAN TAIT: You're aware of the
14 15 16 17 18 19 20	some input to those folks. I don't have the specific documents, but I believe we did express some concerns. VICE CHAIRMAN TAIT: You're aware of the - A VOICE: Tony has them VICE CHAIRMAN TAIT: You're aware of the statute that was passed
14 15 16 17 18 19 20 21	some input to those folks. I don't have the specific documents, but I believe we did express some concerns. VICE CHAIRMAN TAIT: You're aware of the - A VOICE: Tony has them VICE CHAIRMAN TAIT: You're aware of the statute that was passed MR. WHITLEY: Yes.

1	MR. WHITLEY: If it's technically
2	feasible.
3	VICE CHAIRMAN TAIT: and you're telling
4	us that not only no more than 24, but not even 24?
5	MR. WHITLEY: And I don't know the exact
6	number of miles. That's
7	VICE CHAIRMAN TAIT: No
8	MR. WHITLEY: I think that's one of the
9	first things we need to determine, is what what
10	what configuration in terms of mileage gets you to the
11	over the edge
12	VICE CHAIRMAN TAIT: Okay
13	MR. WHITLEY: and then that helps you
14	frame some alternatives, and in looking at different
15	cable designs and other options how to get there.
16	VICE CHAIRMAN TAIT: And you will expedite
17	I hope your review of what's developed in this docket as
18	to what those alternatives might be?
19	MR. WHITLEY: Absolutely.
20	VICE CHAIRMAN TAIT: It's a priority item.
21	And you said you'll work with us until we get it done by
22	the end of the year.
23	MR. WHITLEY: We will. I just want to
24	reemphasize how important it is to get this project in

1	place as soon as possible
2	VICE CHAIRMAN TAIT: To all of us
3	MR. WHITLEY: no one wants this more
4	than we do. Connecticut is in jeopardy. The load is
5	continuing to grow. We need this project yesterday. And
6	every day that it's delayed is going to be bad.
7	VICE CHAIRMAN TAIT: Fred, why don't you
8	continue.
9	MR. CUNLIFFE: I just want to make sure
10	we're clear that on page 6, line 114, you say that the
11	project as proposed and presently designed will not
12	operate reliably. And I think you've already testified
13	to that. Could you and you may have already provided
14	some input to that, but please state again the basis for
15	that statement?
16	MR. WHITLEY: Well, I'd like to ask our
17	consultant to comment on that as well, but our problem is
18	in terms of the operability of the design and the amount
19	of capacitance that's put on the system with that design
20	can create situations that can cause serious equipment
21	damage and possible outages, including widespread
22	outages. So let me hand it off to David.
23	MR. HACKWELL: Yes, I agree entirely with
24	that. We've looked at the GE studies and concluded that

1 the findings in there we do agree with, there is a 2 serious risk of equipment damage, power quality problems 3 for consumers under certain operating configurations of 4 the system. 5 MR. CUNLIFFE: When did ISO New England 6 contract with PB Power? 7 MR. HACKWELL: I think it's now about 8 three weeks ago we had first contact. 9 MR. CUNLIFFE: And what -- what were you 10 charged to do? 11 MR. HACKWELL: We were charged to review 12 the studies prepared by GE. And there were -- I think 13 there were six studies listed, and they are in our 14 report. The studies we were asked to review are listed in 15 the report. 16 COURT REPORTER: Mr. Hackwell, move that 17 microphone just a little closer --18 MR. HACKWELL: Certainly. 19 MR. CUNLIFFE: In your view of the data, 20 did PB Power make any other studies or variations on the 21 GE studies? 22 MR. HACKWELL: We did not do any other 23 studies. We were only asked to review the studies as 24 presented.

1	MR. CUNLIFFE: It appears that there are	
2	two different conclusions here based on the same studies	
3	if ${\tt I'm}$ assuming right in that the Applicant concludes	
4	that they had done a cable transient and harmonic study	
5	in March of 2003 and they did another transient and	
6	harmonic study for Phase 1, a summary in 2003, and again	
7	they did a transient and harmonic study with Phase 1, and	
8	in effect a Phase 2 addition again in October 2003, and	
9	finally they were able to get a Phase 2 final report in	
10	November of 2003. Based on those studies, they concluded	
11	that this proposal, as the application is before us,	
12	believe it can work, and in your opinion it does not.	
13	How does that work out?	
14	MR. HACKWELL: I think the conclusion is	
15	that it can work with a large number of mitigating	
16	measures taken	
17	MR. CUNLIFFE: And what could you	
18	MR. HACKWELL: to solve the basic	
19	problem.	
20	MR. CUNLIFFE: And could you identify a	
21	number of mitigating measures?	
22	VICE CHAIRMAN TAIT: Yes, would you	
23	specify them as concretely as you can?	
24	MR. HACKWELL: The measures as I	

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1	understand it were the use of control switching of
2	circuit breakers within the entire 345-kV system,
3	possible use of pre-insertion resistors on the circuit
4	breakers, and the use of high energy rated surge
5	arrestors to control transient or voltages. And this
6	the number and extent of these devices was set out in
7	some of the sketches associated with the reports.
8	MR. CUNLIFFE: And with those measures
9	would the project be reliable?
10	VICE CHAIRMAN TAIT: We're talking about
11	the 24 miles of underground and nothing more at this
12	time.
13	MR. HACKWELL: The project would be
14	technically we would resolve a majority of the
15	technical issues. Reliability I think would need to be
16	considered separately in view of the additional equipment
17	that's been added to the system.
18	VICE CHAIRMAN TAIT: Would you get
19	harmonics above the third?
20	MR. HACKWELL: Please repeat that.
21	VICE CHAIRMAN TAIT: Would you get above
22	the third harmonic or are you still down in that area
23	that you say won't work
24	MR. HACKWELL: We

1	VICE CHAIRMAN TAIT: resonance?
2	MR. HACKWELL: The study concludes that
3	the resonance would still occur below the third harmonic.
4	VICE CHAIRMAN TAIT: And your opinion if
5	that's so, is it's not reliable?
6	MR. HACKWELL: What we said in our report
7	was that we would need to look at practical and effective
8	mitigating measures in the specific context of that
9	scenario. We haven't said it's definitely unacceptable,
10	but we would conclude that additional studies would be
11	needed to
12	VICE CHAIRMAN TAIT: If you get above
13	MR. HACKWELL: ensure that reliability.
14	VICE CHAIRMAN TAIT: If you get above the
15	third harmonic, would that satisfy you?
16	MR. HACKWELL: It certainly helps.
17	VICE CHAIRMAN TAIT: Mr. Whitley, I go
18	back to your testimony on page 9, the question, would the
19	minimum resonance frequency in the project as proposed
20	always be above the third harmonic? And then over on
21	page 10, another question, so if the project were
22	designed to achieve operations above the third harmonic,
23	would your concerns be resolved? Answer, not
24	necessarily.

1	MR. WHITLEY: A lot a lot of studies	
2	would need to be done. I think the concerns we have	
3	if you look at the GE curves that they provide and show	
4	the you know, the flatness on the curve when you're	
5	above the third harmonic, but when you get down to the	
6	third and lower, the curve almost goes vertical	
7	VICE CHAIRMAN TAIT: We have a nice	
8	colored chart that was put in	
9	MR. WHITLEY: Right. And then also it's	
10	our understanding with input from our consultant that	
11	when you try to mitigate these conditions at the third	
12	harmonic or below, they're very very impractical to	
13	mitigate.	
14	VICE CHAIRMAN TAIT: Yeah, but thinking	
15	about third harmonic and above because that's you said	
16	even that wouldn't satisfy you.	
17	MR. WHITLEY: Yeah. We think it's more	
18	likely that they could be satisfied. It's more	
19	reasonable that they could be satisfied at above the	
20	third harmonic.	
21	VICE CHAIRMAN TAIT: The higher the	
22	better, but	
23	MR. WHITLEY: The higher the better.	
24	VICE CHAIRMAN TAIT: Fred.	

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1	MR. CUNLIFFE: You describe that certain
2	reinforcements will be needed to the entire 345-kV
3	system. Define that entire 345-kV system?
4	MR. WHITLEY: Well, if you're referring to
5	the basic 345-kV loop, remembering the present system
6	that we have there now in Southwest Connecticut is we
7	have a very weak 115-kV system that's very dependent on a
8	lot of local generation to be running and on-line to keep
9	the lights on, and even under that scenario we found
10	ourselves short this summer and had to issue an emergency
11	RFP for demand response and emergency diesel generators
12	to try to keep the power the lights on in Connecticut
13	
14	MR. CUNLIFFE: Mr. Whitley, I think I'm
15	trying to what part of the 345-kV system are we
16	speaking? Are we speaking of the 400 miles in the State
17	of Connecticut at particular substations or are we only
18	talking about in the vicinity of the proposal?
19	MR. WHITLEY: Would you rephrase the
20	question for me? What was the intent of the question?
21	MR. CUNLIFFE: Mr. Hackwell said that
22	certain reinforcements, mitigation measures would need to
23	be implemented in the entire 345-kV system. And I want
24	to be a little bit more specific of what he meant by

7		
	entire.	

- MR. WHITLEY: Well, let me let him answer
- 3 that.
- 4 MR. HACKWELL: Perhaps the use of entire
- 5 was incorrect. What I was referring to was the extent to
- 6 which we reviewed the reports, which was the loop from --
- 7 through -- up to Plumtree.
- MR. CUNLIFFE: Okay, thank you.
- 9 MR. WHITLEY: I think it's probably good
- 10 to add -- maybe amplify the number of different switching
- operations, fault operations and so forth that can get us
- in trouble when we're operating in this zone. Would you
- kind of cover those issues?
- MR. HACKWELL: Yes, certainly. I think
- it's been very well covered in the reports that there are
- a number of causal events that trigger this system. The
- fact that a system resonates a particular value is in
- itself not a problem. What is the problem is the product
- of disturbing situations together with that resonance
- condition, which then result in unacceptable power
- 21 quality for uses on the system. And that may be the
- result of distorted loads in -- on consumers' terminals
- or the results of switching actions on the system itself,
- 24 which in turn cause disturbances.

63

1	MR. CUNLIFFE: And how far could these
2	disturbances go out?
3	MR. HACKWELL: It that's a very
4	difficult question to answer, but they are propagated out
5	from the switching action and will tend to diminish due
6	to damping in the system from the point of initiation.
7	But that point of initiation could be anywhere within the
8	system.
9	MR. CUNLIFFE: Thank you. I want to turn
10	over the cross to Mr. Johan Enslin of KEMA.
11	COURT REPORTER: Mr. Enslin, would you be
12	good enough to spell your name for me please.
13	MR. JOHAN ENSLIN: Johan Enslin, E-n-s-l-
14	i-n.
15	COURT REPORTER: The first name?
16	MR. ENSLIN: Johan, J-o-h-a-n.
17	COURT REPORTER: And one more time on the
18	last name.
19	MR. ENSLIN: E-n-s-l-i-n. I think the
20	proposed mitigation techniques are mainly associated with
21	transient calculations, am I right?
22	MR. HACKWELL: That is correct. Those
23	that have been proposed in the report, the switching
24	issues, yes.

1	MR. ENSLIN: Did you indicate any
2	mitigation techniques for harmonics will be resonance
3	problem?
4	MR. HACKWELL: No, we did not. We could
5	not evaluate from the report how the existing capacity
6	banks on the 115-kV side had been modeled. We did ask
7	for that information to be provided so we could carry out
8	such a review.
9	MR. ENSLIN: Maybe as part of this, do you
10	know of any damping circuits on those capacity
11	installations?
12	MR. HACKWELL: I don't know specifically
13	from the information we were given, no.
14	MR. ENSLIN: Maybe we can direct the
15	question back to the ISO.
16	MR. WHITLEY: No, we do not either.
17	MR. ENSLIN: Thank you.
18	MR. CUNLIFFE: Earlier you had mentioned
19	RTEP 2. Could you tell us the frequency of when these
20	meetings are conducted and what RTEP level are we at
21	today?
22	MR. WHITLEY: Well, this fall we'll be
23	issuing RTEP-04, which takes into account another year's
24	worth of planning, looking at the system on out into the

1	future, identifying system needs and projects that have
2	been identified to mitigate those system needs. And we
3	also provide updates to RTEP periodically during the
4	year, but the next major release will be this fall.
5	MR. CUNLIFFE: Thank you. Did ISO take
6	any action to identify any problems with the proposed
7	project?
8	MR. WHITLEY: We have taken action to go
9	out and investigate the problems to try to better
10	understand the problems.
11	MR. CUNLIFFE: And have you defined any
12	resolutions to those?
13	MR. WHITLEY: We have not defined any.
14	We're working with our consultant. And we'll work with
15	the Applicants to try to look at alternatives.
16	Obviously, the first thing that comes to mind is trying
17	to get some of this capacitance off of this design
18	because it's injecting a large amount of capacitance onto
19	a weak system, and so there are alternatives that can do
20	that.
21	VICE CHAIRMAN TAIT: As I read your
22	testimony, the solutions you have is perhaps to use XLPE
23	cable, but on page 11 it's, you know, more overhead, less
24	underground. Is that one of your solutions?

1	MR. WHITLEY: Well
2	VICE CHAIRMAN TAIT: In other words
3	MR. WHITLEY: what we would like to see
4	is a study to determine with the present cable design
5	start start with the base case with this entire
6	project being overhead and run that as a base case and
7	then incrementally add five miles of underground cable
8	with this technology that's proposed until we see how
9	close we get to the third harmonic and look at that
10	amount of mileage. And that could be one base case that
11	could possibly be feasible. And then start from that and
12	look at alternative designs, which might be integration
13	of a mix of that cable, maybe different configurations
14	of cable there and this other type of cable that has less
15	capacitance. And then there are also other types of
16	designs that could be looked at as well that we have not
17	looked at, but things like our consultant has told us
18	about a gas insulated line which generates a lot less
19	capacitance.
20	VICE CHAIRMAN TAIT: With that sort of
21	study, it wouldn't matter where the under-grounding was,
22	it's still the total that the system would take?
23	MR. WHITLEY: It I think
24	VICE CHAIRMAN TAIT: And the siting of it,

1	10 miles, 15 miles, 24 miles, would not impact your study
2	in that situation?
3	MR. WHITLEY: I think in general you're
4	correct. There may be some specific cases that we
5	uncover that it may make a difference, but I think in
6	general this is driven by the total amount of capacitance
7	in this weak system.
8	VICE CHAIRMAN TAIT: So let's assume that
9	you come up with 15 miles it will take 15 miles
10	through all the mitigation. Where it goes would not
11	impact reliability? Not
12	MR. WHITLEY: Rich
13	VICE CHAIRMAN TAIT: never say never
14	and never say
15	MR. WHITLEY: Right.
16	MR. KOWALSKI: Yeah, I mean I'd hate to
17	give a blank check. We would still
18	VICE CHAIRMAN TAIT: You sound like a
19	lawyer. (Laughter). I
20	A VOICE: He's a good engineer.
21	VICE CHAIRMAN TAIT: I understand, but
22	what $I^\prime m$ saying is that that's not a critical factor of
23	where it goes? Does it have to be does it have to be
24	all in one length or can it be three 5-mile lengths?

1	MR. HACKWELL: If I could come in on that?
2	I think it's quite feasible that it could be a number of
3	short lengths. But once you've looked to the most
4	effective positions for those short lengths, then it
5	would be prudent to go back and redo the study
6	VICE CHAIRMAN TAIT: Okay
7	MR. HACKWELL: to confirm that you
8	don't haven't created another problem.
9	VICE CHAIRMAN TAIT: And of course the
10	cost would go up the more short break you have, but
11	that's a different consideration than reliability?
12	MR. HACKWELL: Right.
13	MR. KOWALSKI: And then once we once we
14	know that we can meet this design, then we go back and
14 15	look and make sure it meets the overall requirements of
15	look and make sure it meets the overall requirements of
15 16	look and make sure it meets the overall requirements of the project from thermal voltage and so forth.
15 16 17	look and make sure it meets the overall requirements of the project from thermal voltage and so forth. VICE CHAIRMAN TAIT: Okay. Fred.
15 16 17 18	look and make sure it meets the overall requirements of the project from thermal voltage and so forth. VICE CHAIRMAN TAIT: Okay. Fred. MR. CUNLIFFE: Did PB Power make any other
15 16 17 18	look and make sure it meets the overall requirements of the project from thermal voltage and so forth. VICE CHAIRMAN TAIT: Okay. Fred. MR. CUNLIFFE: Did PB Power make any other findings that are not described in your testimony?
15 16 17 18 19 20	look and make sure it meets the overall requirements of the project from thermal voltage and so forth. VICE CHAIRMAN TAIT: Okay. Fred. MR. CUNLIFFE: Did PB Power make any other findings that are not described in your testimony? MR. WHITLEY: No.
15 16 17 18 19 20 21	look and make sure it meets the overall requirements of the project from thermal voltage and so forth. VICE CHAIRMAN TAIT: Okay. Fred. MR. CUNLIFFE: Did PB Power make any other findings that are not described in your testimony? MR. WHITLEY: No. MR. CUNLIFFE: And you described that

1	these GE studies that have been done.
2	MR. CUNLIFFE: And what is your
3	understanding of the timing to conduct these studies?
4	MR. WHITLEY: Well, I think the timing
5	there's it takes a lot of time to build a model to do
6	these types of studies. But I believe once you have the
7	model in place, it doesn't take as long to study
8	alternatives.
9	MR. CUNLIFFE: What's the timing, Mr.
10	Hackwell, is it four weeks, six weeks, two months?
11	MR. HACKWELL: I would say a minimum of
12	four weeks
13	MR. CUNLIFFE: A minimum, thank you
14	MR. HACKWELL: possibly a little
15	longer.
16	MR. CUNLIFFE: On page 7 of your
17	testimony, Mr. Whitley, line 145, you make a statement
18	that these phenomena may cause cascading failures on the
19	bulk power system. Please describe the credible
20	scenarios under which such cascading failures may occur?
21	MR. WHITLEY: Well, when you have rapid
22	over-voltage conditions like this, they can cause
23	flashovers and faults on the system. That can happen
24	right away, which can trigger other events, loss of

1	equipment under a stressful condition that can cause
2	cascading outages. Also what's worrisome about this is
3	that you can have these transient over-voltages occur
4	over time, damaging the insulation of transformers,
5	deteriorating that insulation over time, and you may have
6	a premature fault on a transformer that's caused by this
7	high voltage exposure over time. So those are the kinds
8	of things that can happen. And certainly you can have
9	transient events and outages that can spread. We just
10	had another in on the west coast within the last week.
11	And certainly you don't want to design yourself into a
12	place to have that kind of thing happening. You want to
13	be going in the other direction.
14	MR. CUNLIFFE: Has ISO done any studies to
15	determine any type of cascading outages?
16	MR. MACLEOD: Well, can I ask for a little
17	bit more on that question. Cascading outages as a result
18	of what or in connection with what, or
19	MR. RICHARD WAKEFIELD: I'll respond. My
20	name is Richard Wakefield.
21	COURT REPORTER: Spell it please.
22	MR. WAKEFIELD: W-a-k-e-f-i-e-l-d. We're
23	just trying to clarify Mr. Whitley responded to the
24	earlier question by mentioning situations that have in

1	some cases led to cascading outages or may possibly lead
2	to cascading outages. All we're trying to do is to
3	clarify were studies made or analyses made where you
4	showed a cascading outage occurring as a result of the
5	proposed or the Applicants' proposed design?
6	MR. WHITLEY: No, we have not.
7	MR. WAKEFIELD: Thank you.
8	MR. CUNLIFFE: On page 12 of your
9	testimony, line 268, you say stated studies to date do
10	not indicate that this standard can be reached if more
11	cable is used than the Applicants have proposed. Please
12	identify all studies on which this statement is based?
13	MR. MACLEOD: Which line again, Mr.
14	Cunliffe, sorry?
15	MR. CUNLIFFE: It's beginning with line
16	268.
17	MR. MACLEOD: Thank you.
18	MR. CUNLIFFE: And I'm going to restate
19	the question. Studies to date do not indicate that this
20	standard can be reached if more cable is used than the
21	Applicants have proposed. Are you also saying that the
22	proposed cable is not capable of operating reliably?
23	MR. WHITLEY: That's correct, we are
24	saying that.

1 MR. CUNLIFFE: Thank you. And if I could 2 come back to the South Connecticut Working Group, is it 3 not the responsibility of that group to sort of define the type of transmission system to be in place, overhead, 4 5 underground, and then trying to work out the details, a 6 little bit about where you want to go with that? 7 MR. KOWALSKI: I'd say that's correct. 8 Most of our focus, and this really emanates from the 9 majority of our experience in New England, has been on 10 the primary security -- system security and operability 11 aspects of the project. That had been the focus of the 12 efforts. 13 The significance of this particular 14 harmonics issue was one that hadn't really been a focus 15 of attention in the group. Certainly had we been aware 16 of it, it would have been a factor that would have been 17 integral to the design of the system and would have been 18 included in the efforts of the technical group to try and 19 develop a coordinated design. And we would have 20 certainly used the expertise in the group to direct the 21 effort -- to come up with something that would work 22 comprehensively, addressing all issues. 23 MR. CUNLIFFE: Will any future meetings of 24 the Southwest Connecticut group look at any transient or

1	harmonic issues?
2	MR. KOWALSKI: I would suspect that we
3	A VOICE: (Indiscernible)
4	MR. KOWALSKI: we should yes.
5	MR. CUNLIFFE: If I could go back to Mr.
6	Hackwell and the report provided to that you generated
7	for the ISO. On page 11 you start talking about
8	different types of technologies, particularly in cables.
9	Do you know of any manufacturers that offer a cable of
10	low density polyethylene today?
11	A VOICE: What
12	MR. HACKWELL: Low density polyethylene,
13	I'm not aware of any. It's relatively old technology.
14	COURT REPORTER: Mr. Hackwell, move closer
15	to the microphone
16	MR. HACKWELL: Do you want me to repeat
17	that? I'm not aware of any manufacturer who makes that
18	today
19	MR. CUNLIFFE: So that would not be a
20	choice that we would look at?
21	MR. HACKWELL: I don't believe so, no.
22	MR. CUNLIFFE: Alright. You also state
23	about installing XLPE in tunnels. Would should that
24	be the preferred method?

1	MR. HACKWELL: It is a solution which is
2	being proposed by a number of utilities for long length
3	XLPE cable installation.
4	MR. CUNLIFFE: Can XLPE cable be either
5	directly buried or placed in ducts?
6	MR. HACKWELL: Yes, it can.
7	MR. CUNLIFFE: You also raised the point
8	about identifying
9	A VOICE: Deflection PD deflection PD
10	power
11	MR. CUNLIFFE: Just one moment (pause)
12	you mentioned that the use of tunneling is much more
13	preferred so that you could detect power deflection
14	A VOICE: Partial discharge.
15	MR. CUNLIFFE: Partial discharge.
16	MR. HACKWELL: Partial discharge. That's
17	a test which is done to check the quality of the
18	installation immediately after the circuit is first
19	installed prior to its energization.
20	MR. CUNLIFFE: And are there techniques
21	that you could do this if they were in a buried scenario?
22	MR. HACKWELL: They are there are
23	techniques which could do that. But I think as we've
24	pointed out in the report, the sensitivity of such tests

1	is better served by being installed in a tunnel.
2	MR. CUNLIFFE: And the installation of
3	HVDC, would you not agree that you would have cost
4	savings with greater distances, say greater than 30
5	miles?
6	MR. HACKWELL: That is generally the case
7	for long distance DC transmission.
8	MR. CUNLIFFE: Okay. Those are my
9	questions.
10	VICE CHAIRMAN TAIT: Fred, do you want to
11	switch to
12	MR. CUNLIFFE: I'm finished with
13	VICE CHAIRMAN TAIT: Okay
14	MR. CUNLIFFE: I'm finished with ISO New
15	England as far as cross-examination, but we do have some
16	other cross for other witnesses
17	VICE CHAIRMAN TAIT: Yes
18	MR. CUNLIFFE: that we'd like to fit
19	in.
20	VICE CHAIRMAN TAIT: Yes. So would you
21	call could we have those witnesses come to the stand.
22	MR. CUNLIFFE: I think we wanted the
23	Applicant Mr. Zaklukiewicz and
24	VICE CHAIRMAN TAIT: Mr

1	MR. CUNLIFFE: Mr. Walling.
2	VICE CHAIRMAN TAIT: Mr. Walling, yeah. I
3	trust you're not surprised, Miss Randell?
4	A VOICE: I was
5	MS. RANDELL: (Indiscernible) was not
6	in the prehearing conference and I neglected to tell him.
7	Mr. Walling is alerted to it.
8	VICE CHAIRMAN TAIT: Okay.
9	A VOICE: Can we move
10	MS. RANDELL: We can ask that they just
11	move to the end of the table
12	VICE CHAIRMAN TAIT: Yes, can the
13	Applicants' witnesses go to the far end
14	MS. RANDELL: The ISO's people could just
15	stay there
16	VICE CHAIRMAN TAIT: You folks can stay
17	there unless those seats are hot and you want them to
18	cool off.
19	A VOICE: The air-conditioning must be
20	off. (Laughter).
21	VICE CHAIRMAN TAIT: That's it.
22	MS. RANDELL: They haven't gotten to
23	whoopee cushions yet.
24	VICE CHAIRMAN TAIT: For peoples' notice,

1	Mr. Gregory will be here after lunch.
2	MS. RANDELL: Yes.
3	VICE CHAIRMAN TAIT: Okay.
4	COURT REPORTER: Mr. Walling
5	(indiscernible) give your name and spell it please
6	MR. REIGH WALLING: You had it yesterday
7	also you need it again today? Okay. Reigh Walling.
8	The first name is spelled R-e-i-g-h. The last name
9	Walling, W-a-l-l-i-n-g.
10	MR. ENSLIN: I think I I think I
11	identified myself earlier, but Johan Enslin from KEMA.
12	I had distributed yesterday some
13	information about damping filters in existing capacity
14	installations. And my question is has the Applicant and
15	GE perhaps had time to look at the option of looking into
16	damping on existing capacitive installations? Not in
17	detail of course, but just the principle.
18	MR. WALLING: I very recently, very
19	recently, since yesterday performed such an analysis. I
20	think that the challenge is that (1) the capacitor banks
21	are not the primary cause of the resonance issue, that
22	the amount of charging the amount of capacitance
23	provided by the cables far outweighs that. The capacitor
24	banks are not on all the time in the system. So when

1 they're not on, they're not in any way contributing to the damping in the system, there's no feasible way to 2 convert the cables into filters that I know of. 3 4 Also, my analysis shows that using a damp 5 filter tuned to the third harmonic as in the paper that was distributed to us, does very little to minimize 6 7 resonance problems at the frequency down below that, 8 particularly it created a very -- a proximate and quick 9 model of the system similar to what the Applicants' 10 system would be with the proposed system with a resonant 11 frequency above -- somewhat above the second harmonic. 12 And put the damp filter in as the paper suggested, and it 13 seems to have very little impact on the severity of the 14 resonance near the second harmonic. 15 MR. ENSLIN: Let me maybe redirect the --16 that is of course a different system and the frequency 17 characteristics of that specific system is of course much higher than the system here, so you have to redesign that 18 19 filter of course. So looking at that as an option --20 MR. WALLING: Well, it was not put in exactly -- it was put in to the point of creating a type 21 22 C filter with a damping ratio of 10, similar to that 23 filter tuned to the third harmonic. 2.4 MR. ENSLIN: So to -- would -- would you

1 consider studying in more detail this option for the 2 existing capacity installations? 3 MR. ROGER ZAKLUKIEWICZ: I think we would 4 respond to that and say, yes, we would look at it. 5 Again, I'm not certain you clearly 6 The capacitance of the cables is not a understand. 7 source point as your paper identifies HVDC terminals 8 and/or wind farm terminations at single locations. previously testified this morning when Mr. Cunliffe asked 9 10 -- when Mr. Tait asked if -- could the capacitors be added at any number of different locations if we were 11 12 told 15 miles or 20 miles or 10 miles could be located, 13 we would really have to study and clearly understand that 14 a cable two miles long, 10 miles long, or whatever the 15 distance, clearly is a point source. As you've indicated 16 here, the reason for installing the filters is not 17 because of the system today but it's in anticipation of 18 what the system may be in the future when HVDC terminals 19 are added. We would have to look at that in a greater 20 amount of detail to clearly understand whether this will 21 work under all combinations of cable in -- when the cable 22 is in, it's not -- it's somewhat different when the point 23 source is removed. In other words, HVDC terminals are 24 out of service and the filters themselves are.

