

ORIGINAL

STATE OF CONNECTICUT

SITING COUNCIL

\* \* \* \* \*

CONNECTICUT LIGHT & POWER COMPANY \* SEPTEMBER 29, 2004  
AND UNITED ILLUMINATING COMPANY \* (10:00 A.M.)

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

DOCKET NO. 272

RECEIVED  
OCT 08 2004

\* \* \* \* \*

BEFORE: PAMELA B. KATZ, CHAIRMAN

CONNECTICUT  
SITING COUNCIL

BOARD MEMBERS: Brian Emerick, DEP Designee  
Gerald J. Heffernan, DPUC Designee  
Edward S. Wilensky  
Daniel P. Lynch, Jr.  
Philip T. Ashton  
Brian O'Neill  
James J. Murphy, Jr.

STAFF MEMBERS: S. Derek Phelps, Executive Director  
Fred O. Cunliffe, Siting Analyst  
Robert L. Marconi, AAG

APPEARANCES:

FOR THE APPLICANT, CONNECTICUT LIGHT & POWER  
COMPANY:

CARMODY & TORRANCE, LLP  
195 Church Street  
P.O. Box 1950  
New Haven, Connecticut

BY: ANTHONY M. FITZGERALD, ESQUIRE  
BRIAN T. HENEGBRY, ESQUIRE

FOR THE APPLICANT, UNITED ILLUMINATING COMPANY:

WIGGIN & DANA, LLP  
One Century Tower  
P.O. Box 1832  
New Haven, Connecticut 06508-1832  
BY: LINDA L. RANDELL, ATTORNEY  
BRUCE L. McDERMOTT, ESQUIRE

FOR THE PARTY, THE CITY OF MERIDEN:

DEBORAH L. MOORE, ATTORNEY  
142 East Main Street  
Room 239  
Meriden, Connecticut 06450

FOR THE PARTIES, THE TOWN OF WESTON AND  
THE TOWN OF WOODBRIDGE:

COHEN & WOLF  
1115 Broad Street  
Bridgeport, Connecticut 06604  
BY: DAVID BALL, ESQUIRE

FOR THE PARTY, THE TOWN OF MILFORD:

HURWITZ & SAGARIN  
147 North Broad Street  
Box 112  
Milford, Connecticut 06460  
By: JULIE DONALDSON KOHLER, ATTORNEY

FOR THE PARTIES, THE TOWN OF WALLINGFORD AND  
THE TOWN OF DURHAM:

HALLORAN & SAGE  
One Goodwin Square  
225 Asylum Street  
Hartford, Connecticut 06103  
BY: PETER BOUCHER, ESQUIRE  
ALAN CURTO, ESQUIRE

FOR THE PARTY, THE TOWN OF ORANGE:

SOUSA, STONE & D'AGOSTO  
375 Bridgeport Avenue  
Box 805  
Shelton, Connecticut 06084  
BY: BRIAN M. STONE, ESQUIRE

POST REPORTING SERVICE  
HAMDEN, CT (800) 262-4102

FOR THE PARTY, THE TOWN OF WILTON:

COHEN & WOLF  
158 Deer Hill Avenue  
Danbury, Connecticut 06810  
BY: MONTE E. FRANK, ESQUIRE

FOR THE PARTY, ATTORNEY GENERAL BLUMENTHAL:

MICHAEL WERTHEIMER  
Assistant Attorney General  
Ten Franklin Square  
New Britain, Connecticut 06051

FOR THE PARTY, THE OFFICE OF CONSUMER COUNSEL:

BRUCE C. JOHNSON, ESQUIRE  
Office of Consumer Counsel  
Ten Franklin Square  
New Britain, Connecticut 06051

FOR THE PARTY, THE TOWN OF NORTH HAVEN:

UPDIKE, KELLY & SPELLACY  
One State Street  
Box 231277  
Hartford, Connecticut 06123  
BY: BENJAMIN J. BERGER, ESQUIRE

FOR THE PARTY, THE WOODLANDS COALITION FOR  
RESPONSIBLE ENERGY:

PULLMAN & COMLEY  
90 State House Square  
Hartford, Connecticut 06103  
BY: LAWRENCE J. GOLDEN, ESQUIRE

FOR THE PARTY, PSEG POWER CONNECTICUT LLC:

MCCARTER & ENGLISH  
Cityplace I  
185 Asylum Street  
Hartford, Connecticut 06103  
BY: DAVID REIF, ESQUIRE  
JANE K. WARREN, ATTORNEY  
JOEL B. CASEY, ESQUIRE

FOR THE INTERVENOR, ISO NEW ENGLAND:

WHITMAN, BREED, ABBOTT & MORGAN  
100 Field Point Road  
Greenwich, Connecticut 06830  
BY: ANTHONY MacLEOD, ESQUIRE

FOR THE INTERVENORS, EZRA ACADEMY, B'NAI JACOB,  
THE JEWISH COMMUNITY CENTER OF GREATER NEW HAVEN,  
THE DEPARTMENT OF JEWISH EDUCATION, AND  
THE JEWISH FEDERATION OF GREATER NEW HAVEN:

BRENNER, SALTZMAN & WALLMAN  
271 Whitney Avenue  
New Haven, Connecticut 06511  
BY: DAVID R. SCHAEFER, ESQUIRE  
KENNETH ROSENTHAL, ESQUIRE

FOR THE INTERVENOR CONNECTICUT BUSINESS & INDUSTRY  
ASSOCIATION:

ROBERT E. EARLEY, ESQUIRE  
350 Church Street  
Hartford, Connecticut 06103

FOR THE PARTY, THE CONNECTICUT DEPARTMENT OF  
TRANSPORTATION:

CHARLES W. WALSH, II, AAG  
EILEEN MESKILL, AAG  
Office of the Attorney General  
55 Elm Street  
Hartford, Connecticut 06106

FOR THE PARTY, THE TOWN OF WESTPORT:

WAKE, SEE, DIMES & BRYNICZKA  
27 Imperial Avenue  
Westport, Connecticut 06880  
BY: EUGENE E. CEDERBAUM, ESQUIRE

FOR THE PARTY, SOUTH CENTRAL CONNECTICUT WATER  
AUTHORITY:

MURTHA CULLINA LLP  
Cityplace I  
185 Asylum Street  
Hartford, Connecticut 06103  
BY: ANDREW W. LORD, ESQUIRE

POST REPORTING SERVICE  
HAMDEN, CT (800) 262-4102

FOR THE PARTY, COMMUNITIES FOR RESPONSIBLE ENERGY:

PATRICIA BRADLEY, PRESIDENT  
47 Ironwood Lane  
Durham, Connecticut 06422

FOR THE PARTY, THE CITY OF BRIDGEPORT:

MELANIE J. HOWLETT, ATTORNEY  
Associate Town Attorney  
City Hall Annex  
999 Broad Street  
Bridgeport, Connecticut 06604

FOR THE INTERVENOR, THE TOWN OF FAIRFIELD:

EILEEN KENNELLY, ATTORNEY  
Assistant Town Attorney  
Sullivan Independence Hall  
725 Old Post Road  
Fairfield, Connecticut 06824

FOR THE PARTY, THE CITY OF NEW HAVEN:

ELIZABETH GILSON, ATTORNEY  
383 Orange Street  
New Haven, Connecticut 06511

FOR THE PARTY, THE TOWN OF MIDDLEFIELD:

BRANSE & WILLIS, LLC  
41-C New London Turnpike  
Glen Lochen East  
Glastonbury, Connecticut 06033  
BY: ERIC KNAPP, ESQUIRE

FOR THE PARTY, THE CITY OF NORWALK:

LOUIS CICCARELLO, ESQUIRE  
Corp. Counsel

FOR THE PARTY, THE TOWN OF CHESHIRE:

RICHARD J. BURTURLA, ESQUIRE

FOR THE PARTY, THE CITY OF MIDDLETOWN:

TIMOTHY P. LYNCH, ESQUIRE

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. 97<sup>th</sup> DISTRICT

AN INTERVENOR, MARY G. FRITZ, STATE REP. 90<sup>th</sup>  
DISTRICT

AN INTERVENOR, AL ADINOLFI, STATE REP. 103<sup>rd</sup>  
DISTRICT

AN INTERVENOR, RAYMOND KALINOWSKI, STATE REP. 100<sup>th</sup>  
DISTRICT

AN INTERVENOR, THEMIS KLARIDES, STATE REP. 114<sup>th</sup>  
DISTRICT

AN INTERVENOR, JOHN E. STRIPP, STATE REP. 135<sup>th</sup>  
DISTRICT

AN INTERVENOR, WILLIAM ANISKOVICH, STATE REP.  
12<sup>th</sup> SEN. DISTRICT

AN INTERVENOR, JOSEPH CRISCO, JR., STATE REP.  
17<sup>th</sup> SEN. DISTRICT

AN INTERVENOR, LEONARD FASANO, STATE REP.  
34<sup>th</sup> SEN. DISTRICT

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

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 September 29, 2004 at 10:00 a.m., at which time the  
8 parties were represented as hereinbefore set forth . . .

9

10

11 CHAIRMAN PAMELA B. KATZ: I'd like to call  
12 this continuation of Docket 272 hearing to order.

13 Just a couple of housekeeping things to  
14 start with and then I'll go over the suggested order for  
15 today's hearing. I just want to remind everybody that the  
16 Siting Council has received the transcript of the buffer  
17 zone technical session that we had recently. And I'd just  
18 like to thank personally thank all the first selectmen and  
19 mayors who came and indicated to us what their preference  
20 was for the buffer zone. In fact, when I think of it now,  
21 Mr. Phelps, you know, you had those press inquiries about  
22 what was said by whom, do we have that electronically,  
23 that transcript?

24

MR. S. DEREK PHELPS: Yes, ma'am.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Good, okay. So we can make  
2 that available.

3 MR. PHELPS: Yes, Madam Chairman.

4 CHAIRMAN KATZ: Okay, so anyone who wishes  
5 to have that available by the Siting Council.

6 Is there any other procedural matters we  
7 need to do before I go through the suggestion? Okay.

8 First what we'd like to do is I understand  
9 the Applicants are going to give an update of the meetings  
10 that have been occurring between DOT and the Towns and the  
11 Applicants.

12 And then after that, we -- the City of  
13 Bridgeport is coming in to make a limited appearance. The  
14 Town of Fairfield is coming in to make a limited  
15 appearance. The City of Norwalk is coming in to make a  
16 limited appearance.

17 Then we will take in the DOT exhibits,  
18 which are listed on page 26 of your hearing program and we  
19 will have cross-examination on those.

20 The Town of Westport has an exhibit they'd  
21 like to put in as an exhibit as opposed to a limited  
22 appearance. And then we'll do that at that time.

23 And then perhaps while we have the Segments  
24 3 and 4 towns here, I thought that might be a good time in



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 the agenda to go over the exhibit that we got late  
2 yesterday afternoon on the EMFs from underground cable,  
3 the subject of which kept me up most of the night.

4 Then we have other EMFs, the gigawatt  
5 things that some of the Towns want to cross on. We will  
6 do that today.

7 And -- am I missing anything that anyone  
8 said that we were going to do? Okay. Great. Okay, so at  
9 this point the Applicants are going to make a presentation  
10 on the update.

11 MS. ANNE BARTOSEWICZ: All set? Thank you,  
12 Chairman. Anne Bartosewicz for Northeast Utilities.

13 Back in, let's see, I want to say July, we  
14 did discuss some C-DOT routes through Segment 4. And at  
15 the request of the Council asked us to kind of huddle  
16 together and see what we could do.

17 So on August 19<sup>th</sup> -- actually, before I  
18 start, I do want to thank the representatives from C-DOT,  
19 from Bridgeport, Fairfield, Westport and Norwalk, they all  
20 participated in more than one set of meetings, a very good  
21 dialogue, and it was -- it was really good to have that  
22 dialogue.

23 So on October 9<sup>th</sup> -- on August 19<sup>th</sup> the  
24 Applicants held a conference with the four towns and C-

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 DOT. We talked a lot about the different proposals, the  
2 pros and cons, constructability. Although that meeting  
3 had no consensus, what we asked to do -- is actually gave  
4 the towns and C-DOT some homework -- it was fun to give  
5 homework instead of always getting it -- (laughter) -- I  
6 asked -- I asked the towns to -- and C-DOT said, you know,  
7 we'd like to work with you, let's see what we can do. And  
8 so I asked the towns to go back and take a look at the  
9 Route 1 proposed route and see if there were any places  
10 they could come off Route 1 to essentially meet C-DOT  
11 halfway. And what I asked them to do was to do that  
12 homework and that we would schedule individual meetings  
13 with the towns and C-DOT. And so we did that.

14 And on September 14<sup>th</sup> we met with the Town  
15 of Bridgeport, the Applicants and C-DOT, and they talked  
16 about proposed routes. And in the interim, C-DOT actually  
17 -- and I know part of their exhibit today and testimony is  
18 they came up with two additional routes. And actually  
19 their two additional routes are much closer to the  
20 Applicants' proposal than their initial one. So, I would  
21 say that there was -- there is definitely some compromise  
22 on the part of C-DOT.

23 I would report that -- and I know the Towns  
24 will speak for themselves and I don't want to speak for

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1       them. I don't believe any consensus was reached other  
2       than the fact that C-DOT issued two new routes. We met on  
3       September 16<sup>th</sup> with Westport and on September 22<sup>nd</sup> with  
4       Fairfield and on September 22<sup>nd</sup> with Norwalk. And these  
5       were individual town meetings. A C-DOT representative,  
6       representatives of the Applicants met and discussed  
7       different routing. As far as I understand, there is  
8       essentially still no consensus, although because of C-  
9       DOT's change in routes there is some closer routes to the  
10      Applicants' proposal than the original C-DOT route.

11               One of the issues that we -- that the  
12      Applicants brought up is the C-DOT route -- all the routes  
13      they proposed are all longer. The first route was 2.8  
14      miles longer than our proposed. Their alternatives are  
15      2.6 miles longer. And that of course goes to the  
16      undergrounding and our concerns with how much  
17      undergrounding we can do. So we knew that was an issue  
18      that we would have to still deal with. And so there's not  
19      necessarily any resolve at this point in time, but the  
20      parties have been talking and they've been trying to work  
21      together.

22               One additional issue that has surfaced in  
23      the meantime and it has to do with Norwalk. The proposed  
24      route in Norwalk crosses the Saugatuck River twice. And

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 C-DOT's proposal has no -- no river crossing. We have  
2 done some core boring on the north crossing in  
3 anticipation of our environmental permits and we have  
4 found some problematic soil conditions, subsurface  
5 conditions. There is what's called fractured rock and  
6 cobble, which will make crossing the northerly crossing  
7 with an HDD under the river very very problematic, and our  
8 expert tell us not recommended. So we have two choices  
9 there that we are looking at; (1) the request of the City  
10 of Norwalk is to look at going north of that crossing and  
11 into the substation on the west side and essentially going  
12 under the substation to get to the location on the east  
13 side where we have to connect to. And we are looking at  
14 that for the city now.

15 CHAIRMAN KATZ: Okay.

16 MS. BARTOSEWICZ: Secondly, the C-DOT route  
17 doesn't cross the Saugatuck River at all. And there are  
18 advantages on looking at a route that doesn't cross the  
19 Saugatuck River. So, I believe that --

20 A VOICE: It's the Norwalk River.

21 MS. BARTOSEWICZ: I'm sorry, it's the  
22 Norwalk River and not the Saugatuck River --

23 CHAIRMAN KATZ: Yeah --

24 MS. BARTOSEWICZ: -- correct me --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: -- isn't Saugatuck in  
2 Westport?

3 MS. BARTOSEWICZ: Yes. I'm sorry, it's the  
4 Norwalk River. So we are also looking at the C-DOT routes  
5 and modifications that do not cross the river.

6 CHAIRMAN KATZ: Okay.

7 MS. BARTOSEWICZ: So that's just an open  
8 pending issue.

9 CHAIRMAN KATZ: Yeah.

10 MS. BARTOSEWICZ: That's the end.

11 CHAIRMAN KATZ: Great. And thank you for  
12 the update. And I'd just like to compliment all the  
13 parties for keeping the discussions moving forward on a  
14 positive basis.

15 Okay, at this time we will take limited  
16 appearance statements. And we'll have -- Mr. Phelps,  
17 where would you like them? Down here at this table?

18 (Pause)

19 CHAIRMAN KATZ: The City of Bridgeport.  
20 Attorney Howlett, if you have your -- come on up to the  
21 table with your -- I believe since this is a limited  
22 appearance, we're not swearing them. Is that how we're  
23 doing this?

24 MS. MELANIE J. HOWLETT: I don't think this

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 is -- this is not a limited appearance. These are the  
2 comments on behalf of the City --

3 CHAIRMAN KATZ: Yes.

4 MS. HOWLETT: -- for the City of  
5 Bridgeport. We have full party status.

6 CHAIRMAN KATZ: Okay. So we'll swear in  
7 your witness then.

8 MS. HOWLETT: Yes, please.

9 MR. ROBERT L. MARCONI: If your witness  
10 could please before rising, please state his full name and  
11 spell his last name for the benefit of the court reporter.

12 MR. MICHAEL P. NIDOH: My name is Michael  
13 P. Nidoh, N-i-d-o-h. I'm the Director of Planning for the  
14 City of Bridgeport.

15 MR. MARCONI: Okay, thank you. Now if you  
16 could please rise. Please raise your right hand.

17 (Whereupon, Michael P. Nidoh was duly sworn  
18 in.)

19 MR. MARCONI: Please be seated, sir.

20 MS. HOWLETT: I'm Attorney Melanie Howlett,  
21 Associate City Attorney for the City of Bridgeport.

22 Mr. Nidoh, I show you a document dated  
23 September 27, 2004 entitled Comments of the City of  
24 Bridgeport Regarding Alternative Proposed Routes of the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Connecticut Department of Transportation. Do you  
2 recognize this document?

3 MR. NIDOH: Yes, I do.

4 MS. HOWLETT: And did you -- did you  
5 prepare this document with my assistance?

6 MR. NIDOH: Yes, I did.

7 MS. HOWLETT: Do you adopt this document as  
8 your testimony on behalf of the City of Bridgeport?

9 MR. NIDOH: Yes, I do.

10 MS. HOWLETT: The witness is available for  
11 questions.

12 CHAIRMAN KATZ: Thank you, Miss Howlett.  
13 Okay, at this point we will go through the list. Do the  
14 Applicants have any questions?

15 MR. ANTHONY B. FITZGERALD: No, Madam  
16 Chairman.

17 CHAIRMAN KATZ: Okay. Why don't we do this  
18 simply. Can I have a show of hands of those who wish to  
19 cross-examine this witness instead of me reading the whole  
20 list. Mr. Walsh.

21 MR. CHARLES WALSH: Good morning, Madam  
22 Chairman and Council members. Assistant Attorney General  
23 Charles Walsh for the Department of Transportation. Good  
24 morning, Mr. Nidoh.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. NIDOH: Good morning.

2 MR. WALSH: Are you familiar with the  
3 Applicants' preferred route through the City of Bridgeport  
4 for the proposed 345-kV transmission line?

5 MR. NIDOH: Could you define applicant?

6 MR. WALSH: The Connecticut Light & Power  
7 Company and United Illuminating.

8 MR. NIDOH: Yes, I'm familiar with it.

9 MR. WALSH: Are you aware of whether or not  
10 the City of Bridgeport authorizes any parade routes along  
11 the route proposed by the Applicant?

12 MR. NIDOH: There are probably several  
13 different routes -- there are seven different parades in  
14 the City of Bridgeport going on on an annual basis. The  
15 main one being the Barnum Festival. Yes, I believe that  
16 this parade route -- the Barnum Festival would have some  
17 implications to the route, yes.

18 MR. WALSH: And are you aware of whether or  
19 not any children march in these parades?

20 MR. NIDOH: Yes, there are children that  
21 march in the parade.

22 MR. WALSH: Yeah, I'm -- then I'm sure  
23 you're concerned with the children marching in the parade  
24 and children potentially being exposed to elevated



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 magnetic fields resulting from the placement of the  
2 transmission facilities underlying the parade route,  
3 aren't you?

4 MR. NIDOH: Yes, I am familiar with that.

5 CHAIRMAN KATZ: How long is the duration of  
6 these parades? Do they camp out?

7 MR. NIDOH: No, they don't camp out. They

8 --

9 A VOICE: They walk by.

10 MR. NIDOH: They walk a three or four mile  
11 route. It's over within about an hour and a half.  
12 Children also walk down the sidewalks going to and from  
13 school in various other locations.

14 CHAIRMAN KATZ: Okay.

15 MR. WALSH: And they go to and from school  
16 on a daily basis most of the year, correct?

17 MR. NIDOH: Some children walk, some  
18 children ride, some children take buses, yes.

19 MR. WALSH: Are there any -- are you aware  
20 of whether there are any school bus stops along the  
21 Applicants' proposed route?

22 MR. NIDOH: I'm not specifically aware of  
23 any, no.

24 MR. WALSH: Are you aware of any public

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 transportation bus routes along the Applicants' proposed  
2 route?

3 MR. NIDOH: I know there are bus routes in  
4 the City of Bridgeport that cross these locations. And  
5 yes, I'll make the assumption that there are bus stops  
6 along the route.

7 MR. WALSH: Okay. Are you aware whether  
8 there are any residences or condominiums or apartments in  
9 Bridgeport adjacent to the Applicants' proposed route?

10 MR. NIDOH: Yes, there are.

11 MR. WALSH: And are you aware whether there  
12 are any private or public schools adjacent to the  
13 Applicants' proposed route in the Town of Bridgeport?

14 MS. HOWLETT: No --

15 MR. NIDOH: Not that I'm aware of right  
16 now. When you use the word adjacent, contiguous to the  
17 street, no, not that I'm aware of, no.

18 MR. WALSH: Okay, thank you. Are there any  
19 licensed child care, day care facilities adjacent to the  
20 Applicants' proposed route in the City of Bridgeport?

21 MR. NIDOH: I'm not prepared to answer that  
22 question with a definitive answer. But my guess is that  
23 there's potential.

24 MR. WALSH: Thank you. Are you aware of

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 whether there are any youth camps or any public  
2 playgrounds in the City of Bridgeport adjacent to the  
3 Applicants' proposed route?

4 MR. NIDOH: Not any youth camps I'm aware  
5 of. There are playgrounds.

6 MR. WALSH: There are playgrounds.

7 Alright, thank you. I have no further questions.

8 MR. DANIEL P. LYNCH, JR.: Madam Chairman.

9 CHAIRMAN KATZ: Yes, Mr. Lynch.

10 MR. LYNCH: On the proposed route that  
11 we're talking about, are there any distribution lines  
12 along those routes for --

13 MR. PHILIP T. ASHTON: Define --

14 MR. LYNCH: Pardon?

15 MR. ASHTON: Define --

16 MS. HOWLETT: You mean existing?

17 MR. LYNCH: Maybe Mr. Ashton can --

18 MR. ASHTON: Mr. Nidoh --

19 MR. NIDOH: Yes?

20 MR. ASHTON: -- are there any facilities  
21 along the streets which carry electricity delivered  
22 directly to the homes as opposed to a transmission line  
23 which goes point-to-point?

24 MR. NIDOH: There are power line

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 transformers on poles that feed distribution into  
2 individual homes and businesses along the entire route.