1	We also have to be concerned with the
2	numbers we're talking about and clearly understand
3	whether placing the filters on each of the $115-kV$
4	that's 115,000 volt capacitor banks will do what is
5	necessary, and are there many other locations. Clearly,
6	I do not have an appreciation for the size of these
7	filters. I'm assuming they're quite large. From a
8	standpoint if you looked at aerial views of our
9	substations, with few exceptions, there is no room to
10	install the filters that you identify in Figure 6 in your
11	tutorial. So we are talking about installing all totally
12	new capacitor banks at certain locations I believe. But
13	again, these are details we would have to look at. You
14	should also know that we have no at this time no
15	capacitors whatsoever on the 345-kV system. We typically
16	use ungrounded capacitor banks for good reasons. To my
17	understanding there are no ungrounded capacitor banks at
18	345 again for switching, and reasons and the duty on
19	the circuit
20	COURT REPORTER: Excuse me. (Pause).
21	MR. ZAKLUKIEWICZ: These would
22	COURT REPORTER: Okay.
23	MR. ZAKLUKIEWICZ: Yeah. We would we
24	would have to study these in significant detail.

1	MR. WALLING: I think the key point is
2	that converting capacitor banks to filters does not do
3	anything when the capacitor banks are not on-line.
4	MR. ENSLIN: Yes, you're totally right,
5	but the point in your studies it showed that you have
6	a worse case when all the capacitor banks are switched
7	in. In a condition where all the capacitor banks are
8	switched out, the resonance frequency is still the ninth
9	harmonic.
10	MR. ZAKLUKIEWICZ: I think that
11	MR. ENSLIN: That's what you showed
12	yesterday
13	MR. WALLING: Excuse me. With the with
13 14	MR. WALLING: Excuse me. With the with the cables with the cables in, the resonant frequency
14	the cables with the cables in, the resonant frequency
14 15	the cables with the cables in, the resonant frequency with the capacitor banks out is well below the third
14 15 16	the cables with the cables in, the resonant frequency with the capacitor banks out is well below the third harmonic in many cases. Also, the simulation results
14 15 16 17	the cables with the cables in, the resonant frequency with the capacitor banks out is well below the third harmonic in many cases. Also, the simulation results show a number of cases with quite severe results with all
14 15 16 17 18	the cables with the cables in, the resonant frequency with the capacitor banks out is well below the third harmonic in many cases. Also, the simulation results show a number of cases with quite severe results with all capacitor banks out. So, I do not understand what the
14 15 16 17 18	the cables with the cables in, the resonant frequency with the capacitor banks out is well below the third harmonic in many cases. Also, the simulation results show a number of cases with quite severe results with all capacitor banks out. So, I do not understand what the relevance is of redesigning the cap banks to be something
14 15 16 17 18 19 20	the cables with the cables in, the resonant frequency with the capacitor banks out is well below the third harmonic in many cases. Also, the simulation results show a number of cases with quite severe results with all capacitor banks out. So, I do not understand what the relevance is of redesigning the cap banks to be something different if they're not in when a significant situation
14 15 16 17 18 19 20 21	the cables with the cables in, the resonant frequency with the capacitor banks out is well below the third harmonic in many cases. Also, the simulation results show a number of cases with quite severe results with all capacitor banks out. So, I do not understand what the relevance is of redesigning the cap banks to be something different if they're not in when a significant situation is also a factor.

1	some new substations to
2	MR. ENSLIN: I just have just a final
3	question. Can we please ask for the record to have the
4	results which you indicated available to us sometime
5	in the future, so we can evaluate the results?
6	MS. RANDELL: (Indiscernible)
7	VICE CHAIRMAN TAIT: Can you be a little
8	bit more specific?
9	MR. ENSLIN: The results basically done
10	yesterday or follow-up work on that. If it's already
11	available, we would like to see that.
12	MS. RANDELL: Mr. Tait, I'm woefully
13	confused.
14	VICE CHAIRMAN TAIT: I am too. Could you
15	be specific?
16	MR. CUNLIFFE: Mr. Walling, you referred
17	to some analysis that you did
18	MR. WALLING: I did I did some
19	calculations on my computer while I was sitting in the
20	room this morning.
21	MR. CUNLIFFE: Is that analysis can be
22	available to the Council? Can we submit that to the
23	record?
24	VICE CHAIRMAN TAIT: Can you print it out

1	
2	MR. CUNLIFFE: At some point?
3	MR. WALLING: I
4	MS. RANDELL: To what end would be my
5	question? It's draft it's something done, you know,
6	while he was working here
7	VICE CHAIRMAN TAIT: If our
8	MS. RANDELL: I mean is there a request
9	for a study?
10	VICE CHAIRMAN TAIT: If our consultant
11	thinks it's useful, I guess I think it's useful, unless
12	you think it's proprietary or inaccurate. I don't want
13	to intrude on privacy concerns, but
14	MS. RANDELL: I have little doubt about
15	the accuracy
16	VICE CHAIRMAN TAIT: Right
17	MS. RANDELL: having spent some time
18	with Mr. Walling, but I would ask that he be able to go
19	back and, you know, look to see that
20	VICE CHAIRMAN TAIT: Certainly
21	MS. RANDELL: it is as complete as he
22	would like it to be.
23	VICE CHAIRMAN TAIT: Would he do that and
24	perhaps produce it or not produce it after lunch?

1	MS. RANDELL: Gee, that that's really a
2	long time
3	VICE CHAIRMAN TAIT: Well, no, I'm you
4	certainly can have any time you want to make sure it's
5	accurate. We need it at some point
6	MS. RANDELL: I do understand that
7	VICE CHAIRMAN TAIT: I don't need it, but
8	I think our consultant could use it.
9	MS. RANDELL: We do understand that and
10	certainly we're trying to be helpful here. And we'll get
11	with Mr. Walling at lunch
12	VICE CHAIRMAN TAIT: Thank you, Mr.
13	Walling
14	MS. RANDELL: and determine what we
15	need.
16	MR. CUNLIFFE: Those are our questions,
17	Mr. Chairman.
18	VICE CHAIRMAN TAIT: Thank you, gentlemen.
19	Are there any questions of yes.
20	MR. HEFFERNAN: Mr. Zaklukiewicz, I mean
21	would you ever agree to a configuration that you didn't
22	believe was totally reliable?
23	MR. ZAKLUKIEWICZ: No, I do not.

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MR. HEFFERNAN: Thank you.

24

1	MR. ASHTON: That leads to a very critical
2	question. We've been talking as to whether reliability
3	is acceptable or not acceptable, but I've not heard a
4	good measure, a threshold if you will
5	VICE CHAIRMAN TAIT: I would like to
6	reserve the questions for this group to the questions put
7	forth by Fred and not open it up to other areas
8	MR. ASHTON: Okay
9	VICE CHAIRMAN TAIT: they will be
10	available
11	MR. ASHTON: Okay
12	VICE CHAIRMAN TAIT: Are there any
13	MR. ASHTON: I'm going to come back to
14	that
15	VICE CHAIRMAN TAIT: Does anybody on the
16	Council have questions of Mr. Walling on the topics that
17	were just raised? Anybody in the towns want to have
18	cross-examination of Mr. Walling on his recent testimony?
19	Do I need to read the list? Hearing no requests for me
20	to read the list, I'll assume there are no further
21	questions of Mr. Walling and Mr. Zaklukiewicz on this
22	particular topic. Thank you.
23	We will now resume cross-examination of
24	ISO. And Fred, I understand your questions you're

1	through with your questions?
2	MR. CUNLIFFE: The staff has concluded.
3	VICE CHAIRMAN TAIT: Okay. Mr. Murphy.
4	MR. JAMES J. MURPHY, JR.: I have no
5	questions.
6	VICE CHAIRMAN TAIT: No questions. Brian.
7	MR. BRIAN EMERICK: The only question I
8	have is one I'm not going to get an answer to, but it's
9	kind of like where do we go from here?
10	MR. WHITLEY: Well, I
11	VICE CHAIRMAN TAIT: That's the best
12	question.
13	MR. WHITLEY: I think the best thing to do
14	is to identify some alternatives and evaluate those
15	alternatives very quickly working together to see what
16	their impact is on this harmonic resonance issue and see
17	what those impacts are to the performance of the system
18	as far as meeting the reliability criteria to keep the
19	lights on in Connecticut and New England. So that would
20	be the next step.
21	VICE CHAIRMAN TAIT: Well, I guess the
22	Council is trying to figure out how to accomplish that.
23	We had wished this had happened back in the fall of 2003,
24	that you could have gotten together to present to us

1	something that you both agree will work. Is it sensible
2	to have CL&P and ISO sit down tomorrow and start this
3	process? I'm just talking out loud. We you know, our
4	next hearings are July 17 th . Is there any way any
5	possible way for CL&P an ISO to present to the Council
6	and the parties a plan that you both agree will work?
7	Because if you don't agree it will, it's not going to get
8	certified no matter what we say. It's not our decision.
9	MR. WHITLEY: We certainly would come to
10	the table to do that and I expect they would as well.
11	VICE CHAIRMAN TAIT: The table I'm coming
12	to is tomorrow or ASAP
13	MR. WHITLEY: Yes
14	VICE CHAIRMAN TAIT: and then if you
15	come up with a proposal like that, all the parties need
16	to have a chance to look at that proposal after it's beer
17	submitted, and we seem to have lost a lot of ground.
18	My thought is that we're nearing
19	lunchtime. Everybody ought to think about where we go
20	from here without deciding
21	MR. BALL: Mr. Tait, if I might. David
22	Ball on behalf of Woodbridge, Wilton, Weston. It would
23	be it would seem to me that it would be very very
24	important for the towns to be involved in this process,

1	in this process of identifying what seems to be starting
2	from scratch and coming up with a brand new solution. We
3	have all been operating and spending an enormous amount
4	of time and money, as you have, with the assumption that
5	the Applicants' proposal is what was on the table, and
6	we've been working off of that and modeling studies off
7	of that. As I understood Mr. Whitley's testimony, he's
8	suggesting let's start from scratch from the presumption
9	of overhead lines, contrary to the statute, and try and
10	come up with new configurations. I would think the
11	Towns' involvement would be essential in this process.
12	VICE CHAIRMAN TAIT: The question is at
13	what point would it be essential
14	MR. BALL: I
15	VICE CHAIRMAN TAIT: unless the
16	Applicant and ISO come to some sort of agreement, what we
17	think and what you think is not going to solve the
18	problem. You'll have your full chance to look at it once
19	they propose it. I'm not sure in the planning stages too
20	many cooks don't spoil the broth
21	MR. BALL: I appreciate
22	VICE CHAIRMAN TAIT: but I don't want
23	to make any decisions, I'm just talking off the record
24	sort of out loud. Let's think about it because this

1	testimony sets us back.
2	MR. BALL: I appreciate that. My
3	perspective, just for the record, is that the Towns'
4	consultants ought to be involved at this stage and ought
5	to have some input in it right now, rather than being
6	caught again at the eleventh hour with some testimony or
7	reports that we've never seen before and then we don't
8	have time to deal with.
9	VICE CHAIRMAN TAIT: Fine.
10	MS. RANDELL: Shall I wait then until
11	after lunch to address this issue?
12	VICE CHAIRMAN TAIT: I think it would be
13	more productive and I'll keep my mouth shut too
14	MS. RANDELL: I would be thrilled.
15	MR. ASHTON: (Indiscernible) hold the
16	conversations
17	VICE CHAIRMAN TAIT: Yes
18	MR. ASHTON: (indiscernible) the
19	conversations
20	VICE CHAIRMAN TAIT: Hold the we need
21	to know where we go from here.
22	MS. RANDELL: Indeed.
23	VICE CHAIRMAN TAIT: But let's continue
24	where we are right now. Okay.

1	MR. EMERICK: I have no further questions.
2	(Laughter).
3	VICE CHAIRMAN TAIT: Mr. Ashton.
4	MR. ASHTON: I'd like to go back, if I
5	could, and at least probe with ISO when a system is
6	reliable and when it's not and what is the determinate
7	for making that decision. We've heard the Applicants
8	indicate that they find the reliability acceptable. And
9	another synonym for that word has been feasible, which is
10	equally pregnant as far as I'm concerned
11	VICE CHAIRMAN TAIT: I'd add another one,
12	palatable.
13	MR. ASHTON: Yeah. We need some guidance
14	as to when it is and when it ain't. And I'd like to hear
15	your comments on that?
16	MR. WHITLEY: From the standpoint of
17	typical reliability measures, thermal overloads, voltage
18	criteria, I don't think there's any question we have
19	MR. ASHTON: We seem to have transcended
20	that hurdle
21	MR. WHITLEY: Right. We're over into
22	harmonic resonance now and the operability of a plan
23	that's a very complex plan in a very weak system where
24	generation can be on or off, different configurations are

going to be in, we're going to be working on construction
in this system for a number of years trying to rebuild
the system to keep the lights on, and and we don't
have a plan that we have seen that proposes hardware that
fixes these harmonic resonance problems at the third
harmonic or lower. It the study shows us that there's
all kinds of problems, that we're injecting thousands of
megaVARS of capacitance in this system that's going to
generate all these problems and there's no solution in
front of us on how those are going to be mitigated. Our
consultant tells us, based on all of his experience, the
solutions that we're going to be looking at if they are
proposed are going to be very very impractical. So that
leads us to say we can't operate this reliably. My
operators are going to have to operate this power system
and make decisions on whether to put this line in or that
line in, not only to think about providing adequate
voltage and thermal capability but what's this doing when
I switch something, and there's just an infinite number
of combinations they have to deal with. So, I want to
make sure that I'm not in this danger zone, I'm in the
safe zone. And clearly from what my consultant is
telling me and our engineers' interpretation of the GE
studies, that we need to be above that third harmonic to

1 do that.	1	do	that.
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- MR. ASHTON: Let me just explore that a
- 3 little bit if I can. Are you familiar with what is
- 4 Applicants' Exhibit 110, which was the GE --
- 5 MR. WHITLEY: Yes --
- 6 MR. ASHTON: -- produced document?
- 7 MR. WHITLEY: Yes.
- MR. ASHTON: And I refer you to page 9,
- 9 which was the --
- 10 VICE CHAIRMAN TAIT: That was a very
- 11 useful page for all of us --
- MR. WHITLEY: Right --
- MR. ASHTON: Yeah, somebody got their
- money's worth out of that page.
- VICE CHAIRMAN TAIT: Yes, we appreciate
- 16 that.
- 17 MR. ASHTON: First of all a threshold
- question. Is there anything you disagree with in Exhibit
- 19 110?
- MR. WHITLEY: No.
- 21 MR. ASHTON: Okay. So we've got a common
- 22 starting point there. Going to that family of curves.
- Is it your testimony, Mr. Whitley, that anything that
- falls below the third harmonic is unreliable, period, end

1	of discussion?
2	MR. WHITLEY: Yeah, unless there are some
3	mitigating proposals that will mitigate that.
4	MR. ASHTON: Anything that falls
5	MR. WHITLEY: Right
6	MR. ASHTON: if it's unmitigated or
7	mitigated, if it falls below that third harmonic, ISO is
8	not buying it. Is that fair to say?
9	MR. HACKWELL: I would say there's a very
10	high risk of system failures if you get into that area.
11	MR. ASHTON: That's not my question
12	VICE CHAIRMAN TAIT: I thought the
13	question was will ISO approve it?
14	MR. ASHTON: Well, that's not my question
15	
16	VICE CHAIRMAN TAIT: It's my question.
17	MR. WHITLEY: Well, my my answer is no,
18	we're not going to approve it unless we're comfortable
19	that we can operate with safe risks in that zone with
20	mitigating measures. And we haven't seen those. So
21	VICE CHAIRMAN TAIT: And you called them
22	impractical?
23	MR. WHITLEY: Yes.
24	VICE CHAIRMAN TAIT: So I read that as

1	MR. WHITLEY: Right, and you know, the
2	consultant has told me that when you design a filter
3	let's say for the third harmonic, it introduces more
4	problems for the second harmonic, so which in second
5	harmonics are very common. So we're in a very very
6	complex area. And we need to be moving away from that
7	zone down toward the toward the green colored
8	VICE CHAIRMAN TAIT: So the likelihood of
9	ISO ever approving anything below the third harmonic is
10	very slight?
11	MR. WHITLEY: We would have to have a lot
12	of evidence that looked at a lot of scenarios that told
13	us we would be operating safely based on what we know
14	from these studies.
15	MR. ASHTON: I think I'm going to defer
16	anything further right now.
17	VICE CHAIRMAN TAIT: Okay. Gerry.
18	MR. HEFFERNAN: Yeah probably more of a
19	statement than anything else I guess. A lot of it is
20	very confusing to me. The one thing that isn't confusing
21	I don't think is that at the bottom line it has to work -
22	-
23	A VOICE: Exactly.
24	MR. HEFFERNAN: you know. And I

1	certainly can't as one member have difficulty trying
2	to make that decision with ISO saying we don't think it's
3	going to work, the Applicant saying we think it's going
4	to work, the Towns saying well we think it could work if
5	you do this. And I understand the needs and they're
6	real. So somehow there has to be, as the Chairman
7	suggested before, some conversations between the parties
8	before any work
9	VICE CHAIRMAN TAIT: And not to be
10	forgotten we have to solve the EMF question. If you say
11	it works, we then have a statute to deal with. Okay.
12	MR. ASHTON: Life ain't simple.
13	VICE CHAIRMAN TAIT: It's now time for
13 14	VICE CHAIRMAN TAIT: It's now time for people to start cross-examination is it time to take a
14	people to start cross-examination is it time to take a
14 15	people to start cross-examination is it time to take a little early lunch so you can start your lunchtime
14 15 16	people to start cross-examination is it time to take a little early lunch so you can start your lunchtime conversation?
14 15 16 17	people to start cross-examination is it time to take a little early lunch so you can start your lunchtime conversation? MS. RANDELL: I was going to ask you what
1415161718	people to start cross-examination is it time to take a little early lunch so you can start your lunchtime conversation? MS. RANDELL: I was going to ask you what the correct answer to the question of should I start? I
14 15 16 17 18 19	people to start cross-examination is it time to take a little early lunch so you can start your lunchtime conversation? MS. RANDELL: I was going to ask you what the correct answer to the question of should I start? I take it the answer is
14 15 16 17 18 19 20	people to start cross-examination is it time to take a little early lunch so you can start your lunchtime conversation? MS. RANDELL: I was going to ask you what the correct answer to the question of should I start? I take it the answer is VICE CHAIRMAN TAIT: Your choice
14 15 16 17 18 19 20 21	people to start cross-examination is it time to take a little early lunch so you can start your lunchtime conversation? MS. RANDELL: I was going to ask you what the correct answer to the question of should I start? I take it the answer is VICE CHAIRMAN TAIT: Your choice MS. RANDELL: no?

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1 VICE CHAIRMAN TAIT: Okay. That will give 2 you a little bit more time to talk. 3 MS. RANDELL: Yes. 4 VICE CHAIRMAN TAIT: I think we'll need 5 some time at the end of this session to see -- to report 6 back on what your conversations were because we're not 7 going to meet again --8 MS. RANDELL: Right --9 VICE CHAIRMAN TAIT: -- until two weeks. 10 And so I'm sure Chairman Katz would like to know where 11 we're going from here within the interim. So maybe we could save 15 minutes at the end of the day. 12 13 MS. RANDELL: That -- that would be fine. 14 I would suggest that if we don't have a plan to start 15 something tomorrow, we're all not doing our job. 16 VICE CHAIRMAN TAIT: Okay, we will break 17 until 1:00 o'clock then. 18 (Whereupon, a luncheon recess was taken.) 19 VICE CHAIRMAN TAIT: I call this hearing 20 to order this afternoon. The first party is 21 Representative Adinolfi. I understand you have a witness

23 REPRESENTATIVE AL ADINOLFI: Thank you,

Mr. Chairman. Yes, I do have a witness.

22

for us.

1	On March 9 th my constituent Prakash Vaidya
2	submitted testimony and what he called some solutions to
3	under-grounding. And I was requested by NU, or the
4	Applicant I should say, last month that they wanted to
5	cross-examine him and I wasn't prepared and so on. And
6	so we have him here available today for that cross-
7	examination.
8	And Mr. Prakash Prakash Vaidya has
9	degrees in Physics from the University of Delhi, India,
10	Electrical Engineering and Computer Science from computer
11	from Columbia University of New York, and has been
12	practicing engineering since 1976. When the application
13	of the 345-kV was presented, Mr. Vaidya researched the
14	problem with other engineers and reached a conclusion
15	that under-grounding cabling is a viable solution for
16	Phase 2 and submitted that testimony. And he's here for
17	any cross-examination on his testimony now.
18	VICE CHAIRMAN TAIT: Sir, I believe you
19	were already were you sworn in March?
20	A VOICE: No
21	MR. VAIDYA: No, I wasn't.
22	VICE CHAIRMAN TAIT: Okay. I guess we'll
23	do it now then.
24	MR. HAINES: Would you stand, sir, and

1	raise your right hand please
2	COURT REPORTER: Well before he does that,
3	could he just give me his name and spell it please,
4	slowly.
5	MR. VAIDYA: Sure. The first name
6	Prakash, spelled P-r-a-k-a-s-h. The last name V as in
7	Victor, a-i, d as in David, y-a.
8	COURT REPORTER: Thank you very much.
9	MR. HAINES: Okay. Would you raise your
10	right hand.
11	(Whereupon, Prakash Vaidya was duly sworn
12	in.)
13	MR. HAINES: Please be seated.
14	VICE CHAIRMAN TAIT: Mr. Vaidya, I have
15	before me a statement dated March 9, 2004, a Statement of
16	Limited Appearance, entitled It Is Possible to Bury the
17	Entire Line. Is that your testimony today that you will
18	swear to today that that document is
19	MR. VAIDYA: This is the document I
20	prepared, yes.
21	VICE CHAIRMAN TAIT: You prepared and it's
22	true and accurate to the best of your knowledge and

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MR. VAIDYA: That's correct.

23

24

believe?

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1	VICE CHAIRMAN TAIT: And that this is your
2	testimony basically today?
3	MR. VAIDYA: Yes, of course. Given
4	today's circumstances, but yes.
5	VICE CHAIRMAN TAIT: Yes. Since it wasn't
6	sworn to back in March
7	MR. VAIDYA: Right
8	VICE CHAIRMAN TAIT: Does the Applicant
9	have some questions?
10	MS. RANDELL: We do not.
11	VICE CHAIRMAN TAIT: Do any of the parties
12	in the audience have a question of this witness rather
13	than go through the whole list
14	MR. RICHARD BURTURLA: Yes, Mr. Chairman.
15	Richard Burturla on behalf of the Town of Cheshire. I
16	have some limited cross.
17	VICE CHAIRMAN TAIT: Thank you. Why don't
18	you do it right now.
19	MR. BURTURLA: Mr. Vaidya, thank you for
20	coming today. Could you tell the folks on the Siting
21	Council where you live?
22	MR. VAIDYA: I live in Cheshire in the
23	what we call the Old Farms community neighborhood. A
24	beautiful area, surrounded by greenery, not too much

Τ	going on, a quiet neighborhood, approximately about 30
2	families or so. We're adjacent to the Hamden line, so
3	there's a number of families there. Is there anything
4	else
5	MR. BURTURLA: And where precisely is your
6	home with respect to the right-of-way?
7	MR. VAIDYA: The right-of-way goes on the
8	edge of my property and so there's power lines that go on
9	the edge of my property all the way down through my
10	neighbors.
11	MR. BURTURLA: Alright. And are there
12	children in the neighborhood?
13	MR. VAIDYA: There's a lot of children,
14	school children, preschool children. It's a real
15	community with families, young families, just growing as
16	they grow.
17	MR. BURTURLA: And I take it the only way
18	to enter that particular neighborhood is to cross under
L9	the existing 115-kV lines and that same that street
20	the proposed 345-kV lines would be above that particular
21	street, is that right?
22	MR. VAIDYA: That's that's absolutely
23	correct. There's only two ways in and out of this
24	neighborhood. One is if you come off Route 10 and go

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1	down Old Lane Road, you end up at Old Farms. And the
2	other one is off Cook Hill Road through Turtle to Old
3	Farms. So you cannot pass through without going through
4	these overhead lines. And of course I think we've cited
5	in the past our concerns about some of these falling
6	lines too.
7	MR. BURTURLA: Could you tell the folks on
8	the Council exactly where and you just told me this
9	exactly where is the school bus stop?
10	MR. VAIDYA: Well, it takes a right-hand
11	turn on Old Farms Road. Old Farms Road is like an S
12	shape curve and there's so it makes it comes in at
13	a 90-degree turn and there's a series of these overhead
14	towers and, unfortunately, the children have to stand
15	underneath the towers while they wait for their school
16	bus.
17	MR. BURTURLA: Thank you, Mr. Vaidya.
18	Now, you have a background in physics I take it and
19	electrical engineering, is that right?
20	MR. VAIDYA: That's correct.
21	MR. BURTURLA: And you have done some
22	research related to under-grounding of power lines, is
23	that right?
24	MR. VAIDYA: Yes, that's correct. I have

1	been working with I've been studying the literature,
2	I've been talking to people who are in the field. I've
3	contacted people at different public service commissions.
4	And I've presented each one of them the problem and I
5	said this is what is being said and can we put it
6	underground.
7	MR. BURTURLA: And are you aware of an
8	underground 345-kV line in the greater New York area in
9	excess of 24 miles?
10	MR. VAIDYA: Yes, I am.
11	MR. BURTURLA: And where is that line?
12	MR. VAIDYA: This line is going from New
13	Rochelle to Hampsted, Long Island. This line was put in
14	I guess in the late 80's and early 90's.
15	MR. BURTURLA: Thank you. I have nothing
16	further.
17	VICE CHAIRMAN TAIT: Are there any other
18	parties or intervenors in the audience who would like to
19	cross-examine this witness? Are there any questions from
20	the Council?
21	MR. ASHTON: Mr. Chairman I'm sorry
22	VICE CHAIRMAN TAIT: Fred.
23	MR. CUNLIFFE: Yes, I have a couple. One
24	is the line you just referred to in New York

1	MR. VAIDYA: Yes
2	MR. CUNLIFFE: do you know the type of
3	cable installation?
4	MR. VAIDYA: Yes. This is SCFF, fluid
5	filled.
6	MR. CUNLIFFE: Okay, thank you.
7	MR. VAIDYA: And then part of it is a
8	submarine that goes through the Sound.
9	VICE CHAIRMAN TAIT: And what voltage is
10	it, sir?
11	MR. VAIDYA: 345 kilovolts.
12	VICE CHAIRMAN TAIT: Thank you.
13	MR. CUNLIFFE: And the other is since
14	you've made a comment about the previous testimony if you
15	were here this morning, what would your testimony
16	change in any way based on that?
17	MR. VAIDYA: Well from what I understand
18	is that ISO is has an objection to this whole
19	application, and then there's these issues of EMF,
20	there's harmonics, and a myriad of issues that have been
21	raised. My suggestion is they the Applicant should
22	probably be looking at DC because it eradicates all of
23	these problems, there's no EMF, there's no harmonic
24	problems. There would be it would not affect the

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1	communities that it's going through. And it's you
2	know, there's no reactive power so it's more reliable.
3	And we pay for basically what we use.
4	VICE CHAIRMAN TAIT: Would you suggest it
5	go overhead or underground?
6	MR. ASHTON: DC.
7	VICE CHAIRMAN TAIT: If it's DC and
8	there's no EMF problems?
9	MR. VAIDYA: I think that would be
10	something that the State would have the Legislators
11	would have to decide what makes sense. It's not an area
12	I have researched into, but it certainly looks like that
13	would be, given the circumstances today, something that
14	would be considered. I guess there's a new technology
15	also called light HVDC that someone may want to
16	investigate as well.
17	MR. CUNLIFFE: I have no further
18	questions.
19	VICE CHAIRMAN TAIT: Phil.
20	MR. ASHTON: Mr. Vaidya, you referred to a
21	system called FAACTS, fast acting AC transmission system.
22	And that is am I correct in understanding that's
23	achieved by adding capacitors in series with a

24

transmission line?

1	MR. VAIDYA: Actually FAACTS if flexible
2	AC transmission, which is basically using solid state
3	electronics to we used to have the old shunt reactors
4	and so on and now they've got these devices which are
5	solid state and they can be continuously monitoring and
6	injecting reactive power where needed.
7	MR. ASHTON: Shunt reactors you're
8	talking?
9	MR. VAIDYA: They use I have a document
LO	
11	MR. ASHTON: I know what a shunt reactor
L2	is. I'm asking you want how does the FAACTS work?
L3	MR. VAIDYA: How does FAACTS work? Well,
L 4	there's a whole series of applications of where you would
L5	use FAACTS. You could use it for injecting reactive
L 6	power. You could
L7	MR. ASHTON: Well just tell me how it
L8	works first, never mind let's do that
L9	MR. VAIDYA: There's a solid state device
20	which is monitoring the voltage. It's a micro process
21	MR. ASHTON: Yeah
22	MR. VAIDYA: computer that's monitoring
23	the line voltages and currents. And as it determines
24	something has to be rectified, it will inject the

1	appropriate reactive current in the circuit.
2	MR. ASHTON: Inductive current or
3	capacitive?
4	MR. VAIDYA: Yeah both.
5	MR. ASHTON: Both, okay. You also
6	mentioned the use of series capacitors, is that correct?
7	MR. VAIDYA: Series inductors and shunt
8	MR. ASHTON: Just give me a second here
9	and I'll see if I can find the specific reference to it -
10	- (pause) I can't put my fingers on it, but I believe
11	I thought you mentioned it in here
12	MR. VAIDYA: What was the question? If I
13	could
14	MR. ASHTON: Did you recommend using
15	series capacitors to increase the loading on existing
16	transmission lines?
17	MR. VAIDYA: I was focusing on the
18	charging capacitance. And in that case you would use
19	shunt reactors. If you had a situation where you have
20	low voltage, then of course you would use capacitors,
21	shunt capacitors.
22	MR. ASHTON: That I understand too. I
23	can't see I thought I I thought I read it in
24	general is U.S. transmission line technology consistent

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1	with that of the rest of the world, ignoring the fact
2	that 50-hertz and 60-hertz are applied?
3	MR. VAIDYA: I think our engineers are as
4	capable as any engineer in Europe. However, I think
5	there has been a reluctance to make use of technology.
6	And let me give you an example. We people have been
7	talking about XLPE is too new, it doesn't have you
8	know, hasn't been around long enough for us to consider
9	it. But you are familiar with C-I-G-R-E, CIGRE, the
LO	MR. ASHTON: Congressional International -
L1	- (speaks French)
12	MR. VAIDYA: Right
L3	MR. ASHTON: Ground Research (speaks
L 4	French)
L5	COURT REPORTER: Spell that
L6	MR. ASHTON: No, it's French that's the
L7	one we talked about, Tony.
L8	MR. VAIDYA: There's a paper coming out in
L9	August from Switzerland, which is basically something to
20	the effect of a decade of experience with high voltage
21	XLPE underground cables
22	MR. ASHTON: And what high what's the
23	voltage you're talking about here, quantify it?
24	MR. VAIDYA: I I could be wrong, but I

1	think it's 400 -kV.
2	MR. ASHTON: Um-hmm
3	MR. VAIDYA: So let me just say I'm not
4	sure I don't have the paper obviously, so but
5	people are willing to share a decade of experience, so
6	it's not as new as people make it out to be.
7	I guess the other thing is that it seems
8	like people overseas are willing to try more things. For
9	example, in Iceland, which as you know has got terrible
10	meteorological conditions, the weather affects all their
11	lines, so now they're trying to go underground. And
12	about two years ago they came up with a solution to do
13	200 kilometers of under-grounding. Admittedly it's not
14	345-kV, it's I think 132-kV. But what was interesting is
15	they're putting shunt reactors every five kilometers
16	along this because they claim they have a weak system and
17	that they found that they can overcome it and take care
18	of all the charging effects by using these.
19	MR. ASHTON: Do you know if shunt reactors
20	are used in this country at all?
21	MR. VAIDYA: I believe NU had said they do
22	use it. And that was one of the reasons why we have such
23	a weak system.
24	MR. ASHTON: NU said they what?

1	MR. VAIDYA: They are using it?
2	MR. ASHTON: That's your that's your
3	testimony? I'm just asking you, you're telling me.
4	MR. VAIDYA: Yeah, I I said I believe
5	I've read that NU said in one of (pause) I think it
6	says shunt capacitors in here
7	MR. ASHTON: I'm sorry?
8	MR. VAIDYA: I'm looking at a document
9	sent by Northeast Utilities on March 3 rd and I believe
10	that they had made reference to shunt capacitors, fixed
11	shunt capacitors at substations.
12	MR. ASHTON: Would we agree that shunt
13	reactors and shunt capacitors are not the same thing?
14	MR. VAIDYA: That's correct.
15	MR. ASHTON: I did find in your in your
16	testimony I did find the article or the reference to
17	series compensation. It's they're unnumbered pages,
18	but it's under the heading of facts, it's the second
19	paragraph
20	MR. VAIDYA: Okay.
21	MR. ASHTON: Were you referring to series
22	capacitors in that case or or what?
23	MR. VAIDYA: Uh
24	MR. ASHTON: The pages aren't numbered

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1 unfortunately,	but	it's		it's		the	heading	on	the
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- 2 left is facts.
- MR. VAIDYA: Okay. This -- okay.
- 4 MR. ASHTON: Do you see the second
- 5 paragraph --
- 6 MR. VAIDYA: Yes.
- 7 MR. ASHTON: -- it says -- the words begin
- 8 by considering series compensation.
- 9 MR. VAIDYA: Yes.
- MR. ASHTON: Are you talking capacitors,
- series capacitors there?
- MR. VAIDYA: Here -- basically, I should
- give you the source where I'm getting this from --
- MR. ASHTON: No, I want to find out what
- 15 you're talking about first --
- MR. VAIDYA: Okay, but I'm quoting someone
- on this.
- MR. ASHTON: Well, I didn't see any
- 19 quotation marks around it --
- MR. VAIDYA: I know. It's not put in the
- 21 thing because I assumed I was going to be giving this as
- 22 a speech. I didn't realize it was going to be submitted
- in as a document. I would have provided references. I
- do have the references with me. So -- that's why I'm

1	having a problem finding the pages because what you have
2	is different from what I have. But so yes, this is
3	basically a report that's from the World Bank and put out
4	by ABB.
5	MR. ASHTON: And what does series
6	compensation refer to?
7	MR. VAIDYA: I guess that would be a
8 -	that would be speculation on my part. I have an idea
9	what it is, but since you want me to be accurate
10	MR. ASHTON: Okay, thank you. Nothing
11	further.
12	VICE CHAIRMAN TAIT: Ed.
13	MR. EDWARD S. WILENSKY: I think we I
14	drove through or we drove through your neighborhood,
15	am I correct on that, on one of the visits that we made
16	to the various towns? Is it is part of that line
17	going underground in your particular neighborhood, the
18	existing 115 line, a short portion of it?
19	MR. VAIDYA: No.
20	MR. WILENSKY: That wasn't the area that I
21	was in then?
22	REPRESENTATIVE ADINOLFI: Can I answer
23	that? In the proposed proposal from the Applicant, they
24	would take one of the 115 lines, existing 115 lines and

1	run them underground down Old Farms Road so that they
2	could make room for the 345-kV line and stay within the
3	exiting right-of-way.
4	MR. WILENSKY: This is the area that this
5	gentlemen lives in, is that
6	REPRESENTATIVE ADINOLFI: That's correct.
7	MR. WILENSKY: Okay. I just wanted to
8	make sure I knew where you were because I remember
9	driving some of the areas and that helps refresh my mind.
10	Thank you very much. Thank you, Mr. Chairman.
11	VICE CHAIRMAN TAIT: Any questions?
12	MR. HEFFERNAN: No questions.
13	VICE CHAIRMAN TAIT: Does any again the
14	last call on the parties, is there anybody who would like
15	to ask this witness any questions on cross-examination?
16	Hearing none, thank you very much.
17	MR. VAIDYA: Thank you.
18	VICE CHAIRMAN TAIT: Representative
19	Adinolfi, thank you for coming, sir.
20	REPRESENTATIVE ADINOLFI: Thank you.
21	VICE CHAIRMAN TAIT: Our next panel of
22	witnesses has been called the institutional panel of Ezra
23	Academy. We're trying to look for a better name, but
24	that's what I've been stuck with.

1	(Pause)
2	VICE CHAIRMAN TAIT: Thank you for the
3	nametags. We all set, Ed?
4	COURT REPORTER: Can I get their names
5	VICE CHAIRMAN TAIT: Yeah
6	COURT REPORTER: and spellings please.
7	VICE CHAIRMAN TAIT: Mr. Schaefer, would
8	you introduce your panel and
9	MR. DAVID SCHAEFER: Sure. If I can go in
10	order across. Miss Siegel, would you introduce yourself
11	and say what organization you're affiliated with.
12	MS. RONNY SIEGEL: My name is Ronny Siegel
13	and I'm the Executive Director of the Jewish Community
14	Center of Greater New Haven.
15	COURT REPORTER: You need to spell your
16	name for me please.
17	MS. SIEGEL: The first one or second one?
18	COURT REPORTER: Both.
19	MS. SIEGEL: Ronny, R-o-n-n-y. Siegel, S-
20	i-e-g-e-l.
21	MR. SCHAEFER: Okay. And Shelley Kreiger.
22	MS. SHELLEY KREIGER: My name is Shelley
23	Kreiger. I'm the head of school at Ezra Academy. And
24	it's S-h-e-l-l-e-y, K-r-e-i-g-e-r. Ezra Academy is the

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1	bicultural	Jewish	day	school	with	Connecticut	Association
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- of Independent Schools in the Solomon Schecter
- 3 Association.
- 4 MR. SCHAEFER: Okay. Mr. Wunsch.
- MR. ALAN V, WUNSCH: Alan V. Wunsch. I'm
- 6 the Executive Director of Congregation B'Nai Jacob, the
- 7 second largest conservative synagogue in the State of
- 8 Connecticut. A-l-a-n, V as in Victor. Wunsch, W-u-n-s-
- 9 c-h.
- 10 MR. SCHAEFER: Okay. And Miss Perry.
- MS. SYDNEY PERRY: I'm Sydney Perry, S-y-
- d-n-e-y, P-e-r-r-y. I'm the Acting Director of the
- Jewish Federation of Greater New Haven, and the long-term
- 14 Director of the Department of Jewish Education of the
- 15 same institution.
- VICE CHAIRMAN TAIT: Please stand and take
- the oath.
- MR. HAINES: Thank you. Would you raise
- 19 our right hand please.
- 20 (Whereupon, the Ezra Academy Et Al panel
- of witnesses was duly sworn in.)
- MR. HAINES: Thank you. Be seated please.
- VICE CHAIRMAN TAIT: Do we have prefiled
- 24 testimony?

1	MR. SCHAEFER: Yes, we do. There are two
2	prefiled testimony. One is the prefiled testimony of
3	Alan V. Wunsch on behalf of Congregation B'Nai Jacob
4	dated June 7, 2004. And there are exhibits attached to
5	this that would be helpful to the Council I have extra
6	copies if members of the Council don't have it with them.
7	VICE CHAIRMAN TAIT: Thank you.
8	(Pause)
9	MR. SCHAEFER: And then there is also
10	prefiled testimony of the other three witnesses, Sydney
11	Perry, Shelley Kreiger and Ronny Siegel, also dated June
12	7, 2004. And again there are a number of pictures and
13	maps attached. And I have extra copies.
14	VICE CHAIRMAN TAIT: Thank you. Mr.
15	Schaefer, my program indicates several other exhibits to
16	be verified?
17	MR. SCHAEFER: Okay. I don't have my
18	program in front of me. If you could tell me what they
19	are, I'll be glad to do so.
20	VICE CHAIRMAN TAIT: I have No. 3,
21	Responses to Applicants' Interrogatories, dated May 21,
22	2004
23	MR. SCHAEFER: Okay
24	VICE CHAIRMAN TAIT: to be verified.

1	Supplemental Testimony Concerning Laboratory Studies of
2	Effects of EMF from Drs. Bell, etcetera.
3	MR. SCHAEFER: That's been done
4	previously.
5	VICE CHAIRMAN TAIT: Okay.
6	MR. SCHAEFER: When the panel was here
7	yesterday that was done.
8	VICE CHAIRMAN TAIT: Okay. Appendix to
9	Supplemental Testimony from Dr. Bell. That was done
10	MR. SCHAEFER: That's been done.
11	VICE CHAIRMAN TAIT: Okay. So it's just
12	the Responses to Interrogatories and the testimony of
13	your witnesses.
14	MR. SCHAEFER: Okay. The the I
15	believe the responses to the interrogatories that you're
16	referencing are the resumes of the panel from yesterday
17	and so these people would not be able to swear to that
18	if I've got the right document. I thought that was
19	handled yesterday. It may not have been, but this panel
20	could not swear to that.
21	VICE CHAIRMAN TAIT: Do you know whether
22	it was got into the record yesterday, Fred, the
23	resumes? Do you have copies of the resumes?
24	MR. SCHAEFER: I do not from the panel

1	yesterday I do not have it with me here.
2	VICE CHAIRMAN TAIT: I was wondering if
3	anybody, any party objects to having them come into
4	evidence right now without having seen them before.
5	MR. SCHAEFER: Well, they've been served
6	on everybody.
7	VICE CHAIRMAN TAIT: Everybody has been
8	served?
9	MR. SCHAEFER: Yes.
10	VICE CHAIRMAN TAIT: Are there any
11	objections to having those resumes coming in as a full
12	exhibit?
13	MS. RANDELL: No objection.
14	VICE CHAIRMAN TAIT: Hearing none, we will
15	accept those as exhibit 3? Yes.
16	MR. SCHAEFER: Yes.
17	(Whereupon, Ezra Academy Et Al Exhibit No.
18	3 was received into evidence as a full exhibit.)
19	MR. SCHAEFER: Would you like for me to
20	have them sponsor the testimony
21	VICE CHAIRMAN TAIT: Yes, I would. Yes.
22	MR. SCHAEFER: Okay. If I could start
23	with Mr. Wunsch. Mr. Wunsch, do you have a copy of your
24	

1	MR. WUNSCH: Yes, I do
2	MR. SCHAEFER: dated June 7, 2004, and
3	is is this testimony which is true and accurate to
4	the best of your belief?
5	MR. WUNSCH: There's one correction that
6	needs to be made to the prefiled testimony.
7	MR. SCHAEFER: Would you state what that
8	correction is?
9	MR. WUNSCH: Certainly. On page 2 from
10	the prefiled testimony where the description of the power
11	lines in relation to Congregation B'Nai Jacob, it should
12	have read the edge of the right-of-way runs approximately
13	46 feet from the edge of the building and the edge of the
14	right-of-way runs approximately 37 feet from the Ezra
15	playground. And I apologize for that error.
16	MR. SCHAEFER: And are you correcting the
17	first full paragraph on the top of page 2?
18	MR. WUNSCH: Yes, I am.
19	MR. SCHAEFER: Okay. And we'd be glad to
20	file a written errata sheet
21	VICE CHAIRMAN TAIT: Yes
22	MR. SCHAEFER: for that.
23	VICE CHAIRMAN TAIT: thank you.
24	MR. ASHTON: Mr. Schaefer, may I ask also

- on page 3 at the -- it's a single question and answer -the answer in the fourth line refers to a transmission
- 3 line of 460-kV. Would that be a typographical error?
- 4 MR. SCHAEFER: Or that may have been 345
- 5 plus 115, so it was adding the two together.
- 6 MR. ASHTON: The engineering escapes me on
- 7 that.
- 8 MR. SCHAEFER: Well, I'm not sure that it
- 9 was done by an engineer. We can ask Mr. Wunsch about his
- 10 qualifications --
- MR. ASHTON: I will --
- MR. SCHAEFER: -- but I think that's what
- the reference --
- MR. ASHTON: -- I'll ask what the source
- 15 of that --
- 16 MR. SCHAEFER: I think that's what the
- 17 reference was to.
- MR. ASHTON: I hadn't thought of adding --
- MR. SCHAEFER: Yeah. I would offer this
- as an exhibit.
- VICE CHAIRMAN TAIT: Are there any
- objections to the testimony of Allan Wunsch? Hearing
- none, we'll accept it as a full exhibit.
- MR. SCHAEFER: Okay.

1	(Whereupon, Ezra Academy Et Al Exhibit No.
2	6 was received into evidence as a full exhibit.)
3	MR. SCHAEFER: And then with respect to
4	the testimony of Sydney Perry, Shelley Kreiger and Ronny
5	Siegel Mrs. Perry, Kreiger and Siegel, is this your
6	testimony?
7	MS. SIEGEL: Yep.
8	MS. KREIGER: Yes, it is.
9	MS. PERRY: Yes.
10	MR. SCHAEFER: Okay. Is it accurate to
11	the best of your knowledge and belief?
12	MS. SIEGEL: Yes.
13	MS. KREIGER: Absolutely.
14	MS. PERRY: Yes.
15	MR. SCHAEFER: And do you sponsor this
16	testimony?
17	MS. SIEGEL: Yes.
18	MS. KREIGER: Yes.
19	MS. PERRY: I do.
20	MR. SCHAEFER: And do you ask the Council
21	to consider it?
22	MS. SIEGEL: Yes.
23	MS. KREIGER: Yes.
24	MS. PERRY: Please.

1	MR. SCHAEFER: I would move its admission.
2	COURT REPORTER: Those were all yes's?
3	MS. PERRY: Yeah.
4	VICE CHAIRMAN TAIT: All yes's. Are there
5	objections to the admission of these documents? So
6	they'll be admitted as Exhibit 7.
7	(Whereupon, Ezra Academy Et Al Exhibit No.
8	7 was received into evidence as a full exhibit.)
9	VICE CHAIRMAN TAIT: Available for cross-
10	examination?
11	MR. SCHAEFER: Yes, they are.
12	VICE CHAIRMAN TAIT: The Applicant.
13	MS. RANDELL: Yes. I can't resist.
14	Following up on Mr. Ashton's question, there's a
15	reference on the last page of each of your testimony to
16	460 volts of power lines
17	MR. ASHTON: kV kV.
18	MS. RANDELL: It is page 8 of the group
19	testimony and page 3 as you pointed out, Mr. Ashton, of
20	the Wunsch testimony.
21	MR. ASHTON: It's kV though, not volts.
22	MS. RANDELL: I'm sorry, kilovolts.
23	Excuse me, kilovolts. Which one of you wrote that?
24	COURT REPORTER: One moment please before

1	you answer. (Pause). Thank you.
2	MR. WUNSCH: If I could answer on behalf
3	of all four of us, that was prepared in conjunction with
4	some of our volunteers and it was the adding of the 115
5	line plus the 345 line to come up with the 460.
6	MS. RANDELL: And with respect to the
7	testimony generally, let's stay with you, Mr Wunsch?
8	Have I got that right?
9	MR. WUNSCH: Yes. It rhymes with lunch.
10	MS. RANDELL: Did you write the testimony
11	or was it prepared by volunteers?
12	MR. WUNSCH: It was prepared with others.
13	I reviewed drafts of it and prepared it with them.
14	MS. RANDELL: And the same question to
15	Mrs. Perry, Kreiger and Siegel?
16	MS. PERRY: That would be true for me,
17	yes.
18	MS. RANDELL: Thank you.
19	MS. KREIGER: That would be true for me as
20	well.
21	MS. SIEGEL: For me too.
22	MS. RANDELL: A question generally on the
23	quotations of numbers of children participating in

programs and the like. Page 3 of the group testimony, at

24

1	the very top of the page there's a reference to 4,000
2	children are members of the institutions and 2100
3	participate in programs. Just an overall question. If
4	my child goes to camp at the JCC, goes to services at
5	B'Nai Jacob, and also is in the sixth grade at Ezra
6	Academy, is that one child for this purpose or three?
7	MS. KREIGER: That would be three children
8	according to that purpose, but that would be a lot of
9	hours near the power lines.
10	MS. RANDELL: I hear you, I just wasn't
11	clear as I read the testimony
12	MS. KREIGER: We gave them we gave
13	total number
14	MS. PERRY: Total figures
15	MS. KREIGER: we didn't it would
16	have been
17	MS. SIEGEL: It wouldn't
18	MS. KREIGER: impossible to track each
19	child
20	COURT REPORTER: One at a time
21	MS. SIEGEL: Yeah.
22	MS. RANDELL: And that is precisely how I
23	came to the conclusion that that was that.
24	MS. KREIGER: Yep.