3 MR. ASHTON: And to your knowledge, people  
4 in Bridgeport generally use electricity in their homes?

5 MR. NIDOH: I would have to say yes.

6 MR. ASHTON: Okay.

7 A VOICE: Thank you, Mr. Ashton.

8 CHAIRMAN KATZ: Thank you. Mr. Nidoh, you  
9 mentioned in your prefiled statement that under certain  
10 conditions underlined by the City of Bridgeport, the  
11 alternative route by DOT may be acceptable. Can you just  
12 elaborate more on what those conditions are that would  
13 make it acceptable?

14 MR. NIDOH: Their proposed route -- they  
15 changed the alternate route if you will. It goes up Park  
16 Avenue. Park Avenue is a major thoroughfare in the City  
17 of Bridgeport heading north/south. It's a divided  
18 highway. It has esplanades, which have been improved with  
19 landscaping and watering systems. We have traffic  
20 signalization projects in place as well as designed. And  
21 on top of all of that there are residences in close  
22 proximity to the roadway. The proposal that I'm aware of  
23 will involve an awful lot of night work and trenching and  
24 things of that nature that will raise dust and create

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 sound and vibration. And I do not know if there's rock  
2 that they would have to go through to get to this area.  
3 Plus because of the density of the population of the City  
4 of Bridgeport, I know there's all kinds of utilities  
5 underground that have to be adjusted and changed. There's  
6 light poles. The conditions we're talking about would be  
7 a coordination of all those elements in making sure that  
8 our residents are not disturbed in their sleep at night  
9 and our businesses in their ability to transact their  
10 businesses.

11 CHAIRMAN KATZ: So basically the difference  
12 between the Applicant's proposed route and this  
13 alternative route are these residences? I mean in either  
14 case these types of things will have to be coordinated,  
15 correct --

16 MR. NIDOH: Right --

17 CHAIRMAN KATZ: -- to minimize disturbance  
18 --

19 MR. NIDOH: The difference --

20 CHAIRMAN KATZ: -- but the difference is  
21 the residential on Park?

22 MS. HOWLETT: Right --

23 MR. NIDOH: Well, that's the main  
24 difference. There are also historic churches on the Park

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Avenue side.

2 CHAIRMAN KATZ: Right.

3 MR. NIDOH: The original route goes through  
4 a lot of sections of the City of Bridgeport which do not  
5 have any residential uses. Railroad Avenue is a good  
6 example, there's virtually no residential uses along the  
7 avenue there. And even the routes that they're talking  
8 about, Barnum Avenue, residences are limited because  
9 there's primarily commercial on the main avenues.

10 CHAIRMAN KATZ: Okay.

11 MS. HOWLETT: Which is why we prefer it.

12 CHAIRMAN KATZ: Thank you. Other Council  
13 members? Mr. Ashton.

14 MR. ASHTON: Mr. Nidoh, are you aware of  
15 whether or not there are any existing underground electric  
16 facilities in Bridgeport?

17 MR. NIDOH: Yes, there are.

18 MS. HOWLETT: Very few.

19 MR. ASHTON: Are you aware of whether there  
20 are any electric transmission lines in Bridgeport  
21 underground?

22 MS. HOWLETT: No --

23 MR. NIDOH: There is an underground 115-kV  
24 volt line that comes up from the water, and it comes

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 aboveground at Seaview Avenue and Barnum Avenue.

2 MR. ASHTON: Okay. Does -- does Bridgeport  
3 have a director of health?

4 MR. NIDOH: Yes, it does. Dr. Miriam  
5 Evans.

6 MR. ASHTON: Do you ever have occasion to  
7 talk with the Director of Health?

8 MR. NIDOH: She's been employed by the City  
9 of Bridgeport about two weeks now --

10 MR. ASHTON: Well --

11 MR. NIDOH: -- I haven't had a chance to  
12 talk --

13 MR. ASHTON: The predecessor directors of  
14 health --

15 MR. NIDOH: Tom Giesowich (phonetic) was  
16 the predecessor. Yes, I did talk to him.

17 MR. ASHTON: Okay. Are you aware whether  
18 or not Bridgeport has any ordinances which prohibits  
19 microwaves, electric blankets, fluorescent lights, TV's,  
20 or have ever issued any warnings about the use of such  
21 appliances?

22 MS. HOWLETT: No.

23 MR. NIDOH: Not to my knowledge, no.

24 MR. ASHTON: Thank you. Nothing further.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Thank you. Any other --  
2 any other party or intervenor who wishes to cross this  
3 witness? Any other Council member? Mr. Cunliffe, any  
4 questions?

5 MR. FRED O. CUNLIFFE: No questions.

6 CHAIRMAN KATZ: Great. Thank you very  
7 much.

8 MS. HOWLETT: Thank you.

9 MR. NIDOH: Thank you.

10 CHAIRMAN KATZ: Next is the Town of  
11 Fairfield. Mr. Walsh, you can stay if you're going to  
12 have more to say.

13 MS. EILEEN KENNELLY: Hello, Chairman Katz.  
14 This is Eileen Kennelly, Assistant Town Attorney of the  
15 Town of Fairfield.

16 CHAIRMAN KATZ: And could you spell your  
17 name for the court reporter.

18 MS. KENNELLY: K-e-n-n-e-l-l-y.

19 CHAIRMAN KATZ: Thank you.

20 MS. KENNELLY: Unfortunately, our town  
21 engineer was unable to join me today because he's in  
22 what's left of Disney World on a long planned vacation.

23 CHAIRMAN KATZ: Okay. Good for him. You  
24 prefiled a statement. Do you want to just go with that?



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MS. KENNELLY: That is the essence of our  
2 issue with the DOT's route --

3 CHAIRMAN KATZ: Okay --

4 MS. KENNELLY: -- which is somewhat similar  
5 to Bridgeport's, although it differs in some respects.  
6 Park Avenue, which is the line up which it goes in  
7 Bridgeport is also half in Fairfield --

8 CHAIRMAN KATZ: Yeah.

9 MS. KENNELLY: -- so we have an interest in  
10 keeping it off Park Avenue as well for pretty much the  
11 same reasons, it is a residential area.

12 The route after that turns on to Wilson  
13 Avenue and Fairfield Woods Road, which is one of our very  
14 major traveled roads across town. In fact, people in that  
15 neighborhood regularly turn out to complain about anything  
16 that might increase traffic in their area.

17 After it goes through that part of town, it  
18 goes into our Greenfield Hill area, which is very very  
19 narrow roads -- residential and very narrow roads. In  
20 order to do the work, it would be necessary to close those  
21 roads off and there is no really practical alternate route  
22 across --

23 MR. WALSH: Excuse me. Is Miss Kennelly  
24 testifying. She should be sworn.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Yeah, I'm having the same  
2 hesitation.

3 MS. KENNELLY: I'm sorry.

4 CHAIRMAN KATZ: But I'm trying to be good  
5 and not interrupt. Because you don't have a witness here  
6 for the town --

7 MS. KENNELLY: I'm sorry --

8 CHAIRMAN KATZ: -- what we're going to have  
9 to do I think is we're going to have to take the Town's  
10 statement as a limited appearance --

11 MS. KENNELLY: Okay --

12 CHAIRMAN KATZ: -- on its face value --

13 MS. KENNELLY: Okay.

14 CHAIRMAN KATZ: -- okay, and go with that -  
15 -

16 MS. KENNELLY: Okay --

17 CHAIRMAN KATZ: -- since we can't really  
18 take your testimony as the town attorney.

19 MS. KENNELLY: I understand. I would be  
20 happy -- if there should be any questions, it should be  
21 given in writing. And when the town engineer comes back -  
22 -

23 CHAIRMAN KATZ: Right --

24 MS. KENNELLY: -- I'd be happy to have him

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 answer them.

2 CHAIRMAN KATZ: Okay. And we invite him to  
3 come on down to New Britain if he wishes. Okay, we will  
4 do that. Thank you.

5 Next is the City of Norwalk. Good morning,  
6 Mayor Knopp --

7 MAYOR ALEX KNOPP: Good morning, Chairman  
8 Katz --

9 CHAIRMAN KATZ: -- welcome to New Britain.

10 MAYOR KNOPP: Thank you, love to be here.

11 MR. ASHTON: Yeah.

12 MAYOR KNOPP: I'm joined by Harold Alvord,  
13 the City's Director of Public Works.

14 CHAIRMAN KATZ: Okay. And we're going to  
15 have you give your name and spell your names for the court  
16 reporter.

17 MAYOR KNOPP: Yes. My name is Mayor Alex  
18 Knopp, K-n-o-p-p.

19 CHAIRMAN KATZ: Mr. Alvord --

20 MAYOR KNOPP: And Mr. Harold Alvord, A-l-v-  
21 o-r-d, the Director of Public Works for the City of  
22 Norwalk.

23 CHAIRMAN KATZ: And we'll have you be sworn  
24 -- correct?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. MARCONI: Yes. Gentlemen.

2 (Whereupon, Mayor Alex Knopp and Harold  
3 Alvord were duly sworn in.)

4 MR. MARCONI: Please be seated, gentlemen.

5 CHAIRMAN KATZ: Okay. We -- I believe the  
6 City prefiled something, correct?

7 MAYOR KNOPP: Correct.

8 MR. PHELPS: Page 25 --

9 CHAIRMAN KATZ: Hmm?

10 MR. PHELPS: Page 25 of the program --

11 CHAIRMAN KATZ: Okay. Just give me a  
12 moment here --

13 MR. PHELPS: -- that I just gave you.

14 CHAIRMAN KATZ: Yes. Excuse us, we have a  
15 lot of paper up here.

16 (Pause)

17 CHAIRMAN KATZ: Yes, thank you. Okay.

18 Thank you very much. Why don't we just have -- could you  
19 just have them verify this exhibit if you could.

20 MR. MARCONI: Certainly. I believe both of  
21 the witnesses worked on the exhibit here?

22 MAYOR KNOPP: Correct.

23 MR. MARCONI: So if I might ask the witness  
24 panel then, both of you, are you -- are you, in fact,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 familiar with the exhibit that's been offered to the  
2 Siting Council?

3 MAYOR KNOPP: Yes.

4 MR. HAROLD ALVORD: Yes.

5 MR. MARCONI: Did you prepare this exhibit  
6 together?

7 MAYOR KNOPP: Yes.

8 MR. ALVORD: Yes.

9 MR. MARCONI: Is it true and correct to the  
10 best of your knowledge and belief?

11 MAYOR KNOPP: Yes.

12 MR. ALVORD: Yes.

13 MR. MARCONI: And does it represent -- and  
14 do you adopt this as your testimony --

15 MAYOR KNOPP: Yes.

16 MR. ALVORD: Yes.

17 MR. PHELPS: Madam Chairman.

18 CHAIRMAN KATZ: Yes?

19 MR. PHELPS: I'd like to confirm that this  
20 material was received by the office on Friday consistent  
21 with the schedule that was asked for for prefiling.

22 CHAIRMAN KATZ: Great. Thank you. Okay,  
23 so any objection we will make this a full exhibit?

24 Hearing none. Okay, Mr. Walsh, we're going to let you go

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 first if you wish.

2 MR. WALSH: Thank you. Good morning, Mr.  
3 Mayor.

4 MAYOR KNOPP: Good morning.

5 MR. WALSH: Good morning, Mr. Alvord. I'd  
6 like to ask you the same questions I asked the witness  
7 from the City of Bridgeport. Are you familiar with the  
8 Applicants', Connecticut Light & Power and United  
9 Illuminating's proposed route for the proposed 345-kV line  
10 through the City of Norwalk?

11 MR. ALVORD: Yes.

12 MR. WALSH: Do you know whether or not  
13 there are any parade routes along the Applicants' proposed  
14 route?

15 MR. ALVORD: I'm sorry, I couldn't  
16 understand your question.

17 MR. WALSH: Are there any parade routes in  
18 the City of Norwalk along the route which the Applicants  
19 have proposed for the underground 345-kV line?

20 MAYOR KNOPP: May we ask what is a parade  
21 route?

22 MR. WALSH: A parade. Do you have any  
23 celebrations where you have people marching in large  
24 groups along the route where the Applicants' proposed 345-

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 kV line is to be buried in the right-of-way through the  
2 Town of -- City of Norwalk?

3 MR. ALVORD: The answer is no.

4 CHAIRMAN KATZ: (Indiscernible) -- the fact  
5 that you have to explain that question should be a hint to  
6 you.

7 MR. WALSH: Yes. To the extent that --

8 MAYOR KNOPP: We thought it had something  
9 to do with harmonics, that's why -- (laughter) --

10 MR. WALSH: There may be harmonics involved  
11 in the parade.

12 MAYOR KNOPP: Everything always gets back  
13 to harmonics, so --

14 MR. WALSH: That's right.

15 CHAIRMAN KATZ: Yes.

16 MR. WALSH: Are you aware whether or not  
17 there are any school bus stops or public transportation  
18 bus stops along the Applicants' proposed route in the City  
19 of Norwalk?

20 MR. ALVORD: Yes.

21 COURT REPORTER: Place that microphone a  
22 little closer or adjust --

23 MR. WALSH: That was a yes, sir?

24 MR. ALVORD: Yes.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. WALSH: Thank you. Are you aware  
2 whether there are any residences, condominiums, or  
3 apartments adjacent to the Applicants' proposed route in  
4 the City of Norwalk?

5 MR. ALVORD: There are some, yes.

6 MR. WALSH: Thank you. And are there any  
7 private or public schools adjacent to the Applicants'  
8 proposed route in the City of Norwalk?

9 MR. ALVORD: Not immediate to it, no.

10 MR. WALSH: In the vicinity?

11 MR. ALVORD: In the general vicinity, yes.

12 MR. WALSH: Thank you.

13 MR. ASHTON: What does general vicinity  
14 mean please?

15 MR. ALVORD: Well, we have 18 schools in  
16 the City of Norwalk and they're in the general vicinity of  
17 just about every street and road we have in the City, but  
18 --

19 MR. ASHTON: Hundreds of feet --

20 MR. ALVORD: The direct access to the  
21 school is not directly off the Applicants' preferred  
22 route.

23 MR. ASHTON: And so we're talking hundreds  
24 of feet, is that fair to say?



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. ALVORD: That would be fair to say.

2 MR. ASHTON: Thank you.

3 MR. WALSH: Would it be less than 300 feet?

4 MR. ALVORD: I couldn't --

5 MR. WALSH: Alright --

6 MR. ALVORD: -- I couldn't make it that  
7 specific.

8 MR. WALSH: Alright, fine, thank you. With  
9 respect to, well the City of Norwalk, are there any  
10 licensed child day care facilities adjacent to the  
11 Applicants' proposed route in the City of Norwalk?

12 MR. ALVORD: I don't know --

13 MAYOR KNOPP: We -- we haven't checked  
14 that.

15 MR. WALSH: Alright. Would it be  
16 reasonable to assume that there may be some?

17 MAYOR KNOPP: We don't speculate.

18 MR. WALSH: Alright, thank you. To the --  
19 are there any youth camps or public playgrounds in the  
20 City of Norwalk adjacent to the Applicant's proposed route  
21 in the City of Norwalk?

22 MAYOR KNOPP: We haven't checked that.

23 MR. WALSH: To the best of your knowledge  
24 are there -- do you know of any playgrounds along the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Applicants' proposed route, Mr. Alvord?

2 MR. ALVORD: I do not right off-hand know  
3 of any that are right along the route, no.

4 MR. WALSH: Alright, thank you. I have no  
5 further questions.

6 CHAIRMAN KATZ: Thank you, Mr. Walsh. Do  
7 the Applicants have questions of this witness?

8 MS. LINDA RANDELL: We do not.

9 CHAIRMAN KATZ: Any member of the other  
10 parties and intervenors who have questions of this  
11 witness?

12 COURT REPORTER: Could you repeat what the  
13 Applicant said?

14 CHAIRMAN KATZ: I'm sorry. The Applicant  
15 said --

16 MS. RANDELL: We do not.

17 CHAIRMAN KATZ: Okay. To -- just to  
18 paraphrase your testimony -- and I always appreciate  
19 brevity, shorter, flatter, wider, and straighter, Route 1?

20 MAYOR KNOPP: Correct.

21 CHAIRMAN KATZ: Like I said, I appreciate  
22 that brevity. Okay. Do other Council members have  
23 questions of this --

24 MR. ASHTON: Yes.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Mr. Ashton.

2 MR. ASHTON: Mayor Knopp and Mr. Alvord,  
3 are you aware whether there are any existing underground  
4 transmission lines in the City of Norwalk now?

5 MR. ALVORD: I'm not aware of any -- I'm  
6 not aware of any.

7 MR. ASHTON: Would the lines coming out of  
8 the Norwalk Harbor plant be overhead or underground?

9 MR. ALVORD: You mean off the Norwalk  
10 Substation?

11 MR. ASHTON: No, off the Norwalk power  
12 plant, Norwalk Harbor Power Plant up to the railroad?

13 MR. ALVORD: Right off-hand, I don't know.

14 MR. ASHTON: Mayor, do you know?

15 MAYOR KNOPP: Well, obviously the cables  
16 from Long Island come -- are underground into the Manressa  
17 Island plant. And the lines going from the plant I  
18 believe are over ground, connect up -- I believe they're  
19 over ground.

20 MR. ASHTON: Okay. Are you -- does Norwalk  
21 contain along its streets any overhead distribution lines,  
22 that is lines that serve local customers?

23 MAYOR KNOPP: Are there any overhead  
24 distribution lines in Norwalk?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. ASHTON: Yeah.

2 MAYOR KNOPP: The answer is yes.

3 MR. ASHTON: And how about underground  
4 lines, are there any parts of the city that are  
5 undergrounded?

6 MAYOR KNOPP: Yes.

7 MR. ASHTON: Okay.

8 MAYOR KNOPP: Mainly the newer commercial  
9 routes --

10 MR. ASHTON: Okay --

11 MAYOR KNOPP: -- where we try to put  
12 utilities under ground.

13 MR. ASHTON: Do you have a director of  
14 health in Norwalk?

15 MAYOR KNOPP: Yes, we do.

16 MR. ASHTON: And do you converse with that  
17 individual periodically?

18 MAYOR KNOPP: Very often.

19 MR. ASHTON: Are you aware of any  
20 prohibitions on the use of or warnings on the use of  
21 appliances such electric blankets, microwaves, fluorescent  
22 lights, TV's, either in private property or in public  
23 property?

24 MAYOR KNOPP: I've not researched the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 question and I -- and I --

2 MR. ASHTON: Have you ever heard of any?

3 MAYOR KNOPP: I've never heard of any, but  
4 I haven't --

5 MR. ASHTON: Nothing further, thank you --

6 MAYOR KNOPP: -- but I haven't explored the  
7 question either.

8 CHAIRMAN KATZ: Thank you. Any other  
9 Council members, questions?

10 MR. LYNCH: I have one.

11 CHAIRMAN KATZ: Mr. Lynch.

12 MR. LYNCH: Just one question. If the  
13 Applicant were to change from the high pressure fluid  
14 cable to a XLPE solid cable, would your objection still be  
15 the same?

16 MAYOR KNOPP: Yes.

17 MR. LYNCH: Thank you.

18 CHAIRMAN KATZ: Any staff questions for  
19 this witness? Mr. Cunliffe.

20 MR. CUNLIFFE: I do have one. You  
21 mentioned traffic ratios nighttime versus daytime for the  
22 DOT. Are you assuming that construction of the Conn-DOT  
23 route would be done during daytime?

24 MR. ALVORD: It would be our preference --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 if one of the Conn-DOT options were adopted that would  
2 take it through residential areas, then our preference  
3 from a City perspective would be that it be done during  
4 the daytime so that you don't have the noise and  
5 disruption of nighttime when residents are trying to  
6 sleep, children are playing in their yards and on the  
7 streets and so on.

8 MR. CUNLIFFE: Thank you.

9 CHAIRMAN KATZ: Thank you.

10 MAYOR KNOPP: Just -- just -- if I could  
11 add just one brief point. A very important part of our  
12 testimony is that the character of U.S. 1 through Norwalk  
13 changes dramatically whether you're on the western or  
14 eastern part of the city. On the eastern part of the city  
15 U.S. 1 is not considered an alternative to I-95. On the  
16 western part of the city it is. And therefore, if there  
17 were, as occurs daily, an accident or a backup of any kind  
18 on I-95 on the western portion of the city, then U.S. 1  
19 becomes the alternative route. In the eastern part of the  
20 Norwalk if there's an accident on I-95, State Route 136  
21 becomes the alternate and not U.S. 1. That's a very  
22 important distinction in looking at why we prefer options  
23 in terms of U.S. 1 on different utility projects.

24 MR. CUNLIFFE: Thank you for the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 clarification.

2 CHAIRMAN KATZ: Thank you. Is there any  
3 other party and intervenor who has questions for this  
4 witness? Seeing none, thank you very much.

5 MAYOR KNOPP: Thank you, Chairman Katz.  
6 Mr. Cederbaum, while we're doing towns, why don't we put  
7 in the Town of Westport Exhibit.

8 MR. EUGENE CEDERBAUM: Yes, thank you.

9 CHAIRMAN KATZ: You can come on down. And  
10 you have copies?

11 MR. CEDERBAUM: Yes, I do.

12 CHAIRMAN KATZ: Do you want to go --

13 MR. CEDERBAUM: Madam Chairman, thank you  
14 for your indulgence firstly.

15 CHAIRMAN KATZ: Yeah.

16 COURT REPORTER: Your name please.

17 MR. CEDERBAUM: Eugene Cederbaum, Town  
18 Counsel's Office, the Town of Westport.

19 Our First Selectman, Diane Farrell, had  
20 written a letter to the Council. And I believe, although  
21 Mr. Walsh told me this morning that he couldn't find it,  
22 that all of the parties and intervenors received a copy of  
23 that letter. Because she was unable to be here this  
24 morning, I asked her to swear to the contents of that

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 letter and I would like to introduce it as an exhibit.  
2 The letter is dated August 19, 2004. It's directed to  
3 you. And her oath was taken yesterday and it's at the  
4 foot of the letter.

5 CHAIRMAN KATZ: And you've shown this to  
6 the Applicants?

7 MR. CEDERBAUM: I have not yet --

8 CHAIRMAN KATZ: Why don't we go --

9 MR. CEDERBAUM: -- well, the Applicant does  
10 have it --

11 CHAIRMAN KATZ: Okay --

12 MR. FITZGERALD: We do?

13 MR. CEDERBAUM: -- but wasn't --

14 CHAIRMAN KATZ: Let's go off the record for  
15 a minute --

16 MR. CEDERBAUM: Okay --

17 CHAIRMAN KATZ: -- and do what you need to  
18 do.

19 MR. CEDERBAUM: I apologize.

20 CHAIRMAN KATZ: Off the record.

21 (Off the record)

22 CHAIRMAN KATZ: Okay. A document -- an  
23 exhibit from the Town of Westport has been distributed.  
24 And Attorney Cederbaum has indicated that it has been



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 sworn. Does the Applicants have any objection taking this  
2 in as an exhibit?

3 MR. FITZGERALD: Yes. As it happens, we --  
4 none of us recall seeing this before, but that's not the  
5 basis of the objection. It's a statement of position and  
6 the author is not here to be cross-examined about it. I'm  
7 not sure the cross-examination is all that fruitful anyway  
8 since it's a statement of -- including a legal position.  
9 It -- it should just come in as a limited appearance.

10 CHAIRMAN KATZ: Mr. Cederbaum, we are  
11 allowed when we do our findings of fact to take limited  
12 appearance statements and indicate what the position of a  
13 party or intervenor is without it being evidence.