MS. RANDELL: So that Tony won't yell at
me and you, one person needs to speak at a time. I'll
try on my end, but then you just need to coordinate.
Thank you.
Let's start with what I've called the
group testimony. With respect to the JCC, that land was
purchased from CL&P, correct?
MS. SIEGEL: Um-hmm.
COURT REPORTER: Was that a yes?
MS. SIEGEL: Yes.
VICE CHAIRMAN TAIT: We need an audible
yes.
MS. SIEGEL: Yes.
VICE CHAIRMAN TAIT: And an identifiable
witness. So you might give your name if
MS. SIEGEL: Ronny
VICE CHAIRMAN TAIT: Yes.
MS. SIEGEL: Yes the answer is yes.
MS. RANDELL: In April of 1990?
MS. SIEGEL: Yes.
MS. RANDELL: Mr. Tait, we have a
collection of exhibits that all of them are already in
the record. We thought it would just be easier if we all
had a package. So with your permission, Mr. McDermott

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1	will provide them to the witness panel and to the Council
2	and to the witness panel's attorney.
3	VICE CHAIRMAN TAIT: These are documents
4	already in the record?
5	MS. RANDELL: I believe so.
6	VICE CHAIRMAN TAIT: Are these from the
7	Applicants' documents?
8	MS. RANDELL: They are primarily from the
9	witness panel's documents
10	VICE CHAIRMAN TAIT: At the back of their
11	testimony?
12	MS. RANDELL: At the back of their
13	testimony, just to ease there are a few
14	VICE CHAIRMAN TAIT: A few others
15	MS. RANDELL: that are Applicants'
16	documents.
17	VICE CHAIRMAN TAIT: Okay. Which they
18	haven't subscribed to
19	MS. RANDELL: No
20	VICE CHAIRMAN TAIT: Okay
21	MS. RANDELL: No, no, no.
22	MR. SCHAEFER: They they appear to be
23	from the exhibits to the to the panel's testimony,
24	except for some projections of EMF levels that were

1	charts prepared by the Applicant that they've attached to
2	this.
3	MS. RANDELL: And when we get to those,
4	you will recognize them as ones that Dr. Bailey has
5	subscribed to.
6	VICE CHAIRMAN TAIT: Okay. Alright.
7	MS. RANDELL: And you have as the first
8	page a copy of Exhibit R to the panel's testimony, which
9	is the deed from the JCC to CL from CL&P to the JCC.
10	MS. SIEGEL: Yes.
11	MS. RANDELL: Okay. At the time the land
12	was conveyed to the JCC, the land was undeveloped except
13	for the existing 115 kilovolt transmission lines,
14	correct?
15	MS. SIEGEL: Correct.
16	MS. RANDELL: And those transmission lines
17	had been there for quite a number of years?
18	MS. SIEGEL: I assume so.
19	MS. RANDELL: So the pictures that you've
20	appended to your testimony let's just take Exhibit K
21	to the group testimony (pause) we're fine, people
22	have them
23	MR. SCHAEFER: Not everybody has got it
24	though you're referring to something that many people

1	don't have.
2	MS. SIEGEL: Yes.
3	MS. RANDELL: My problem is I just need to
4	be able to see
5	A VOICE: It's the same picture
6	MS. RANDELL: what they're going to see
7	
8	MR. ASHTON: The same picture
9	VICE CHAIRMAN TAIT: The same picture.
10	MS. RANDELL: Okay. Back in 1990 if that
11	picture were taken, the only thing that would be there
12	would be the transmission line and the trees, right?
13	MS. SIEGEL: I said correct.
14	MS. RANDELL: Okay. And that's true of
15	all the pictures that you've appended?
16	MS. SIEGEL: It is true of all the
17	pictures taken of the JCC, yes, and its camp.
18	MS. RANDELL: CL&P retained an easement as
19	part of the deed when it conveyed the property, yes?
20	MS. SIEGEL: Correct, in 1990.
21	MS. RANDELL: And the easement gave CL&P
22	the right to maintain the transmission lines, build new
23	transmission lines, do what was necessary with respect to
24	those lines, yes?

1	MS. SIEGEL: Yes.
2	MS. RANDELL: And the easement agreement
3	also precluded the JCC from utilizing the right-of-way
4	for parking?
5	MS. SIEGEL: That was resolved after the
6	deed.
7	MS. RANDELL: And at the time that the
8	deed
9	MS. SIEGEL: At the time, they as I
10	understand because I wasn't there
11	MS. RANDELL: Right
12	MS. SIEGEL: so you have to take my
13	word afterward they did come to some agreement about
14	the parking lot
15	MS. RANDELL: After
16	MS. SIEGEL: because we would not have
17	been able to build the building without parking, we
18	wouldn't get any zoning.
19	MS. RANDELL: So after the property was
20	conveyed by CL&P to the JCC, the JCC asked CL&P if they
21	could change the easement to provide that the JCC could
22	utilize the area under the transmission lines in the
23	right-of-way for parking?
24	MS. SIEGEL: Correct.

1	MS. RANDELL: And in November of 1990 CL&P
2	agreed to that and there's a document that shows that?
3	MS. SIEGEL: Correct.
4	MS. RANDELL: Alright. And what, if
5	anything, in terms of dollars did the JCC pay for CL&P's
6	agreeing to let to forebear its easement rights?
7	MS. SIEGEL: I do not know. But if you
8	give me some chance, I'll get the information to you.
9	MS. RANDELL: Well subject to check, when
10	you check, would you agree that the JCC did not pay
11	anything to CL&P
12	MS. SIEGEL: I do not know
13	MS. RANDELL: for that permission?
14	Okay. Now, when did the JCC open at this location?
15	MS. SIEGEL: In 1993.
16	MS. RANDELL: What month?
17	MS. SIEGEL: November.
18	MS. RANDELL: So before the JCC
19	MS. SIEGEL: October, I'm sorry. October
20	of 1993.
21	MS. RANDELL: October of '93. Before the
22	JCC opened, some representative of the JCC called United
23	Illuminating and asked that EMF measurements be taken,
24	correct?

1	MS. SIEGEL: Correct.
2	MS. RANDELL: And why was that done?
3	MS. SIEGEL: It was done because some of
4	the parents of the day care and preschool wanted us to
5	assure them that there is no problem with that. And
6	because of the pressure of the parents, the JCC took upon
7	itself to find out from the utility company whether or
8	not the levels are acceptable and that's what we did.
9	And
10	MS. RANDELL: And UI came out in May of
11	1993
12	MS. SIEGEL: Correct
13	MS. RANDELL: to do measurements before
14	the JCC moved in as it were?
15	MS. SIEGEL: That I'm not sure. You have
16	the date?
17	MS. RANDELL: If if you would
18	MS. SIEGEL: If you check the date and
19	it's correct, yes, but
20	MS. RANDELL: If you would turn to page 5
21	of the handout.
22	MS. SIEGEL: Okay, one minute, I will.
23	Yes, they did it on November 29, 1993. And we opened
24	October 1993.

1	MS. RANDELL: And if this is a letter
2	that the JCC provided in discovery in this proceeding,
3	correct? You can look to your counsel
4	MS. SIEGEL: I
5	MS. RANDELL: for confirmation.
6	MS. SIEGEL: Okay.
7	MR. SCHAEFER: It's a letter from United
8	Illuminating that we provided back to you, yes.
9	MS. SIEGEL: Yeah.
10	MS. RANDELL: If you would look at that
11	letter, it notes values from May 19 th are shown in
12	parenthesis. There are two sets of EMF measurements in
13	the letter. Would you agree with me that
14	MS. SIEGEL: One was made November $19^{\rm th}$ and
15	one was made in a different date, that's correct.
16	MS. RANDELL: And the letter states that
17	the earlier date, the one the measurements in
18	parenthesis were from May?
19	MS. SIEGEL: Um-hmm, yeah -
20	MS. RANDELL: You agree?
21	MS. SIEGEL: Yeah.
22	MS. RANDELL: And that was before the
23	building opened?
24	MS. SIEGEL: Yeah.

1	MS. RANDELL: Okay. Why did you have UI
2	come back after the building opened to take another set
3	of measurements?
4	MS. SIEGEL: Because as I understand from
5	the history, I was of the Center the group of
6	parents that we used to have the day care and
7	preschool in Hamden, not in Woodbridge. And when we
8	finished the building closer to '93, all these parents
9	were going to move to Woodbridge. At that time they
10	wanted us to assure them that the UI would do additional
11	testing for them to move from Hamden to Woodbridge. It
12	was a whole process of moving. Some moved from downtown,
13	some moved from Hamden, some moved from another area.
14	And I think that in response to parents whose children's
15	safety is the utmost concern to them, we did it. And the
16	UI assured us that everything is okay. At that time we
17	also had some testimony from other people who assured the
18	parents that it's okay, otherwise we wouldn't be able to
19	open the preschool.
20	MS. RANDELL: Were you associated with the
21	JCC in 1993?
22	MS. SIEGEL: No. I started to work in the
23	JCC in 1997.
24	MS. RANDELL: So who told you that UI

1	assured the JCC of anything with respect to electric and
2	magnetic fields in 1993?
3	MS. SIEGEL: Who told me? The previous
4	director
5	MS. RANDELL: And
6	MS. SIEGEL: and some of the
7	representative of UI came in July and talked to me and
8	reminded me that although I wasn't there, they did it
9	before the building was opened and assured us. Some of
10	them are here.
11	MS. RANDELL: And that would be Miss
12	Shanley?
13	MS. SIEGEL: I don't remember her name,
14	but I can check my record in my appointment book through
15	July and let you know.
16	VICE CHAIRMAN TAIT: July of what year?
17	MS. SIEGEL: This
18	A VOICE: This past
19	MS. SIEGEL: 19 the past year, 1994
20	
21	MS. RANDELL: And
22	MS. SIEGEL: 2004. Sorry sorry,
23	sorry. Take it off the testimony.
0.4	

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MR. ASHTON: 2003 you mean? July?

24

1	MS. SIEGEL: No, this this this July
2	
3	A VOICE: 2003
4	VICE CHAIRMAN TAIT: It hasn't come yet
5	(Multiple voices overlapping,
6	indiscernible)
7	MS. SIEGEL: Before this whole process
8	started, the UI came to visit the center and assured us
9	that they are looking for a very amicable process of
10	increasing and they wanted to meet with us. And we met
11	with them. It was very pleasant and very amicable. And
12	they did what they did and they said we would make sure
13	there is no more than you know, all the things that
14	the UI told us before, they told us again.
15	MS. RANDELL: Well, I need to know since
16	you weren't there in '93 and let's focus on what the
17	UI representative told you in July of 2003, and I need
18	specifics
19	MS. SIEGEL: That there will be no more
20	no danger from whatever they're going to put in there
21	than this which we have before. And that they assured us
22	before and they'll assure us again.
23	MS. RANDELL: And so the representative
24	from UI who you spoke with in July 2003, it's your

1	testimony that she assured you that whatever you were
2	told in 1993
3	MS. SIEGEL: Is the same now
4	MS. RANDELL: is the same now?
5	MS. SIEGEL: Yes.
6	MS. RANDELL: And she said that there is
7	no danger? Is that your recollection?
8	MS. SIEGEL: I don't know if she used
9	those words. Don't quote those words. She just assured
10	me there's no more than what they assured us then that
11	they assure us now. So whatever they assured us then,
12	that is still is still now. There's no it's not
13	any worse or not we shouldn't be more alarmed, we
14	shouldn't look at it as an additional problem for us.
15	MS. RANDELL: Mr. Wunsch, were you there
16	in 1993?
17	MR. WUNSCH: No, I was not.
18	A VOICE: Nobody was maybe Sydney
19	MS. RANDELL: Between 1993 and 2003 did
20	anyone did any representative of the JCC speak to UI
21	about electric and magnetic fields?
22	MS. SIEGEL: No. Only that time in July
23	that I just talked about.
24	MS. RANDELL: And based on the records or

1	what people told you, did the JCC take any action with
2	respect to the day care center after having the
3	measurements done in 1993?
4	MS. SIEGEL: No.
5	MS. RANDELL: You said there were other
6	assurances by other people than UI in 1993. Who provided
7	those assurances?
8	MS. SIEGEL: I'd have to look into the
9	record of that time. I don't know
10	MS. RANDELL: Would you?
11	MS. SIEGEL: Sure. I don't know if there
12	was I said the UI was the one who talked to me and
13	said it. I don't know if other people. There was
14	testimony of doctors, but I don't know what they were,
15	they testimony. There was some testimonies of similar
16	but I don't know the content of them at this point and
17	I'd have to look at what they said and what they didn't
18	say in order to provide your the information.
19	VICE CHAIRMAN TAIT: Miss Siegel
20	MS. SIEGEL: Yes?
21	VICE CHAIRMAN TAIT: this conversation
22	is July 2003?
23	MS. SIEGEL: Yeah.
24	VICE CHAIRMAN TAIT: Was it with a man or

1	a woman?
2	MS. SIEGEL: One man and one woman.
3	VICE CHAIRMAN TAIT: And they were talking
4	about the existing lines
5	MS. SIEGEL: Yes
6	VICE CHAIRMAN TAIT: or the new 345
7	line?
8	MS. SIEGEL: They were talking about the
9	various option they gave us a heads-up to the process,
10	that's why they came.
11	VICE CHAIRMAN TAIT: I'm trying to
12	distinguish between the '93 letter, which was talking
13	about existing 115 lines, and the new 345 lines that are
14	being proposed in this application. Was the conversation
15	this July about the new 345 line, which you say
16	MS. SIEGEL: Yes
17	VICE CHAIRMAN TAIT: they assured you
18	there was no change?
19	MS. SIEGEL: Yes. Either they'll be
20	taller or they'll be different or be crossed I don't
21	remember the details, but there was a conversation saying
22	there will not be you won't be subject to any more
23	than what before, so we should not be alarmed that the
24	process is going to put us into something that we don't

1	want to be in.
2	VICE CHAIRMAN TAIT: Thank you.
3	MS. RANDELL: Are there any notes from
4	1993 or from your conversation in 2003?
5	MS. SIEGEL: I don't know if there are
6	notes, but there are probably just I don't
7	MS. RANDELL: You don't know?
8	MS. SIEGEL: No, I don't know.
9	MS. RANDELL: Okay
10	MS. SIEGEL: I don't know if they took
11	notes either.
12	MS. RANDELL: Has the day care center been
13	in use continuously since the building was constructed
14	and opened
15	MS. SIEGEL: Yes
16	MS. RANDELL: in October'ish 1993?
17	MS. SIEGEL: Yes.
18	MS. RANDELL: You haven't moved it?
19	MS. SIEGEL: We have not moved it because
20	I don't think we can.
21	MS. RANDELL: When did you construct the
22	pool? When did the JCC construct the pool that's on-
23	site?
24	MS. SIEGEL: Later than we opened the

1	building.	Ιt	took	about		between		if	we	opened	in
---	-----------	----	------	-------	--	---------	--	----	----	--------	----

- 2 '93 the pool was done probably in '94, '95.
- 3 MS. RANDELL: And --
- 4 MR. SCHAEFER: I assume you're referring
- 5 to the outdoor pool and not the indoor pool.
- 6 MS. SIEGEL: The outdoor, the day camp --
- 7 you're talking about the day camp now?
- 8 MS. RANDELL: I was talking about the
- 9 outdoor pool, thank you.
- MS. SIEGEL: It's the day camp.
- 11 MS. RANDELL: The indoor pool has been
- 12 there I assume --
- MS. SIEGEL: Yes --
- MS. RANDELL: -- since the building was --
- MS. SIEGEL: Yes, yes.
- MS. RANDELL: And when did you construct
- the ball field near the JCC?
- MS. SIEGEL: About the summer of opening
- 19 the building, about '94.
- MS. RANDELL: And when did the day camp
- 21 start operating?
- MS. SIEGEL: In '94.
- MS. RANDELL: Between 1993 and 2003, and I
- apologize if I asked you this, did anyone at the JCC have

1	any conversation or communication with UI about electric
2	and magnetic fields?
3	MS. SIEGEL: Not specifically, but the day
4	care, it was the same conversation we had in July.
5	MS. RANDELL: I'm sorry, just between
6	I'm just trying to cover the years and move on. Nothing
7	
8	MS. SIEGEL: Oh no, no
9	MS. RANDELL: Nothing happened
10	MS. SIEGEL: No
11	MS. RANDELL: in your
12	MS. SIEGEL: No
13	MS. RANDELL: No conversations
14	MS. SIEGEL: No, no.
15	MS. RANDELL: Okay. Between 1993 and 2003
16	did the JCC have any inquiries from parents with respect
17	to electric and magnetic fields?
18	MS. SIEGEL: No, not about the day camp.
19	MS. RANDELL: Or the day care center or
20	anything?
21	MS. SIEGEL: From time to time somebody
22	would ask, but it was not a major event. It was not
23	really an objection or a complaint, it was just a
24	question, like they ask about everything else about the

1	center.
2	MS. RANDELL: And did you respond?
3	MS. SIEGEL: The director of the preschool
4	and day care responded, yes.
5	MS. RANDELL: And did they report to you
6	that they had discussed this?
7	MS. SIEGEL: With a parent?
8	MS. RANDELL: Yes.
9	MS. SIEGEL: Yes.
10	MS. RANDELL: Is there any record of that?
11	MS. SIEGEL: Probably, yes.
12	MS. RANDELL: And did any of those
13	inquiries cause you to talk to anyone outside of the JCC
14	about electric and magnetic fields?
15	MS. SIEGEL: The practice of the director
16	of day care when a parent inquired about it used to be
17	providing them with the same information you have in
18	front of you, the UI and the other article and
19	information that helped us open without feeling that it's
20	not right to do. So a parent who asked that, had a talk
21	with the director and received the information for their
22	to read. And then if they had a question, if they had
23	objection, we probably would have pursued it, but usually
24	that was sufficient for them.

1	MS. RANDELL: Okay, so from your
2	personal knowledge, this letter from UI dated November
3	1993 was provided to parents upon request?
4	MS. SIEGEL: The information on the
5	information of this letter maybe not the exact letter,
6	but the information contained in this letter was.
7	MS. RANDELL: Now are you aware that there
8	are mitigation techniques to reduce magnetic fields, that
9	there are designs for structures of overhead lines that
10	can be utilized to reduce fields?
11	MS. SIEGEL: No, I'm personally not aware
12	of it.
13	MS. RANDELL: I don't mean for Miss Siegel
14	to have to dominate the panel. Anyone on the panel?
15	MS. KREIGER: Other than what I learned
16	yesterday about contact currents, which is on my list to
17	find out more about on Monday, no, I didn't know.
18	MS. RANDELL: Okay. Is anyone on the
19	panel aware that representatives of the JCC, Ezra Academy
20	and B'Nai Jacob have met with United Illuminating and
21	Connecticut Light & Power to discuss a mitigating design
22	for transmission lines?
23	MS. KREIGER: Can I?
24	MS. RANDELL: Please.

1	MS. KREIGER: I met with Miss Shanley from
2	the utility after the June community informational
3	meeting regarding the upgrade on the power line. And at
4	that point when we met, she did
5	VICE CHAIRMAN TAIT: June of what year?
6	MS. KREIGER: This past June.
7	VICE CHAIRMAN TAIT: 2004?
8	MS. KREIGER: 2004.
9	VICE CHAIRMAN TAIT: 2003?
10	MS. KREIGER: At that point we did do
11	measurements outside. And at no point
12	VICE CHAIRMAN TAIT: I think you mean
13	MS. KREIGER: was there a discussion of
14	anyway to mitigate.
15	MS. RANDELL: Let me I think there's a
16	little confusion. When you say June, you don't mean just
17	a few weeks ago? You mean about a year ago?
18	A VOICE: A year
19	MS. KREIGER: A year ago.
20	MS. RANDELL: Okay.
21	VICE CHAIRMAN TAIT: 2003
22	MS. KREIGER: 2003.
23	VICE CHAIRMAN TAIT: 2003.
24	MS. RANDELL: That would be 2003.

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MS. KREIGER: Sorry.
MS. SIEGEL: June and July of last year
MS. RANDELL: Okay
MS. KREIGER: Yes
MS. SIEGEL: that's when the whole
thing started.
MS. RANDELL: Okay. Mr. Wunsch
MS. KREIGER: We were together
MS. SIEGEL: Yeah
VICE CHAIRMAN TAIT: Try to separate your
testimony so the court reporter knows who is saying what,
when.
MS. KREIGER: Got it.
MR. WUNSCH: Alan Wunsch is saying that he
was with Shelley Kreiger and Miss Shanley (laughter) -
- at that meeting.
VICE CHAIRMAN TAIT: Very good.
MS. RANDELL: Thank you. If you
A VOICE: We can be obedient
MS. RANDELL: could turn to page 8 of
your package.
MS. SIEGEL: Yes.
MS. RANDELL: Has any of you ever seen

1	calculations with respect to the Jewish Community Center?
2	Have you ever seen that before I just handed it to you
3	today?
4	MS. PERRY: I have not.
5	MS. KREIGER: I have not.
6	MS. SIEGEL: I have not.
7	MR. WUNSCH: I don't believe so. Alan
8	Wunsch.
9	MS. SIEGEL: Ronny Siegel. Have not.
10	MS. RANDELL: You're all going to sound
11	like superstar athletes referring to yourselves in the
12	third person.
13	MS. SIEGEL: Don't worry, we'll never be
14	confused with them.
15	MS. RANDELL: Okay. Accept if you would,
16	subject to check, that what this document page 8 reflects
17	is that magnetic field levels can be reduced through
18	design, I assume you would agree that that would be a
19	good thing?
20	MS. SIEGEL: Can I answer it with not a
21	yes or no? Am I allowed to answer the question
22	MS. RANDELL: Let's let's try yes or no
23	

VICE CHAIRMAN TAIT: Try yes or no. Would

24

1	it be a good thing?
2	MS. SIEGEL: It's in principle, it
3	would be a good thing.
4	MS. RANDELL: Good. And if levels could
5	be at or below the levels the EMF levels the
6	magnetic field levels that were reflected in this
7	November 29, 1993 letter, that you would think also
8	that would be a good thing?
9	MS. SIEGEL: In principle, yes.
10	MS. RANDELL: And if the right-of-way
11	could be moved so that the transmission lines were
12	farther away from the JCC, thereby reducing magnetic
13	fields further, you would think that would be a good
14	thing also?
15	MS. SIEGEL: In principle, yes.
16	MS. RANDELL: Would it be acceptable then
17	to the Jewish Community Center, we'll start with you, if
18	that change were made and therefore you had field levels
19	at or below the measurements that were taken in 1993?
20	MS. PERRY: I'd like to answer that,
21	Ronny, before you do. I have no idea where that question
22	is taking us and, therefore, I refuse to answer yes or no
23	to it. But I would say if there's a possibility to
24	change a right-of-way, it's an enormous I think

1	undertaking. And I guess we would have to seriously
2	consider what that would mean both for our building and
3	for our community.
4	MS. RANDELL: Because that would mean you
5	would have less property? What are your concerns?
6	MS. PERRY: I do not know what it would
7	mean, but I have to assume that it is a major undertaking
8	to change that large of a right-of-way there. So, I
9	would not want to say yes or no to your question because
10	I'm not sure where it is taking us to the point
11	MS. RANDELL: Am I correct then that no
12	one representing the Jewish Community Center, Ezra
13	Academy, or B'Nai Jacob, either legal representation or
14	just a representative of the organization, am I correct
15	that none of those people have suggested to any of you
16	people on the panel that there have been discussions with
17	respect to the potential to move the right-of-way at the
18	JCC?
19	MR. SCHAEFER: I'm going to object. I
20	don't know just
21	MS. SIEGEL: There were
22	MR. SCHAEFER: there have been meetings
23	that counsel has with each of these organizations has
24	lay-leadership that run the organization. These

1	representatives are the professionals that operate the
2	entities. And the substance of based on meetings with
3	the Applicants and proposals that have been made, there
4	have been meetings with the lay-leadership of these
5	organizations discussing the options. I think
6	MS. SIEGEL: Yes
7	MR. SCHAEFER: I know that Mrs. Siegel
8	was at one of the meetings
9	MS. SIEGEL: Yes
10	MR. SCHAEFER: but
11	MS. SIEGEL: Yes Mrs. Siegel answers
12	yes.
13	MR. SCHAEFER: Right. But I'm not sure
14	the substance of those communications with counsel
15	VICE CHAIRMAN TAIT: I'm not sure she's
16	interested in the substance.
17	MS. RANDELL: No, I'm of course not
18	interested in the substance. I'm interested in knowing
19	what has been communicated to the witnesses who are
20	representing these organizations.
21	MS. SIEGEL: We were aware of the meetings
22	of counsel and we participated we had a meeting with
23	him and we knew that there is dialogue between UI and
24	counsel. And we are at this point only talking. There

1	is nothing that we know is
2	VICE CHAIRMAN TAIT: One of the topics
3	though was
4	MS. SIEGEL: About what?
5	VICE CHAIRMAN TAIT: One of the topics of
6	those conversations was relocating the right-of-way?
7	MS. SIEGEL: Correct.
8	MR. SCHAEFER: I think it's important to
9	be clear that the right-of-way goes between two
10	facilities
11	MS. SIEGEL: Right
12	MR. SCHAEFER: and there's no way to
13	move it without eliminating one of the facilities.
14	VICE CHAIRMAN TAIT: We have a map.
15	MR. SCHAEFER: Yes.
16	VICE CHAIRMAN TAIT: We have a map in the
17	record.
18	MS. RANDELL: We have the map.
19	MS. SIEGEL: Yeah.
20	VICE CHAIRMAN TAIT: Okay.
21	MS. SIEGEL: But we are aware of it and
22	yes we know it's happening and, yes, we continue to talk,
23	but where it would lead us, I think Miss Perry said we
24	don't know.

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HEARING RE: CL&P and UI
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1 MS. RANDELL: So you're not prepared to 2 support that? 3 A VOICE: Not at this time --4 MS. SIEGEL: I'm not -- not supporting it, 5 let's put it this way. 6 VICE CHAIRMAN TAIT: I'm not sure they're 7 the representatives who can support it. They're the 8 professionals --9 MS. RANDELL: They are indeed --10 VICE CHAIRMAN TAIT: -- and not the 11 principles --12 A VOICE: Right. 13 MS. SIEGEL: I indeed would do anything that would make the kids at the center safe. So for me, 14 whichever way would get there, I'll go there. It is my 15 16 responsibility, so. 17 MS. PERRY: And I would say that while 18 equally concerned about the safety of our children, as 19 the Acting Director of the Jewish Federation, we have to 20 be concerned with not only the health of our children but 21 also the health of our community and institutions. And a 22 change that might eliminate one of our institutions could 23 be equally damaging and detrimental to our total vital 24 community.

1	MS. RANDELL: So it's a balance?
2	MS. SIEGEL: Always a balance
3	MS. PERRY: Oh, it is not it is not a
4	balance, but it is not desirable for us to see the
5	elimination of one of our institutions, that is not a
6	desirable.
7	MS. RANDELL: And which institution are
8	you referring to, Miss Perry?
9	MS. PERRY: If you will, I think that the
10	cornerstone institutions of the community are houses of
11	prayer, schools and places of assembly. You're talking
12	about those three in this conversation. And I find that
13	to have to prioritize one over the other would be
14	impossible.
15	MS. RANDELL: Perhaps I misunderstood,
16	Miss Perry. I was not asking that. You said in your
17	answer that to relocate the right-of-way at the JCC would
18	result in the elimination, I think that was the word, of
19	one of the institutions. And I'm just asking which one.
20	MS. PERRY: Uh let me restate then. I
21	think I meant to have said if the change of the right-of-
22	way would mean the elimination of one of our
23	institutions, then that would cause us really
24	considerable pain in the community.

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1	MS. RANDELL: Thank you. I have no
2	follow-up on that now that I understand it, I appreciate
3	it.
4	Mr. Wunsch, you're the representative of
5	B'Nai Jacob?
6	MR. WUNSCH: Correct.
7	MS. RANDELL: Okay. And again the
8	property on which the B'Nai Jacob facilities are located
9	was sold from by CL&P to B'Nai Jacob in 1965, is that
10	correct?
11	MR. WUNSCH: Actually, it's my
12	understanding based on a review of the deed, that that
13	occurred in 1957, though that was before my time.
14	MS. RANDELL: I'm sorry, I think you're
15	right, I think that's what the deed reflects. And there
16	were transmission lines at that location as well?
17	MR. WUNSCH: That is my understanding.
18	MS. RANDELL: And when did B'Nai Jacob
19	open on that property?
20	MR. WUNSCH: It's my understanding again
21	that construction was completed and the building opened
22	in 1962.
23	MS. RANDELL: And prior to that, the land
24	was undeveloped except for the transmission lines?

1 MR. WUNSCH: I don't have any -- I don't 2 know. 3 MS. RANDELL: Okay. It was just B'Nai 4 Jacob that was located there in 1962, is that right, and 5 the others followed? 6 MR. WUNSCH: That is my understanding. 7 MS. RANDELL: Okay. When did the Maquom 8 Community Hebrew High School locate at the B'Nai Jacob 9 facility. 10 MR. WUNSCH: I don't have an exact date, 11 but I can go back at least 16 years for documentation 12 before that for Maquom. 13 MS. RANDELL: And Ezra Academy? 14 MS. KREIGER: Ezra Academy moved to B'Nai 15 Jacob in 1968. 16 MS. RANDELL: With respect to the property 17 that B'Nai Jacob and these other entities are located, 18 CL&P retained an easement for transmission lines on that 19 property too, right? 20 MR. WUNSCH: Correct, from my reading of 21 the deed. 22 MS. RANDELL: And the easement allows CL&P 23 to do what is necessary to maintain those lines, 24 reconstruct those lines, and so on?

1	MR. WUNSCH: That's my understanding.
2	MS. RANDELL: Okay. Now, there's a
3	basketball court presently located within the right-of-
4	way near Ezra Academy, is that right?
5	MS. KREIGER: Yes.
6	MS. RANDELL: When was that put up?
7	MS. KREIGER: I don't know the date that
8	that was put up, but it's no longer in use. It's being
9	taken down this summer.
10	MS. RANDELL: Okay. Did anyone from B'Nai
11	Jacob talk to CL&P about the basketball court and the
12	hoop structure before it was built?
13	MR. WUNSCH: I'm not aware I'm not
14	sure. I do not know on behalf of B'Nai Jacob.
15	MS. RANDELL: Did anybody check to
16	determine whether the easement prohibited structures in
17	the right-of-way?
18	MR. WUNSCH: Again on behalf of B'Nai
19	Jacob, I do not know.
20	MS. RANDELL: Okay. When was the first
21	time that anyone at B'Nai Jacob, and let's roll in Ezra
22	Academy and the other lessees if we can, sought to have
23	electric and magnetic field measurements at that
24	location?

1	MS. KREIGER: To my knowledge, the first
2	time was when the testing was done by that I think is
3	in your packet by the F.H. Hellene Company (phonetic), it
4	predated my being head of school, so I just went to the
5	file to see what was there.
6	MS. RANDELL: Thank you. That would be
7	page 15 of your package.
8	A VOICE: Of your package
9	MS. KREIGER: I believe so.
10	MS. RANDELL: The package that is
11	MS. KREIGER: Yes
12	MS. RANDELL: in front of the
13	witnesses.
14	MS. KREIGER: Yes. Page 15.
15	MS. RANDELL: It is information that you -
16	- your representatives provided in this proceeding,
17	right, because they got it from you?
18	MS. KREIGER: Yes.
19	MS. RANDELL: Okay. Why did B'Nai Jacob
20	call F.L. Hellene to take magnetic field measurements?
21	MS. KREIGER: Actually, I don't believe
22	B'Nai Jacob did. I believe Ezra Academy called
23	MS. RANDELL: Okay
24	MS. KREIGER: FH F.L. Hellene. The

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1	history, which is an oral history at this point and
2	predated me
3	MS. RANDELL: Right
4	MS. KREIGER: was that there were some
5	concerns that people wanted to know about electromagnetic
6	fields. The lines are obviously visible. They had
7	measurements taken. And looked at the current data then,
8	which seemed to indicate that the levels based on the
9	information available at the time were not to be of
10	concern in the area of the school. And that's what we
11	knew then, and
12	MS. RANDELL: What is the source of your
13	information, Miss Kreigel Miss Kreiger about what
14	happened back then?
15	MS. KREIGER: The source of my information
16	is just maybe the discussions from the school secretary
17	who was there at the time and, you know, a past parent
18	who had a recollection, you know, going back and asking.
19	MS. RANDELL: Were any actions taken after
20	these measurements were received?
21	
	MS. KREIGER: Just that it peaked
22	MS. KREIGER: Just that it peaked certainly when I came in, I wouldn't say that it was on
22 23	•

1	they would come to look at the school and seeing the
2	power lines, we would try to stay current in, you know,
3	whatever research was available
4	MS. RANDELL: And how
5	MS. KREIGER: and we would give it to
6	the parents.
7	MS. RANDELL: How would you stay current
8	in the research that was available?
9	MS. KREIGER: Well, we have a pretty
10	informed parent body, they keep us very current.
11	MS. RANDELL: So the parent group would
12	tell you about new developments?
13	MS. KREIGER: Yeah. If they were a
14	physician, you know, and they read something in a
15	journal, they would, you know, bring it in for me to
16	read. And we kept a packet of information. And if
17	people were concerned, we would give them what
18	information we had, and they would go out and do their
19	own research and make their own decision about whether
20	they wanted to send their children there.
21	MS. RANDELL: Did any of them report back
22	to you on what they'd learned?
23	MS. KREIGER: Generally the questions came
24	up during pre-admissions, tours of the school. In some

1	cases if people didn't come back to the school, I suppose
2	there were a variety of reasons they might not have come
3	back. I we've never done, you know, serious
4	statistical exit surveys, but it might be interesting to
5	go back and ask if they didn't come because of their
6	concern about the lines. I don't know.
7	MS. RANDELL: And did anyone at Ezra
8	Academy or B'Nai Jacob speak to United Illuminating after
9	March 31, '93, and let's take it all the way up to last
10	year, about electric and magnetic fields?
11	MS. KREIGER: Not to my knowledge.
12	MR. WUNSCH: For Congregation B'Nai Jacob,
13	I'm not I just don't I do not know.
14	AUDIO TECHNICIAN: Miss Randell, would you
15	turn that microphone please, so that
16	MS. RANDELL: Sure. Am I correct based on
17	our prior discussion of mitigation design with respect to
18	the JCC, that none of the professionals at the witness
19	table have seen any mitigation designs or calculations
20	with respect to magnetic field levels at B'Nai Jacob and
21	Ezra Academy?
22	MS. KREIGER: I have not seen any. I've
23	heard a superficial discussion of something that's
24	described like this when people talk about it, but

1	MS. RANDELL: No, that's pretty good.
2	VICE CHAIRMAN TAIT: Tony can handle that.
3	MS. KREIGER: Tony okay.
4	MR. WUNSCH: And for B'Nai Jacob, Alan
5	Wunsch, similarly I have not seen anything but I've heard
6	some third-party discussions concerning some, similar to
7	what Shelley had said.
8	MS. PERRY: And I have not seen nor heard
9	(laughter) but I still speak, so.
10	MS. RANDELL: That's okay. I'm going to
11	hand you a document that has been admitted into evidence
12	and just ask if any of you have seen it before.
13	MS. KREIGER: Okay.
14	MS. RANDELL: For the record, it is the
15	cross-section mitigation that was filed I believe at the
16	end of May.
17	VICE CHAIRMAN TAIT: Do we have an exhibit
18	number?
19	MS. RANDELL: I'm sure Mr. McDermott will
20	tell me what it is. (Pause).
21	Let me turn your attention specifically to
22	Cross-Section 8, Segment B, and please just accept
23	subject to check that that would relate to the location
24	the JCC is at and Segment C would be the location that

B'Nai Jacob and Ezra Academy are at. And just, if you
would, tell me if you've seen this one before? I'm told
by a chorus that it is Exhibit 96.
MS. KREIGER: I can't tell you if I've
specifically seen this document. I've seen something
with these pictures of these poles at the informational
community meeting that was held in the Woodbridge town
gymnasium
MS. RANDELL: Um-hmm.
MS. KREIGER: but not as it's
specifically related to Ezra Academy. I can't tell you
if I've seen exactly this page
MS. RANDELL: Thank you
MS. KREIGER: or something like this.
MS. SIEGEL: I have exactly the same
answer. We saw some variation of power lines and but
we didn't see this specific one.
MR. WUNSCH: Alan Wunsch for B'Nai Jacob.
I do not believe I have ever seen this document.
MS. PERRY: Nor have I. I was out of the
country at that meeting when it might have be presented.
MS. RANDELL: Thank you. If a mitigation
design could accomplish magnetic field levels at the
building edge at Ezra Academy and B'Nai Jacob that would

1	be less than the magnetic fields measured by F.H F.L.
2	Hellene in 1993, would that be acceptable to you?
3	Speaking as professionals and not decision-makers for the
4	organization?
5	MS. SIEGEL: Thank you.
6	MS. KREIGER: Based on what I've learned
7	about the risks of electromagnetic fields, clearly
8	reducing the risks is going to be my highest priority
9	now. I've learned a lot in the past six months, more than
10	I never
11	MS. SIEGEL: Needed to
12	MS. KREIGER: but I no, not
12 13	MS. KREIGER: but I no, not apparently not needed, but but my goal would be to
13	apparently not needed, but but my goal would be to
13 14	apparently not needed, but but my goal would be to reduce the risk and to lower the electromagnetic fields
13 14 15	apparently not needed, but but my goal would be to reduce the risk and to lower the electromagnetic fields to where they're levels that everyone would agree provide
13 14 15 16	apparently not needed, but but my goal would be to reduce the risk and to lower the electromagnetic fields to where they're levels that everyone would agree provide no perceived risk, to be prudent to avoid risk.
13 14 15 16 17	apparently not needed, but but my goal would be to reduce the risk and to lower the electromagnetic fields to where they're levels that everyone would agree provide no perceived risk, to be prudent to avoid risk. COURT REPORTER: One moment please.
13 14 15 16 17	apparently not needed, but but my goal would be to reduce the risk and to lower the electromagnetic fields to where they're levels that everyone would agree provide no perceived risk, to be prudent to avoid risk. COURT REPORTER: One moment please. (Pause). Thank you.
13 14 15 16 17 18 19	apparently not needed, but but my goal would be to reduce the risk and to lower the electromagnetic fields to where they're levels that everyone would agree provide no perceived risk, to be prudent to avoid risk. COURT REPORTER: One moment please. (Pause). Thank you. MR. WUNSCH: Alan Wunsch for B'Nai Jacob.

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MS. SIEGEL: Yes.

discussion of contact currents?

23

24

9 currents until yesterday. 10 MS. SIEGEL: I didn't either. 11 MS. RANDELL: Okay. 12 MS. KREIGER: But I did write it down 13 And the only action I've taken is that it's on Monda 14 list, so 15 MS. RANDELL: I understand the concer 16 Just quickly, Miss Siegel, back to the JCC, where ar 17 buses parked now? 18 MS. SIEGEL: The buses are parked in 19 far the closer parking lot to camp MS. RANDELL: And 21 MS. SIEGEL: to the day camp. 22 MS. RANDELL: And that's a location MS. SIEGEL: You have a picture there		
MS. RANDELL: Has any of your organizations taken action with respect to the JCC building or the Ezra Academy, B'Nai Jacob building to determine if contact currents are an issue and wheth those can be mitigated? MS. KREIGER: I didn't know about concurrents until yesterday. MS. SIEGEL: I didn't either. MS. RANDELL: Okay. MS. KREIGER: But I did write it down And the only action I've taken is that it's on Mondal list, so MS. RANDELL: I understand the concept Just quickly, Miss Siegel, back to the JCC, where are buses parked now? MS. SIEGEL: The buses are parked in far the closer parking lot to camp MS. RANDELL: And MS. RANDELL: And MS. SIEGEL: to the day camp. MS. RANDELL: And that's a location MS. SIEGEL: You have a picture there	MS. PERRY: Right.	
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	MS. SIEGEL: You have a picture there -	
MS. RANDELL: Right	MS. RANDELL: Right	

1	MS. SIEGEL: of the entrance to the day
2	camp
3	MS. RANDELL: Um-hmm.
4	MS. SIEGEL: and that's where the buses
5	for the day camp park. That's the buses of the after
6	school park.
7	MS. RANDELL: And that's where CL&P had to
8	agree to forebear on its easement?
9	MS. SIEGEL: Yeah.
10	MS. RANDELL: Okay.
11	MS. SIEGEL: Yes.
12	MS. RANDELL: Miss Kreiger
13	MS. KREIGER: Yes.
14	MS. RANDELL: I think you're the one
15	responsible for Ezra Academy?
16	MS. KREIGER: Yes, I am.
17	MS. RANDELL: Yes, you are, okay. Is it
18	fair to say for that for many years one of your prime
19	issues is enrollment?
20	MS. KREIGER: I think it's to any
21	school their prime source of income is tuition and their
22	focus is enrollment.
23	MS. RANDELL: That's where I was going to

go. And particularly with the day schools in the New

24

1	Haven area, enrollment at the levels of, you know,
2	seventh grade and above is an issue as well?
3	MS. KREIGER: Yeah, I think that's true.
4	MS. RANDELL: It's a constant way of life?
5	MS. KREIGER: Yep.
6	MS. RANDELL: Mr. Wunsch, the same
7	question with respect to membership at B'Nai Jacob is an
8	issue, always has been an issue, always will be an issue?
9	MR. WUNSCH: Yes, I would say membership
10	is paramount.
11	MS. RANDELL: Bear with me (pause)
12	Miss Siegel
13	MS. SIEGEL: Yes
14	MS. RANDELL: in designing the JCC
15	facility
16	MS. SIEGEL: Yes?
17	MS. RANDELL: have you been told why
18	the preschool playground was located where it was along
19	near the right-of-way?
20	MS. SIEGEL: I never asked because I came
21	a few years after it was complete.
22	MS. RANDELL: Okay. And so you've never
23	asked recently either?

MS. SIEGEL: No.

24

MS. RANDELL: Miss Kreiger, the same
question with respect to Ezra Academy, in designing the
facility, why was the pickup and drop-off location put
closest to the right-of-way? If you know.
MS. KREIGER: I mean I would only
speculate, to guess since I wasn't there when the
addition was put onto the building.
VICE CHAIRMAN TAIT: That's a good answer.
MS. KREIGER: Thank you. I appreciate
that.
MS. RANDELL: Thank you.
MS. SIEGEL: Thank you very much.
MS. RANDELL: We have no further
questions.
VICE CHAIRMAN TAIT: That's speaking for
both UI and CL&P?
MS. RANDELL: Indeed.
VICE CHAIRMAN TAIT: Okay.
MS. SIEGEL: Thank you.
VICE CHAIRMAN TAIT: Representative
Adinolfi, any questions? No questions. The Towns of
Wallingford, Durham, Woodbridge, Milford, Orange, that
group?
MS. RANDELL: Do you want to sit here,

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1	Monte?
2	(Pause)
3	VICE CHAIRMAN TAIT: Is this a group
4	presentation?
5	MR. MONTE FRANK: I'm asking questions on
6	behalf of the Town of Woodbridge.
7	VICE CHAIRMAN TAIT: Okay. And Mr. Ball,
8	will you be asking questions too?
9	MR. BALL: No, I will not.
10	VICE CHAIRMAN TAIT: Mr. Boucher, will you
11	be asking questions too or can we was that no, Mr
12	A VOICE: Correct.
13	COURT REPORTER: Could you repeat that?
14	VICE CHAIRMAN TAIT: He said no I think
15	that's what he said.
16	MR. FRANK: May I proceed, Mr. Tait?
17	VICE CHAIRMAN TAIT: Yep.
18	MR. FRANK: Thank you. Mrs. Kreiger, why
19	don't I start with you. You testified that Ezra Academy
20	is affiliated with Solomon Schecter? What does that
21	mean?
22	COURT REPORTER: You have to answer
23	audibly.
24	MS. KREIGER: I yes, I testified that

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1	Ezra Academy is a Solomon Schecter Jewish day school.
2	That means that it is a school affiliated directly with
3	the United Synagogue Conservative Movement, and it's the
4	day school arm of that movement. The United Synagogue
5	sponsors under its auspices synagogues of the
6	conservative movement, the ramah (phonetic) camps,
7	sleepover and day camps, and Solomon Schecter Schools,
8	which are the full-day arm of the conservative movement.
9	MR. FRANK: Are there any other Solomon
10	Schecter affiliated schools in the New Haven area?
11	MS. KREIGER: No, it's the only Solomon
12	Schecter school in New Haven.
13	MR. FRANK: Is it fair to say that Ezra
14	Academy is a regional institution?
15	MS. KREIGER: Ezra Academy yes. It has
16	we have students from Cheshire to Westport.
17	MR. FRANK: And how many towns
18	approximately?
19	MS. KREIGER: I think we identify them
20	by participating synagogues. Twelve synagogues, probably
21	equally as many communities.
22	MR. FRANK: And how many children does
23	Ezra Academy currently serve?
24	MS. KREIGER: We have 214 students

1	currently enrolled.
2	MR. FRANK: Okay. I want to follow up on
3	a couple of questions that Miss Randell asked you. She
4	asked you a number of questions about your knowledge of
5	EMF prior to the proposed 345-kV line
6	MS. KREIGER: Um-hmm
7	MR. FRANK: do you recall those?
8	MS. KREIGER: Yes.
9	MR. FRANK: Is it fair to say that since
10	the overhead 345-kV line was proposed, that you have
11	learned a great deal about the association between EMF
12	and childhood leukemia?
13	MS. KREIGER: Yes, I have.
14	MR. FRANK: Okay. Now, there were a
15	number of what I call technical questions asked to you
16	about potential mitigation measures and what particular
17	readings of EMF mean. Are you an epidemiologist, a
18	doctor, or scientist of any kind?
19	MS. KREIGER: No.
20	MR. FRANK: No
21	MS. KREIGER: I'm a speech pathologist and
22	learning disability specialist by background before I was
23	the head of school.
24	MR. FRANK: Okay. With all due respect, I

1	don't think that qualifies
2	MS. KREIGER: I don't think it qualifies
3	me at all in this.
4	MR. FRANK: And you are aware of the
5	testimony of Dr. Bell, Dr. Rabinowitz, Dr. Gerber?
6	MS. KREIGER: Yes.
7	MR. FRANK: And you're aware of the
8	testimony of Dr. Ginsberg of the Department of Public
9	Health?
10	MS. KREIGER: Yes, I was made aware of
11	that.
12	MR. FRANK: And am I correct to say that
13	you were relying on their expertise and their advice on
14	the issue of the association between EMF and childhood
15	leukemia?
16	MS. KREIGER: I am relying on their
17	advice.
18	MR. FRANK: And you're relying on their
19	expertise and advice with respect to potential or
20	possible mitigation measures or design?
21	MS. KREIGER: Absolutely. I wouldn't
22	venture into that arena at all.
23	MR. FRANK: Okay. From your perspective
24	as the head of school of Ezra, if the overhead line was

1	approved were to be approved as proposed, what do you
2	perceive as the potential impacts on your institution?
3	MS. KREIGER: I believe there has already
4	been an impact on the institution just with the proposal.
5	We have an entering kindergarten coming in in the fall of
6	significantly lower numbers than we've had previously. I
7	you know and that's that's unusual.
8	MR. FRANK: Why don't I shift gears please
9	to Mr. Wunsch. Did I pronounce your last name correctly?
10	MR. WUNSCH: Wunsch.
11	MR. FRANK: Okay. You are the Executive
12	Director of B'Nai Jacob?
13	MR. WUNSCH: Correct.
14	MR. FRANK: Okay. And how many members
15	does B'Nai Jacob have?
16	MR. WUNSCH: Approximately, 696 family or
17	single memberships.
18	MR. FRANK: Okay. And you mentioned
19	that's the second largest conservative synagogue in the
20	State of Connecticut?
21	MR. WUNSCH: Correct.
22	MR. FRANK: And how many towns does B'Nai
23	Jacob draw from?
24	MR. WUNSCH: Twenty-seven.