14 MR. CEDERBAUM: Well, the concern here is -  
15 -

16 CHAIRMAN KATZ: Sit down.

17 MR. CEDERBAUM: Oh, thank you. The concern  
18 is that -- firstly, it is a statement by the chief  
19 executive of the town. The cross-examination of this  
20 document, as indicated, is of probably no useful purpose.  
21 We were concerned that it be a full exhibit so the  
22 commission could use it as a full exhibit to the extent  
23 that that differs from a limited exhibit, and we believe  
24 we accomplish that by having Miss Farrell swear to the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 truth of it. I don't know that the fact that it expresses  
2 fact -- well some factual but also the opinion of the  
3 chief executive of the town with regard to the route quite  
4 frankly is very different from some of the contents of the  
5 statements that prefiled testimony that you've heard and  
6 read from Norwalk, Bridgeport, and Fairfield. As a matter  
7 of fact, I think it's consistent with that.

8 CHAIRMAN KATZ: Did you give -- I'm sorry -  
9 -

10 MR. CEDERBAUM: They were here --

11 CHAIRMAN KATZ: Yeah --

12 MR. CEDERBAUM: -- I certainly recognize  
13 the fact --

14 CHAIRMAN KATZ: Right --

15 MR. CEDERBAUM: -- you had live bodies here  
16 --

17 CHAIRMAN KATZ: Right --

18 MR. CEDERBAUM: -- but by the same token if  
19 -- the cross-examination of those statements was of  
20 limited -- so, I think that it's -- the Town would prefer  
21 that it be admitted as a full exhibit. I see no prejudice  
22 in doing so.

23 CHAIRMAN KATZ: Can you get a copy for Mr.  
24 Marconi.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. CEDERBAUM: Yes. And just let me  
2 state, I thought that this had gone out to the service  
3 list electronically. I know we filed it with the  
4 commission with 20 copies. And I have 20 more of the  
5 unsworn statement. And apparently that didn't happen.  
6 May I approach?

7 CHAIRMAN KATZ: Yes. Let's go off the  
8 record for a moment.

9 (Off the record)

10 CHAIRMAN KATZ: Mr. Walsh, have you been  
11 provided with a copy?

12 MR. WALSH: I was provided with a copy of  
13 it this morning --

14 CHAIRMAN KATZ: Okay --

15 MR. WALSH: -- I did not have any record of  
16 receiving it previously --

17 CHAIRMAN KATZ: Okay --

18 MR. WALSH: -- and so indicated to Mr.  
19 Cederbaum.

20 CHAIRMAN KATZ: Do you have any objection  
21 to it being a full exhibit?

22 MR. WALSH: I have no objection.

23 CHAIRMAN KATZ: Okay. Is there any other  
24 party or intervenor who wishes to weigh in on whether it

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 should be a full exhibit? Okay, I'm going to -- we're  
2 going to go back off the record. I want to give Mr.  
3 Marconi a chance to review it and we'll go from there.

4 (Off the record)

5 CHAIRMAN KATZ: On the record. Mr.  
6 Cederbaum, for today we will take it in as a limited  
7 appearance. In the future if you'd like it as a full  
8 exhibit, we're going to ask you to provide a witness here  
9 in New Britain.

10 MR. CEDERBAUM: Thank you very much, Madam

11 --

12 MR. MARCONI: For cross-examination --

13 (pause) --

14 CHAIRMAN KATZ: Thank you, Mr. --

15 MR. CEDERBAUM: There's no rethinking of  
16 that decision -- (laughter) -- thank you very much.

17 CHAIRMAN KATZ: I always welcome Mr.  
18 Marconi's advice. Okay, that completes the towns I  
19 believe. Okay.

20 At this point we are going to go to DOT on  
21 their direct case, page 26 of the hearing program. Mr.  
22 Walsh, Miss Meskill, if we could have your witnesses come  
23 up.

24 MS. EILEEN MESKILL: Um-hmm.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Are there any witnesses  
2 that have not been previously sworn?

3 MS. MESKILL: Yes, there is one.

4 CHAIRMAN KATZ: Okay, we'll do that first  
5 when they come up to the table.

6 MR. MARCONI: If the attorneys want to sit  
7 with their witnesses they can --

8 CHAIRMAN KATZ: You may sit over there with  
9 your witnesses or you can stay here, whatever your  
10 preference is.

11 MR. ASHTON: It's easier to whisper over  
12 there.

13 CHAIRMAN KATZ: Yeah.

14 MS. MESKILL: That's true. (Laughter).

15 CHAIRMAN KATZ: They probably have the  
16 seats wired for electric shock. Okay, gentlemen, if you  
17 can identify yourself, give your name and spell your name,  
18 and then we're going to have Mr. Marconi swear in the new  
19 witness.

20 MR. ARTHUR GRUHN: I am Art Gruhn. I am  
21 the chief engineer for the Connecticut Department of  
22 Transportation. The spelling of my name is G-r-u-h-n.

23 MR. JOSEPH OBARA: I'm -- excuse me -- and  
24 I'm Joseph Obara, Manager of Design Service of Conn-DOT.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 And the last name is spelled O, B as in boy, a-r-a.

2 MR. JOHN CAREY: I'm John Carey, Manager of  
3 Traffic Engineering at Conn-DOT. The spelling of my name  
4 is C-a-r-e-y.

5 CHAIRMAN KATZ: And if you could just  
6 indicate which ones of you have been previously sworn.

7 MR. GRUHN: I have been.

8 CHAIRMAN KATZ: Mr. Gruhn said yes. And --

9 MR. CAREY: Yes.

10 CHAIRMAN KATZ: Yes. Okay. And we'll  
11 swear in the new witness.

12 MR. MARCONI: If the new witness could be  
13 please rise and raise your right hand

14 (Whereupon, Joseph Obara was duly sworn  
15 in.)

16 MR. MARCONI: Please be seated.

17 CHAIRMAN KATZ: Just -- you know, as a  
18 housekeeping matter, if we have you back, we like those  
19 little nameplates, they're very helpful.

20 MS. MESKILL: No problem.

21 CHAIRMAN KATZ: Okay.

22 MS. MESKILL: As a matter of procedure we  
23 have two exhibits --

24 CHAIRMAN KATZ: Yes --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MS. MESKILL: -- that need to be sworn.  
2 For the record, Assistant Attorney General Eileen Meskill  
3 for the Department of Transportation.

4 There's two new exhibits, Exhibit 12 and  
5 13. The first one is -- No. 12 is the DOT responses to  
6 the Council's request dated August 19, 2004. It's a  
7 letter from Mr. Gruhn and the maps that were attached,  
8 which I -- and the table of projects as well, that was  
9 included in that.

10 And the second was the prefilled testimony  
11 of Mr. Gruhn, that was dated September 24, 2004. And I'll  
12 ask Mr. Gruhn if he will verify that those are accurate to  
13 the best of his knowledge and belief?

14 MR. GRUHN: Yes, they are.

15 MS. MESKILL: And I would ask that they be  
16 marked as full exhibits.

17 CHAIRMAN KATZ: Mr. Gruhn, any updates or  
18 changes since you prefilled those?

19 MR. GRUHN: No, there are not.

20 CHAIRMAN KATZ: Great, thank you. Is there  
21 any objection to making DOT 12 and 13 full exhibits?  
22 Hearing none, they are full exhibits.

23 (Whereupon, DOT Exhibit No. 12 and No. 13  
24 were received into evidence as full exhibits.)

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Are your witnesses ready  
2 for cross-examination?

3 MS. MESKILL: Yes, they are.

4 CHAIRMAN KATZ: Great. We'll start with  
5 the Applicants.

6 MR. FITZGERALD: Madam Chairman, we don't  
7 have any cross on these recently filed exhibits and we  
8 refer the Council to our previous cross of the earlier  
9 testimony.

10 CHAIRMAN KATZ: Understood. Next,  
11 Representative Al Adinolfi. Not present. The Town of  
12 Middlefield. The Towns of Wallingford, Durham,  
13 Woodbridge, Milford, Orange, etcetera.

14 MR. DAVID BALL: No questions.

15 CHAIRMAN KATZ: Mr. Ball says no questions.  
16 The City of Norwalk, questions? No questions. The Town  
17 of Westport, Attorney Cederbaum.

18 MR. CEDERBAUM: Yes, ma'am, thank you.

19 CHAIRMAN KATZ: Let's get you -- let's put  
20 you down at the end of the table, Mr. Cederbaum.

21 MR. CEDERBAUM: Thank you, Madam Chairman.  
22 Eugene Cederbaum for the Town of Westport. I can't see  
23 all, but good morning.

24 We heard this morning from Miss Bartosewicz



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 -- if I pronounced that correctly -- that the two  
2 supplemental routes proposed by Conn-DOT came much -- or  
3 came significantly closer to the Applicants' proposed  
4 route. Speaking for those two routes in the Town of  
5 Westport, that is not true, is it?

6 MR. GRUHN: Let me just look at the map  
7 again --

8 MR. CEDERBAUM: Oh, sure.

9 CHAIRMAN KATZ: What I'm thinking of doing  
10 is maybe we can go off the record for a moment and we have  
11 a visual that we'll put up that might be helpful to the  
12 Council. Mr. Cunliffe, can we scotch-tape this up -- off  
13 the record.

14 (Off the record)

15 CHAIRMAN KATZ: Okay, on the record.  
16 Before we continue with the cross-examination by the Town  
17 of Westport, I'd just like the Applicant to just identify  
18 what this is up on the screen that we're going to use as  
19 an aid for discussing Westport. Mr. Prete.

20 MR. JOHN PRETE: What we are providing  
21 through presentation is the GIS similar to yesterday that  
22 shows different colors. And the different colors are  
23 representative of not only the proposed route through  
24 Segments 3 and 4, but the various options that were

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 proposed by C-DOT. And I would -- I would like to  
2 describe the dots since they got me in trouble yesterday -  
3 - (laughter) -- they were our attempts at getting linear  
4 lengths, so we just placed them on the GIS to really come  
5 up with the length of the line. That's all they are.

6 CHAIRMAN KATZ: Okay. And if you could --  
7 (laughter) -- and if you indicate what the color code is?

8 MR. PRETE: Sure. I think as we go through  
9 here -- I need George --

10 CHAIRMAN KATZ: Isn't that Silver Sands in  
11 Bridgeport --

12 A VOICE: Yeah, that's not --

13 CHAIRMAN KATZ: -- I mean Milford --

14 A VOICE: It's not Westport, I don't think  
15 --

16 CHAIRMAN KATZ: Okay --

17 MR. PRETE: Why don't you zoom out once and  
18 then maybe --

19 CHAIRMAN KATZ: Oh, I see -- okay, that's  
20 the Saugatuck -- okay --

21 MR. PRETE: -- the folks can help us with  
22 what option is which --

23 A VOICE: Is there a way you could take one  
24 bank of lights out -- (indiscernible) --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 COURT REPORTER: Hold it --

2 CHAIRMAN KATZ: Yes, we can do that -- Mr.  
3 Cunliffe, can we reduce some lighting behind the -- by the  
4 screen up here? No, right here -- (pause) --

5 A VOICE: But you can't see --

6 MR. ASHTON: We can see.

7 CHAIRMAN KATZ: No, we can see.

8 A VOICE: You can't see us, that's good --  
9 (laughter) --

10 CHAIRMAN KATZ: Okay, we are ready -- who's  
11 your witness, who's going to identify the color codes?

12 A VOICE: The color codes themselves --

13 CHAIRMAN KATZ: For the record?

14 A VOICE: I'm not sworn in, can I speak?

15 CHAIRMAN KATZ: Oh -- no. Let's -- tell  
16 Mr. Prete.

17 COURT REPORTER: One moment please.

18 (Pause). Thank you.

19 MR. PRETE: The -- I've been told that the  
20 colors are a deviation from the proposed route and as we  
21 walk through it, we'll be able to define whether that was  
22 synonymous with option 1, 2, or 3.

23 CHAIRMAN KATZ: Okay. (Pause). So what  
24 are you -- you're going to walk us through it first and

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 then Mr. Cederbaum will ask his questions? Is that how  
2 you want to do it?

3 MR. CEDERBAUM: Madam Chairman, I may be  
4 able to phrase my questions -- (indiscernible) --

5 COURT REPORTER: Wait a minute --

6 MR. PRETE: Zoom out quite a bit -- just go  
7 into Westport. (Pause). Okay, that's good. Can you just  
8 walk through with that hand where --

9 CHAIRMAN KATZ: Just a second, I think we  
10 we're still off the record here --

11 MR. PRETE: Walk through where the existing  
12 route is and then --

13 MR. CEDERBAUM: Okay, now?

14 CHAIRMAN KATZ: Okay, we're on -- (mic  
15 feedback) --

16 (Off the record)

17 CHAIRMAN KATZ: Okay, we're on the record.  
18 Mr. Cederbaum, you're going to phrase your questions that  
19 make this --

20 MR. CEDERBAUM: I may be able to phrase my  
21 questions --

22 CHAIRMAN KATZ: Okay --

23 MR. CEDERBAUM: -- in a way that will make  
24 life a little bit easier for all of us.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: We'll try that.

2 MR. CEDERBAUM: Okay. And my first  
3 question was far too broad, so let me -- let me say if we  
4 can agree that the proposed route through Westport is on  
5 the Post Road except for a little squiggle in the middle  
6 of town that avoids the immediate downtown area, and can  
7 we agree that that is the Applicants' proposed route, that  
8 it enters Westport on the Post Road, it leaves Westport on  
9 the Post Road except for an immediate downtown detour?  
10 Can we agree on that?

11 MR. GRUHN: Yes, I think we can agree on  
12 that.

13 MR. CEDERBAUM: Now, with respect to that  
14 reference, the original proposal that you submitted, is it  
15 true that that was a proposal that -- and of course that  
16 the Post Road is a commercial area through Westport --  
17 your first route was north of the Post Road -- primarily  
18 north of the Post Road through a residential area, is that  
19 correct?

20 MR. GRUHN: That is correct.

21 MR. CEDERBAUM: And that residential area  
22 was -- primarily consisted of two-lane residential roads?

23 MR. GRUHN: Correct.

24 MR. CEDERBAUM: Your second and third

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 proposed routes, which were through Westport very close to  
2 one another and south of the Post Road primarily on Greens  
3 Farms Road, is that correct?

4 MR. GRUHN: Greens Farm and Clapboard Hill.

5 MR. CEDERBAUM: Yes, that's correct. I'm  
6 sorry. Thank you. And those are two two-lane residential  
7 roads?

8 MR. GRUHN: Generally, yes.

9 MR. CEDERBAUM: And both -- all three of  
10 these alternate routes are through very heavily populated  
11 residential areas?

12 MR. GRUHN: Through populated residential  
13 areas, yes.

14 MR. CEDERBAUM: Okay, thank you very much.  
15 So that they really can't be characterized as they go  
16 through Westport as similar with respect to -- similar to  
17 -- withdrawn -- similar to the Applicants' proposed route  
18 which runs down the Post Road?

19 MR. GRUHN: We never characterized them as  
20 similar.

21 MR. CEDERBAUM: Thank you. Now, I realize  
22 that this project started as a homework assignment, but I  
23 do have a series of questions because the -- your  
24 proposals are being considered seriously at this point in

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 time as alternate routes. So bear with me, I don't --  
2 these series of questions are not being critical of Conn-  
3 DOT, but they nonetheless, I believe, need to be asked in  
4 the context of whether or not consideration of this  
5 proposal by the Council constitutes either a new  
6 application or a very significant amendment.

7 MR. WALSH: I -- I think -- well, if the  
8 questions are legal questions, I will be objecting. If  
9 it's asking --

10 MR. CEDERBAUM: They're not legal  
11 questions, but I -- I made that preface only so that this  
12 wasn't seen as a frontal attack on the integrity of your  
13 client. They are not.

14 CHAIRMAN KATZ: Why don't we just let him  
15 ask a question and then you can object if you feel it  
16 necessary. We encourage that politeness, so let's just --  
17 we'll keep going.

18 MR. CEDERBAUM: In -- in drafting these  
19 proposals for alternate routes was there any study done in  
20 Conn-DOT of the effect of these routes on -- for any  
21 collection of environmental or ecology data?

22 MR. GRUHN: No, there was not. That was  
23 not part of the assignment.

24 MR. CEDERBAUM: And again I understand and

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 that's why I made -- that's why I made my introductory  
2 remark. Was there any collection of data or analysis of  
3 historical or recreational information?

4 MR. GRUHN: No, there was not. That was  
5 not part of the assignment.

6 MR. CEDERBAUM: Did you provide any type --  
7 either draw up or provide to the Council any schedule of  
8 dates showing rights-of-way or property acquisitions or  
9 construction or completion plans were these proposals --  
10 any of these routes to be adopted by the Council?

11 MR. GRUHN: I'm not sure I understand the  
12 question.

13 MR. CEDERBAUM: Okay. Did you prepare --  
14 did you consider whether you would need to acquire any  
15 rights-of-way or easements or property with respect to  
16 these routes if they were to be adopted?

17 MR. GRUHN: No. The Department does not  
18 have the capability to design electric routes.

19 MR. CEDERBAUM: Okay. So the answer is you  
20 didn't consider the easement or property acquisition  
21 questions?

22 MR. GRUHN: No, we did not. That would  
23 have to be the Applicants' responsibility.

24 MR. CEDERBAUM: I understand. And it is



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 one of my point that you of course are not the Applicant  
2 or in the Applicants' shoes.

3 MR. GRUHN: That is correct.

4 MR. FITZGERALD: We'll stipulate to that.

5 (Laughter).

6 MR. CEDERBAUM: Very happily they'll  
7 stipulate to that -- well -- did you identify and/or  
8 contact any federal, state, regional, district, or  
9 municipal agencies with an interest in these routes?

10 MR. GRUHN: Other than the consultation  
11 with the towns, no, we did not.

12 MR. CEDERBAUM: And in your consultations  
13 with the towns, did you make any attempt to contact and  
14 speak with the chief executive officers of the towns?

15 MR. GRUHN: I'll defer that. Joe, you were  
16 at the meetings.

17 MR. OBARA: I don't believe we did any  
18 special effort in that respect.

19 CHAIRMAN KATZ: Can you just tell us who  
20 you did speak with in Westport?

21 MR. OBARA: I -- I don't recall the  
22 specific people.

23 CHAIRMAN KATZ: Do you recall --

24 MR. OBARA: It was a few weeks ago --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: -- what departments -- what  
2 town departments they worked for?

3 MR. OBARA: I believe it was Public Works  
4 and perhaps the town engineer, I'm not sure though.

5 CHAIRMAN KATZ: Okay, thank you.

6 MR. CEDERBAUM: The town engineer would be  
7 part of Public Works. And I know Mr. Edwards did meet  
8 with the team. And I believe that meeting took place on  
9 the 16<sup>th</sup> of September?

10 MR. OBARA: That sounds about right.

11 MR. CEDERBAUM: Okay. Did you consider and  
12 collect any data with regard to an assessment of EMF  
13 consequences, if any, of these routes?

14 MR. GRUHN: No. That is not within the  
15 capability of the Department.

16 MR. CEDERBAUM: Did you collect any data or  
17 make any projects about the estimated costs if a  
18 transmission line were laid on the proposed routes?

19 MR. GRUHN: No. That is not within the  
20 expertise of the Department.

21 MR. CEDERBAUM: Did you make any analysis  
22 or prepare any statement or advise the Council with  
23 respect to the fact that your -- any of your proposed  
24 routes would serve the public need for adequate, reliable,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 and economic service?

2 MR. GRUHN: If you are talking electrical  
3 service, no, we did not. That is not our capability.

4 MR. CEDERBAUM: Okay. Did you publish a  
5 summary of the proposed routes in any newspaper designed  
6 to inform the public of the routes at any time?

7 MR. GRUHN: No. That was not part of our  
8 assignment.

9 MR. CEDERBAUM: Did you advise the public  
10 or plan for any hearings on the proposed route, any of  
11 your proposed routes?

12 MR. GRUHN: No. That was not part of our  
13 assignment or the responsibility of the Department of  
14 Transportation.

15 MR. CEDERBAUM: Did you notify the general  
16 public via a separate enclosure in the electric bills of  
17 each customer which would be -- who would be affected by  
18 any of your routes were they to be adopted by the  
19 commission -- by the Council?

20 MR. GRUHN: No. The Department does not  
21 send out electric bills, we cannot do that.

22 CHAIRMAN KATZ: Too bad we don't have toll  
23 booths any more, you would have had a mechanism there.

24 (Laughter).

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. ASHTON: Don't raise the issue.

2 MR. GRUHN: I believe that's probably  
3 beyond the scope of the Siting Council at this point --  
4 (laughter) --

5 MR. ASHTON: Thank goodness.

6 MR. CEDERBAUM: And do you agree that the  
7 routes that you propose in Westport are also significantly  
8 different from the standpoint of the overwhelming -- the  
9 overwhelming mileage of residential areas versus  
10 commercial areas that your routes would entail?

11 MR. GRUHN: I cannot agree to that. I will  
12 say that the routes that the DOT proposed are in  
13 residential areas. And Route 1 is a combination  
14 residential/commercial area.

15 MR. CEDERBAUM: And in the presentation and  
16 preparation of your proposals was there any opportunities  
17 for municipalities to conduct public hearings prior to the  
18 consideration of these proposals by the Council?

19 MR. GRUHN: Again, that was not the  
20 assignment given to the Department of Transportation, so I  
21 cannot answer that question.

22 MR. CEDERBAUM: Well, you -- I'm sorry --  
23 it wasn't part of your assignment --

24 MR. GRUHN: That is correct --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. CEDERBAUM: -- but does that make you  
2 unable to answer the question?

3 MR. GRUHN: As far as whether somebody else  
4 gave opportunity to the community --

5 MR. CEDERBAUM: Okay -- no, I'm not -- of  
6 course you can't answer for anyone else. I was just  
7 asking whether Conn-DOT made any effort to --

8 MR. GRUHN: Conn-DOT did not make any  
9 effort, no. That was not part of the assignment.

10 MR. CEDERBAUM: And are these three routes  
11 in your opinion, do they constitute a substantial change  
12 in the location of the route from the proposed route of  
13 the Applicant?

14 MR. GRUHN: That would be a legal opinion  
15 and I cannot answer that.

16 MR. CEDERBAUM: Thank you, Madam Chairman.  
17 I have no further questions.

18 CHAIRMAN KATZ: Thank you, Mr. Cederbaum.  
19 Mr. O'Neill, you had a question?

20 MR. BRIAN O'NEILL: Yes. Mr. Gruhn -- am I  
21 on? Mr. Gruhn, I'm assuming that your assignment did not  
22 include any technical feasibility studies of whether or  
23 not the proposed alternative would work on a technical  
24 basis as far as laying cables down and having the proper

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 flow go through the --

2 MR. GRUHN: That is correct. As we have  
3 stated, our concern is the operation of the transportation  
4 system. The routes that we proposed would allow the  
5 State's transportation and regional transportation system  
6 to continue to operate without the impact of the  
7 installation and the future maintenance of the  
8 installation.

9 MR. O'NEILL: So you -- your assignment was  
10 basically just to review it on the basis of traffic?

11 MR. GRUHN: That is correct.

12 MR. O'NEILL: Thank you.

13 CHAIRMAN KATZ: Thank you. Next on the  
14 list is Assistant Attorney General Michael Wertheimer.

15 MR. MICHAEL WERTHEIMER: No questions,  
16 thank you.

17 CHAIRMAN KATZ: Mr. Wertheimer says no  
18 questions. The City of Bridgeport, questions for these  
19 witnesses.

20 MS. HOWLETT: Just one.

21 CHAIRMAN KATZ: Can you -- Mr. Cederbaum,  
22 can you give your colleague the seat there. After we  
23 complete this DOT portion, we will be doing EMFs from  
24 underground cable. And I urge the Segments 3 and 4 towns

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 to stay for that.

2 MS. HOWLETT: Melanie Howlett --

3 CHAIRMAN KATZ: Just a second and we'll get  
4 you -- okay, start over.

5 MS. HOWLETT: Melanie Howlett, Associate  
6 City Attorney for the City of Bridgeport.

7 Regarding your concerns about the  
8 transportation on state roads through these towns, isn't  
9 it not true that the responsibility of the traffic on the  
10 state roads is the responsibility of the municipality and  
11 not the State? Don't we control the traffic through local  
12 police?

13 MR. GRUHN: The State is responsible for  
14 assuring a safe and efficient transportation system on the  
15 state highway system. If it is part of the state highway,  
16 that remains the DOT's responsibility, and that is our  
17 concern.

18 MS. HOWLETT: But in terms of who actually  
19 regulates the traffic, the flow of traffic when there's a  
20 problem with bottlenecks or rerouting people or detours,  
21 the responsibility is the local police of the  
22 municipalities and not the State Police?

23 MR. GRUHN: As far as a legal definition, I  
24 cannot answer that. The Department is responsible for

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 making sure that any detours, any construction within the  
2 state highway system is done in a safe and efficient  
3 manner.

4 MS. HOWLETT: I'm not talking about the  
5 state highway, I'm not talking about 95, or Route 8, or  
6 the Merritt Parkway. I'm talking about the state local  
7 roads going through a residential neighborhood or a  
8 commercial neighborhood within the local municipality?

9 MR. GRUHN: Local roads are local  
10 responsibility. State highways are State responsibility.

11 CHAIRMAN KATZ: Miss Howlett, do you want  
12 to give a route number, would that be more helpful?

13 MS. HOWLETT: Route 1.

14 CHAIRMAN KATZ: Okay. Let's --

15 MS. HOWLETT: The Post Road or Boston  
16 Avenue going through -- state -- state -- state road --  
17 state -- excuse me -- state -- State Street going through  
18 Bridgeport.

19 CHAIRMAN KATZ: Okay. Mr. Gruhn, if you  
20 could take it from there --

21 MS. HOWLETT: It's a state road --

22 MR. GRUHN: Route 1 is a state highway and  
23 the State is responsible for Route 1 and the operations of  
24 traffic on Route 1.



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MS. HOWLETT: What I'm saying is, is it not  
2 true that if there is a traffic problem on those roads,  
3 that the traffic responsibilities in terms of detouring  
4 the traffic falls to the local police, that the state  
5 troopers do not take on that responsibility?

6 MR. GRUHN: If you are --

7 MS. HOWLETT: Or don't you know?

8 MR. GRUHN: If you are asking is  
9 enforcement the responsibility of the town and the  
10 municipality, yes, it is.

11 MS. HOWLETT: Thank you. That only took  
12 five minutes. Thank you very much.

13 CHAIRMAN KATZ: ISO New England, questions  
14 for these witnesses?

15 MR. ANTHONY MACLEOD: No questions, Madam  
16 Chairman.

17 CHAIRMAN KATZ: Mr. MacLeod says no  
18 questions. The Town of Fairfield, Attorney Kennelly,  
19 questions for these witnesses?

20 MS. KENNELLY: A few brief questions.

21 MR. LYNCH: Madam Chairman.

22 CHAIRMAN KATZ: Mr. Lynch.

23 MR. ASHTON: He hasn't got a mic yet.

24 CHAIRMAN KATZ: Joe, can we have Mr.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Lynch's --

2 MR. LYNCH: Just one -- just one follow-up  
3 question, a point of clarification. For state roads is  
4 maintenance and repair the responsibility of the DOT?

5 MR. GRUHN: Yes, it is.

6 MR. LYNCH: And as far as any type of  
7 detours or traffic does the DOT farm that out to the  
8 cities as far as extra duty or is that the responsibility  
9 of the police force or emergency fire?

10 MR. GRUHN: The DOT will issue a permit for  
11 any work within the state highway system. Under that  
12 permit it is a requirement that the permittee hire the  
13 appropriate traffic authorities whether it be State Police  
14 -- city police; an example, Route 1 through the City of  
15 Bridgeport, or it may even be private traffic men.

16 MR. LYNCH: Thank you.

17 CHAIRMAN KATZ: For the record.

18 MS. KENNELLY: Attorney Eileen Kennelly,  
19 Assistant Town Attorney of Fairfield.

20 I'd just like to lead us through a couple  
21 of the routes in Fairfield and ask you some questions  
22 about those.

23 CHAIRMAN KATZ: Can we have that.

24 MS. KENNELLY: I believe they're mostly up,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1       except I'm not sure I can see the original alternate that  
2       was suggested. The ones we're looking at now are, I  
3       believe, the more recent alternates that were suggested  
4       running along -- slightly off Route 1. There should be  
5       another line on there that was the original alternate  
6       suggested route, running up Park -- no, running up Park  
7       Avenue and across. Is that visible on this map? I'm  
8       sorry.

9                       Mr. Gruhn, can you answer, is that original  
10       proposed route visible on this map?

11                      MR. GRUHN: I cannot tell you. That's not  
12       my map. I have no idea what's on it.

13                      CHAIRMAN KATZ: Would the Applicant provide  
14       any help on this?

15                      MR. PRETE: The blue line.

16                      MS. KENNELLY: The -- is it the light blue  
17       line?

18                      MR. PRETE: I'll have the hand trace it  
19       down right now.

20                      MS. KENNELLY: Okay, thank you. (Pause).  
21       Okay. Mr. Gruhn, would -- would you be able to say  
22       whether you are aware of the part of the route to the  
23       west, the part closer to Westport, goes through a  
24       residential area of mostly two-lane roads?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. GRUHN: I believe most of the route is  
2 through residential area of two-lane roads.

3 MS. KENNELLY: Thank you. And with regard  
4 to the alternate part of the route down slightly off Route  
5 1 -- if we can just go south again and a little further to  
6 the east, okay -- may I ask what is the blue dotted line  
7 that shows on that map, a little bit up and towards  
8 Bridgeport there?

9 MR. GRUHN: Again, you would have to ask  
10 the Applicant that, I'm not sure.

11 MS. KENNELLY: Okay. Could someone tell us  
12 what the blue dotted line is there.

13 MR. PRETE: The blue -- the blue dotted  
14 line is neither of the Applicants' proposal or C-DOT's  
15 proposal.

16 MS. KENNELLY: Okay. Would you be aware of  
17 whether that is part of C-DOT's proposal because I don't  
18 believe it's part of the Applicants'?

19 MR. PRETE: No, I believe it's neither.

20 MS. KENNELLY: It is neither. I see, sir.  
21 Okay. With regard to the green dotted line that goes  
22 south of the Post Road -- yes, that area -- are you --  
23 were you aware of the fact that that is also largely a  
24 residential area?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. GRUHN: Yes, we are.

2 MS. KENNELLY: Are you aware that that is  
3 part of the Fairfield Historic District?

4 MR. GRUHN: I cannot answer that one way or  
5 the other.

6 MS. KENNELLY: Okay, thank you. May I ask  
7 why the -- well perhaps no one can answer this question  
8 who is here right now -- I was just wondering why the blue  
9 dotted line appeared if it was not a part of either the  
10 Applicants' or Conn-DOT's proposal?

11 MR. PRETE: This GIS is, among other  
12 things, kind of a work in progress. And this -- the blue  
13 dots were probably something that occurred early on in the  
14 application as a potential when we talked to the City of  
15 Bridgeport and Fairfield.

16 CHAIRMAN KATZ: So they are not subject to  
17 cross-examination at this point since they do not seem to  
18 be an active concept.

19 MS. KENNELLY: Okay, thank you.

20 CHAIRMAN KATZ: Is there any other party  
21 and intervenor who I did not call upon who wishes to  
22 cross-examine these witnesses? Seeing none, Mr. Cunliffe,  
23 do you have any questions?

24 MR. CUNLIFFE: Yes, I do. In your prefiled

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 testimony, Mr. Gruhn, Question No. 6, page 3, it says if  
2 no other feasible alternative route would be practical and  
3 the state highway system would be the most efficient  
4 manner to place a transmission line, that you would  
5 continually work with the Applicant in the parameters of  
6 that construction, is that correct?

7 MR. GRUHN: That is correct.

8 MR. CUNLIFFE: And could you update us to  
9 where the Phase I 217 is in your encroachment agreement?  
10 Are you still working out details for that?

11 MR. GRUHN: Yes, details are still being  
12 worked out. We have had meetings with the Applicant,  
13 DPUC, and the Siting Council regarding the various points.

14 MR. CUNLIFFE: And this would be probably a  
15 good model that you're working on that could be transposed  
16 to Docket 272?

17 MR. GRUHN: Yes. The idea is that it would  
18 be a uniform application -- as much uniformity as you can,  
19 obviously different construction techniques. Different  
20 areas require some different things, but generally it  
21 would follow the same guidelines.

22 MR. CUNLIFFE: Thank you. Those are my  
23 questions.

24 CHAIRMAN KATZ: Thank you. Mr. Emerick.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. BRIAN EMERICK: Yes. Mr. Gruhn, with  
2 respect to that effort of coming to an agreement on 217,  
3 is there any time schedule for that?

4 MR. GRUHN: I do not have one at this point  
5 in time. No, some of it involves legislation which would  
6 not be acted upon until the Legislature reconvenes in  
7 January.

8 MR. EMERICK: In 217 the location of the  
9 splice vaults, does that represent the same complication  
10 as it does for the proposal currently before the Council?

11 MR. GRUHN: Yes. Basically, the splice  
12 vaults in the roadway with the condition that they have a  
13 24-hour a day splicing operation for two to three weeks  
14 period of time creates a significant impact to the  
15 transportation system, especially during rush hour, peak  
16 travel periods, commercial areas during the day when the  
17 businesses are open, so that is a very significant  
18 concern.

19 MR. EMERICK: Are you looking to attempt to  
20 resolve that or is the resolution in that matter to locate  
21 it out of the right-of-way?

22 MR. GRUHN: We have suggested to Northeast  
23 Utilities that wherever feasible, it should be located  
24 outside of the right-of-way. In 217 most of the chambers

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 are outside of the right-of-way. As far as I know, the  
2 design and planning for this particular application has  
3 not gone to the point of actually locating specific  
4 chambers.

5 MR. EMERICK: But given your statements the  
6 last time in terms of the roadway and the right-of-way  
7 essentially being the same and your desire not to have  
8 them in the roadway, it would suggest that they have to be  
9 out of the right-of-way --

10 MR. GRUHN: That is correct. There may be  
11 locations where Northeast Utilities would have to obtain  
12 right-of-way or rights to install the chambers.

13 MR. EMERICK: And are there any discussions  
14 directed at trying to ameliorate some of your concerns  
15 about locating the splice vaults or is that kind of an  
16 unresolved -- an issue that can't be resolved to your  
17 satisfaction?

18 MR. GRUHN: Again, that's something that  
19 would probably be done during the actual design phase of  
20 the application once the final route is determined. The  
21 preference of the Department is to have the chambers  
22 outside of the travel-way of the roadway because of the  
23 need to have 24-hour a day operations while splicing is  
24 occurring and while repair is being done.



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. EMERICK: Okay. Thank you very much.

2 CHAIRMAN KATZ: Mr. Heffernan.

3 MR. GERALD J. HEFFERNAN: No questions.

4 CHAIRMAN KATZ: Mr. O'Neill.

5 MR. O'NEILL: What is the width of your  
6 right-of-way along the section of Post Road in Westport?

7 MR. GRUHN: It all depends on where you  
8 are. It varies all over the place.

9 MR. O'NEILL: Is there much variation off  
10 the roadway itself? I know there's two lanes going  
11 sometimes into one lane.

12 MR. GRUHN: Again, you have to look at the  
13 specific location. These rights-of-way are all extremely  
14 old, some are very narrow, some the State has acquired  
15 additional rights as the result of construction projects  
16 and other activities. So without knowing a specific  
17 location, I cannot tell you exactly where the right-of-way  
18 is or what the width is.

19 MR. O'NEILL: So when you're suggesting  
20 that traffic would be disrupted, it would be disrupted in  
21 some areas more than others given the variation of the  
22 width of the right-of-way, would it not?

23 MR. GRUHN: As long as the installation was  
24 in a travel lane of the highway, traffic would be

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 disrupted.

2 MR. O'NEILL: And -- so you're suggesting  
3 that the right-of-way is limited to the traffic lanes?

4 MR. GRUHN: No. The right-of-way goes  
5 beyond the traffic lanes in some locations. In some areas  
6 we may be built out virtually to the right-of-way,  
7 especially in intersections. So it's very -- again, I  
8 cannot tell you unless I know a specific location and have  
9 the right-of-way maps.

10 MR. O'NEILL: Okay. So you don't know if,  
11 in fact, the extent of the right-of-way may go beyond the  
12 roadway for a mile or half a mile or 50 feet because you  
13 don't have the maps in front of you?

14 MR. GRUHN: No. And that would be  
15 something the Applicant would have to work with as they're  
16 designing the project.

17 MR. O'NEILL: Thank you.

18 CHAIRMAN KATZ: Okay. Mr. Ashton, we'll  
19 take you next.

20 MR. ASHTON: Thank you. Mr. Gruhn,  
21 referring to your question and answer No. 6 in your  
22 prefiled testimony, at the end of the question you refer  
23 to, quote, "the proposed 345-kV transmission line". Are  
24 you referring to an overhead line at that portion?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. GRUHN: No, that portion refers to the  
2 undergrounding.

3 MR. ASHTON: Well as you read the question  
4 -- let me read it if I may -- it says if the Applicants  
5 are constrained for technological reasons to construct the  
6 underground portion of the proposed 345-kV transmission  
7 line within state highway right-of-way, would the DOT  
8 object to the use of the right-of-way for the proposed  
9 345-kV transmission line? I don't understand the question  
10 then. It -- if you're saying the proposed line refers to  
11 the underground, it's a circular question, isn't it?

12 MR. GRUHN: I'm not sure I understand your  
13 question. (Laughter).

14 MR. ASHTON: Well, let me -- okay -- if I  
15 may I'm going to insert -- for the words proposed 345-kV  
16 transmission line, I'm going to insert the word  
17 underground there and then read the question; it says if  
18 the Applicants are constrained for reasons to construct  
19 the underground portion of the proposed transmission line  
20 within the state highway right-of-way, would the DOT  
21 object to the use of the right-of-way for the proposed  
22 underground transmission line? It doesn't make sense to  
23 me. What does that question ask?

24 MR. GRUHN: I believe the -- the question

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 was crafted to address if -- and it probably could have  
2 been a little clearer now that you've raised the question  
3 -- if the undergrounding on alternate routes was  
4 constrained --

5 MR. ASHTON: Oh --

6 MR. GRUHN: -- because of technological  
7 reasons.

8 MR. ASHTON: Oh, okay. Okay. So if -- it  
9 refers to --

10 MR. GRUHN: That was --

11 MR. ASHTON: That makes --

12 MR. GRUHN: That's what the intent was.

13 MR. ASHTON: Thank you, that makes it much  
14 clearer. An odd ball question. Does the -- does Conn-DOT  
15 recommend the use of aluminum underground?

16 MR. GRUHN: We -- we have used it on some  
17 drainage installations. There are certain concerns with  
18 the use of aluminum depending upon soil conditions. And  
19 when designing for the use of that type of material, you  
20 have to take into consideration the soil conditions that  
21 will be reactive with the aluminum.

22 MR. ASHTON: And -- for example, if I  
23 buried a plate in the ground, what -- would you expect  
24 that there would be electric -- galvanic corrosion of that

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 plate?

2 MR. GRUHN: Again there could be depending  
3 upon the soil conditions and what those soil conditions  
4 were. I --

5 MR. ASHTON: Would that be a material risk?

6 MR. GRUHN: If the soil conditions were not  
7 the appropriate ones for the use of aluminum, yes.

8 MR. ASHTON: Okay. In laying out the C-DOT  
9 alternative was there any consideration given in the  
10 design of that alternative to anything other than traffic  
11 conditions?

12 MR. GRUHN: No, there was not.

13 MR. ASHTON: Okay. Mr. Walsh in his cross-  
14 examination raised a few things that I'd like to pose on  
15 to you. Does the DOT own or operate any overhead or  
16 underground electric lines, for example the railroad --  
17 the electrified railroad?

18 MR. GRUHN: The --

19 MR. ASHTON: Or street lighting?

20 MR. GRUHN: The DOT does -- on Metro North  
21 we own and operate the -- or we own the catenary system,  
22 that is a DOT system.

23 MR. ASHTON: Okay.

24 MR. GRUHN: That is the only area that I'm

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 aware of other than signal light power feeds.

2 MR. ASHTON: Street lighting?

3 MR. GRUHN: Street lighting on limited  
4 access highways, yes.

5 MR. ASHTON: Okay. Does the DOT have any  
6 prohibition or warnings on the use of TV's, microwave  
7 equipment, or fluorescent lights that you're aware of?

8 MR. GRUHN: The only thing I'm aware of is  
9 with fluorescent lights, the disposal of the fluorescence  
10 for mercury.

11 MR. ASHTON: Okay.

12 CHAIRMAN KATZ: I'm waiting for the trap to  
13 shut.

14 MR. ASHTON: Do you personally use TV's,  
15 microwaves, electric blankets, fluorescent lights in your  
16 own home?

17 MR. GRUHN: Not electric blankets.

18 MR. ASHTON: Not electric blankets. Okay,  
19 I won't touch that one. Thank you very much. That's all  
20 I have. Thank you, Madam Chairman.

21 MR. O'NEILL: (Indiscernible) -- a follow-  
22 up question.

23 CHAIRMAN KATZ: Yeah. Can I first then you  
24 second. Mr. Gruhn, if -- if this Council determined that

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 we needed to have some type of shielding material in the  
2 right-of-way between the underground cable and the road or  
3 sidewalk above, would DOT have to be involved in that  
4 decision on what that material would be?

5 MR. GRUHN: We -- we would be concerned  
6 about its impact on future use of the right-of-way, so we  
7 would request that we be consulted. You know, generally,  
8 for example, burying a plate of some type would not, that  
9 I can think of, create a major problem, but we would like  
10 to be consulted just to make sure there's not a  
11 significant issue at a particular location.

12 MR. ASHTON: Could that create a galvanic  
13 cell?

14 MR. GRUHN: I am not an electrical  
15 engineer, so I can't remember that far back --

16 MR. ASHTON: I won't push --

17 MR. GRUHN: -- to my college days  
18 unfortunately.

19 MR. ASHTON: I won't press.

20 CHAIRMAN KATZ: That -- that required one  
21 semester of EE. Mr. O'Neill.

22 MR. O'NEILL: Yes. Mr. Gruhn, I've noted  
23 that along the railroad right-of-ways in the State of  
24 Connecticut along the power line poles there are often

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 signage giving warnings danger high voltage wires. Would  
2 you explain why those signs are there, what is the intent,  
3 and who mandated the placement of those signs?

4 MR. GRUHN: Most of those signs on the  
5 cataneries were originally placed by the Penn Central  
6 Railroad. And then as the various railroads went into  
7 bankruptcy, the Department eventually took it over. The  
8 basic reason for the signs is there has been a tendency  
9 for people to climb the catanery towers and become  
10 electrocuted and they are there to warn people that there  
11 is high voltage -- high voltage power. There may be some  
12 signs along the right-of-way. There are some UI poles.  
13 And I cannot answer why there are or are not signs on the  
14 UI poles.

15 MR. O'NEILL: Has the DOT ever been  
16 involved with electromagnetic fields or studies regarding  
17 electromagnetic fields?

18 MR. GRUHN: None that I'm aware of. The  
19 first I've gotten involved really in it is in these  
20 hearings.

21 MR. O'NEILL: Thank you.

22 CHAIRMAN KATZ: Mr. Murphy.

23 MR. JAMES J. MURPHY, JR.: No questions.

24 CHAIRMAN KATZ: Mr. Lynch.



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. LYNCH: No questions.

2 CHAIRMAN KATZ: Okay. Any further  
3 questions from anyone of these witnesses? Any redirect?

4 MR. WALSH: I'd just like one question for  
5 clarification and this is for anyone on the panel. Did  
6 the DOT when they provided their alternate design, try and  
7 pick as straight as route as possible for constructability  
8 purposes?

9 MR. GRUHN: That was the intent, especially  
10 with the alternate routes.

11 MR. WALSH: So when the DOT did in fact  
12 look or propose an alternate route, it wasn't limited  
13 solely to traffic concerns, it was also looking somewhat  
14 with an eye towards constructability, correct?

15 MR. GRUHN: Well, yes -- yes.

16 MR. WALSH: Alright, thank you. No further  
17 questions.

18 CHAIRMAN KATZ: I thought you were going to  
19 ask him if there were any parades on the alternate routes  
20 -- (laughter) -- okay --

21 MR. LYNCH: I do have one question.

22 CHAIRMAN KATZ: Mr. Lynch.

23 MR. LYNCH: Would the type of cable make  
24 any difference to Conn-DOT as far as its application in

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 this -- or rather its -- how it would design the -- how  
2 the Applicant would design the cable rather for Conn-DOT?

3 MR. GRUHN: The only -- the only thing that  
4 I can see that would make a difference -- and again I'm  
5 not an electrical engineer and I'm not an expert in that -  
6 - one of our big concerns we have stated is the length of  
7 time for splicing. If the type of cable affects the  
8 length of time for splicing, that may or may not have a  
9 bearing on what -- how -- what effect it would have on  
10 traffic operations.

11 MR. LYNCH: Thank you.

12 CHAIRMAN KATZ: Any other redirect? I  
13 think we are completed with these witnesses. Thank you  
14 very much. Let's go off the record for a moment.

15 COURT REPORTER: Off the record.

16 (Off the record)

17 CHAIRMAN KATZ: (Indiscernible) -- in the  
18 house?

19 COURT REPORTER: On the record.

20 A VOICE: I just saw him in the hallway --

21 CHAIRMAN KATZ: Okay. We -- well, we'll --  
22 let's go back off the record.

23 (Off the record)

24 CHAIRMAN KATZ: One of the coming

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 attractions -- after lunch we will have a continuation of  
2 what we don't finish by noon. We are going to allow  
3 cross-examination after lunch of the gigawatt information  
4 that the Applicant provided. And also we are going to  
5 have the -- the staff is going to give the Council report  
6 on the 12-C Cost Socialization Process.

7 Okay. Mr. Fitzgerald, were you able to  
8 provide copies to the Segments 3 and 4 towns of the  
9 exhibit that you showed the Council yesterday, 161, 162,  
10 etcetera?

11 MR. FITZGERALD: Well, they were -- they  
12 were e-mailed to the entire service list.

13 CHAIRMAN KATZ: Okay.

14 MR. FITZGERALD: There were a number of  
15 hard copies here yesterday to be passed out.

16 CHAIRMAN KATZ: Yes.

17 MR. FITZGERALD: So, I -- I think that -- I  
18 think that everybody -- everybody who was here yesterday  
19 who was interested got one.

20 CHAIRMAN KATZ: Okay. I just want to  
21 indicate to those towns that we just got it yesterday and  
22 you all apparently just got it and I will allow cross-  
23 examination of it in the future, but I wanted to get the -  
24 - I wanted to get started so to speak on that -- on that

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 point. I believe we verified those exhibits yesterday,  
2 correct?

3 MR. FITZGERALD: Yes, we did.

4 CHAIRMAN KATZ: Okay.

5 MR. FITZGERALD: By the way, I might note -  
6 - yesterday I also ran through a litany of information  
7 that was in the record already. It occurred to me  
8 afterwards that there's also information on XLPE magnetic  
9 fields specifically in Appendix 2 to the application in  
10 Docket 217.