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1	MR. FRANK: The same question to you,
2	concerning your knowledge of EMF prior to the proposed
3	overhead 345-kV line, is it fair to say that since the
4	overhead 345-kV line was proposed, that you've learned a
5	great deal about the association between EMF and
6	childhood leukemia?
7	MR. WUNSCH: Correct, yes.
8	MR. FRANK: And I understand that you're a
9	lawyer by training?
10	MR. WUNSCH: That is correct.
11	MR. FRANK: Okay. And I will stipulate to
12	the record that in no way it qualifies you to testify as
13	an epidemiologist, a doctor, or scientist, would you
14	agree?
15	MR. WUNSCH: I think it actually hurts
16	yes, I would agree.
17	VICE CHAIRMAN TAIT: There's more than one
18	of us that would agree with that. (Laughter).
19	MR. FRANK: And is it fair to say that you
20	are also relying upon the expertise and advise of Dr.
21	Bell, Dr. Rabinowitz, Dr. Gerber, and Dr. Ginsberg on the
22	issue of the association between EMF and childhood
23	leukemia?
24	MR. WUNSCH: Yes, I'm relying on their

1	expertise.
2	MR. FRANK: And you're relying on their
3	expertise with respect to possible mitigation design or
4	measures?
5	MR. WUNSCH: Yes, I am relying on their
6	expertise in that area also.
7	MR. FRANK: The same question I asked of
8	Mrs. Kreiger, if the line as proposed were to be
9	approved, what do you perceive as the potential impacts
10	to your institution?
11	MR. WUNSCH: I think the impacts are
12	clearly economic to us in two areas. One is the current
13	landlord/tenant relationships that we have with Ezra and
14	with Maquom Hebrew High School, certainly with Ezra
15	though. I couch it on the terms of landlord/tenant,
16	we're really symbiotic and we're a partnership, though
17	technically we have a landlord/tenant in their ability to
18	attract students and i.e. then pay their bills and rent
19	are very important to us, and that would certainly have
20	an impact. Our building was the addition was put on
21	with the understanding that Ezra Academy would be in the
22	building, pay rent, etcetera, etcetera. I also am
23	concerned about the economics of our own membership of
24	our parents sending their children to day school you

1	know, religious school, nursery school, and how that
2	affects our membership and the costs associated with
3	that.
4	MR. FRANK: Okay. Mrs. Siegel, I'd like
5	to ask you a series of questions about the JCC or the
6	Jewish Community Center. Is it fair to say that JCC is a
7	regional institution?
8	MS. SIEGEL: Yes.
9	MR. FRANK: Okay. Are there any other
10	JCCs in the New Haven area?
11	MS. SIEGEL: No.
12	MR. FRANK: Let me ask you another
13	question. How many JCCs are there in the State of
14	Connecticut?
15	MS. SIEGEL: Three.
16	MR. FRANK: And from what towns do you
17	draw your members?
18	MS. SIEGEL: We draw our members
19	predominantly from 16 towns, but we serve 48. There's
20	members that live in 48 different towns in Connecticut.
21	MR. FRANK: Okay. Now, Miss Randell asked
22	you a series of questions about what the JCC knew when it
23	bought the property from CL&P in 1990, and let me ask you
24	a couple of questions about that. In 1990 when the JCC

1	bought the property from CL&P, are you aware of any
2	disclosure from CL&P or United Illuminating that they
3	intended to construct a 345-kilovolt overhead line
4	MS. SIEGEL: No
5	MR. FRANK: in place of what's there
6	now?
7	MS. SIEGEL: No. There's no record of it
8	either.
9	MR. FRANK: And when the easement was
10	changed to allow parking under the existing 115-kilovolt
11	line, did CL&P or United Illuminating disclose to you
12	that they had an intent at some point in the future to
13	construct overhead 345-kilovolt lines?
14	MS. SIEGEL: Not to my knowledge.
15	MR. FRANK: And the same question with
16	respect to when the facility was opened in 1993, was
17	there any disclosure made to the JCC about an intent to
18	construct an overhead 345-kilovolt line?
19	MS. SIEGEL: Not to my knowledge or my
20	records.
21	MR. FRANK: Let me ask the same question
22	another way. When was the first time that you learned
23	that CL&P and United Illuminating intended to construct
24	an overhead 345-kilovolt line?

1	MS. SIEGEL: In 2004 when the two
2	representatives of UI came to see
3	VICE CHAIRMAN TAIT: Do you mean
4	MR. FRANK: You mean 2003?
5	VICE CHAIRMAN TAIT: 2003
6	MS. SIEGEL: '03
7	VICE CHAIRMAN TAIT: Miss Siegel?
8	MS. SIEGEL: I'm sorry. 2003.
9	VICE CHAIRMAN TAIT: Times flies
10	MS. SIEGEL: To the record to the
11	record, July or June of 2003.
12	MR. FRANK: If if the line were
13	approved as proposed, what do you perceive as the
14	potential impacts to the JCC?
15	MS. SIEGEL: From all the knowledge I
16	acquired in the last few months, No. 1, it would be a
17	safety issue for our children. And No. 2, fiscally I
18	might be in jeopardy of staying in business because
19	people are not going to give voluntary money to a place
20	that they feel their children are not safe.
21	MR. FRANK: Okay. Now, I asked the other
22	panel members whether or not they were epidemiologists or
23	doctors or scientists. Is it fair to say you are not
24	either?

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1 MS. SIEGEL: I don't even sound like one.

- 2 (Laughter).
- MR. FRANK: Ask a stupid question and get
- 4 a stupid answer.
- MS. RANDELL: No, you got a good answer --
- 6 VICE CHAIRMAN TAIT: No, that was a very
- 7 intelligent answer. (Laughter).
- MR. FRANK: We'll just leave it I asked a
- 9 stupid question. And to put myself at risk again --
- 10 VICE CHAIRMAN TAIT: That's what you're
- 11 paid for as a lawyer.
- 12 MS. SIEGEL: That's okay, we each have our
- 13 role.
- 14 MR. FRANK: I don't think I recall seeing
- 15 a transcript of any of your classes where you teach at,
- 16 Professor Tait.
- 17 VICE CHAIRMAN TAIT: I should edit.
- 18 MR. FRANK: Is it fair to say that you are
- 19 relying on the expertise and advice of Dr. Bell, Dr.
- 20 Rabinowitz, Dr. Gerber, and Dr. Ginsberg?
- MS. SIEGEL: Yes, I do.
- MR. FRANK: Okay. Miss Perry, could you
- just describe briefly what the Federation is?
- MS. PERRY: Surely. The Federation

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1	Movement in our community has a mission of leading,
2	building, strengthening, and constantly renewing the
3	agencies of our community we have seven agencies
4	and with the desire to have a vital and dynamic community
5	that is self-perpetuating and that builds the strongest
6	kind of future for the Jewish people in our community.
7	MR. FRANK: Okay. And what is the
8	relationship between the member institutions and the
9	Federation?
10	VICE CHAIRMAN TAIT: Could you identify
11	the seven members
12	MS. PERRY: I would be happy to do that
13	VICE CHAIRMAN TAIT: just for our
14	MS. PERRY: Well, this will be a test for
15	me, is that is that right
16	VICE CHAIRMAN TAIT: A test for me.
17	MS. PERRY: Camp Laurelwood, which is a
18	local overnight camp. The Jewish Community Center.
19	VICE CHAIRMAN TAIT: Camp Laurelwood is
20	not located on these premises
21	MS. PERRY: It is not, no. The seven
22	agencies are not located on our campus.
23	VICE CHAIRMAN TAIT: Okay.
24	MS. PERRY: Only only one is in the

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1	same location. So Laurelwood, which is a sleepover camp.
2	The Jewish Community Center. The Jewish Home for the
3	Aged. Tower One, Tower East, which is elderly housing
4	and independent living. The Jewish Family Service
5	(pause)
6	VICE CHAIRMAN TAIT: It's a test.
7	MS. PERRY: No, no, I've got these two for
8	sure (laughter) Ezra Academy and the Hebrew Day
9	School, which is an orthodox day school in our community.
10	Those are the seven constituent agencies of the
11	Federation.
12	VICE CHAIRMAN TAIT: Okay.
13	MR. FRANK: And what are your concerns as
14	on behalf of the Federation with respect to the
15	proposed 345 overhead line?
16	MS. PERRY: Well, two-fold concerns, and
17	they've both been touched on in our discussion. One is
18	always the safety, the security, and the development and
19	growth of our children, which are sureties for the
20	future.
21	And the second is the fiscal health of our
22	agencies. We are a fundraising organization which
23	provides allocation to our constituent agencies as well
24	as to the Jewish community overseas. Even the smallest

1	variation in enrollments will affect the Federation. I
2	don't know if it's been said, but I want to at least say
3	that Ezra Academy is the largest day school in our
4	community. B'Nai Jacob is the largest synagogue in our
5	community. And the Jewish Community Center is the
6	largest agency in our community. Therefore, for the
7	three of them to be in any way at risk in terms of their
8	enrollments, it will seriously impact our future. And
9	that is one of the things that we as a federated
10	community need to be very vigilant about.
11	VICE CHAIRMAN TAIT: Do I understand that
12	you raise funds for all the agencies, they don't have
13	independent
14	MS. PERRY: We do
15	VICE CHAIRMAN TAIT: fundraising
16	MS. PERRY: No, I we raise money for
17	all the agencies, but we do not raise all the money that
18	the agencies need.
19	VICE CHAIRMAN TAIT: So they also have
20	their own fundraising
21	MS. PERRY: Exactly right, correct.
22	A VOICE: Are you taking pledges this
23	afternoon (laughter)
24	MS. PERRY: I'm always taking pledges,

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1	sir.
2	MR. FRANK: And just to clarify that, is
3	it fair to say that each of the institutions receive some
4	money from the Federation, right?
5	MS. PERRY: No, that is not correct,
6	because the synagogue community does not receive
7	VICE CHAIRMAN TAIT: That's one of those
8	questions
9	MS. PERRY: Right. The synagogue
10	community does not receive direct allocation from the
11	Federation
12	MR. FRANK: Okay
13	MS. PERRY: the agencies do, but the
14	synagogue communities do not. There are other ways that
15	they get service but not in direct funds.
16	MR. FRANK: Okay. And the synagogues rely
17	how how does a synagogue raise money to support the
18	institution?
19	MS. PERRY: I'll answer this and then Mr.
20	Wunsch will correct me if I'm wrong, but they raise money

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through two traditional forms. One is the money that is

paid for for family memberships and for school. And the

second is, and a continual job at that I would say,

21

22

23

24

fundraising.

1	MR. FRANK: Okay. And with respect to the
2	JCC and Ezra Academy, is it fair to say that the
3	organizations are to a great extent dependent on tuition
4	and membership fees?
5	MS. KREIGER: Ezra is predominantly
6	predominantly, I mean close to a 90 percent tuition drive
7	school. And the remainder is fundraising.
8	MR. FRANK: Okay. And the same with JCC?
9	MS. SIEGEL: JCC is predominantly
10	supported self from membership and fees for service, like
11	day camp, preschool, day care.
12	MR. FRANK: Okay. And Mrs. Kreiger, just
13	one last question. What would be the impact on Ezra if
14	hypothetically enrollment was down 25 percent in a given
15	year?
16	MS. KREIGER: Twenty-five percent? Uh
17	you know, it's a hard question to answer I'm going to
18	try to answer it it would be devastating to the school
19	if enrollment was down 25 percent. The problem with the
20	kind of loss of enrollment you're talking about I believe
21	is that it wouldn't be down 25 percent in a particular
22	grade. You would have a 25 percent distribution over the
23	nine grades of the school which would still require you
24	to have teachers for those grades and not economically

1	viable classes. When you do I can talk with some
2	assurance about budgets for schools
3	MR. FRANK: You've
4	MS. KREIGER: a budget
5	MR. FRANK: You've answered my question.
6	MS. KREIGER: Okay.
7	MR. FRANK: Nothing further.
8	VICE CHAIRMAN TAIT: Mr. Boucher does not
9	have any questions. Mr. Bell? No questions?
10	A VOICE: Ball Ball
11	VICE CHAIRMAN TAIT: Miss Donaldson? Mr.
12	Mitch Goldblatt from Orange, any questions? The Town
13	of Westport?
14	A VOICE: No questions, Mr. Chairman.
15	VICE CHAIRMAN TAIT: The City of Meriden?
16	Absent. Attorney General Assistant Attorney General
17	Wertheimer?
18	MR. MICHAEL WERTHEIMER: No questions.
19	VICE CHAIRMAN TAIT: Thank you. The City
20	of Bridgeport? Absent. Communities for Responsible
21	Energy?
22	A VOICE: No questions.
23	VICE CHAIRMAN TAIT: No questions. The
24	Office of Consumer Counsel?

1	MR. JOHNSON: No questions for this panel.
2	VICE CHAIRMAN TAIT: Woodlands Coalition?
3	Absent well, we understand yeah, no questions,
4	okay. ISO New England?
5	MR. MACLEOD: No questions, thank you.
6	VICE CHAIRMAN TAIT: No questions. The
7	Department of Transportation?
8	MS. MESKILL: No questions.
9	VICE CHAIRMAN TAIT: The Town of
10	Fairfield?
11	A VOICE: No questions
12	VICE CHAIRMAN TAIT: The Town of Wilton?
13	MR. FRANK: No questions. (Laughter).
14	VICE CHAIRMAN TAIT: The Town of Weston?
15	MR. FRANK: No questions either. I think
16	that gets back to our prior point
17	VICE CHAIRMAN TAIT: It certainly does.
18	South Central Water District?
19	A VOICE: No questions.
20	VICE CHAIRMAN TAIT: The Town of Cheshire?
21	MR. BURTURLA: No questions.
22	VICE CHAIRMAN TAIT: The Town of North
23	Haven?
24	A VOICE: No questions.

1	VICE CHAIRMAN TAIT: Council questions?
2	Fred, any questions?
3	MR. CUNLIFFE: No questions.
4	VICE CHAIRMAN TAIT: Mr. Murphy?
5	MR. MURPHY: No questions.
6	VICE CHAIRMAN TAIT: Brian?
7	MR. EMERICK: No.
8	VICE CHAIRMAN TAIT: Phil?
9	MR. ASHTON: Yeah, just a couple. Going
10	back to my original question of 460-kV, that was supplied
11	to you, am I correct, that figure?
12	MS. KREIGER: When I came, we had a
13	conversation about our testimony. And then when I got
14	the packet, I think it was just my volunteers who put it
15	together.
16	MR. ASHTON: And who are your volunteers
17	who put it together?
18	MS. KREIGER: Uh
19	MR. ASHTON: Were they Drs. Bell, Gerber -
20	_
21	MS. KREIGER: No
22	MR. ASHTON: Rabinowitz?
23	MS. KREIGER: not the no. Parent
24	volunteers.

1	MR. ASHTON: Okay. In your discussions
2	with Drs. Bell, Gerber, Rabinowitz, Carpenter and so
3	forth, did you get into technical aspects of the proposed
4	line construction?
5	MS. KREIGER: I have not talked directly
6	with Drs. Bell
7	MR. ASHTON: Et al?
8	MS. KREIGER: I've never met Dr. Ginsberg.
9	You know, we've talked I've had parent my parent
10	volunteers who have talked with them and have come back
11	and talked to me. I have talked to Dr. Rabinowitz
12	MR. ASHTON: Okay
13	MS. KREIGER: but I've not talked
14	directly to Dr. Bell about this.
15	MR. ASHTON: Is that a fair answer for all
16	four of you?
17	MS. SIEGEL: Yes.
18	MS. PERRY: Definitely.
19	MR. WUNSCH: Yes.
20	MR. ASHTON: One last question. Do you
21	serve coffee at the institution?
22	MS. PERRY: Coffee, bagels, donuts
23	MS. SIEGEL: Anything you want.
24	MR. ASHTON: Okay, thank you.

1	MS. SIEGEL: Do you want to visit us?
2	MR. ASHTON: I've flown over it but I
3	haven't visited it on the ground.
4	MS. SIEGEL: You should.
5	MR. WUNSCH: We serve coffee at B'Nai
6	Jacob.
7	MS. KREIGER: Only to the teachers.
8	MR. ASHTON: I'm sorry?
9	MS. KREIGER: Only to the teachers and
10	guests, not to students.
11	VICE CHAIRMAN TAIT: Gerry, any questions?
12	MR. WILENSKY: Can I ask one question?
13	Just one (laughter) Mr. Wunsch, I noticed there are
14	various exhibits from the academy and the day care. I
15	don't see anything in there as far as pictures for B'Nai
16	Jacob. Am I missing something or were they not included
17	in this packet?
18	MR. WUNSCH: You're talking about my
19	testimony? There were only two things included, Exhibit
20	A, which is a copy of the deed, and
21	MR. WILENSKY: But I noticed
22	MS. KREIGER: Could I explain that?
23	MR. WILENSKY: Surely, please.
24	MS. KREIGER: I think Alan Wunsch aptly or

1	tried to describe the kind of co-dependent relationship
2	between Ezra Academy and B'Nai Jacob. We're actually in
3	the same physical space. Ezra Academy put an addition
4	onto Congregation B'Nai Jacob in 19 give me a minute -
5	- '88. And I have pictures of that for you to see. If -
6	-
7	MR. WILENSKY: Yeah. But is it included -
8	- it's not included in this packet then, is that right?
9	MS. KREIGER: I believe it's Exhibit A, B,
10	C, is the outside areas. And then you'll see a
11	playground space, the back of the building with the
12	flagpole for the American flag is Exhibit H, that dark
13	thing is the building, part of the building of B'Nai
14	Jacob
15	MR. WILENSKY: But A and B are Ezra
16	Academy.
17	MS. KREIGER: Where
18	MS. SIEGEL: It's the same building.
19	A VOICE: The same
20	MR. WILENSKY: The same
21	MS. KREIGER: It's the same building
22	MR. WILENSKY: B'Nai
23	COURT REPORTER: One at a time
24	MS. KREIGER: we are in the back

1	entrance
2	VICE CHAIRMAN TAIT: One at a time please.
3	MS. KREIGER: I'm sorry.
4	MR. WILENSKY: Your turn.
5	MS. KREIGER: I'm not waiting my turn
6	MR. WILENSKY: Go ahead please.
7	MS. KREIGER: Ezra Academy has a rear
8	entrance to the building and B'Nai Jacob has the front
9	entrance to the building, but it's the same building.
10	MR. WILENSKY: Okay. Thank you very much.
11	Thank you, sir.
12	VICE CHAIRMAN TAIT: Is there any
13	MR. HEFFERNAN: Just just one, Mr.
14	Chairman. In reaction to Miss Randell's question, I mean
15	I think we'd all agree that if nothing else changed and
16	the milligauss went down, that would be a positive thing.
17	Is there agreement on that?
18	MS. KREIGER: I think that I would
19	agree with that
20	MR. HEFFERNAN: I mean
21	MS. KREIGER: but something we would
22	change
23	MR. HEFFERNAN: I mean there might be
24	something else wrong I understand

1	MS. KREIGER: No, no
2	MR. HEFFERNAN: but I mean just that's
3	a positive move
4	MS. KREIGER: No, but from what the school
5	has learned in the last few months
6	MR. HEFFERNAN: I understand that
7	MS. KREIGER: we're moving the
8	playground, we've closed the basketball court, we're
9	moving the basketball courts. We're doing everything
10	physically within our power to reduce whatever exposure
11	the kids have
12	MR. HEFFERNAN: But having it go down
13	would be a positive thing?
14	MS. KREIGER: Yes.
15	MS. PERRY: Yes.
16	MS. SIEGEL: Yeah, we're doing the same in
17	camp. We can't obviously do much in the building, but we
18	moved a lot of camp activities to the other side of camp
19	further away from the right-of-way.
20	MR. HEFFERNAN: I understand. Thank you.
21	VICE CHAIRMAN TAIT: Thank you. Is there
22	any other party or intervenor who would like to cross-
23	examine the panel at this time that hasn't had a chance
24	to do so? Seeing none, we thank you very much for your

1	attendance
2	MR. SCHAEFER: Mr. Chairman, can I just
3	ask one or two questions on redirect
4	VICE CHAIRMAN TAIT: Yes
5	MR. SCHAEFER: to clear things up.
6	Thank you. If if I could have Miss Siegel, looking
7	at your testimony, Exhibit Q, which is a site plan of the
8	Jewish Community Center
9	MS. SIEGEL: Yeah?
10	MR. SCHAEFER: which shows the power
11	line easement in yellow, is it true that that easement is
12	45 feet from the corner of your building
13	MS. SIEGEL: Yes
14	MR. SCHAEFER: that has the day care
15	facility?
16	MS. SIEGEL: Yes
17	MR. SCHAEFER: Okay
18	MS. SIEGEL: yes.
19	MR. SCHAEFER: And if the power lines or
20	the power line easement are moved away from the Jewish
21	Community Center building
22	MS. SIEGEL: Um-hmm
23	MR. SCHAEFER: does that necessarily
24	move them closer to the day camp?

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1	MS. SIEGEL: Yes yes.
2	MR. SCHAEFER: Okay. Is there any way to
3	move them where it doesn't move them closer to one
4	facility or the other?
5	MS. SIEGEL: I don't know.
6	MR. SCHAEFER: Okay. And could you
7	explain to the Council the importance of the well,
8	first of all, do you know how much was spent building the
9	day camp?
10	MS. SIEGEL: About probably half a million
11	dollars.
12	MR. SCHAEFER: Okay. And can you explain
13	to the Council the revenue the importance of the
14	revenue for the day camp to the survival of the Jewish
15	Community Center?
16	MS. SIEGEL: Well, the there are three
17	major businesses the Jewish Center runs, one is camp, one
18	is day care. And those two because they are so important
19	to the Jewish Center, generate the majority of all
20	families' fees because they serve children of families.
21	The third one is obviously physical education. But those
22	two, day care day camp and day care are the largest
23	fee producers of the JCC and its services.
24	MR. SCHAEFER: Okay. I have no further

1	questions. Thank you.
2	VICE CHAIRMAN TAIT: Thank you. Thank you
3	for your testimony today. Is Mr. Gregory in the room?
4	Miss Randell, is Mr. Gregory in the room?
5	A VOICE: Yes, he is.
6	MS. RANDELL: Uh there he is. Yes.
7	VICE CHAIRMAN TAIT: Could you come to the
8	witness stand, Mr. Gregory.
9	COURT REPORTER: We're off the record, Mr.
10	Chairman?
11	VICE CHAIRMAN TAIT: Yes, we're off.
12	(Off the record)
13	VICE CHAIRMAN TAIT: Mr. Gregory, you had
14	some homework to do that took you
15	MR. BRIAN GREGORY: A long time.
16	VICE CHAIRMAN TAIT: Well into the night
17	it sounds like
18	MR. GREGORY: Yes.
19	VICE CHAIRMAN TAIT: so would you
20	COURT REPORTER: Back on the record
21	VICE CHAIRMAN TAIT: We're back on the
22	record, yes. Would you describe what you have before you
23	and
24	MR. GREGORY: Yes. I've prepared a

1	document which calculates the fault rates around the
2	world of certain cable circuits made of cross-link
3	polyethylene. And this is to update the previous figures
4	that were given in Docket 217.
5	VICE CHAIRMAN TAIT: And you are willing
6	to stand by those figures and swear that to the best your
7	knowledge and belief these are accurate and
8	MR. GREGORY: Yes, these are as accurate
9	as I can get at this moment.
10	VICE CHAIRMAN TAIT: Does anybody have any
11	objections to the admission of this as docket as item,
12	what, Fred one
13	MS. RANDELL: 113.
14	VICE CHAIRMAN TAIT: 113?
15	MR. CUNLIFFE: Right.
16	VICE CHAIRMAN TAIT: Exhibit 113.
17	(Whereupon, Applicants' Exhibit No. 113
18	was received into evidence.)
19	VICE CHAIRMAN TAIT: Does anybody wish to
20	cross-examine Mr. Gregory on this docket? Fred, do we
21	have any cross-examination?
22	MR. CUNLIFFE: Yes.
23	VICE CHAIRMAN TAIT: Okay, you can start.
24	MR. CUNLIFFE: Is it your understanding

1	that XLPE has a lower capacitive charge than an HPFF
2	cable?
3	MR. GREGORY: Yes, it has low capacitance.
4	MR. CUNLIFFE: Okay. And on your third
5	page of your work you have a table of a comparison of
6	fault rates between the 2001 table which you had
7	generated and then updated it to 2003. What is the
8	factors that are driving the downward trend of fault
9	rates?
10	MR. GREGORY: Simply time.
11	MR. CUNLIFFE: Just experience?
12	MR. GREGORY: Yes.
13	MR. CUNLIFFE: Okay.
14	MR. GREGORY: Perhaps I should mention
15	I have listed this in a number of positions in this
16	document since the previous occurrence in compiling
17	this, time has moved on by two years, so some of the
18	circuits were only two years old at that time, now
19	they're four years old. So if they don't have the same
20	incidence of rates per year, then simply the fault rate
21	is halved. That is one issue.
22	The other issues, I've changed some of the
23	circuits I looked at before. Before there were just five
24	circuits that I was confident on that had we had

- fault data on. It's very difficult to collect fault
- 2 data. People don't like to indicate their problems.
- 3 This time we've got 13 listed circuits that I'm
- 4 reasonably confident on. Some have faults and some do
- 5 not. Now by adding in circuits that are not fouled, of
- 6 course that also reduces the fault rate. So, I've tried
- 7 to be fair in what I've done.
- MR. CUNLIFFE: Would you agree as time
- 9 went on there have been fewer faults?
- MR. GREGORY: No. In terms of total
- 11 number of faults, that has increased to 17 faults.
- MR. CUNLIFFE: From a previous --
- MR. GREGORY: From the previous occasion,
- 14 yes. It's the difference between the absolute number of
- faults and the fault rate.
- VICE CHAIRMAN TAIT: You don't attribute
- it to improved technology?
- MR. GREGORY: No, because the -- there
- have been few extra circuits installed. As we can see
- 20 here, it takes a very long time to plan a circuit and to
- 21 manufacture and install it. We're talking of maybe a two
- or three-year period to manufacture and install after the
- 23 planning is completed. So, I don't believe it's per say
- improved technology.