11 CHAIRMAN KATZ: Okay.

12 MR. FITZGERALD: So if you're interested,  
13 you might want to look there.

14 CHAIRMAN KATZ: We can -- we can go through  
15 the list and then we can do Council questions.  
16 Representative Al Adinolfi. Not present. The Town of  
17 Middlefield -- well, I'm going to do this, can I have a  
18 show of hands of any parties and intervenors who wish to  
19 cross-examine the Applicant on these new exhibits. Mr.  
20 Ball, why don't we start with you. And do you want to --  
21 Mr. Cunliffe, do you have questions?

22 MR. CUNLIFFE: I have a couple.

23 CHAIRMAN KATZ: Okay.

24 MR. BALL: Thank you. David Ball for the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Town of Woodbridge. I have just a few questions about  
2 this.

3 I'd like to ask questions about the PDC  
4 Report. I'm not sure what exhibit number it is of the  
5 document that was handed out yesterday.

6 CHAIRMAN KATZ: Before you go any further,  
7 Mr. Cunliffe, what number did we give the PDC magnetic  
8 field calculations?

9 MS. BARTOSEWICZ: 162.

10 CHAIRMAN KATZ: 152, thank you --

11 MS. BARTOSEWICZ: Sixty --

12 MR. PRETE: One-sixty-two.

13 CHAIRMAN KATZ: One-sixty-two.

14 MR. BALL: There are apparently a number of  
15 EMF calculations in this chart and I'd just like to ask  
16 what assumptions went into those calculations?

17 DR. GARY JOHNSON: Okay. Gary Johnson.  
18 The calculations assume -- actually, if -- in general they  
19 assume balance loading, depths vary between three feet  
20 over the vault, I think up to eight feet over the vault.  
21 The specific cases, they talk about loading currents.  
22 These would be the typical loads that would be expected  
23 for the 15-gigawatt case for the two different depths that  
24 are discussed.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. BALL: Aside from assumptions like  
2 depth, which are unique to undergrounding, are the load  
3 assumptions the same as the assumptions that you made when  
4 you did your calculations for overhead EMF numbers at the  
5 15-gigawatt case?

6 DR. JOHNSON: Okay, the assumptions for the  
7 15-gigawatt case and the loadings that would be produced  
8 if these cables were the route in place would be the same.

9 MR. BALL: Okay. Now just so that I'm  
10 clear on this, the calculations that we have in this first  
11 document do not include any mitigation measures, is that  
12 right?

13 CHAIRMAN KATZ: For underground?

14 MR. BALL: For underground.

15 CHAIRMAN KATZ: Maybe you can explain what  
16 mitigation you're asking about.

17 MR. BALL: Well, why don't I ask this  
18 differently. Tell me -- why don't we discuss what  
19 mitigation measures are possible with EMF underground?  
20 I'll lead into it.

21 DR. JOHNSON: Okay, that's -- that becomes  
22 a very broad question. Going back to the document,  
23 probably closer to your original question, for these cases  
24 discussed in Exhibit 162, they're using two cables for

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 each phase -- or two conductors for each phase of the  
2 underground circuit. By doing that, that allows them to  
3 do an optimal phasing to reduce the magnetic fields over  
4 the cable. So in terms of the levels and the numbers  
5 produced in this document, it is using like an optimized  
6 phasing solution to reduce the magnetic field, but that  
7 basically is the limit of the reduction methods. It does  
8 mention at the end the possible use of a steel plate, but  
9 calculations were not done for that.

10 MR. BALL: Okay --

11 CHAIRMAN KATZ: And -- may I follow up, Mr.  
12 Ball?

13 MR. BALL: Yes.

14 CHAIRMAN KATZ: Do we have any idea what a  
15 steel plate would do in the way of --

16 DR. JOHNSON: It mentions in general in the  
17 document that a steel plate would give roughly a factor of  
18 two reduction, but that would be directly over the cable.  
19 As you go out to the sides, that level of reduction would  
20 be -- become less and less and eventually disappear.

21 CHAIRMAN KATZ: So it's safe to say the  
22 mitigation is only directly under the plate itself?

23 DR. JOHNSON: Directly under, directly  
24 over, however you want to look at it.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Okay. Yes, Mr. Emerick.

2 MR. EMERICK: As I mentioned yesterday, I  
3 thought we had testimony in the past about a high quality  
4 aluminum product or shield?

5 DR. JOHNSON: You could also use an  
6 aluminum plate. The difference -- you get into two  
7 different methods of shielding. And probably shielding is  
8 to some extent a misnomer in terms of magnetic field  
9 shielding. It's actually magnetic field restructuring or  
10 cancellation. Shielding, you know, implies like a total  
11 blocking or sort of elimination of the field. In the  
12 typical methods of magnetic field shielding, what you're  
13 doing is either sort of redirecting the magnetic field,  
14 moving it somewhere else, flux shunting would be that,  
15 that uses ferromagnetic material like steel plate, iron.

16 The other method is more field  
17 cancellation. That uses a conductive material like  
18 aluminum or copper. And the method by which it works is  
19 the magnetic field itself induces eddy currents in the  
20 conductive material, which in turn produce their own  
21 magnetic field, which acts in opposition to the applied  
22 magnetic field, canceling out a portion of it.

23 The bottom line is both methods can reduce  
24 the magnetic field for particular conditions and



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 geometries on the other side of the material. The long  
2 winded answer is they reduce the magnetic field in certain  
3 cases.

4 COURT REPORTER: One moment please.  
5 (Pause). Thank you.

6 CHAIRMAN KATZ: Mr. Wilensky.

7 MR. EDWARD S. WILENSKY: Yes. What is the  
8 longevity of these plates, whatever you referred to,  
9 whatever type you use, aluminum or whatever? I thought  
10 the -- is it a short -- a short shelf life shall we say?

11 DR. JOHNSON: As Mr. Ashton eluded to I  
12 think in some of his questions this morning, it's --

13 MR. WILENSKY: Alright, I wasn't here this  
14 morning, sorry --

15 DR. JOHNSON: Oh --

16 MR. WILENSKY: -- so, I didn't hear that  
17 answer.

18 DR. JOHNSON: In the past these methods  
19 have been used in limited applications, and limited  
20 locations typically for very short distances say in  
21 buildings where you have a particular piece of equipment  
22 that you -- that's sensitive to magnetic fields that you  
23 may want to shield. So in that case, you have a dry  
24 environment or a protected environment. Use of these

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 methods in -- essentially in an outdoor underground  
2 facility, to my knowledge, has not been used. There have  
3 been short-term tests. But something that would get at  
4 the question of like lifetime, when you face questions of  
5 corrosion, mechanical abuse, those we have no experience  
6 with. Mr. Ashton eluded to questions of, you know, how  
7 long is an aluminum plate going to last in the ground.  
8 That's going to depend on how it's protected, how it's  
9 installed, and it gets into a whole host of construction  
10 and installation issues, of which to my knowledge we have  
11 very little experience.

12 MR. WILENSKY: In the City of New York  
13 there are a lot of underground cables. Do they do  
14 anything such as this, such as plate over their  
15 underground cable? Would you know? Do you have any  
16 knowledge of that, or --

17 DR. JOHNSON: I have no direct knowledge,  
18 no.

19 MR. WILENSKY: Okay. Thank you very much.  
20 Thank you, Madam Chairman.

21 CHAIRMAN KATZ: Thank you. Mr. Emerick.

22 MR. EMERICK: Yeah, just to follow up in  
23 terms of the difference between the plating and the  
24 potential reduction. Is there a difference between steel

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 and aluminum or are we talking basically the same amount  
2 of reduction?

3 DR. JOHNSON: No. It's two completely  
4 different techniques. The steel is flux shunting and  
5 that's -- for underground cable, some of the limited tests  
6 that we've done show about a factor of two in a typical  
7 application. Aluminum plating could give you directly  
8 over the cable, like above it on the ground, potentially a  
9 reduction of about five. Both of these methods for the  
10 plate though will drop off and reduce as you go out to the  
11 sides.

12 MR. EMERICK: But in terms of each of these  
13 methods as you just really indicated, I'd almost view it  
14 as being somewhat experimental given that there isn't a  
15 lot of application for it in what we're talking about  
16 here. I mean would you consider it to be -- while the  
17 theory is there and the applications have been used in  
18 other places in terms of applying it in this situation, I  
19 judge it to be more experimental.

20 DR. JOHNSON: I would consider it  
21 definitely experimental. We know theoretically what can  
22 be achieved, but we have no long-term experience in this  
23 type of application.

24 MR. EMERICK: Okay, thank you.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Mr. O'Neill.

2 MR. O'NEILL: You referred to your limited  
3 testing. Could you elaborate on your limited testing  
4 experience?

5 DR. JOHNSON: Tests that I've been involved  
6 with at the high voltage transmission research center has  
7 looked at steel plates, different quality steel plates,  
8 aluminum plates, copper plates, different thicknesses.  
9 Typically, about the greatest size we went to were four-  
10 by-eight sheets. We have also had some experience in  
11 using these techniques to shield like an office area or a  
12 room in the situation where there was bus work directly  
13 underneath the floor and you had some sensitive equipment  
14 in the room that had to be operated. So in that respect  
15 we have the level of shielding that can be obtained for  
16 different size and thicknesses of sheets and how that  
17 shielding will drop off as you go toward the edges of the  
18 sheet. So from that -- and also we have some information  
19 on what you have to do to connect these sheets to cover a  
20 larger area and how those different techniques hold up  
21 over time. The bottom line, what we found is unless you  
22 almost -- essentially, unless you weld the sheets together  
23 and have a very good almost --

24 MR. O'NEILL: Seamless

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 DR. JOHNSON: -- seamless connection  
2 between them, the shielding is really limited to that  
3 continuous piece of sheet. So if you have a gap, it's  
4 going to break the shielding. Even if you bridge that gap  
5 with like fasteners or try to bolt the sheets together,  
6 over time, and time being a few months, that will fail.

7 MR. O'NEILL: Given the experience that  
8 you've had, do you have any specific recommendations as  
9 far as the type of metallurgy or thickness that would give  
10 the optimum protection for people standing directly over a  
11 vault for example?

12 DR. JOHNSON: That -- that literally is  
13 going to come down to the configuration of the conductor  
14 and the vault because that will influence your choice of  
15 material. There are some orientations that steel would be  
16 essentially the best choice. Other orientations of the  
17 conductors that the conductive material or aluminum plate  
18 would be the more effective or preferred choice. In some  
19 applications it really would require both materials to be  
20 used in a sandwich type layer.

21 MR. O'NEILL: Could you explain what the  
22 different recommendation might be depending upon it being  
23 fluid filled or a solid cable conductor? Would there be  
24 any different type of shielding you'd recommend if it was

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 a fluid filled cable or a solid --

2 CHAIRMAN KATZ: HPFF as opposed to XLPE?

3 MR. O'NEILL: Yes.

4 DR. JOHNSON: Well, okay. There you're  
5 getting into almost a whole different arena of questions  
6 because the HPFF cable, in and of itself, is really using  
7 two techniques to reduce the magnetic fields. And it's  
8 almost the situation where you have the three conductors  
9 in very close proximity. Because of its nature the HPFF  
10 cable will have the three conductors in close proximity,  
11 which will reduce the separation between the centers of  
12 the conductors. That's one technique that you use to  
13 reduce the fields, get the cables as close as you can.  
14 Then on top of that it's encased in a steel pipe. And the  
15 combination of the two, close proximity and the steel  
16 pipe, is going to give you almost a double impact of field  
17 reduction. Now in addition to that, I suppose you could  
18 put another layer of steel between that pipe, but because  
19 you already have steel totally around the cable, you've  
20 gotten most of the impact and advantage right there. By  
21 putting another steel plate say in the ground above it,  
22 you would reduce the field further. Because of the  
23 geometry of the cables, steel probably would be in that  
24 case the preference over aluminum.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. O'NEILL: Would you consider that  
2 redundancy to be preferable from an engineering point of  
3 view or not --

4 DR. JOHNSON: I --

5 MR. O'NEILL: -- having a steel plate over  
6 the top of a steel encased cables? Would you make that  
7 recommendation or --

8 DR. JOHNSON: It's almost like wearing  
9 suspenders and a belt.

10 MR. O'NEILL: Thank you.

11 CHAIRMAN KATZ: Thank you. Dr. Johnson,  
12 just -- (pause) --

13 MR. LYNCH: Dr. Johnson, let me just see if  
14 I understand this correctly. If you're going to use any  
15 type of plating in an uncontrolled environment or even a  
16 controlled environment, you're going to have to -- to  
17 prevent seams, you're going to have to do some type of  
18 overlapping or what -- you said sandwiching? Could you  
19 explain that?

20 DR. JOHNSON: Well -- okay -- actually, two  
21 different things. For -- to continue the effectiveness of  
22 the shield, say if we're using four-by-eight sheet plates  
23 or some standard size, to continue the effectiveness of  
24 that shielding from one section to the next, you basically

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 need to weld those plates together to have it extend.  
2 Otherwise, you're going to have like a four-by-eight sheet  
3 and then at that gap, even if it's a very small amount of  
4 gap between that and the next plate, you're going to have  
5 essentially leakage of the field through that gap, so you  
6 need to weld the plates together.

7 In addition, another technique you can use  
8 to further the shielding in some cases, depending on the  
9 orientation of field, so this would depend on whether the  
10 cable is installed say in a flat horizontal arrangement, a  
11 vertical arrangement in the ground, or something in  
12 between, like a delta or L-shaped arrangement in the duct  
13 bank, depending on which one of those configurations you  
14 used, that would shift the choice either more toward steel  
15 being more effective or aluminum being more effective. In  
16 some cases the orientation may be such that neither one is  
17 the best choice. And so in that case, you would want to  
18 layer -- have a layer of steel, a layer of aluminum. And  
19 in that case, you would basically create like a sandwich.  
20 On top of that, as has been sort of eluded to this  
21 morning, there are construction and maintenance issues,  
22 which I can let some of these people get into, but  
23 basically you've got to protect the plates from corrosion,  
24 long-term corrosion.



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. LYNCH: Thank you.

2 MR. ROGER ZAKLUKIEWICZ: Mr. Lynch, on  
3 continuous lengths of steel plating, it would have to be  
4 similar to a steel pipe. And I believe as we described in  
5 217 and possibly in this docket also, piping itself for  
6 HPFF would probably come in in lengths of pipe  
7 approximately 40-foot long. When you're joining the two  
8 pieces of pipe, you have to weld each piece of pipe. And  
9 each 40-foot section of pipe also has a protective mastic  
10 on it, which prevents then the direct contact of the steel  
11 with earth. Once the welds are made, they are sanded down  
12 and then you apply a mastic, so you have a continuous  
13 mastic so no piece of the pipe from point A to point B is  
14 actually in direct contact with earth. In the case of the  
15 steel plates now, you would have to have those steel  
16 plates -- during the purchase of them also to be covered  
17 with a mastic, otherwise the plating is going to corrode  
18 in the soil. Where there's any amount of DC current  
19 flowing in the soil you will get that metal giving up its  
20 electrons to the surface which is a disintegration of the  
21 material itself. So you would -- you would have to --  
22 once the plates are in place above the cable sections, you  
23 would now have to weld those plates. And in addition,  
24 once the weld is made, you would have to figure out some

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 way of putting the mastic both beneath the plate and above  
2 the plate to keep it from corroding, otherwise at every  
3 one of the joints where you have welding, the welds -- you  
4 are going to have at those points a disintegration of the  
5 plate materials.

6 Where -- where they have been installed to  
7 date to my knowledge, they have been in very small  
8 sections lengthwise, and what we've used there is  
9 sacrificial anodes for which the material every two years,  
10 three years, four years is physically replaced, which  
11 provides the protection or cathodic protection for the  
12 plating. What we're talking here with a continuous run,  
13 the ability to use anodes is no longer there. And that's  
14 why just like with HPFF piping you turn around and put a  
15 mastic on it and do testing every six months to a year to  
16 make certain you do not have voids of the mastic, which  
17 you're able to test for and pick up for. This would be  
18 the same thing.

19 The difficulty here is in the case of the  
20 HPFF piping you have no corrosion going on from the inside  
21 out. In other words, it's under pressure, it's under the  
22 pressure of the dielectric fluid and so you don't have a  
23 corrosion on the inside, you're just worried now about the  
24 corrosion of the pipe on the outside. Some how we would

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 have to figure out a way -- once the welds are made, the  
2 temperatures of the welds is going to break down the  
3 mastic. And once you've got these plates, whether they're  
4 four-by-eight, four-by-ten, four-by-fourteen, you're going  
5 to have to some how lift it back up again and make certain  
6 I've got a mastic on both sides of this continuous  
7 plating. And I'm not certain how you lift it up if I've  
8 already welded the other piece. The construction of this  
9 is kind of mind boggling at a minimum of how you would  
10 physically do this, but I also want everyone to be aware  
11 of where we've got requirements to go in, open up a trench  
12 at 10:00 o'clock at night, do the construction, and close  
13 everything back up at 5:00 o'clock in the morning.

14 This idea of also having to weld plates in  
15 place, sand, grind them down, apply mastic, and still  
16 achieve any work that day is something that needs to be  
17 really considered. In our estimation I think we thought  
18 probably on average we could possibly get 100-foot a day  
19 done. Having to put plates and do the welding in the  
20 trench means a couple of things. No. 1, I've got to make  
21 a wider opening rather than the opening we thought we were  
22 going to have to have if I need to get individuals down  
23 into that trenched area to do the welding. So, I've got a  
24 much bigger width for my opening than I would have if I

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 was just placing the conduits and the cables -- after  
2 pulling the cables. This would end up possibly having  
3 instead of a trench being open for 40 inches, it may  
4 require a six-foot wide trench. Construction time  
5 probably gets diminished by a factor of two or three of  
6 what we would be able to accomplish at best in my mind,  
7 and -- and the risk of did I really get everything done  
8 such that I've got those plates protected or three years  
9 from now they're just not going to be there where I've got  
10 these voids. So just a concern that we have in the back  
11 of my mind anyway of the application of plate shielding of  
12 some sort.

13 MR. LYNCH: Mr. Zak, the mastic method that  
14 you're talking about, is that the same thing they use to  
15 protect the gas pipelines?

16 MR. ZAKLUKIEWICZ: Yes, it would be.

17 MR. LYNCH: Thank you.

18 CHAIRMAN KATZ: Thank you. We're going to  
19 recess until 1:00 o'clock. Mr. Ball, you'll have the  
20 floor at 1:00 o'clock.

21 (Whereupon, a luncheon recess was taken.)

22 CHAIRMAN KATZ: I'd like to call this  
23 hearing to order. I had a question. The question was if  
24 a first selectman wanted to come in at a future date and

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 make additional comments on the buffer zone as a limited  
2 appearance, would the Siting Council be willing to  
3 accommodate those comments? And the answer is yes. We  
4 are having -- probably toward the end of October we  
5 anticipate hearings on the KEMA report and the ROC group  
6 report. And what I can do is set aside at 10:00 a.m. if  
7 there's any mayor or first selectman who is here at 10:00  
8 a.m. and would like to make additional comments on the  
9 buffer zone as a limited appearance to the Siting Council,  
10 we'd be glad to take them on that day. So the answer is  
11 yes.

12 MR. EMERICK: Madam Chair.

13 CHAIRMAN KATZ: Yes?

14 MR. EMERICK: Yeah. If we entertain such  
15 statements in the future, wouldn't we want to do that  
16 under oath given that most of the municipalities --

17 CHAIRMAN KATZ: Yeah --

18 MR. EMERICK: -- are parties and --

19 CHAIRMAN KATZ: -- you're probably right --

20 MR. EMERICK: -- and we'll probably have  
21 questions.

22 CHAIRMAN KATZ: Right. I'll put Mr.  
23 Marconi on that. Yes?

24 MR. LYNCH: Can we limit that to just first

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 selectmen and mayors --

2 CHAIRMAN KATZ: Yeah, I'd like to --

3 MR. LYNCH: -- and not the general public.

4 CHAIRMAN KATZ: I'd like to just limit that  
5 offer to just first selectmen and mayors. Okay. Mr.  
6 Ball, you've been very patient. I'd like to resume cross-  
7 examination at this time. And you have the floor.

8 MR. BALL: Thank you. Mr. Johnson, I just  
9 want to ask you a couple of questions about your --

10 CHAIRMAN KATZ: Just -- just out of  
11 curiosity before you go on, is it Dr. Johnson or Mr.  
12 Johnson?

13 DR. JOHNSON: Technically doctor.

14 CHAIRMAN KATZ: Okay. We'll go with that.

15 MR. BALL: I'll go with doctor.

16 MR. EMERICK: He's earned it.

17 MR. BALL: You were talking about I believe  
18 two types of shielding initially. And what you said I  
19 believe, and you'll correct me if I'm wrong, is that one  
20 type is called flux shunting. And that is the steel plate  
21 shielding that we're talking about?

22 DR. JOHNSON: That is correct.

23 MR. BALL: Okay. And that is -- and with  
24 steel plate you would expect the reduction in EMFs to be

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 double, the fields would be reduced two times, is that  
2 right?

3 DR. JOHNSON: Right. You'd get about a 50  
4 percent or one-half value of the field. In fact, roughly  
5 a factor of two reduction. That's in the case where you  
6 put the plate like directly above the cable. Now as you  
7 go toward the edges, because the magnetic field is sort of  
8 fringing out around the edges of the plate, that reduction  
9 is going to basically drop off and become non-existent.  
10 The other thing is your height above the plate increases,  
11 you're going to see more of this fringing field and again  
12 the reduction will drop.

13 MR. BALL: Alright. Well, just sticking  
14 with that, in your report in the introduction you talk  
15 about a 39-inch wide steel plate at the top of a cable  
16 duct and what you say is that the reduction above ground  
17 of magnetic field values would be approximately 20 to 30  
18 feet center. Is that right? So for a 39-inch wide steel  
19 plate the reduction of magnetic fields above ground would  
20 be wider than 39 inches? That's my question?

21 DR. JOHNSON: You will have a reduction,  
22 but you will not have that factor of two over that 20 or  
23 30 feet. Basically what PDC is saying in their report in  
24 that 20 to 30 feet, by the time you're out that far the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 reduction has disappeared.

2 MR. BALL: Okay. So it will -- there will  
3 be a reduction, it will just be --

4 DR. JOHNSON: It will become --

5 MR. BALL: -- dissipating as you go further  
6 out?

7 DR. JOHNSON: It will become less and less  
8 as you go further and further away from the cable --

9 MR. BALL: Okay --

10 DR. JOHNSON: -- or basically off the edges  
11 of the shield.

12 MR. BALL: Alright. Now, I want to ask you  
13 about the second type of shielding which you mentioned. I  
14 believe you referred to it initially as field  
15 cancellation, is that accurate?

16 DR. JOHNSON: Correct. It's not  
17 redirecting the field. It's -- really what it's doing is  
18 taking the field -- the field itself will induce a current  
19 in the material. That induced current will also produce a  
20 magnetic field but it will be in the opposite direction to  
21 the magnetic field applied, so it will help cancel it out,  
22 and that's how it obtains its reduction.

23 MR. BALL: And in order to accomplish that,  
24 do you install a plate? What is installed?



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 DR. JOHNSON: Again a plate similar say to  
2 the steel would be installed. The thickness would  
3 probably be also similar, a quarter-inch to a half-inch.  
4 If you were installing say a four-by-eight sheet --  
5 roughly I think in this case the width of the vault is  
6 like 40 inches wide, if you installed something like that  
7 again directly overhead, you might -- could attain a  
8 reduction probably of about five.