1	VICE CHAIRMAN TAIT: We've heard testimony
2	that it's improving all the time. Would you comment on
3	that sort of testimony that we've heard, it's getting
4	better? Unquantifiably these statements have been
5	MR. GREGORY: It is, it's a qualitative
6	statement. There was a big improvement to make EHV XLPE
7	cables possible that occurred within the mid 1990's. And
8	the circuits that we have listed largely embody those
9	improvements already. And of course because it's a new
10	technology, you can test it as much as you wish, but the
11	real test is when it's put into service. So, I don't
12	believe there has been further improvements. It is
13	already as high a quality product I think as the
14	manufacturers can achieve. And that doesn't mean to say
15	that when they have faults, they won't attempt and will
16	obviously analyze them and improve.
17	VICE CHAIRMAN TAIT: We're considering a
18	24-mile underground cable from Norwalk to Devon. Is that
19	too long? Where would you place that on this chart as
20	the likelihood of faults if you could?
21	MR. GREGORY: I don't think the length
22	itself will affect the fault rate.
23	VICE CHAIRMAN TAIT: Okay.
24	MR. GREGORY: What affects the fault rate

1	is the selection of a manufacturer or manufacturers
2	because I believe with that length you would probably
3	need to have the cable sourced from several to be able to
4	achieve it in the time scale that you wish.
5	VICE CHAIRMAN TAIT: Several
6	manufacturers?
7	MR. GREGORY: Several manufacturers. So
8	the issues are in selecting cable that has been pre-
9	qualified according to the international standards, which
10	recommend a one-year test on voltage at 70 percent over
11	voltage and on load cycling, and also to look at
12	manufacturers which have preferably a form of track
13	record in both the cable and the joints, and then
14	basically in selecting to select a manufacturer that's
15	got a good quality record, by quality which is checking
16	the manufacturer, the design facilities, the joint the
17	design of the joints, etcetera, I think those are the key
18	issues. And if they are followed, there is no major
19	reason why a long circuit shouldn't be as reliable as a
20	short one.
21	VICE CHAIRMAN TAIT: What time lag is
22	there? If the Applicant placed their order today for 24
23	miles of XLPE to a variety of manufacturers, when could
24	they expect to be able to put it in the ground?

1	MR. GREGORY: Well, there would be a lead
2	time of one and a half years immediately assuming that it
3	is pre-qualified by testing. And the manufacturer can
4	manufacture cable during that time but he takes the risk
5	that if he fails the test, his cables are scrapped. So
6	that's assume that a cautious approach is taken and the
7	cable is then made after the one and a half year period,
8	we're probably looking at a two-year manufacturing period
9	and another one year minimum to install.
10	VICE CHAIRMAN TAIT: If the Applicant was
11	willing to assume the risk that the cable wouldn't work,
12	you would knock out the one and a half year testing
13	period?
14	MR. GREGORY: Yes. But it would be a
15	brave manufacturer
16	VICE CHAIRMAN TAIT: Not if the utility
17	guaranteed the end
18	MR. GREGORY: Yes, I guess so.
19	VICE CHAIRMAN TAIT: Okay. Fred.
20	MR. CUNLIFFE: I just want to get back
21	again to what attributes the reduced fault rates for this
22	data. You say it's time. But if the fault rates were X
23	today, wouldn't they be the same in 10 years or 50 years?
24	MR. GREGORY: No. If you had the same

1	if a circuit had five faults each year and every year,
2	then the length has stayed the same, time is moving on,
3	so the fault rate would stay the same. But if if I
4	take the example in Singapore, one circuit that was 20
5	kilometers long suffered seven faults when it was
6	commissioned during the first year of its service life,
7	to such an extent it wasn't possible to fully utilize it.
8	And it was such a serious nature that it was decided to
9	replace every joint in the whole 20 kilometers. So that
10	would be roughly a joint every half a kilometer and over
11	three joints at each of those positions. So thereafter -
12	- and that's been put back into service there haven't
13	been failures reported. So the fault incident the
14	number of faults stays the same but time is increasing,
15	so the apparent fault rate decreases as time moves on.
16	MR. CUNLIFFE: You've mentioned one
17	scenario and you said you had seven faults and you
18	decided to replace everything, and wouldn't you be
19	starting at zero again? So that if it was a successful
20	commission, zero faults, that its fault rate to zero?
21	You don't count the previous because those were old
22	joints, you cut them out and threw them away?
23	MR. GREGORY: No, I don't.
24	MR. CUNLIFFE: Alright. Thank you.

1	MR. GREGORY: It's it's very difficult
2	to decide how to analyze figures. One collects the fault
3	data that one has and uses that.
4	VICE CHAIRMAN TAIT: No question pending.
5	Brian? Phil? Be short, we've got to get the Towns in.
6	MR. ASHTON: Yeah. I have just a couple
7	of quick questions.
8	COURT REPORTER: Could you
9	MR. ASHTON: Yes, I will. In the last two
10	years you testified in Docket 217, the first phase of
11	this from Bethel to Norwalk I believe. And I believe I
12	asked you in that docket whether there was any
13	indications of a failure mechanism which appeared years
14	ago in distribution plastic cables, a phenomenon called
15	treeing. Are you familiar with that?
16	MR. GREGORY: Yes.
17	MR. ASHTON: Has there been anything
18	any phenomenon of that nature which has appeared in XLPE
19	in the last few years which could be a threat to its
20	integrity?
21	MR. GREGORY: The phenomenon of treeing of
22	course physically will always exist. And
23	VICE CHAIRMAN TAIT: Could you spell that
24	spell that?

1	MR. GREGORY: It's tree as in t-r-e-e, as
2	in arboreal tree. And it's named that because it looks
3	like a tree, with the twigs and branches coming out.
4	MR. ASHTON: That's when you cut a cross
5	section of the cable?
6	MR. GREGORY: Yes. So most of the treeing
7	problems that occurred at distribution voltages were due
8	to not having a metallic sheath that could prevent water
9	from entering the cable. And that the general type of
10	treeing that caused a great deal of problems with lower
11	voltage XLPE cables was a diffusion of water from the
12	ground through the outer layers of the cable and into the
13	insulation. And unless you want me to, a certain
14	phenomenon occurred that resulted in electrical distress
15	
16	MR. ASHTON: Yeah
17	MR. GREGORY: but I should say that
18	this also occurs in a very small form in EHV XLPE cables.
19	So when we were manufacturing cables in my previous
20	existence, if we sliced a cable after it had gone through
21	the factory acceptance test and if the cable had had a
22	chemical reaction which wasn't quite in the process
23	window, we could find very small water trees in the
24	insulation but of a microscopic scale. So the physical

1	phenomenon still exists, but the cables are protected for
2	metallic with a metallic sheath of foil so you can't
3	get replenishment of water from the outside.
4	MR. ASHTON: There have been no other
5	phenomenon uncovered which threatened the integrity of
6	the insulation systems that were not anticipated I take
7	it?
8	MR. GREGORY: The not seriously. What
9	was investigated was space charge accumulation in which
10	residual chemical molecules left over from the cross-
11	linking reaction migrate onto the electric field too
12	close to the shields around the conductor and around the
13	outer surface of the insulation. On DC this has a very
14	major effect in an XLPE cable. On AC it was found to
15	have only a five or ten percent increase in the design
16	stress.
17	MR. ASHTON: And that is is that life
18	threatening to a cable?
19	MR. GREGORY: In a cable well designed and
20	with a design margin included, no.
21	MR. ASHTON: Okay. One last question.
22	Would you have any general comment on the state of U.S.
23	technology versus technology throughout the rest of the
24	world? Are they roughly equal, slightly different, but

1	roughly equal, or what?
2	MR. GREGORY: Concerning cross-link
3	polyethylene cables?
4	MR. ASHTON: Concerning cables in general?
5	I don't want a long dissertation, I'm just looking for
6	are we roughly on par?
7	MR. GREGORY: No, behind.
8	MR. ASHTON: The U.S. is behind?
9	MR. GREGORY: Yes. The U.S. was with HPFF
10	cables when I was a young engineer, or 30, maybe 35
11	years ago, was on a level with world leading technology
12	and people from Phelps Dodge came to the UK and I
13	attended lectures, and subsequently we had a technology
14	agreement with various companies in the States. But the
15	U.S. utilities I think ceased to purchase cables for
16	whatever reason, EHV. And one by one the cable companies
17	closed. I think leaving just one now. And there isn't a
18	significant manufacturer of XLPE EHV cable for 345-kV and
19	above in the U.S.A.
20	COURT REPORTER: One moment please.
21	(Pause).
22	MR. GREGORY: But the type of circuit
23	COURT REPORTER: Hold it, hold it okay,
24	go ahead.

1	MR. GREGORY: Yeah. The type of circuits
2	being discussed now may well encourage U.S. manufacturers
3	to invest in the future and to recover the technology.
4	MR. ASHTON: One last question. You're
5	talking manufacturing capability or technology itself?
6	MR. GREGORY: Both in my view go in hand,
7	EHV
8	MR. ASHTON: Okay, thank you.
9	MR. WILENSKY: No questions.
10	MR. HEFFERNAN: No questions.
11	VICE CHAIRMAN TAIT: Thank you.
12	MS. RANDELL: (Indiscernible)
13	VICE CHAIRMAN TAIT: Any further questions
14	oh yes, Miss Randell?
15	MS. RANDELL: Might I just ask what might
16	be helpful in view of the PB report that we got yesterday
17	
18	VICE CHAIRMAN TAIT: Um-hmm.
19	MS. RANDELL: Mr. Gregory, could you just
20	quickly run down the list of these XLPE projects and tell
21	us whether they were installed tunnel in a tunnel,
22	direct buried, or duct? Would you be able to do that
23	MR. GREGORY: Yes
24	MS. RANDELL: just now?

MR. GREGORY: No problem.
MS. RANDELL: Okay. When we file the
official copy, we can add a little notation of, you know,
T, DB, or D.
VICE CHAIRMAN TAIT: Okay.
MR. GREGORY: Yes. Going down, the first
one is laid direct short length in a power station in the
UK.
The second two, it says Germany, and
BAYVAC (phonetic) is short for Berlin Electricity
Company, these are circuits in tunnels under Berlin.
The next one the next two from
Copenhagen are buried in the ground.
MS. RANDELL: Okay.
MR. GREGORY: The next one in Taiwan is in
a tunnel.
The next one, the National Grid Company,
is a very short length buried in the ground in a
substation.
The next one, UK, is a private generator
in Ireland, but still within the United Kingdom, Northern
Ireland.
VICE CHAIRMAN TAIT: You were going to get
an argument there.

1	MR. GREGORY: No, no, no. That is
2	aboveground in a substation.
3	Singapore, there are two of the circuits
4	listed there. They are buried in the ground. In the
5	U.S.A
6	MR. ASHTON: When you say buried in the
7	ground, do you mean direct buried or
8	MR. GREGORY: Direct buried.
9	MR. ASHTON: Okay.
10	MR. GREGORY: Then the next one is
11	significant from this point of view in the U.S.A., Los
12	Angeles, that is in ducts.
13	The next one, U.S.A., in Arizona is also
14	in ducts. And Spain is in tunnel.
15	MS. RANDELL: Thank you. Would it also be
16	useful when we do the official copy, that we append Mr.
17	Gregory's original Docket 217 table?
18	VICE CHAIRMAN TAIT: I think that would be
19	very helpful.
20	MS. RANDELL: We'll do that.
21	MR. ASHTON: To show the comparison.
22	MS. RANDELL: Right.
23	VICE CHAIRMAN TAIT: Is there anybody on
24	the party list that would like to ask questions on this

1	chart at this time?
2	MR. BALL: I don't have any I do not
3	have any questions. I just wanted to reiterate the
4	Woodlands Coalition's counsel is not here and I believe
5	we have an understanding that they've reserved the right
6	to cross-examine at a future date. I wanted to
7	VICE CHAIRMAN TAIT: Yes, that's right.
8	MR. BALL: Thank you.
9	VICE CHAIRMAN TAIT: I would like to take
10	a break now if people don't have further
11	A VOICE: (Indiscernible)
12	VICE CHAIRMAN TAIT: Yes, sir?
13	A VOICE: Is that (indiscernible) or
14	an interested party
15	COURT REPORTER: I can't pick you up
16	VICE CHAIRMAN TAIT: We're not picking
17	you're not by a microphone, sir. Would you identify
18	yourself?
19	MR. KENNETH FLATO: (Indiscernible)
20	interested party, Ken Flato
21	COURT REPORTER: Hold it
22	AUDIO TECHNICIAN: Sir, sir, right here
23	VICE CHAIRMAN TAIT: Come to a microphone.
24	COURT REPORTER: I near you near a

1	microphone.
2	MR. FLATO: I just didn't know if you
3	wanted it through the attorney through our attorney or
4	not
5	COURT REPORTER: Sir
6	VICE CHAIRMAN TAIT: Yes
7	MR. FLATO: Just two quick
8	COURT REPORTER: Sir, sir
9	VICE CHAIRMAN TAIT: We would like it
10	through your attorney if he has questions.
11	COURT REPORTER: Identify yourself please.
12	MR. FLATO: Ken Flato, First Selectman
13	Fairfield.
14	VICE CHAIRMAN TAIT: We're going to let
15	the officials make a statement to us after the break
16	MR. FLATO: Right. These are questions to
17	the table.
18	VICE CHAIRMAN TAIT: To Mr. Gregory?
19	MR. FLATO: Correct.
20	VICE CHAIRMAN TAIT: I would prefer they
21	come from your counsel
22	MR. FLATO: Okay
23	VICE CHAIRMAN TAIT: if he's here.
24	MR. FLATO: We'll try to do this. Thank

1	you.
2	VICE CHAIRMAN TAIT: And this is the town
3	of?
4	A VOICE: Fairfield.
5	VICE CHAIRMAN TAIT: Fairfield.
6	MS. EILEEN KENNELLY: The first question
7	is
8	VICE CHAIRMAN TAIT: Would you identify
9	yourself please.
10	MS. KENNELLY: I'm sorry. Eileen
11	Kennelly, Assistant Town Attorney, Town of Fairfield.
12	VICE CHAIRMAN TAIT: And would you spell
13	your name?
14	MS. KENNELLY: K-e-n-n-e-l-l-y. And the
15	first name is E-i-l-e-e-n.
16	COURT REPORTER: I didn't hear and the
17	title was?
18	MS. KENNELLY: Assistant Town Attorney,
19	Town of Fairfield.
20	I we understand that there are some
21	additional locations in the United States where there are
22	underground cable in Boston, New York, and Providence.
23	And we're wondering why those were not included on your
24	list? And could they be if you weren't previously aware

1	of them?
2	MR. GREGORY: If I face the excuse me -
3	_
4	VICE CHAIRMAN TAIT: Yes, you can answer
5	the question.
6	MR. GREGORY: The installations in Boston,
7	XLPE, are short lengths of 345-kV XLPE cable that have no
8	joints and so I did not include them. Generally I try to
9	include circuits which had joints which are the weak link
10	or circuits that had failures, for example in the
11	terminations. And to the best of my knowledge, Boston has
12	not had a failure in the short lengths of 345-kV cable.
13	In New York they have and I'm very
14	familiar with this for professional reasons they have
15	138-kV XLPE cables installed, three cables in a pipe.
16	That is below the voltage range that I've taken in
17	looking EHV, which has been at 220-kV and above.
18	VICE CHAIRMAN TAIT: Thank you.
19	MR. GREGORY: In Providence, I must
20	confess I don't know of Providence, and I apologize for
21	this, or of that cable. So perhaps you could help me?
22	MS. KENNELLY: I just heard that. One
23	other question, which I'm not sure you had answered
24	earlier. Do the number of miles of cable make a

1	difference to the failure rate?
2	MR. GREGORY: Yes, they do. Because the
3	way it's worked out in the document is to multiply the
4	length of the circuit, the single phase circuit times the
5	time in years and take that figure, and then take the
6	number of faults and divide it by that figure.
7	MS. KENNELLY: Thank you.
8	VICE CHAIRMAN TAIT: We will take a 10-
9	minute break. And when we come back, we will have the
10	Towns' presentation.
11	(Whereupon, a short recess was taken.)
12	VICE CHAIRMAN TAIT: We've had a request
13	from several town officials to address the Council and
14	we'd like to take the time to do so. And Mr. Hannah, I
15	guess you're first. And we'd like you to sit down by
16	that mic because they'll record your immortal words
17	forever better that way.
18	MR. PAUL HANNAH: Do I need to fill this
19	out?
20	VICE CHAIRMAN TAIT: We know you.
21	COURT REPORTER: Give your name and spell
22	
23	VICE CHAIRMAN TAIT: But for the court
24	reporter please spell your name, and your office.

1 MR. HANNAH: My name is Paul Hannah. 2 That's H-a-n-n-a-h, the same backwards and forwards. I'm 3 the First Selectman of the Town of Wilton. 4 And I am a veteran of Phase 1. I was in 5 the working group that was established by the 6 Legislature, along with a representative of ISO New 7 England and people from CL&P and other towns. I first 8 got in this in July of 2001, three years ago, when the 9 loop was first presented to us. And actually our first 10 meeting with the lawyers was on a date that I will always 11 remember, September 11, 2001, a meeting with our 12 attorneys. So this is not a new -- the idea of a loop or 13 the idea of reliable service in Southwest Connecticut is 14 not a new idea. 15 I'm delighted that the Siting Council 16 ordered that Phase 1 go ahead, that being the Norwalk to 17 Bethel line. I understand from Bob Carberry that bids 18 are -- have come in. And they're hoping, the court 19 willing, to go ahead with that in July. And we certainly understand the need and are supporting that. Not all of 20 21 my citizens are supporting it, but everybody -- but the 22 towns are supporting it. 23 I'd like to point out that there has never 24 been presented a 100 percent overhead route in any

studies done by ISO New England or NEPOOL in the 345 line

contrary to what Mr. Whitley told you this morning. The

ones I think he was referring to had two miles

underground in Bridgeport. There has never been a

solution that's a hundred percent overhead in this loop

area.

Phase 2 project since June of 2003, a year. We, the seven communities in Segments 3 and 4, filed with the Siting Council in August of '03 an endorsement of the plan. And we have been spending a lot of money, a lot of time, a lot of effort in working on it and understanding it. And we're naturally very disappointed to learn -- I guess I didn't learn on June 7th, but to learn shortly thereafter that ISO New England, which had been working on this project certainly since July of 2001 and had always talked about a loop, was not saying that something they knew about for over a year was only worth hiring a consultant within the last six weeks.

I think you all have done a commendable job in pointing out the timetable and the fact that we're somewhat at the eleventh hour on this new development that the -- at least a significant player feels it's not reliable. And I certainly won't go through all the dates

1 and that sort of thing. 2 The Siting Council is to be commended with 3 -- and I think a very important need is we need more power in Southwest Connecticut. The principal users are 5 of course Stamford, Norwalk and Greenwich, but the towns 6 like Wilton and the smaller communities also need it. 7 I gather that more work is inevitable from 8 what the Council said, that this does present a change in 9 the way you're going to go about this because ISO New 10 England has interpreted the data differently than the 11 Applicants have interpreted it. And two -- I think you 12 have two approaches that I hope you'll consider. 13 one that I think makes sense and one that I think doesn't 14 make sense. 15 Mr. Whitley this morning suggested you 16 start with an all overhead approach. The presumption is 17 that all overhead would work. I assume by that he means 18 he'd include the two miles through Bridgeport. And then 19 sort of look at five-mile segments of under-grounding. 20 submit to you that in fairness to the towns and the 21 communities who have worked on this, in our case for

three years, and everybody else's case for at a year, and

in your case I guess for almost a year, that that is

really tantamount to starting all over. You might as

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well have United Illuminating and Northeast Utilities withdraw this application and develop another one and start the process all over because it just doesn't make any sense, we don't have any data, we don't have any time, and I think it's very unfair to all the parties, not just to the municipalities.

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A suggested approach instead of the Whitley approach would be to start from the Applicants' proposal, which we support, those of us in Segments 3 and 4 support, recognizing that there will be need to tweak it in some areas here and there, but start from that proposal, look at ways to mitigate it or fix it, or whatever the correct term is. Things like changing the nature of the cable. I believe it's HPFF. And there are XLPE cables and there are other types of underground cable. Also looking at the other devices that can be hung on the lines. And harmonics is a new term to me. I haven't been attending these meetings. I've now got to learn how harmonics work. I'm convinced I can do that if necessary. But I hope that that will be the approach, you'll come from the Applicants' application and not take this all up de novo. I believe in fairness to all the parties and the intervenors that would be what should be done. If you're going to do what Mr. Whitley and the ISO

1 people propose, that is to start with an all overhead 2 configuration that nobody has really serious considered, 3 there's certainly not a preferred route for an all 4 overhead configuration that has ever been set out, then my suggestion would be that would be to start all over 5 6 again. 7 I think the -- we support the Siting 8 Council's work and the need to provide more power and 9 would certainly like to work with you all and with the 10 Applicants and with ISO New England. It's sort of ironic because in Phase 1, I think the towns felt that -- at 11 12 least in the working group, there was three of us from 13 the towns and three of us from ISO and C&P, and they kind of split three/three, and Joel Rinebold had to take the 14 15 lead and try and hammer us together. Well in this one, it looks like ISO and CL&P -- or rather CL&P and UI on 16 17 the other hand have split apart. So we're on the -- I 18 guess we would like to work with CL&P, United 19 Illuminating, and the other municipalities as we have 20 been, the Legislature and other people to move this ahead 21 without starting it over. 22 I wanted to thank for taking the time, Mr. 23 Tait, in letting me speak, and I will leave the podium. 24 VICE CHAIRMAN TAIT: Thank you, Mr.

1	Hannah. Is Mr. Flato here?
2	MR. FLATO: Yes, sir. There's one other
3	member of our group that was asking to possibly speak for
4	30 seconds, I think she's on your list next, if that's
5	alright
6	VICE CHAIRMAN TAIT: Eileen Kennelly? Do
7	you want to defer to her?
8	MR. FLATO: Just for a moment because she
9	has a she's late for a
10	VICE CHAIRMAN TAIT: When you get to the
11	microphone, please identify yourself and who you're
12	representing.
13	MS. KENNELLY: Eileen Kennelly and I'm
14	speaking on behalf of the Greater Bridgeport and Valley
15	Metropolitan Planning Organization, among whose members
16	are Bridgeport, Fairfield, Stratford, Easton and
17	Trumbull, all of whom are affected by this plan.
18	I've been asked to read a letter to you
19	addressed to Chairman Katz.
20	Dear Chairman Katz, the Greater Bridgeport
21	and Valley Metropolitan Planning Organization comprised
22	of 13 member communities passed a resolution at its
23	quarterly meeting of June 15, 2004 as follows:
24	Be it resolved that the Greater Bridgeport

1	and Valley MPO hereby endorses and fully supports the
2	application before the Siting Council, Docket No. 272, as
3	proposed by CL&P and UI, which recommends only
4	underground 345-kV transmission lines to be constructed
5	in Segment 3 and Segment 4 communities along routes filed
6	with the Siting Council.
7	And be it further resolved that the Siting
8	Council is urged to support area communities by approving
9	the plan for underground lines wherever proposed.
10	And be it further resolved that the MPO
11	strongly opposes overhead transmission lines in any of
12	our communities at any other possible locations.
13	This resolution was adopted at the public
14	meeting of June 15, 2004. Thank you very much.
15	VICE CHAIRMAN TAIT: Thank, you, Miss
16	Kennelly. Mr. Flato.
17	MR. FLATO: Thank you and good afternoon.
18	And my name backwards is otalf no, just kidding Ken
19	Flato, First Selectman of the Town of Fairfield.
20	First of all, just, you know, let me say
21	having only been to a couple of your meetings, one of the
22	first hearings, I appreciate the amount of time and
23	energy and effort you've been putting into this. And I
24	can imagine how difficult it is when you're far along in

1 a process to have new information come forward. But I'm 2 an optimist and I'm hopeful that wise heads will figure 3 out a way to move things along. 4 I have a small prepared statement and then 5 some comments relative to that to the commission. 6 Town of Fairfield as a party in the contested proceeding 7 is hereby responding to the request of the council to 8 address the possibility of 345-kV lines running either 9 underground or overhead through our town. Fairfield has

only feasible and realistic approach that could be

no objection to any underground route and firmly believes

the underground route proposed by the Applicants is the

considered within our town. In fact, any change

suggested by others to consider a possible overhead route

within Fairfield would lead to a unmitigated

16 environmental disaster and to health related concerns in

17 nearby schools, institutions for the elderly and other

18 facilities.

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19 Underground routes have proven reliable in

other states, especially around high density areas.

21 Fairfield is a relatively high density suburban area.

22 Experts have testified to the validity of underground

23 345-kV lines within the distances that extend through the

small amount of mileage required through Fairfield and I

1 believe nearby communities.

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Fairfield must strongly object to any plan that leads to the destruction of our natural resources and that would impact schools, companies, and residents adversely. We reiterate our sole support for the underground lines through Segment 3 and 4 towns and urge the Council to approve the application.

If I could take a couple of minutes, you know, and comment. Having just over the last few days -and there would have been more CEOs here today, but frankly a lot of them were together earlier today and a few of us were able to come up on very short notice. of the interesting things on this table, I was just looking at is, is there's no correlation between the length and amount of overhead -- of underground cable and the number of faults per cable. In fact, the interesting thing is the circuit failure rate is highest for the smallest underground cable under a mile, and the circuit failure rate is lowest in the longest 42-mile underground cable length in the table submitted to you. That's not to say there may not be safety issues that you should address that relate to joints and things like that, and obviously I'm not an expert in the technology relating to this, but I would hope that the focus is not on trying to

change an entire process but on trying to find the
feasible engineering solutions to the best cable you can
put in these areas. As the gentleman before testified, a
lot of this is dependent on the quality of what's
installed.

It's interesting to me that the ISO at the last minute did this and puts words in as could result and not would result. And that just gravitates towards seeking more overhead lines.