9 MR. BALL: Okay. And the material, correct  
10 me if I'm wrong, I believe that you said it was copper?

11 DR. JOHNSON: Some sort of conductive  
12 material, a high grade conductive aluminum or copper.

13 MR. BALL: Okay.

14 DR. JOHNSON: Basically, any highly  
15 conductive material.

16 MR. BALL: And when you go aboveground  
17 using the field cancellation technique, is it the same  
18 concept where there is a reduction in EMFs however it  
19 dissipates as you go out to the side?

20 DR. JOHNSON: Again, it's the same thing.  
21 Your best reduction is going to occur at the center of the  
22 plate directly over the head. And as you go toward the  
23 edges of the plate, that reduction will drop off. And  
24 then at some distance beyond the edge of the plate, you

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 basically will see no reduction.

2 MR. BALL: Now -- I just want to discuss  
3 with you what mitigation options there may be and whether  
4 we've discussed all of them. You talked about optimal  
5 phasing --

6 DR. JOHNSON: Right.

7 MR. BALL: -- and that's already assumed in  
8 your calculations in the initial report, correct?

9 DR. JOHNSON: Right. In this report  
10 they've chosen where you have two conductors per phase or  
11 a total of six, you can arrange those to get an optimal  
12 phasing which will help reduce that field, much in the  
13 same way that you're using like an optimized split-phase  
14 design for some of the overhead portions of the line.

15 MR. BALL: Okay. And then we also have the  
16 two types of shielding we just talked about, the steel  
17 plates or the field cancellation, correct?

18 DR. JOHNSON: Right.

19 MR. BALL: Are there any other mitigation  
20 options? You say that PDC is in the process of  
21 investigating other methods of mitigation. What are you  
22 referring to?

23 DR. JOHNSON: Some of the other techniques  
24 -- if you look at like Figure 1, they show the ground

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 continuity conductors at the top of the vault. To a very  
2 -- let's say to a very very limited extent you can think  
3 of those as two small segments of a conductive plate, that  
4 those ground continuity conductors you will induce a  
5 current in those. And again that induced current will act  
6 -- produce a field that will act to help reduce the  
7 applied field. It's not going to be anywhere near as  
8 effective as a solid sheet because there you have both a  
9 more complete total sheet and you just have more conducive  
10 material available for inducing the current. So you can  
11 have these wires placed at different positions or at  
12 different numbers and different sizes that will reduce the  
13 field some, but it's going to be much less than what you  
14 would get with an aluminum plate.

15 MR. BALL: Is it possible to combine the  
16 conductors with some form of shielding?

17 DR. JOHNSON: You can -- well, the use of  
18 the wires in conjunction with say the conductive plate,  
19 you're really getting the advantage there from the  
20 conductive plate, so the wires really aren't going to do  
21 you much good in terms of any sort of shielding.

22 As I said, you could combine to some extent  
23 the aluminum plate and the steel plate. You're already  
24 making use of the optimal phasing arrangement. Other

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 techniques that you use -- and basically what the HPFF  
2 cable does is reduce the phasing between the conductors by  
3 having the conductors in very very close proximity in this  
4 HPFF tube or cable, so there you've got reduction because  
5 of the close proximity and you've encased the conductors  
6 in steel. So basically think about it, you've included a  
7 steel plate around them, so you've already combined two of  
8 the shielding techniques.

9 MR. BALL: Are there any other methods for  
10 mitigation that you might be looking at, other than what  
11 we've discussed?

12 DR. JOHNSON: I think -- I think we've  
13 covered them. We've looked at reduced spacing. We've  
14 looked at optimal phasing. We've looked at conductive  
15 media either in the form of a plate or the placement of  
16 the wires, which will provide cancellation.

17 I guess a brute force method is also  
18 increase the depth. But again that could be -- that's  
19 effective directly overhead because you've increased your  
20 distance. But as you go out to the sides, if you look at  
21 your effective distance to that cable, whether it's three  
22 feet underground or 10 feet underground and you're now 20  
23 feet out to the edge, your actual distance to the cable  
24 may have only changed really, you know, from 22 feet to 23

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 feet. So it's effective directly overhead, but that  
2 technique as you go out to the edges does not really buy  
3 you anything.

4 CHAIRMAN KATZ: Mr. Emerick.

5 MR. EMERICK: Yes. Dr. Johnson, in the  
6 graph and calculation in Exhibit 162, do you consider the  
7 conductors in terms of the fields that are present in  
8 those graphs and tables?

9 DR. JOHNSON: Could you run that through  
10 again or rephrase it?

11 MR. EMERICK: In Exhibit 162 the diagram  
12 shows conductors being present. And you just indicated  
13 that that's a potential mitigation strategy although  
14 limited. Were those considered in arriving at the graph  
15 and values --

16 DR. JOHNSON: Oh --

17 MR. EMERICK: -- that are presented in that  
18 exhibit?

19 DR. JOHNSON: Yes. In fact, if you look at  
20 the plots or the graphs like -- such as in Figure 2, you  
21 will notice that they're not perfectly symmetrical,  
22 there's like a little bump on one side or the other.  
23 That's the effect of those wires in the top of the vault,  
24 that extra little bump or the little shift off of

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 symmetry.

2 MR. EMERICK: Okay. And a couple of other  
3 questions on this. It's a duct bank. I assume those are  
4 plastic pipes that the cables are in?

5 MR. PRETE: That is correct.

6 MR. EMERICK: If those -- excuse me. Go  
7 ahead.

8 CHAIRMAN KATZ: Just a second --

9 MR. PRETE: My mic wasn't on, so I wanted  
10 to answer your question. That is correct.

11 MR. EMERICK: Okay. I heard you, but --  
12 okay. Is it possible -- if those pipes were steel, would  
13 it make a difference?

14 DR. JOHNSON: No, not in that case because  
15 the advantage of steel or aluminum, to either extent, if  
16 the pipe was around a single conductor, it wouldn't matter  
17 what the material was because it's just a single phase  
18 that it's enclosing, a single conductor. The advantage  
19 comes in with the steel, is if you have -- if it's  
20 enclosing more than one phase.

21 MR. EMERICK: Thank you.

22 CHAIRMAN KATZ: Just to follow up on that -

23 -

24 MR. ZAKLUKIEWICZ: Mr. Emerick --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Yes, Mr. Zak, go ahead.

2 MR. ZAKLUKIEWICZ: Placing steel pipe  
3 around a single phase, the heat losses are going to be  
4 significant. What you gain is with the HPFF you have all  
5 three cables together and you have the flux cancellation  
6 of the three. Not advised to put single phase in a steel  
7 pipe. The heating on a pipe is going to be extensive and  
8 the losses are going to be astronomical.

9 CHAIRMAN KATZ: Just to follow up. Dr.  
10 Johnson, for example on Figure 5, which is Singer to  
11 Norwalk XLPE eight feet of cover and we show a maximum  
12 value directly over about 19 milligauss, that's a 15-  
13 gigawatt case. Did you do any 27.7-gigawatt cases and  
14 would it make a difference?

15 DR. JOHNSON: For this case where it's a  
16 single line, essentially the fields would be proportional  
17 to the currents of the loadings where you're only looking  
18 at the single circuit. For this I did not nor did PDC do  
19 calculations specifically for 27.7, but it could be scaled  
20 from the 15-gigawatt.

21 CHAIRMAN KATZ: So it could be almost  
22 double, is that what you're saying?

23 DR. JOHNSON: Yes. I mean to verify that,  
24 we can do the calculations, but probably a rough order,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 yes.

2 CHAIRMAN KATZ: Okay. Back to you, Mr.  
3 Ball.

4 MR. BALL: I just have one more question.  
5 Is it your intention to report back with studies showing  
6 maximized EMF reduction from underground lines which  
7 include things like field cancellation and shielding  
8 because I note that the report said you were not able to  
9 do those calculations because of time constraints. Do you  
10 intend to do those?

11 DR. JOHNSON: That would be up to the  
12 Council and Applicant.

13 CHAIRMAN KATZ: Let's phrase it this way,  
14 yes. Right now I understand the ROC group is looking at a  
15 case that involved XLPE. And according to these charts,  
16 you get your highest milligausses from XLPE. So what I  
17 guess I'd like is whatever case the ROC group comes up  
18 with, I'd like the -- what the -- with the maximum  
19 mitigation what would be the milligausses. Is that -- is  
20 that clear?

21 MR. PRETE: We would like to prepare that  
22 for you but also add interesting information about  
23 constructability, costs, and things of that nature --

24 CHAIRMAN KATZ: Right --



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PRETE: -- would that be okay?

2 CHAIRMAN KATZ: Yes, yes.

3 MR. PRETE: Great.

4 CHAIRMAN KATZ: Yes, it has to be  
5 practical. Yes.

6 MR. BALL: Thank you. I don't have any  
7 other questions.

8 CHAIRMAN KATZ: Thank you, Mr. Ball. Mr.  
9 Frank, did you have anything?

10 MR. MONTE FRANK: No.

11 CHAIRMAN KATZ: You're just a sidekick,  
12 huh.

13 MR. FRANK: Providing moral support.

14 CHAIRMAN KATZ: Mr. Wilensky.

15 MR. WILENSKY: Dr. Johnson, I know I asked  
16 you before about what -- about the City of New York,  
17 whether these plates have been used there. Have they been  
18 used anyplace or is this a new innovation, or what are we  
19 -- what are we discussing here? Something that -- is this  
20 something that would be experimental?

21 DR. JOHNSON: In terms of an underground  
22 transmission line for long distances --

23 MR. WILENSKY: Yes --

24 DR. JOHNSON: -- I'm not aware of them

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 being used anywhere.

2 MR. WILENSKY: The other problem that I see  
3 or would it be a problem, what about when you weld all  
4 these various plates together, does this create a  
5 maintenance problem? Not on the plates? And I thought --  
6 and Mr. Zak might have referred to that in his 10-minute  
7 dissertation early on today, but I don't know whether that  
8 was part of it or not. Would that -- Mr. Zak, would that  
9 create a maintenance problem for the cable if the plates  
10 were overhead -- or not overhead -- above the plate --  
11 above the lines?

12 MR. ZAKLUKIEWICZ: Oh absolutely. You  
13 would have to test these continuously to make certain you  
14 don't have voids. In other words, rocks being placed down  
15 on top of the plates after they're welded and after the  
16 mastic is placed over the welded joints.

17 And clearly how exactly we would install  
18 some kind of shielding such as this over the vaults is  
19 another whole issue we haven't even spoken of. All we've  
20 spoken of is the duct bank itself. When it comes time for  
21 the vaulting and anytime we would -- the major concern  
22 would be anytime a contractor is in doing something else  
23 on a water main, a gas main, of gouging if you will the  
24 steel plate, not going through it, and not notifying

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 anyone of it and now I've got a place where the mastic now  
2 has been scoured and I've got extensive corrosion taking  
3 place until we do the testing every six months and to find  
4 out those locations. So most contractors are not going to  
5 call you up and say I just did damage to your facility, so  
6 -- even though ethically that should be the case, it is  
7 typically not the case, Mr. Wilensky --

8 MR. WILENSKY: Yeah --

9 MR. ZAKLUKIEWICZ: -- clearly, it's going  
10 to add to the cost of maintenance onto an underground  
11 system.

12 CHAIRMAN KATZ: Yeah, but the plates help  
13 to support the weight of the parade floats. (Laughter).

14 MR. PRETE: Mr. Wilensky, I think it's fair  
15 -- your question was right on target, that in these  
16 lengths that we're talking about, this type of plating in  
17 mitigation would be experimental.

18 MR. WILENSKY: Yeah. Thank you. Thank  
19 you, gentlemen. Thank you very much.

20 CHAIRMAN KATZ: Okay. Other parties and  
21 intervenors who wish to cross on this subject of EMF from  
22 underground cable? Mr. Cederbaum.

23 MR. CEDERBAUM: I don't want to cross-  
24 examine --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Mr. Cederbaum, you're not  
2 allowed to talk until you get to the mic.

3 MR. CEDERBAUM: I just want to clarify that  
4 you have reserved --

5 CHAIRMAN KATZ: Yes --

6 MR. CEDERBAUM: -- for a subsequent time --

7 CHAIRMAN KATZ: Yes --

8 MR. CEDERBAUM: -- after we've digested --

9 CHAIRMAN KATZ: Yes. Cleanup day is  
10 turning up probably into cleanup two day, but yes.

11 MR. CEDERBAUM: Okay. Then the Town of  
12 Westport would like to cross-examine --

13 CHAIRMAN KATZ: Yes --

14 MR. CEDERBAUM: -- whenever it's schedule.

15 CHAIRMAN KATZ: Yes --

16 MR. CEDERBAUM: Thank you.

17 CHAIRMAN KATZ: -- I can imagine. But Mr.  
18 Cederbaum -- you can sit -- you might want to wait until  
19 after the ROC group report comes out before you --

20 MR. CEDERBAUM: Yes --

21 CHAIRMAN KATZ: -- expend resources. Is  
22 there other parties and intervenors? Oh, no -- this is  
23 the revenge of the DOT? (Laughter).

24 MR. WALSH: No, Madam Chairman. DOT would

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 like to ask some questions, but again pursuant to your  
2 direction to Attorney Cederbaum, whether or not it would  
3 be wise for the DOT to wait until the ROC report came out.

4 CHAIRMAN KATZ: Okay, if you'd like to  
5 reserve that --

6 MR. WALSH: We would like to reserve.

7 CHAIRMAN KATZ: -- we'll take note of that.

8 MR. WALSH: Thank you.

9 CHAIRMAN KATZ: Sure. I expect a pothole  
10 in my street by the end of the day -- (laughter). Is  
11 there any other party or intervenor who wishes to cross on  
12 this subject? Okay, we are -- what I'm going to do is --

13 A VOICE: Pam -- (indiscernible) --

14 CHAIRMAN KATZ: Oh, I'm sorry.

15 MR. FITZGERALD: Redirect?

16 CHAIRMAN KATZ: Oh, yes. Yes, of course.

17 MR. FITZGERALD: I won't be long. Mr.  
18 Johnson -- or Dr. Johnson -- either one is correct  
19 actually --

20 DR. JOHNSON: As long as you call me to  
21 dinner, I'm fine.

22 MR. FITZGERALD: The -- you've explained  
23 that with the plate technique as you get out toward the  
24 edges of the plate and beyond the edges of the plate, the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 reduction that is achieved decays. Can you give us a  
2 quantitative idea of that? I mean what -- say if you're --  
3 -- if you treat the reduction at the edge -- at the center  
4 of the plate as a hundred percent, when you get out beyond  
5 the edge of the plate, typically in broad strokes where  
6 are you?

7 DR. JOHNSON: Okay. Let's say for the  
8 steel plate, if in the center of the plate if we're at  
9 about a 50 percent reduction, we're at say one-half, by  
10 the time we're at the edge of the plate, maybe 20 inches,  
11 two feet away, we're down to only about a 25 percent  
12 reduction. And by the time we're out say -- if we're  
13 talking like a 40-inch wide plate, by the time we're out  
14 to maybe 80 inches or six, seven, eight feet away, we're  
15 probably at about 80 -- or not -- actually 15 percent  
16 reduction.

17 MR. FITZGERALD: Okay. So that if one  
18 wanted to roughly gauge the impact of using one of those  
19 plates, one could look at the values that are listed in  
20 the report here for every foot. And once you're out  
21 beyond say 10 feet --

22 DR. JOHNSON: Ten feet --

23 MR. FITZGERALD: -- you could figure -- you  
24 could take 20 percent -- reduce whatever value is shown

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 here by 20 percent and you're in the ballpark of where  
2 you'd likely be?

3 DR. JOHNSON: Actually, by the time you're  
4 out to probably 10 feet in the case of a 40-inch wide  
5 plate, you probably would only have about 10 percent  
6 reduction or so --

7 MR. FITZGERALD: Okay, 10 percent --

8 DR. JOHNSON: -- you'd be down into the  
9 single digit reduction. So the field if you looked at it  
10 -- say if it's initially 10-milligauss at 10 feet, you put  
11 the plate in at 10 feet, it might drop it to 9-milligauss  
12 --

13 MR. FITZGERALD: And --

14 DR. JOHNSON: -- about a 10 percent  
15 reduction.

16 MR. FITZGERALD: Okay. And just one more  
17 question. When you use depth as a means of reduction --

18 DR. JOHNSON: Yes --

19 MR. FITZGERALD: -- as you put the cables  
20 further down into the earth, do you have to move them  
21 further apart from one another for thermal cooling  
22 purposes?

23 DR. JOHNSON: That's one of the things that  
24 is brought out in the report, is if you increase the depth

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 -- initially, I believe PDC looks at a 3-foot burial depth  
2 as they show in Figure 1 and show the plot for that.  
3 Under similar conditions if they increase that depth to 80  
4 feet -- or eight feet -- I'm sorry, we're not putting it  
5 that far down -- (laughter) -- that's the towers -- if we  
6 put it down to eight feet, you increase or basically  
7 decrease the ability to cool the cable or the thermal  
8 loss, and you have to space the cables further apart. By  
9 spacing the XLPE cables further apart, you've increased  
10 the phase spacing and that's going to have that  
11 configuration producing a higher magnetic field. So  
12 although you've helped reduce it by putting it further  
13 underground, because of the need to expand the geometry,  
14 the net result further away from the center of the cable  
15 is to actually increase the field.

16 MR. FITZGERALD: Okay, thank you. I have  
17 nothing further.

18 CHAIRMAN KATZ: Thank you. Mr. Cunliffe.

19 MR. CUNLIFFE: Well that one answered my  
20 first question. With the last page, page 15 on Exhibit  
21 162, you provided a diagram with a steel plate and you've  
22 testified that you would get a reduction about two to one.  
23 Is there any reason to provide a table that would show any  
24 difference to that effect?



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 DR. JOHNSON: To provide a table?

2 MR. CUNLIFFE: Well, you have a table  
3 behind for each of the other figures, but there's no table  
4 following up this particular diagram, you just --

5 DR. JOHNSON: Oh --

6 MR. CUNLIFFE: -- you just state two to  
7 one, so I have to go back and do my math.

8 DR. JOHNSON: Well, okay. Two to one is  
9 general experience with trying experimentally putting a  
10 steel plate over a duct bank or a three-phase arrangement  
11 of cables. To do full calculations for a steel plate  
12 requires that you go to fairly advanced calculation  
13 techniques, find that element analysis or some other  
14 technique, which gets fairly involved and laborious. And  
15 in the time constraints that was not done.

16 MR. FITZGERALD: (Indiscernible) -- the  
17 question is it could be done.

18 CHAIRMAN KATZ: Okay. What we'll do is  
19 we'll have a ROC report, we'll have a configuration, and  
20 your witnesses will maximize within practicality EMF  
21 mitigation and we'll go from there.

22 MR. FITZGERALD: Alright.

23 CHAIRMAN KATZ: Okay.

24 MR. CUNLIFFE: My other questions relate --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 go to Mr. Prete. And those questions -- are we crossing  
2 Mr. Prete's testimony at the same time?

3 CHAIRMAN KATZ: No --

4 MR. CUNLIFFE: Okay --

5 CHAIRMAN KATZ: -- we're just doing --  
6 we're going to --

7 MR. CUNLIFFE: Thank you. That's it then.

8 CHAIRMAN KATZ: We're going to do 12-C  
9 after that and then we're going to go back to Mr. Prete.

10 MR. CUNLIFFE: I'm done with --

11 CHAIRMAN KATZ: Okay. Mr. Emerick.

12 MR. EMERICK: No questions, thank you.

13 CHAIRMAN KATZ: Mr. Ashton.

14 MR. ASHTON: I'm sorry, I missed the  
15 testimony -- I do have one question though --

16 CHAIRMAN KATZ: Pull the mic in.

17 MR. ASHTON: In the -- in the materials  
18 handout yesterday you talked about possibly putting an  
19 aluminum plate in the ground. What sort of experience do  
20 you have with the life -- the useful life of an aluminum  
21 plate in essentially a salt environment as far as  
22 corroding?

23 MR. ZAKLUKIEWICZ: (Indiscernible) -- some  
24 of the testimony you weren't here. We basically said the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 aluminum plate would have -- excuse me -- would have to  
2 have a mastic over it just like a steel plate to protect  
3 that corrosion, such that when the plates are welded  
4 together you would have to do an aluminum weld, grind  
5 down, place a mastic over the welded area. Other than  
6 that, the material is going to disappear.

7 MR. ASHTON: Would the mastic have no  
8 chance of scratches in it or anything like that --

9 MR. ZAKLUKIEWICZ: Yes, that is a major  
10 concern and a risk similar to what you have if you had an  
11 aluminum pipe.

12 MR. ASHTON: Mastic is not used in piping  
13 to my knowledge as a coating any more because it does  
14 offer that problem. The use of an epoxy coating or  
15 something of that nature --

16 MR. ZAKLUKIEWICZ: Well, I said mastic as a  
17 general term, Mr. Ashton, as opposed to mastic per say of  
18 that one material --

19 MR. ASHTON: Okay --

20 MR. ZAKLUKIEWICZ: -- but it would have to  
21 have some kind of a coating, which would basically provide  
22 a barrier between the aluminum and earth.

23 MR. ASHTON: Thank you. Nothing further.

24 COURT REPORTER: One moment please.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 (Pause). Thank you.

2 CHAIRMAN KATZ: Mr. Murphy.

3 MR. MURPHY: No questions.

4 CHAIRMAN KATZ: Mr. Wilensky.

5 MR. WILENSKY: No questions.

6 CHAIRMAN KATZ: Mr. Lynch.

7 MR. LYNCH: No questions.

8 CHAIRMAN KATZ: Mr. Lynch said no  
9 questions.

10 Just one follow-up. When we're talking  
11 overhead lines, Dr. Johnson, we've been talking different  
12 scenarios, like six milligausses, three milligausses, .6  
13 milligausses. Looking through your tables, it doesn't  
14 look like in the general vicinity of the underground cable  
15 we can hit any of those numbers?

16 DR. JOHNSON: For XLPE cable because of the  
17 --

18 CHAIRMAN KATZ: Yes, that's what I mean,  
19 for XLPE.

20 DR. JOHNSON: Right. Because of the  
21 spacing between the conductors -- there are a couple of  
22 things going on. The spacing of the conductors, even  
23 though it's drastically reduced from the overhead, that  
24 reduction doesn't buy you as much because you're now also

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 much closer to the conductors. Instead of being 30, 40  
2 feet away, you're only eight feet away. And so even  
3 though you've reduced the phase spacing and therefore the  
4 fields drop off much faster, in close proximity, right  
5 overhead they're still effectively almost as much for the  
6 XLPE. In the case of the HPFF you've reduced the spacing  
7 even further. Now instead of maybe 10 to 20 inches,  
8 you're talking literally a few inches, three or four  
9 inches. Not only that, you've encased them in a steel  
10 pipe, which provides -- you've totally encased them, which  
11 provides shielding there. So your HPFF cable provides you  
12 essentially sort of the best of both material shielding  
13 and close proximity and gets you down to magnetic fields  
14 in the two to three milligauss.

15 CHAIRMAN KATZ: But I'm talking XLPE.

16 DR. JOHNSON: XLPE, you're going to have  
17 essentially double digit magnetic fields directly  
18 overhead.

19 CHAIRMAN KATZ: Okay. I just wanted to  
20 make sure I had read it correctly. Okay. At this point,  
21 I think we -- we had -- is there anyone else who had  
22 questions for these witnesses on the subject of EMF from  
23 underground cable? Seeing none, we'll go off the record  
24 for a minute and we're going to switch gears. Well, you

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 can sit -- you can stay.

2 When I had gone to the New England Energy  
3 Conference, there was a lot of talk about socialization of  
4 costs and the 12-C process, and it was apparent that -- it  
5 was a little more complicated than I guess I had  
6 originally thought. So, I've asked the Executive Director  
7 to put together some information about what the 12-C  
8 process is that determines how costs -- which costs  
9 Connecticut bears and which ones are borne in New England.  
10 And I'm going to ask Derek Phelps right now to give a  
11 briefing to the Council.

12 After his briefing, we will make copies  
13 available. I'm going to ask if anyone has further  
14 thoughts -- if any party or intervenor has further  
15 thoughts on this material to please brief us. The Council  
16 wants to get as much up to speed as possible of all the  
17 different viewpoints on the 12-C process, because in the  
18 end we're going to have to have some type of finding on  
19 how much this cost. And --

20 COURT REPORTER: Madam Chair, is this --

21 CHAIRMAN KATZ: Yes --

22 COURT REPORTER: -- the director will be on  
23 the record?

24 CHAIRMAN KATZ: Correct. So Mr. Phelps.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PHELPS: Thank you, Madam Chair. As  
2 you indicated, the process is rather involved. There are  
3 a number of rulings and tariffs that come into play. As  
4 you indicated, I -- pursuant to your direction I did work  
5 with a couple of knowledgeable persons, most notably DPUC  
6 staff, and in particular Attorney Rob Luysterborghs, who  
7 was extraordinary helpful, he's part of the adjudication  
8 unit in DPUC. And what you have is my level best to try  
9 to coddle the information together into an outline that  
10 describes the participants involved in the cost allocation  
11 process, a little outline of how it works and some of the  
12 priorities involved, and then an instructive example  
13 involving a Rhode Island case.

14 I should also mention that there is some  
15 material that I've had available to me in the office, it's  
16 indicated largely in the last page of the memo that was  
17 passed around this morning. And certainly to the extent  
18 that some of these views, some of the information  
19 contained here is not necessarily cut and dry, to the  
20 extent that anybody wishes to remark or expound upon any  
21 of the information or offer what they view to be  
22 corrections, we all welcome that.

23 In essence, what stands out primarily is a  
24 December 18, 2003 order by FERC known as Docket ER03-1141,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 which approves a new rule in the process for transmission  
2 project cost allocation that the NEPOOL and ISO use to  
3 determine who pays for the costs of transmission projects  
4 in New England. What I desire to do for you here in this  
5 short presentation is to describe that process in a way  
6 that I hope is helpful to the Council. The bottom line,  
7 however, as I think we've all known, as a general rule  
8 what has been sort of an overarching principle is that  
9 projects that contribute to the reliability of the grid in  
10 New England stand to be socialized across the entire New  
11 England service territory. To the extent that portions of  
12 the costs are deemed by ISO or NEPOOL to go beyond what is  
13 absolutely necessary, it is distinctly possible that those  
14 differential costs, those incremental costs will be borne  
15 by Connecticut ratepayers only.

16 To begin, who determines who will pay for  
17 the costs of the transmission projects? Well, it's a  
18 consortium of NEPOOL, ISO New England, and FERC. NEPOOL,  
19 as I think most folks know, was organized in 1971 and is a  
20 voluntary association comprised of more than -- about 230  
21 New England industry participants, which include electric  
22 utilities rendering or receiving services, independent  
23 power generators, marketers, load generators and so on.

24 NEPOOL, through it's FERC approved restated



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 NEPOOL agreement, known as the RNA, and the NEPOOL tariff  
2 develops and implements the rules and procedures for the  
3 operation of the wholesale regional electricity market for  
4 New England. With respect to transmission projects,  
5 NEPOOL is responsible, however in large part these duties  
6 are shared with ISO through a contracted agreement pending  
7 final approval of the RTO agreement for planning and  
8 technical review of proposed modifications or upgrades to  
9 the New England regional transmission system.

10 Now, ISO New England. ISO was formed I  
11 want to say in 1997 and operates the New England bulk  
12 power system under guidelines contained in a contract with  
13 NEPOOL, the RNA, and the NEPOOL tariff. ISO is  
14 responsible to protect short-term reliability of the  
15 electricity grid of New England and to administer  
16 competitive and efficient wholesale markets to administer  
17 the NEPOOL tariff.

18 I'm not wanting to read word-for-word here,  
19 so I want to skip ahead. With respect to transmission  
20 projects, under the NEPOOL tariff ISO New England is the  
21 primary decision-maker regarding whether (1) a proposed  
22 modification or upgrade to the regional transmission  
23 system will have an adverse impact on the reliability and  
24 operation of the system; (2) a proposed modification or

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 upgrade to the regional system is needed; and (3) there  
2 are -- whether or not there are excessive costs related to  
3 such modifications or upgrades that should be excluded  
4 from regional cost support. I'll say again, with respect  
5 to transmission projects, under the NEPOOL tariff  
6 agreement, ISO is the primary decision-maker regarding  
7 those three things.

8 Now, FERC resolves any disputes to the  
9 extent that persons feel aggrieved or unsatisfied with the  
10 rulings. FERC is the final arbiter.

11 What are the rules for who should pay for  
12 the costs of a transmission project? Well, the states  
13 share under a regional cost support arrangement, that is -  
14 - that is provided as follows. Again, the December 12,  
15 2003 FERC order established the general rule, which was  
16 effective January 1 of this year, that certain classes of  
17 transmission upgrades should receive regional cost  
18 support. For these upgrades, the costs will be rolled  
19 into the regional transmission rates paid by all New  
20 England transmission customers under the NEPOOL tariff.

21 For projects that qualify -- for projects  
22 that qualify, regional costs for cost-sharing, the costs  
23 would be shared as follows as a result of the way the  
24 market shakes out. Connecticut 27 percent. The remainder

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 is all the other states in the New England service  
2 territory, which include Massachusetts at 45 percent,  
3 Rhode Island at 9, Maine at 7 percent, New Hampshire at 7,  
4 and Vermont at 5.

5 Now, classes of projects eligible for cost-  
6 sharing are the following two things; Regional benefit  
7 upgrades, often referred to as RBUs, and those projects  
8 listed in the Schedule 12-B of the NEPOOL tariff from the  
9 Regional Transmission Expansion Plan of 2002. And it is  
10 within that plan that Phases 1 and 2 are referred. And  
11 we've been hearing all along the projects that would be  
12 put into operation by December 20<sup>th</sup> of 2007 are included in  
13 that.

14 To qualify as an RBU a project must (1) be  
15 a 115-kV or above transmission, meet the non-voltage  
16 criteria specified within the RNA, be identified by the  
17 Transmission Expansion Advisory Committee, known as TEAC,  
18 in the RTEP agreement as providing regional reliability or  
19 economic benefits. TEAC is a group of NEPOOL  
20 participants, as I think we've been told, that in  
21 consultation with state regulators advises the ISO New  
22 England on regional system infrastructure needs.

23 Now here's an area that we've -- that I've  
24 included in my memo that I think is important. The

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Connecticut upgrades referred to as Phases 1 and 2, which  
2 are a part of RTEP, and we've heard testimony about the  
3 ability of these projects to actually be put into  
4 operation by December of '07 and to the extent that that's  
5 a concern for anybody, projects are listed in Schedule 12-  
6 B, so if Phases 1 and 2 are placed in service by December  
7 20<sup>th</sup> of '07, these projects would more readily and  
8 immediately qualify for regional support. If Phases 1 and  
9 2 projects are not placed in service by December 20<sup>th</sup> of  
10 '07, these projects could also still be eligible as RBUs,  
11 regional benefits, which do not have to be in service by  
12 any particular deadline. The December 18, '03 order also  
13 identified certain projects which I won't get into because  
14 it's not terribly pertinent to my discussion.

15 Excessive costs not shared regionally.  
16 This is an important area I know that is very much in the  
17 forefront of everyone's minds. Even if a project  
18 qualifies as an RTEP project, as we know Phases 1 and 2  
19 are, or an RBU for regional cost support, some of the  
20 costs associated with the project may not be eligible for  
21 regional support if the ISO New England determines that  
22 certain of the costs are excessive or otherwise constitute  
23 localized costs. We've heard the term goldplating.

24 In making a determination whether localized

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 costs exist, the ISO New England under Schedule 12-C of  
2 the NEPOOL tariff is required to consider the  
3 reasonableness of the proposed design and construction  
4 with respect to, quote, "good utility practice", current -  
5 - furthermore, to consider current engineering design and  
6 construction practices in the area in which the upgrade is  
7 built, and alternate, feasible, and practical upgrades,  
8 also relative costs, operation, timing of implementation,  
9 efficiency, and reliability of the proposed upgrades.  
10 These are all under the heading of reasonable. The costs  
11 that exceed reasonable requirements shall be deemed  
12 localized costs. Therein lies the essential difference  
13 that we've heard discussed.

14 Under a FERC docket, I'll mention this as  
15 an aside, my notes indicate FERC ER03-1247, I'll say it  
16 again it's not on the memo, and for those who will want to  
17 comment, FERC ER03-1247 under a settlement with CL&P in  
18 the Tariff 10 case, which is a matter of history at the  
19 Department of Public Utility Control, there is -- there is  
20 an understanding among DPUC staff and myself that perhaps  
21 some portions of Phases 1 and 2 are not supported -- if --  
22 if some of these portions of Phases 1 and 2 as I've just  
23 described them are not supported regionally, such costs  
24 would potentially fall under the local network service

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 tariff of the public traded utilities and the applicants  
2 involved in this proceeding. My notes say CL&P, but that  
3 ignores the fact that UI is involved in the proceeding.  
4 Under this tariff there would be approximate shares for  
5 something on the order of about 65 percent, Massachusetts  
6 15 percent, and New Hampshire 20 percent. But I invite  
7 persons in this proceeding to comment on those percentages  
8 if they have different numbers.

9           What is a review process for determining  
10 what transmission project costs will -- what is the review  
11 process for determining what transmission project costs  
12 will receive regional support? Well, FERC's order  
13 regarding a Rhode Island case is perhaps very instructive.  
14 Rhode Island had a project in front of them just recently  
15 where they had concern internal to their siting process as  
16 to what portions of the project would merit and ultimately  
17 receive approval by ISO New England and NEPOOL for  
18 socialization costs. So to the extent that they attempted  
19 to engage ISO New England and NEPOOL in their process  
20 while the project was pending, they were advised that they  
21 needed to complete the siting process and have the project  
22 go through the 18.4 reliability process before ISO and  
23 NEPOOL and the cost allocation process would be engaged.  
24 And that information is described in my memo. That's

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 under heading 4 and I won't read the details of that, but  
2 the bottom line is this. Ultimately, the Attorney General  
3 of Rhode Island appealed NEPOOL's, ISO's conclusions that  
4 indeed the project needed to be approved and receive full  
5 siting at the state level before the cost allocation  
6 matter would be taken up. And ultimately the FERC  
7 reasoned -- well denied that appeal and reasoned in their  
8 decision that final siting approval of a specific location  
9 and configuration was necessary in order to enable the ISO  
10 New England the ability to perform review of the project  
11 impact on the electric system under the RNA and of cost  
12 responsibility Schedule 12 of the NEPOOL tariff. So to  
13 the extent that that's been a question that's been raised,  
14 indeed it's been taken up and it was ultimately resolved  
15 as I indicated is the role of FERC to that end.

16 Lastly, I'll just explain that it is  
17 noteworthy that in the FERC decision that I referenced  
18 earlier, that FERC went on to say that it approved the  
19 cost allocation provisions, the new rule that I've  
20 described to you, in part because FERC believed that they  
21 would -- that these rules and processes, to the extent  
22 that they're published and available for public  
23 consumption, would provide greater certainty to entities  
24 investing in transmission. FERC reasoned that siting

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 boards are entitled to similar guidance to allow them to  
2 perform their function more effectively. While the FERC  
3 stopped short of ordering any tariff provisions to mandate  
4 the ISO to provide siting boards with guidance, the FERC  
5 encouraged the ISO New England to provide state siting  
6 boards with as much guidance as possible regarding the  
7 likely cost allocation for proposed transmission projects.

8           Again, I hope that this can serve as the  
9 beginning of a dialogue within the docket. And parties  
10 and intervenors who wish to remark as to the accuracy of  
11 this are certainly invited to do so because I share  
12 everyone's desire to ensure that a complete and factual  
13 picture is brought before the Council for their  
14 consideration.

15           CHAIRMAN KATZ: Okay. I believe, Mr.  
16 Marconi, you indicated we should take administrative  
17 notice of this?

18           MR. MARCONI: Yes, because Mr. Phelps is  
19 really not presenting testimony as to certain facts, he's  
20 offering his overview as to the actual authorities that  
21 are cited here. And I think the Council -- if we -- to  
22 the degree we haven't yet, we should take administrative  
23 notice of all of the Federal Energy Regulatory Commission  
24 documents, all of the NEPOOL documents, so that if the



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Council is ever going to, to whatever degree, rely upon  
2 any of these aspects, we are able to cite to those  
3 documents. And I -- I don't know if anybody else has any  
4 objections to that, but I would suspect that we should  
5 take administrative notice of the underlying documents.

6 CHAIRMAN KATZ: Okay, so we will take  
7 administrative notice of the memo. We will serve the  
8 list. And again, we invite comments and briefs on the  
9 subject matter of cost allocation.

10 MS. RANDELL: Madam Chairman.

11 CHAIRMAN KATZ: Yes.

12 MS. RANDELL: We would like to take you up  
13 on that offer. We will submit comments. Do we have a  
14 date?

15 MR. MARCONI: Well, why don't we give at  
16 least -- at least two weeks, if not --

17 CHAIRMAN KATZ: Is two weeks sufficient?

18 MS. RANDELL: Yes.

19 CHAIRMAN KATZ: Yes.

20 MS. RANDELL: Thank you.

21 MR. PHELPS: Madam Chair, I just want to  
22 say again thank you to DPUC staff --

23 CHAIRMAN KATZ: Yes --

24 MR. PHELPS: -- and Mr. Luysterborghs in

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 particular in helping to prepare the material today.

2 CHAIRMAN KATZ: Yes, thank you. Food for  
3 thought.

4 Okay, at this point the last item on the  
5 agenda that I have is that the Applicants had prefiled  
6 some EMF information I guess relating to gigawatts,  
7 etcetera, and that we were going to have some further  
8 cross-examination on. Correct?

9 MR. FITZGERALD: Yes. It -- actually, the  
10 testimony is an explanation of why the 15 -- the so-called  
11 15-gigawatt case --

12 CHAIRMAN KATZ: Okay --

13 MR. FITZGERALD: -- should be the  
14 appropriate reference case for evaluating magnetic field  
15 exposures.

16 CHAIRMAN KATZ: Okay. Did you have some  
17 type of presentation before we have cross? Did you have  
18 any further visuals?

19 MR. FITZGERALD: No. We -- we have -- well  
20 --

21 CHAIRMAN KATZ: I saw something flash on  
22 the screen before and that's why I'm asking.

23 MR. FITZGERALD: Well, that's just because  
24 there are a number of figures that are actually in the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 testimony itself and we thought that it might be --

2 CHAIRMAN KATZ: Helpful --

3 MR. FITZGERALD: -- helpful to be able to  
4 put the figures on the screen to respond to questions --

5 CHAIRMAN KATZ: Sounds good --

6 MR. FITZGERALD: -- so we don't have an  
7 additional presentation --

8 CHAIRMAN KATZ: Okay --

9 MR. FITZGERALD: -- we really tried to boil  
10 it down as far as we could in this testimony.

11 CHAIRMAN KATZ: Okay. Can I have a show of  
12 hands of those who wish to cross-examine on this subject?  
13 Mr. Frank, Mr. Wertheimer, Mr. --

14 MR. CEDERBAUM: Madam Chairman --  
15 (indiscernible) --

16 CHAIRMAN KATZ: You need to come to a mic,  
17 Mr. Cederbaum.

18 MR. CEDERBAUM: Yeah. Given the  
19 developments of yesterday, the Town of Westport would like  
20 to reserve its right whenever that comes up to cross-  
21 examine, only because, quite frankly, until yesterday's  
22 happenings the issues of EMF were not as critical as they  
23 are today to Westport since the plan was for  
24 undergrounding.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MS. RANDELL: Madam Chairman.

2 CHAIRMAN KATZ: Miss Randell --

3 MS. RANDELL: I'd like --

4 CHAIRMAN KATZ: -- did you want to be  
5 heard?

6 MS. RANDELL: I'd like to respond briefly.  
7 The issue of the 15-gigawatt loading and the 27.7 is  
8 certainly not a new one --

9 CHAIRMAN KATZ: Yeah --

10 MS. RANDELL: -- and while we understand  
11 the concerns of the Towns, pushing everything off and  
12 reserving all cross-examination until later, I think does  
13 not get us to an end point.

14 CHAIRMAN KATZ: Yeah. Mr. Cederbaum, in  
15 fairness, this 15-gigawatt versus the 27.7-gigawatt thing  
16 has been around for awhile and the parties and the  
17 intervenors who have been sleeping on our porch, I think,  
18 you know, have had an opportunity to, you know, give this  
19 a little more thought. And -- if you come back to it, I'm  
20 going to ask you to come back to it only very briefly.

21 MR. CEDERBAUM: Okay. And I -- I only say  
22 that because it's not only a matter, at least as I see it,  
23 of how long -- the many -- the myriad of issues in this  
24 case have been around, but what the relevance of each one

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 of those issues are to each one of the Towns has been over  
2 the course of these proceedings --

3 CHAIRMAN KATZ: Okay --

4 MR. CEDERBAUM: -- and that in that  
5 context, the issues that perhaps are raised to the Town of  
6 Westport as of yesterday may be far more significant than  
7 the day before yesterday. And that, therefore, that is  
8 why I'm making the statement I'm making. And I think that  
9 --

10 CHAIRMAN KATZ: We will note that.

11 MR. CEDERBAUM: Thank you very much.

12 MR. FITZGERALD: We've got some extra  
13 copies of the testimony here if any of you don't happen to  
14 have it with you who would like it.

15 CHAIRMAN KATZ: Would anyone like another  
16 copy?

17 MR. ASHTON: That was Exhibit 156 that was  
18 submitted yesterday I believe?

19 MR. FITZGERALD: Yes.

20 MS. RANDELL: Yes.

21 MR. MARCONI: I would like an extra copy.

22 CHAIRMAN KATZ: Yeah, if we could have a  
23 couple up here, Mr. McDermott, that would be helpful. Mr.  
24 Wertheimer, I'm going to give you the chair first,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 followed by Mr. Frank since I saw your hand first.

2 (Pause)

3 CHAIRMAN KATZ: Go ahead, Mr. Wertheimer.

4 MR. WERTHEIMER: Thank you. Good  
5 afternoon, Mr. Prete. Michael Wertheimer for the Office  
6 of the Attorney General.

7 As you explain on the first page of your  
8 testimony dated September 24<sup>th</sup>, the purpose of this  
9 testimony is to explain the Company's view that the 15-  
10 gigawatt case is the most appropriate to use when modeling  
11 magnetic fields associated with overhead lines, is that  
12 right?

13 MR. PRETE: That's correct.

14 MR. WERTHEIMER: You would agree that the  
15 reason for modeling magnetic fields in this case is really  
16 to design a buffer zone? This is a buffer zone issue  
17 we're talking about?

18 MR. PRETE: I'm not sure I would call it a  
19 buffer zone as I would, Mr. Wertheimer, just an  
20 understanding of the milligauss levels.

21 MR. WERTHEIMER: It certainly has direct  
22 relevance to the buffer zone issue, you'd agree with that?

23 MR. PRETE: Absolutely.

24 MR. WERTHEIMER: The 15-gigawatt case calls

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 for -- to reduce EMFs to three milligauss. At 15  
2 gigawatts you'll have one buffer zone, at 27.7 you'll have  
3 another buffer zone, is that right?

4 MR. PRETE: In that explanation, that's  
5 correct.

6 MR. WERTHEIMER: Now, you say on page 2  
7 that the 15-gigawatt case is representative of conditions  
8 on the line -- that exist on the line most of the time.  
9 Do you see that spot?

10 MR. PRETE: I do.

11 MR. WERTHEIMER: Okay. And let's turn to  
12 the graph on page 3 now and talk about what this shows.  
13 This is for 2002 and the 15-gigawatt case, right?

14 MR. PRETE: That's correct. And the graph  
15 actually, Mr. Wertheimer, is right behind you on that  
16 screen.

17 MR. WERTHEIMER: Now, the 15-gigawatt case  
18 is built on a certain set of assumptions, is that right?

19 MR. PRETE: That's correct.

20 MR. WERTHEIMER: Who came up with these  
21 assumptions?

22 MR. PRETE: The companies.

23 MR. WERTHEIMER: When did you come up with  
24 those assumptions?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PRETE: Subject to check, the  
2 assumptions -- a better part of a year ago when we defined  
3 a lot of the information needed to do modeling on EMF  
4 before the application was put together.

5 MR. WERTHEIMER: Was it done for this case?

6 MR. PRETE: When you define this case, what  
7 would that be?

8 MR. WERTHEIMER: Docket 272 --

9 MR. PRETE: Yes --

10 MR. WERTHEIMER: -- was it done in  
11 connection with this proceeding?

12 MR. PRETE: Yes.

13 MR. WERTHEIMER: Can you give me some  
14 flavor of what those assumptions are?

15 MR. PRETE: Sure, I'd be happy to. The  
16 assumptions as are noted -- on top of page 2 it talks  
17 about the most important driver of milligauss calculation  
18 is of course the loading on the line. And the two main  
19 factors in determining the loading of the line is (a) No.  
20 1 where the load is, and (b) what generation dispatch you  
21 would assume. Obviously, that translates into the loading  
22 of the line. And as you can see on the bottom of this  
23 page 3, I think that does a good job at giving that  
24 particular assumption. It states that the 15-gigawatt



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 case here assumes that only the large generating units on  
2 in Southwest Connecticut are two units, Bridgeport Energy  
3 and Bridgeport Harbor, which I'm sure the Council is aware  
4 of. The total is 759 megawatts. Of those two units,  
5 actually Bridgeport Harbor isn't at full power. I believe  
6 the assumption there is it's running around 300 megawatts.  
7 Now -- and neither is Bridgeport Energy for that matter.  
8 And further down on that page it shows that the entire  
9 generation capacity in Southwest Connecticut is roughly  
10 2200 megawatts. So that's a very important factor as Mr.  
11 Wertheimer asked for assumptions. Then I'd like to go to  
12 this particular graph to identify --

13 MR. ASHTON: Mr. Prete, before you go on,  
14 just for clarification, the 2188 megawatts is the total  
15 installed capacity, you have dispatched against that load  
16 level a total of 759 megawatts. Do -- is it presumed that  
17 all units are available for the dispatch scenario? In  
18 other words, they may not be economic and hence off, but  
19 they are all available?

20 MR. PRETE: That's correct.

21 MR. ASHTON: Okay. The ones -- the units  
22 that were conspicuous to my mind by their absence were the  
23 Milford units, the two gas turbines. Were they not  
24 economic in that case?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PRETE: I think as Mr. Wertheimer had  
2 asked, when was this particular assumption and case put  
3 together, and we have to go back the better part of a year  
4 before the application was filed. At that time I believe  
5 Milford Power was not operating units.