There's an opinion I have about all this in terms of the need to move forward. And that is very simple, that if the ISO and the Siting Council thinks that you're going to accomplish your objectives by considering changing to an overhead configuration in any significant way through our communities, I can assure you that the cost estimates that the utilities perceived for those alternatives are way understated, that the number of lawsuits, the number of impact, the number of schools—in our town alone, I'm guesstimating there are probably 10 institutions that may have the same concerns and impacts that you heard from Wallingford from one institution. We have many more near and close to those lines, residents and institutions, probably more than any other community in this entire segment, in this entire

network. The reason they haven't all been here at the meetings is because they presumed that the direction that everything was going in had been validated by engineers and presented.

I believe that there may be other reasons that ISO at the last minute is raising these concerns. I think if you had just gone along with the proposal as it was presented, ISO never would have objected. I think their concern may be generated by the fact that other communities, rightly so, are seeking many many more miles of underground than in the application that was presented to you. And that — and that may be a viable valid thing to consider, but it's interesting that until you started taking some of that seriously, there was nothing to be heard from ISO.

ISO may be concerned about costs. I can't imagine that the documented costs in the initial, possible, feasible — in possible alternative of over ground documented properly the huge sums of millions of dollars that are going to be required for condemnation and the number of people that are going to claim that they are going to be impacted by overhead lines and by the health hazards of overhead lines that will result in exorbitant costs to utility customers and to the entire

1 So, I don't see this thing getting done if this system. 2 whole application gets turned on its head. I think you 3 might as well, as Mr. Hannah said, forget the whole idea. 4 I mean a few brownouts a year isn't the worst thing in 5 the world. I would very much like to see us having as 6 modern a system as possible, but I don't want to see our 7 communities impacted in ways so adversely that the detriment far outweighs any possible benefit for expanded 8 9 growth down the road. 10 I'm hopeful that you'll persevere, that 11 you'll -- that you'll work through these questions. I 12 know there's a lot of information you're going to have to 13 ask for, but I just wanted to let you know how forcefully 14 and strongly many of my colleagues and myself 15 representing our towns and cities -- I talked with the 16 Mayor Bridgeport two days ago about it, and you got a 17 letter from him recently about some of the concern for a 18 small change in their area, and that was before they 19 realized the extent of the possible overhead if it were 20 to go, you know, in the formulary that the ISO New 21 England is suggesting. 22 I think you've got a role to represent our state and our communities. And maybe the ISO has a 23 24 different perspective. And I understand that safety

Ţ	obviously is paramount, but, you know, I urge you to live
2	up to your responsibilities and to work for the
3	communities involved and do your best to try to come up
4	with a good solution. Thank you very much.
5	VICE CHAIRMAN TAIT: Thank you for your
6	thoughts, Mr. Flato. I think Brian asked the question
7	where do we go from here. Let me
8	MR. EUGENE CEDERBAUM: Mr. Chairman, on
9	behalf of the Town of Westport
10	VICE CHAIRMAN TAIT: I'm sorry, I did say
11	that you could have the mic.
12	MR. CEDERBAUM: I am I am not as
13	impressive or as effective as Diane Farrell, but she has
14	asked me to make a statement. Eugene Cederbaum
15	VICE CHAIRMAN TAIT: For
16	MR. CEDERBAUM: town counsel.
17	VICE CHAIRMAN TAIT: For the town of?
18	MR. CEDERBAUM: Westport.
19	VICE CHAIRMAN TAIT: Westport.
20	MR. CEDERBAUM: And it's funny that you
21	should have said what you said because I sat through this
22	morning's testimony, ISO testimony, and at lunch I
23	prepared a closing argument. And then I said a closing
24	argument is not what's appropriate. What's appropriate

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is not only where do we go from here, but how do we best get there, and how do we best get there as quickly as we can get there, because there is a solution that's going to be found. And that solution has to meet all of the issues that have been raised. It's just a shame that the timing is such that we find ourselves here in June and not earlier in last fall or summer.

I think we need a better process. I think this process failed. There was a lack of communication.

As -- as all of us involved in government affairs and those of us who are not only involved in government affairs but burdened to be lawyers, we know that process and communication is so important. And as I heard what happened with the timeline on what was known when and who knew it and what was communicated to whom, when I can't help but think that the municipalities and the Applicant and the Council and ISO all wanted the same result, but they weren't communicating. And I think that's because the process failed. So, I think going forward from here the process must be improved.

And I agree with Mr. Ball that it is essential that the Towns be involved in the communication and the process and the planning that is going to go on from here because they are as an important constituency

1	as any other constituency. And they were completely
2	well, I can't let me just say that my involvement has
3	been more recent, hasn't been three or four years back,
4	but from the last six or nine months that I've been
5	involved, the Towns' involvement in this process has been
6	very limited and very frustrating from a lack of
7	discovery to receiving documents at the eleventh hour.
8	So this process can be improved in the modified planning
9	for a new system by having the Towns as a player not as a
10	constituency on the sideline.
11	Also there can't be any more surprises
12	when an essential fact in this process or hypothesis or
13	fear or concern is known by any of the parties. It
14	should be known by all of the parties. This
15	MS. RANDELL: Mr. Chairman, I hate to
16	object and I have let this run on quite long, but this
17	really is by way of legal argument and not a statement by
18	the Selectman of Westport.
19	VICE CHAIRMAN TAIT: Well, I think we're
20	going to address where we go from here as soon as you get
21	through, sir. And you might prefer to wait until you
22	have what we have suggestions for you.
23	MR. CEDERBAUM: Well this was intended by
24	way of suggestion. It was not intended by way of

1	criticism. If it's an appropriate if there's another
2	appropriate time
3	VICE CHAIRMAN TAIT: Well, I think you're
4	now giving us suggestions as a lawyer of how to proceed.
5	And let me first say here's what we think might be a
6	good approach and I'd appreciate any lawyer's comments on
7	what we are planning to do.
8	MR. CEDERBAUM: Okay, so it's not
9	appropriate now, it's appropriate at a later time?
10	VICE CHAIRMAN TAIT: Well, in about 10
11	minutes.
12	MR. CEDERBAUM: I'll be here.
13	VICE CHAIRMAN TAIT: Yes.
14	MR. CEDERBAUM: Thank you very much.
15	VICE CHAIRMAN TAIT: I think it's the
16	consensus of the Council that we are somewhat spinning
17	our wheels for the rest of the day to continue what we're
18	doing. And not that we won't finish our cross-
19	examination of ISO, but that will be postponed for
20	another day when perhaps we know more. I know ISO and
21	CL&P and UI have been talking and talking productively.
22	I think those conversations need to continue immediately.
23	I think what the best thing to do, and I'm
24	asking for your comments on it, is to hold a meeting in

1	New Britain as soon as possible with all parties to
2	consider where we go from here, so that you have a chance
3	to look at go back to your folks and talk to and get
4	like the last suggestions. We don't need them this
5	afternoon. And I'll have Mr. Phelps get in touch with
6	you as to how fast we can get that going because the
7	clock is ticking. My hope is that ISO and CL&P and UI
8	will be talking. And so at that meeting we will have
9	some thoughts of what people think can be done in the
10	time we have. Our next hearing is July 17 th , is it?
11	MR. ASHTON: 27 th
12	MS. RANDELL: I think it's
13	VICE CHAIRMAN TAIT: The 27 th . So that
14	gives us five weeks to get something before July $27^{\rm th}$ to
15	make any sense to go forward to discuss anything. So how
16	does that schedule sound to you? Could I hear from
17	counsel?
18	MS. RANDELL: Yes. I'd like to propose a
19	modification if I may. I would suggest that the meeting
20	you're talking about would be good, but it's not we
21	should talk about the timing. What we would suggest, the
22	companies and the ISO, is that Mr. Whitley and Mr.
23	Zaklukiewicz oversee a group of people with the
24	engineering and operational capabilities to design a

1 solution that the ISO and the companies believe works 2 with the goal of maximizing the linear length of 3 underground consistent with it being obviously reliable and operable. I am hopeful, based on the discussions over 4 5 the lunch hour, that this does not mean we are starting 6 over, but instead that we would be able to submit a report to the Council by June 30th of the design that we 7 8 would jointly propose to pursue. And that at that point the Council then would have a hearing -- or not a hearing 9 10 -- a meeting, a discussion, however you want to, so that there can be discussion. At which point we can have the 11 12 transient and harmonic study of this design done. 13 My understanding based on the timing for 14 GE and the studies is that we could have the study done 15 by mid August in time for the August hearings if they 16 occur. And that if the Towns were to agree to suspend the 17 GE study of the old Towns' proposal, which as I recall 18 started with 24 miles of HPFF, which we know is a non-19 starter for the ISO, if they would agree to suspend that, 20 I believe GE would have an ability to do one more study 21 in that timeframe should that be necessary. 22 So, I would suggest that we follow that 23 route, give the technical people the opportunity, hearing

everything from the Council today, to develop a design

24

1	that we are hopeful not we, I'm not one of the
2	technical people that they are hopeful will work. And
3	it's a way that gets from there to here, here to there,
4	and get it avoids the problem as you pointed out of
5	having, you know, 20 people try to do a design, that
6	there is something that can be discussed.
7	VICE CHAIRMAN TAIT: The Towns have
8	expressed a strong interest in participating in the
9	initial phase of that rather than reacting to something
10	that is presented. What is your reaction to that?
11	MS. RANDELL: My reaction to that is I
12	think we know the sentiment of the Towns. We have been
13	here quite awhile and we we understand fully where
14	they are coming from. I can tell you that the companies
15	agree that we should start from our proposal but deal
16	with mitigation deal with things that get the
17	capacitance off the system compared to what we've
18	proposed. And I believe that would be more fruitful than
19	having everybody sitting around and toss around ideas. I
20	mean, I'm great, I can talk about what the capacitance is
21	on XLPE and so on and HPFF, but really I think we need to
22	give the technical people a chance. And I think I'm only
23	talking 13 days, assuming I got my date right today, to
24	develop something that should work. And I understand the

1	sentiment of the Towns. And so I would suggest that, you
2	know, GE not start that study I'm sure they can keep
3	gainfully occupied in automating the model and so on, so
4	that we can all proceed. And if there are serious
5	issues, they can be discussed at the meeting.
6	VICE CHAIRMAN TAIT: Mr. Ball.
7	MR. BALL: First of all, I cannot speak
8	for 16 towns. I appreciate Miss Randell's comments. I
9	appreciate the thought behind it. The process makes some
10	sense, although I'm not sure I would agree with the way
11	she's characterized certain things, but that's maybe
12	argument.
	-
13	First of all, as part of this process
13 14	First of all, as part of this process whether our consultants are actually sitting at the table
	•
14	whether our consultants are actually sitting at the table
14 15	whether our consultants are actually sitting at the table or not, I do believe there needs to be some communication
14 15 16	whether our consultants are actually sitting at the table or not, I do believe there needs to be some communication with the Towns so that on June 30 th we aren't yet again
14 15 16 17	whether our consultants are actually sitting at the table or not, I do believe there needs to be some communication with the Towns so that on June 30 th we aren't yet again hit with a new configuration. I would like there to be
14 15 16 17 18	whether our consultants are actually sitting at the table or not, I do believe there needs to be some communication with the Towns so that on June 30 th we aren't yet again hit with a new configuration. I would like there to be some mechanism for there to be communication. That is
14 15 16 17 18 19	whether our consultants are actually sitting at the table or not, I do believe there needs to be some communication with the Towns so that on June 30 th we aren't yet again hit with a new configuration. I would like there to be some mechanism for there to be communication. That is the first point.
14 15 16 17 18 19 20	whether our consultants are actually sitting at the table or not, I do believe there needs to be some communication with the Towns so that on June 30 th we aren't yet again hit with a new configuration. I would like there to be some mechanism for there to be communication. That is the first point. I agree conceptually that the notion
14 15 16 17 18 19 20 21	whether our consultants are actually sitting at the table or not, I do believe there needs to be some communication with the Towns so that on June 30 th we aren't yet again hit with a new configuration. I would like there to be some mechanism for there to be communication. That is the first point. I agree conceptually that the notion should be working off the proposal and trying to find

1	As far as suspending the GE studies, I
2	simply don't have the ability to speak on behalf of 16
3	towns as I stand here today, and we would obviously have
4	to get back to the Applicants on that.
5	VICE CHAIRMAN TAIT: I actually have to
6	talk to the Chairman of the commission and we are not
7	ready to make a final decision this afternoon. Let me
8	talk to Chairman Katz and take your thoughts and decide
9	what next to proceed.
10	MR. BALL: And I think and my last
11	point, if I may, is obviously the concern that we have is
12	we are all operating under tight deadlines. And the
13	Towns have enormous process concerns at this point as to
14	the ability to present feasible alternatives and we don't
15	want that right to be prejudiced.
16	MS. RANDELL: Mr. Prete tells me that he's
17	happy the companies are both happy to keep the Towns
18	in touch of where we are. I don't know what the
19	frequency Mr. Ball has in mind. I'm sure Mr. Prete would
20	be thrilled to call you at 10:00 every
21	MR. BALL: I'm sure he would
22	MS. RANDELL: you know, every day or
23	whatever
24	MR. BALL: We can talk about that off the

1	record.
2	VICE CHAIRMAN TAIT: I urge all the
3	parties to talk off the record while I talk to Chairman
4	Katz. And is there any sense to have a meeting before
5	the $30^{\rm th}$ to discuss where we go from here or do you wish
6	the Council just to announce where we go from here?
7	(Laughter).
8	MS. RANDELL: I was about to say no, let's
9	not have a meeting. Of course if the Council is
10	intending to do something that's different, sure, we
11	would like an opportunity to discuss it.
12	VICE CHAIRMAN TAIT: I don't know what's
13	different because nothing has actually been proposed that
14	I've gotten Chairman Katz to say as to what she wants to
15	do. My thought is to propose to her is to have a meeting
16	with counsel to decide where we go so you can all think
17	about it between now and next Monday.
18	MR. BALL: I agree with that. I think
19	that, frankly, there are
20	VICE CHAIRMAN TAIT: There's some good
21	suggestions out there. You need to go back to your
22	folks, they're talking about postponing the GE study,
23	find out if all that's possible, and that we hold a
24	meeting in New Britain ASAP with parties to fix June 30^{th}

1	dates or July
2	MR. BALL: I think that should be done. I
3	think we ought to have a meeting with the Council, a
4	process meeting
5	VICE CHAIRMAN TAIT: A process meeting
6	MR. BALL: to discuss where we're going
7	
8	VICE CHAIRMAN TAIT: a prehearing on
9	how we
10	MR. BALL: sooner rather than later,
11	because there may be all sorts of implications that we
12	haven't considered at this point.
13	VICE CHAIRMAN TAIT: That's right, or
14	there are things that would make it work better, or
15	things that we haven't thought about that would make it
16	worse. So my thought is that would be my recommendation
17	to the Chairman that we would set a date as soon as
18	possible to have that process meeting
19	MR. BALL: I would agree with that
20	VICE CHAIRMAN TAIT: and everybody is
21	invited to it, all counsel I mean. There's no testimony,
22	there's no substance to it.
23	MR. ASHTON: Mr. Ball, since the GE
24	transient network analyzer study is highly specific as to

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1	what physical issue you're talking about, if in fact the
2	proposed 24 miles of HPFF is a non-starter, then there's
3	no reason that the Towns should not abandon that effort.
4	I mean technically it just doesn't make any sense
5	A VOICE: Mr. Ashton, I need
6	MR. ASHTON: I just want you to be clear
7	on that. So that insofar as they can be GE can be
8	told to hold off on that study, it will (a) save the
9	Towns' money from being wasted, and (b) will help open a
10	window of opportunity for the necessary TNA studies to be
11	done on whatever configuration is finally going to be
12	proposed
13	MR. BALL: Thank you
13 14	MR. BALL: Thank you MR. ASHTON: and I think the Towns
	•
14	MR. ASHTON: and I think the Towns
14 15	MR. ASHTON: and I think the Towns probably ought to participate in that setting that
14 15 16	MR. ASHTON: and I think the Towns probably ought to participate in that setting that study up so that, you know, you see the whole thing
14 15 16 17	MR. ASHTON: and I think the Towns probably ought to participate in that setting that study up so that, you know, you see the whole thing MR. BALL: I I
14 15 16 17 18	MR. ASHTON: and I think the Towns probably ought to participate in that setting that study up so that, you know, you see the whole thing MR. BALL: I I MR. ASHTON: it ought to be a
14 15 16 17 18	MR. ASHTON: and I think the Towns probably ought to participate in that setting that study up so that, you know, you see the whole thing MR. BALL: I I MR. ASHTON: it ought to be a transparent process.
14 15 16 17 18 19 20	MR. ASHTON: and I think the Towns probably ought to participate in that setting that study up so that, you know, you see the whole thing MR. BALL: I I MR. ASHTON: it ought to be a transparent process. MR. BALL: I agree with that. I agree
14 15 16 17 18 19 20 21	MR. ASHTON: and I think the Towns probably ought to participate in that setting that study up so that, you know, you see the whole thing MR. BALL: I I MR. ASHTON: it ought to be a transparent process. MR. BALL: I agree with that. I agree with exactly what you said. I simply I think what I

1	you'll
2	MR. BALL: I
3	MR. ASHTON: take the message back that
4	it's a waste of money
5	MR. BALL: Fair enough
6	MR. ASHTON: to pursue something that
7	is a non-starter.
8	VICE CHAIRMAN TAIT: I would also suggest
9	looking at the highway options again to see if we can't
10	clean up the docket and simplify it, but
11	MR. BALL: I only speak for three towns
12	VICE CHAIRMAN TAIT: I realize that. But
13	while you're talking with other towns, maybe you might
14	pass the word along.
15	I don't know from our calendar whether
16	June 30 th would work. We are backed up on a lot of
17	things. So my thought is by the close of business on
18	Monday we will get a date out to you that we will hold a
19	hearing, a process hearing
20	MR. PHELPS: A process meeting.
21	VICE CHAIRMAN TAIT: to try to say
22	precisely where we go from here. And we would urge all
23	parties to think about that and come to the meeting
24	prepared to come to a joint resolution so we can get on

1	with this cooperatively.
2	MS. RANDELL: I think cooperatively is a
3	really good idea
4	VICE CHAIRMAN TAIT: All I've heard
5	MS. RANDELL: I just want it to be
6	clear that the companies do not think that there is any
7	starting over involved, any you know, any suspension.
8	I've now been authorized to say that the companies and
9	the ISO believe an appropriate place to begin this look
10	is very much like the GE study that we suggested
11	yesterday, which is substitute XLPE for HPFF for the 24
12	miles to see if it can work. And so we are really not in
13	a starting over mode. I think we're just
14	VICE CHAIRMAN TAIT: I think
15	MS. RANDELL: essentially where we were
16	yesterday morning.
17	VICE CHAIRMAN TAIT: I'm sure the Council
18	is not interested in starting over again either.
19	MS. RANDELL: Well then then we're
20	cool.
21	VICE CHAIRMAN TAIT: I think all I've
22	heard is expressions of cooperation of ISO, from the
23	Applicants and from the parties to it, and we will do so
24	fast as we can. Mr. Johnson.

1	MR. JOHNSON: Yes. On behalf of OCC, we
2	have, as the Council knows, experts that understand these
3	issues in the case already. We endorse the proposals
4	that are here, namely a process a technical meeting of
5	some sort at the Council as soon as possible and the
6	proposal that the Applicants and ISO would get together
7	in the next, you know, two weeks and give us a report
8	VICE CHAIRMAN TAIT: And keeping
9	keeping everybody fully informed
10	MR. JOHNSON: We would
11	VICE CHAIRMAN TAIT: all along the way
12	
13	MR. JOHNSON: We we think it's probably
14	more efficient to have a secondary role only for the
14 15	more efficient to have a secondary role only for the others outside of ISO and the Applicants at this time.
15	others outside of ISO and the Applicants at this time.
15 16	others outside of ISO and the Applicants at this time. For instance if our people wanted to be involved, we
15 16 17	others outside of ISO and the Applicants at this time. For instance if our people wanted to be involved, we could accept something specifically secondary, like
15 16 17 18	others outside of ISO and the Applicants at this time. For instance if our people wanted to be involved, we could accept something specifically secondary, like observer status in those meetings or whatever.
15 16 17 18 19	others outside of ISO and the Applicants at this time. For instance if our people wanted to be involved, we could accept something specifically secondary, like observer status in those meetings or whatever. VICE CHAIRMAN TAIT: Thank you. Mr.
15 16 17 18 19 20	others outside of ISO and the Applicants at this time. For instance if our people wanted to be involved, we could accept something specifically secondary, like observer status in those meetings or whatever. VICE CHAIRMAN TAIT: Thank you. Mr. Phelps, is there anything we need to do before I
15 16 17 18 19 20 21	others outside of ISO and the Applicants at this time. For instance if our people wanted to be involved, we could accept something specifically secondary, like observer status in those meetings or whatever. VICE CHAIRMAN TAIT: Thank you. Mr. Phelps, is there anything we need to do before I MS. RANDELL: I think Mr. MacLeod needs to

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1	MR. MACLEOD: I just thought it would
2	be appropriate you've heard from everybody else I
3	think in the line of march, ISO generally follows the OCC
4	in this proceeding, so this is the time and this is the
5	place. But I simply wanted to say for the record that
6	ISO is absolutely in concurrence with what Linda Randell
7	had said earlier, and I think that should be on the
8	record, so there it is.
9	VICE CHAIRMAN TAIT: Okay.
10	COURT REPORTER: One moment please.
11	(Pause).
12	MR. WERTHEMIER: Thank you
13	AUDIO TECHNICIAN: Wait a second, Mr.
14	Wertheimer. (Pause).
15	COURT REPORTER: Go ahead, Mr. Wertheimer.
16	MR. WERTHEIMER: Thank you. I understand
17	the comments from Council and the ISO and I appreciate
18	the cooperation. I would just like to reiterate from the
19	Attorney General's perspective the absolute need for
20	transparency and for as much involvement by the towns
21	that are most directly affected by this as possible.
22	Without that, we may be left with a situation where the
23	Applicants and ISO come in with almost a take it or leave
24	it thing. And that shifts too much of a burden on the

back end to other people who want to have input. I think 1 2 that would present significant process issues. So as 3 much of this as we can take care of along the way to make 4 it inclusive and transparent, the better. I also support 5 the idea of a process meeting as soon as practical to try 6 to map that out. 7 VICE CHAIRMAN TAIT: That's what I'm 8 saying. I think at that point raise those issues that 9 you're concerned about and we'll work on them and see if 10 we can't get everybody on board. 11 MR. ASHTON: In the interests, a 12 transcript --13 VICE CHAIRMAN TAIT: So the Chairman has a 14 nice tape of today's proceedings -- alright -- any other 15 questions or process --16 A VOICE: Mr. Chairman, did you set up a 17 meeting for Monday? 18 VICE CHAIRMAN TAIT: No. By Monday night 19 in the mail we'll have the date at which we're going to 20 hold this process meeting. 21 MR. CEDERBAUM: And that will be -- that 22 will come out in the normal --23 VICE CHAIRMAN TAIT: On Monday night it

will come out -- it will be in the mail to you on Monday

24

1	night.				
2	MR. CEDERBAUM: Thank you.				
3	VICE CHAIRMAN TAIT: Is that right, Mr.				
4	Phelps?				
5	MR. PHELPS: I just wish to confirm that				
6	pursuant to you conferring with the Chairman tomorrow,				
7	the staff in the office fully intends to send out				
8	communication by e-mail and by fax effectively by close				
9	of business Monday what the date will be of a process				
10	meeting. We'll hope to schedule it within seven business				
11	days of Monday. And then following from that, the				
12	participants will have a better impression following				
13	the process meeting, the participants will have a better				
14	road map as to what the expectations are for a process				
15	going forward.				
16	VICE CHAIRMAN TAIT: Miss Randell.				
17	MS. RANDELL: I have a document that Mr.				
18	Walling has printed from his computer				
19	VICE CHAIRMAN TAIT: Okay				
20	MS. RANDELL: called approximate				
21	evaluation of the effectiveness of a damped Type C third				
22	harmonic filter to mitigate system resonance between				
23	second and third harmonic. He is here. Shall I ask him				
24	to verify it				

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1	VICE CHAIRMAN TAIT: Would you						
2	MS. RANDELL: so we can give it an						
3	exhibit number						
4	VICE CHAIRMAN TAIT: Would you please						
5	MS. RANDELL: and be done?						
6	VICE CHAIRMAN TAIT: Yes. Thank you very						
7	much for reminding me. And thanks, Mr. Walling, for						
8	doing it. Do we have an exhibit number? 114?						
9	MS. RANDELL: 114 is my understanding.						
10	Mr. Walling, would you verify this document with the very						
11	long title I just read as your work product with your						
12	initial review of the Type C third harmonic filter						
13	related in the KEMA documents that we received at the						
14	close of hearing yesterday?						
15	MR. WALLING: Yes, I do.						
16	MS. RANDELL: I would offer it as a full						
17	exhibit.						
18	VICE CHAIRMAN TAIT: Are there any						
19	objections? If not, it's admitted as a full exhibit.						
20	(Whereupon, Applicants' Exhibit No. 114						
21	was received into evidence as a full exhibit.)						
22	VICE CHAIRMAN TAIT: And does that						
23	complete our business for the day? I can now start my						
24	birthday.						

1		A VOICE:	Нарру	birthday	y to you -	-	
2	(singing,	laughter)					
3							
4		(Whereupon	n, the	hearing	adjourned	l at	4:20
5	p.m.)						

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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 25 th day of June, 2004.

Paul Landman,

President

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