6 MR. ASHTON: Okay. So in that -- in that  
7 event that you assume that Milford was not available  
8 because of other than economic reasons and now it is  
9 available, would it be your opinion that there is a  
10 greater likelihood that the dispatch under a nominal 15-  
11 gigawatt case would include not only the Bridgeport Harbor  
12 and Bridgeport Energy units but the two Milford units?

13 MR. PRETE: That's highly possible.

14 MR. ASHTON: And what would be the impact  
15 of that on transmission line loading and hence magnetic  
16 fields?

17 MR. PRETE: It would have a direct impact  
18 to lower the loadings on the line between Beseck and East  
19 Devon.

20 MR. ASHTON: And what -- how would that  
21 affect the fields?

22 MR. PRETE: It obviously would then lower  
23 those fields.

24 MR. ASHTON: Okay.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Just layman's bottom line,  
2 because you're generating more power locally, you have to  
3 import less?

4 MR. ASHTON: Yes --

5 MR. PRETE: Yes, ma'am.

6 CHAIRMAN KATZ: It took awhile, but I think  
7 I got it.

8 MR. PRETE: I appreciate that.

9 MR. WERTHEIMER: So basically, you assume a  
10 certain amount of load and you assume that to meet that  
11 load you need a certain amount of generation and you  
12 picked which generation you thought would likely be  
13 running under that scenario, and that's our 15-gigawatt  
14 case?

15 MR. PRETE: That's correct. I just wanted  
16 to refer to load, Mr. Wertheimer --

17 MR. WERTHEIMER: Could we -- can we just  
18 let me do the cross-examination here and you can refer to  
19 other things as you -- just answer my question.

20 MR. PRETE: I was just trying to answer the  
21 assumptions, and that was one of them.

22 MR. FITZGERALD: (Indiscernible) --

23 MR. WERTHEIMER: Now, you consider those  
24 assumptions to be reliable? I mean they're your

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 assumptions and you did the best you could?

2 MR. PRETE: Yes.

3 MR. WERTHEIMER: Okay. Now, let's look on  
4 this -- this chart on top of page 3, it says for 2002 for  
5 83 percent of the year you're at the 16-gigawatt load or  
6 less. Is that -- is that what that indicates, one of the  
7 things that it indicates?

8 MR. PRETE: Actually, I would say that 83  
9 percent of the year it would be under 17 megawatts.

10 MR. WERTHEIMER: Under 17, okay.

11 MR. PRETE: Gigawatts -- I'm sorry,  
12 gigawatts.

13 MR. WERTHEIMER: Now, just to make sure  
14 that I'm reading this correctly, go to the bar above 17-  
15 gigawatt load, it's about at 8 percent?

16 MR. PRETE: That's correct.

17 MR. WERTHEIMER: Could I then add the 8  
18 percent to that 83 and come up with about 91 percent?

19 MR. PRETE: Yes.

20 MR. WERTHEIMER: So at 17 or lower -- you'd  
21 be at 17 or lower for 91 percent of the hours of that  
22 year?

23 MR. PRETE: Again, I would -- I would  
24 correct it and say it would be under 18 gigawatts.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. WERTHEIMER: Fair enough. Another way  
2 of doing this is that if you stacked up all of these bars,  
3 you'd come up with a hundred percent?

4 MR. PRETE: That's correct.

5 MR. WERTHEIMER: Okay. So under 19 would  
6 be roughly 94 and a half, under 20 would be about 96. Am  
7 I in the ballpark?

8 MR. PRETE: Yes, you are.

9 MR. WERTHEIMER: Okay. Now, let's go down  
10 to the under 16 load. The bar for 16 is a shade over 14  
11 percent, is that right?

12 MR. PRETE: That's correct.

13 MR. WERTHEIMER: So if you take 14 percent  
14 from the 83, that's less than -- you'd come up with about  
15 69 percent of the hours for the under 16-megawatt load, is  
16 that right?

17 MR. PRETE: That's correct.

18 MR. WERTHEIMER: Okay. So explain the  
19 significance of saying under 16 versus 15 for that number,  
20 for 69 percent of the hours?

21 MR. PRETE: I -- I believe the significance  
22 is -- in past testimony we have testified that a 15-  
23 gigawatt loading is an average loading, whereby loads  
24 would be higher 50 percent of the time and lower 50

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 percent of the time. So in your same deductions as you  
2 were going forward, if you then go to the 15-gigawatt bar  
3 there and subtract that percentage, you would end up very  
4 close to 55 percent -- 65 percent.

5 MR. WERTHEIMER: So Mr. -- I believe it was  
6 Mr. Zaklukiewicz who testified that the 15-gigawatt case  
7 in 2002 -- I think you were above that 48 percent hours of  
8 the year and below that 52 percent hours of the year.  
9 That's still the Applicants' position on what the 50 --  
10 the 15-gigawatt case is?

11 MR. ZAKLUKIEWICZ: That is correct.

12 MR. WERTHEIMER: Now, your graph on page 8  
13 is projected future at 27.7, is that right?

14 MR. PRETE: That's correct.

15 MR. WERTHEIMER: And the graph reads the  
16 same way, if you add the numbers of each graph for  
17 gigawatt load, you can come up with the percentages at  
18 those levels as we did on the first one. Is that right?

19 MR. PRETE: That's correct.

20 MR. WERTHEIMER: Okay. Now, this 27.7-  
21 gigawatt case is also based on assumptions, is that right?

22 MR. PRETE: Yes, it is.

23 MR. WERTHEIMER: Are they again the  
24 assumptions that the Applicants came up with?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PRETE: Yes, they are.

2 MR. WERTHEIMER: And when did you come up  
3 with those assumptions?

4 MR. PRETE: Essentially, the same time as -  
5 -

6 MR. WERTHEIMER: About the time that you  
7 were filing this application?

8 MR. PRETE: It was brought to my attention  
9 that the assumptions on this 27.7 were actually  
10 assumptions that are upwards of three years old when the  
11 Southwest Connecticut Working Group and others were  
12 deciding the solution to Southwest Connecticut.

13 MR. WERTHEIMER: CL&P was on the Southwest  
14 Connecticut Working Group?

15 MR. PRETE: I believe members of the  
16 planning department, yes, were on the --

17 MR. WERTHEIMER: And --

18 MR. PRETE: -- Southwest Connecticut  
19 Working Group --

20 MR. WERTHEIMER: And United Illuminating  
21 and ISO New England?

22 MR. ZAKLUKIEWICZ: That is correct.

23 MR. WERTHEIMER: And these assumptions work  
24 the same way, you assume a certain amount of load, assume

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 a certain amount of generation required to meet that load,  
2 and then make assumptions about which generation would be  
3 dispatched at that time to meet those load demands?

4 MR. PRETE: I would say that the difference  
5 here, Mr. Wertheimer, is that these particular assumptions  
6 are associated with what planning does to stress the  
7 system as we defined in the testimony, it tries to push as  
8 much load through various arteries to make sure that the  
9 design and the solution can work during the times where  
10 these particular again stress conditions would be  
11 anticipated or planned.

12 MR. WERTHEIMER: System planning  
13 assumptions, is that fair to say?

14 MR. ZAKLUKIEWICZ: Yes.

15 MR. WERTHEIMER: Whereas your assumptions  
16 for the 15-gigawatt case were not designed for system  
17 planning?

18 MR. PRETE: That is correct.

19 MR. WERTHEIMER: They were designed for  
20 comparison for use in this proceeding?

21 MR. PRETE: That's correct.

22 MR. ZAKLUKIEWICZ: Yes.

23 MR. WERTHEIMER: Do you consider the 27.7-  
24 gigawatt case assumptions to be reliable?



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PRETE: Your term of reliability, Mr.  
2 Wertheimer, if you could perhaps use another term.  
3 Reliable to us is from the point of view of a solution for  
4 electricity.

5 MR. WERTHEIMER: Is it something that we  
6 could rely on in terms of that we, the Council and all the  
7 parties can rely on when trying to figure out -- let me  
8 step back -- the purpose of this is for -- we've already  
9 established is for buffer zones -- the purpose of my  
10 questions is for buffer zones --

11 MR. PRETE: Okay --

12 MR. WERTHEIMER: -- in trying to compare  
13 one case to another, okay. You agree with that?

14 MR. PRETE: Sure.

15 MR. WERTHEIMER: Can we rely on the 27.7  
16 case to be a reasonable projection of what conditions  
17 would be like at peak load -- at those peak load  
18 projections for measurements with EMF?

19 MR. PRETE: No, sir, I -- no, not from the  
20 point of view of buffer zone, I would not agree with that.

21 MR. WERTHEIMER: And that's because it's  
22 designed more for system planning than for -- is designed  
23 more to stress the system than it is to figure out exactly  
24 projected -- what will actually be running if load ever

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 reached that peak?

2 MR. PRETE: That -- that is correct.

3 MR. WERTHEIMER: Okay. Now, you're  
4 familiar -- I'm sorry, let me step back -- in Volume 6 of  
5 your application you provided projected EMF levels at the  
6 15-gigawatt case and the 27.7-gigawatt case, is that  
7 right?

8 MR. PRETE: That's correct.

9 MR. WERTHEIMER: And you applied the same  
10 assumptions that you've got in your testimony that we're  
11 talking about today in that application?

12 MR. PRETE: Yes, in general those are  
13 exactly the same. I believe we had a revision to the 15-  
14 gigawatt assumptions, because at the time the application  
15 was made, generating units like Towantic and I believe the  
16 state of the cable across Long Island are different than  
17 they were today, so we amended that I believe in the early  
18 fall -- I'm sorry, the early spring of this year.

19 MR. WERTHEIMER: The 27.7 case assumptions  
20 would be the same because those are three years old,  
21 right?

22 MR. PRETE: Again, it was explained to me  
23 other than the state of Towantic, which was a generating  
24 plant planned two or three years ago, they would be

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 exactly the same.

2 MR. WERTHEIMER: So the 27.7-gigawatt case  
3 assumptions that were planned, they are not really three  
4 years old, they've been adjusted since that time?

5 MR. PRETE: Yeah, as stated for the plans  
6 of generation that either did or didn't occur, correct.

7 MR. WERTHEIMER: Any other adjustment to  
8 that gigawatt case?

9 MR. PRETE: Again, I'll have to check on  
10 that, but at this point in time we're not sure.

11 MR. WERTHEIMER: How about the 15-gigawatt  
12 case, is that -- have those assumptions changed since the  
13 time that you came up with them at the beginning of this  
14 process?

15 MR. PRETE: Again, we amended those in the  
16 spring of this year and they have not changed since then.

17 MR. WERTHEIMER: Are you familiar with the  
18 Reliability and Operability Committee that was developed  
19 in the course of this proceeding?

20 MR. PRETE: I am.

21 MR. WERTHEIMER: Are you a part of that  
22 committee?

23 MR. PRETE: I am.

24 MR. WERTHEIMER: Now, that -- that

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 committee, the ROC group, is not applying a 15-gigawatt  
2 case or a 27.7-gigawatt case, is that correct?

3 MR. PRETE: They're primarily using the  
4 stressed 27.7 case to come up with the mission.

5 MR. WERTHEIMER: Aren't they using the 30-  
6 gigawatt case?

7 MR. PRETE: It will be used to determine  
8 how long the project would last or would work, but from  
9 the principle of maximizing underground, the 27.7 stress  
10 case is primarily used.

11 MR. WERTHEIMER: Let -- let me try to be  
12 more specific. Were you here for the hearings on July 29,  
13 2004 when Mr. Kowalski for ISO New England was testifying?  
14 Do you recall that?

15 MR. PRETE: I --

16 MS. RANDELL: I don't think Mr. Prete --

17 MR. PRETE: I was not here.

18 MR. WERTHEIMER: Okay. Well, let me --  
19 does it surprise -- would it surprise you if Mr. Kowalski  
20 said that he believed that in this analysis he examined a  
21 30,000 megawatt load level for ISO New England?

22 MS. RANDELL: Madam Chairman --

23 (indiscernible) -- I'm on? Madam Chairman, if Mr.

24 Wertheimer is citing to something that occurred in a

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 hearing day that Mr. Prete was not present, could we have  
2 a transcript cite so that Mr. Prete can read the entire  
3 context of the statement?

4 MR. WERTHEIMER: Absolutely. July 29,  
5 2004, it occurs on page 83. The discussion that that's  
6 part of is a few pages before and runs on a few pages  
7 after.

8 MS. RANDELL: Thank you. Bear with us  
9 while we provide Mr. Prete with the transcript.

10 CHAIRMAN KATZ: Just while we're taking a  
11 moment here, Mr. Prete, are you comfortable making all  
12 these responses your testimony or would UI like to swear  
13 in another witness?

14 MR. ALAN SCARFONE: Well, I think --

15 MR. PRETE: The other members of this panel  
16 will jump in as they see fit. And I believe Mr. Scarfone,  
17 who was at the July hearing as well as part of the ROC  
18 group, might be able to answer your question.

19 MR. SCARFONE: Mr. Wertheimer, the 27.7 and  
20 30-gigawatt cases are being used by the Southwest  
21 Connecticut Working Group and the ROC committee to do  
22 system planning studies and to determine the reliable --  
23 to determine a reliable solution for Southwest  
24 Connecticut. That was the intent I believe of which Mr.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Kowalski had testified on that day. And that's basically  
2 what the -- those two load levels are being used for.

3 MR. WERTHEIMER: So there's a 30-gigawatt  
4 case out there?

5 MR. SCARFONE: Yes. And we have testified  
6 before on the 30-gigawatt case.

7 MR. WERTHEIMER: So there's another set of  
8 assumptions for a 30-gigawatt case that are memorialized  
9 somewhere?

10 MR. SCARFONE: I believe in the record  
11 there is reports from the Southwest Connecticut Working  
12 Group that has talked about the 30-gigawatt case.

13 MR. WERTHEIMER: And the ROC committee is  
14 applying the 30-gigawatt case and the 27.7-gigawatt case,  
15 is that true?

16 MR. SCARFONE: I believe right now we're  
17 trying to focus on determining a solution for the 27.7 and  
18 having GE do their analysis for the transient over-  
19 voltages, but I -- initially, we're trying to develop a  
20 solution for the 27.7.

21 MR. WERTHEIMER: So where did this 30-  
22 gigawatt case come from?

23 MR. SCARFONE: In consultation with the ISO  
24 when we were developing the Southwest Connecticut

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 solution, the ISO had indicated a desire to look a little  
2 bit longer term and determine if this 345-kV loop will  
3 last through a higher load level than what's projected to  
4 be in the late 2008, 2010 time period. And I think many -  
5 - all of our -- many planning studies do that type of  
6 analysis. You want to determine whether or not -- how  
7 long your solution is going to last. And in consultation  
8 with the ISO, they requested that we do that analysis.

9 COURT REPORTER: One moment please.

10 (Pause) Thank you.

11 MR. WERTHEIMER: If I could also refer you  
12 just -- and the Applicants to the Case 6 summary provided  
13 by the ROC group, which I believe was made part of this  
14 case at some point --

15 CHAIRMAN KATZ: Has that been entered into  
16 evidence?

17 A VOICE: Yes --

18 MS. RANDELL: I believe so. We'll check.

19 MR. WERTHEIMER: It also refers to a 30-  
20 gigawatt case.

21 CHAIRMAN KATZ: Okay.

22 MR. WERTHEIMER: So the assumptions for the  
23 30-gigawatt case were come up with by that same Southwest  
24 Connecticut Working Group?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. SCARFONE: That's correct.

2 MR. WERTHEIMER: And so that would also be  
3 about three years old?

4 MR. SCARFONE: I believe the Southwest  
5 Connecticut Working group had its first meeting,  
6 unfortunately, on September 11, 2001.

7 MR. WERTHEIMER: Now, according -- on page  
8 6 -- I'll get back to your testimony -- on page 6 of your  
9 testimony you state that the New England system is  
10 expected to hit the 27.7-gigawatt peak in 2010, is that  
11 right?

12 MR. PRETE: That's a more than likely  
13 chance as opposed to extreme, correct.

14 MR. WERTHEIMER: Right. That's the 50/50  
15 case?

16 MR. PRETE: That's correct.

17 MR. WERTHEIMER: And that's based on the  
18 2004 CELT, C-E-L-T, report? The 50/50 case basically  
19 means that there's a 50 percent chance of meeting that  
20 level on any -- during that year on any given day? How  
21 does it work?

22 A VOICE: No, that's not what --

23 MR. PRETE: It states that with average  
24 weather that you'd have a 50/50 chance of hitting it at



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 that level in that year.

2 MR. WERTHEIMER: Okay. And that's -- the  
3 50/50 case is separate from what's called the 90/10 case,  
4 is that right?

5 MR. PRETE: Right. That would be  
6 consistent with the extreme case.

7 MR. WERTHEIMER: The 90/10 case is known as  
8 the extreme weather case?

9 MR. PRETE: That is correct.

10 MR. WERTHEIMER: And that means that  
11 there's a 10 percent chance of reaching those load levels  
12 during that year assuming average weather, or assuming --  
13 oh, it's extreme weather, I'm sorry --

14 MR. PRETE: Right.

15 MR. WERTHEIMER: Okay. And -- so there's  
16 basically a 10 percent chance that the New England system  
17 will hit the 27.7-gigawatt case in 2005, is that right?

18 MR. PRETE: That's correct.

19 MR. WERTHEIMER: And whenever the 27.7-  
20 gigawatt load level is reach, your testimony indicates  
21 that the average load would be 16.8 gigawatts? Page 6 --

22 MR. PRETE: We extrapolate that the average  
23 would be 16.8 gigawatts, correct.

24 MR. WERTHEIMER: And that's based on a

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 mathematical calculation that you did?

2 MR. PRETE: That it is.

3 MR. WERTHEIMER: Now, the 2004 CELT report  
4 also makes projections with respect to the 30-gigawatt  
5 case, is that right? It's on page 7 of your testimony.

6 MR. PRETE: Yes.

7 MR. WERTHEIMER: It indicates that under  
8 the 90/10 case, according to that report, you could hit  
9 the 30-gigawatt level in 2013, is that right?

10 MR. PRETE: That is correct.

11 MR. WERTHEIMER: And if you hit that 30-  
12 gigawatt peak load, the average load would be 18  
13 gigawatts, is that right?

14 MR. PRETE: Through the extrapolation, yes.

15 MR. WERTHEIMER: The same mathematical  
16 calculation that you did?

17 MR. PRETE: That's correct.

18 MR. WERTHEIMER: Okay. Now, you state in  
19 your testimony that constructing a case for -- that would  
20 be typical for the 17-gigawatt load or the 18-gigawatt  
21 load, would be -- require you to make assumptions and be  
22 speculative, is that right?

23 MR. PRETE: That's correct.

24 MR. WERTHEIMER: Now -- but you -- you

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 constructed a 15-gigawatt case, right?

2 MR. PRETE: Correct.

3 MR. WERTHEIMER: And others have  
4 constructed a 27.7-gigawatt case, right?

5 MR. PRETE: Correct.

6 MR. WERTHEIMER: And they were both based  
7 on assumptions that we've talked about?

8 MR. PRETE: Right. Two different reasons.  
9 The end result of the 15-gigawatt case is we've come up  
10 with realistic loading on the lines consistent with, as  
11 you put it, the buffer zone. The 27.7, however, is  
12 consistent with Planning's effort, and ISO's effort to  
13 stress the system. And in stressing the system, as is in  
14 testimony, we shut off even more generation in the  
15 Southwest Connecticut area to force more load down the  
16 Beseck to East Devon to Norwalk line.

17 MR. WERTHEIMER: So is it -- and correct me  
18 if I'm wrong, but you're saying that you can come up with  
19 a realistic line loading scenario for 15 gigawatts for  
20 buffer zones, but you cannot do so for 17 gigawatts,  
21 cannot do so for an 18-gigawatt level because that would  
22 be speculative?

23 MR. PRETE: Speculative in the sense that  
24 it is our belief that more generation would more than

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 likely be on during those cases in the Southwest  
2 Connecticut area, thereby reducing that load --

3 MR. WERTHEIMER: But --

4 MR. PRETE: -- we kept that generation on.

5 MR. WERTHEIMER: But you made assumptions  
6 as to which load would be dispatched to meet a 15-gigawatt  
7 load and you would make assumptions to make -- as to which  
8 generation would be dispatched to meet a 17-gigawatt load,  
9 an 18-gigawatt load. I don't see why one would be more  
10 speculative than the other?

11 MR. PRETE: As you reach out into the years  
12 as you had presented those, when the average load is  
13 forecasted to be 17 or 18, those are synonymous with the  
14 27.7 and the 30 gigawatts. In order to meet the load  
15 across New England on 30 gigawatts, transmission and/or  
16 generation would more than likely need to be installed.  
17 Where those are installed is then what we're pointing to  
18 as far as speculation. Those would be future plans not  
19 yet even in the cue.

20 MR. ZAKLUKIEWICZ: Mr. Wertheimer --

21 MR. WERTHEIMER: You -- you jumped very  
22 quickly from 15 to 27.7 to 30 and I'm not going that far.  
23 I'm talking about the difference between a 15-gigawatt  
24 case and a 17-gigawatt case or an 18-gigawatt case --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PRETE: Right --

2 MR. WERTHEIMER: -- the fact of the matter,  
3 Mr. Prete, is you made assumptions for dispatch based on a  
4 load of 15 gigawatts, right? We've already talked about  
5 that.

6 MR. PRETE: Right, that's an average load  
7 synonymous with the peak we just had occurred in 2002 --

8 MR. WERTHEIMER: And you can make  
9 assumptions if it was a 16-gigawatt case, a 16.5-gigawatt  
10 case, 17 or 18?

11 MR. PRETE: But again, those are average  
12 loads that we have extrapolated in years that are five to  
13 ten years down the road --

14 MR. WERTHEIMER: But when we talk --

15 MR. SCARFONE: Mr. Wertheimer --

16 MR. WERTHEIMER: Excuse me. When we talk  
17 about the 15 -- we've had -- we've talked about the 15-  
18 gigawatt case throughout this proceeding. It was in your  
19 application pretty much from day one. We've relied on  
20 those assumptions. Now explain to me why we can rely on  
21 those assumptions for a 15-gigawatt case, but a 16-  
22 gigawatt case that's too speculative because we can't rely  
23 on those assumptions?

24 MR. SCARFONE: Mr. Wertheimer, the 15-

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 gigawatt case is what we've classified as an average load  
2 level. The contents of Mr. Prete's testimony indicates  
3 that the 17 and 18 gigawatt levels are the averages when  
4 you reach the 27 and 30-gigawatt load levels for peak  
5 loading. Yes, we can develop a 16-gigawatt and 17-  
6 gigawatt load flow right now and come up with a dispatch,  
7 but the contents of which these numbers were put in this  
8 testimony is that at the 27.7 and at the 30, those were  
9 the expected average load levels during that time period.  
10 The average load level today is 15.

11 MR. ZAKLUKIEWICZ: Mr. Wertheimer, maybe I  
12 can help a little bit. The generation in New England  
13 right at this time is 32,000 gigawatts approximate. To  
14 meet a 30-gigawatt load, significant additional  
15 transmission and generation must be installed in New  
16 England to meet that load. So our problem is that to  
17 serve a 30-gigawatt load for which in that period you  
18 would have an average 17 and 18 gigawatts, we're not  
19 certain exactly where all this new generation would be  
20 located. We're not certain if it will all be installed in  
21 Southwest Connecticut, Eastern Connecticut, or none in  
22 Connecticut. So in the case of the average 15, we know  
23 historically what has been dispatched, and that's what  
24 we've used on a typical average day. We know that there's

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 typically one or two units installed and operating in  
2 Southwest Connecticut. For 27.7 we know today if we had  
3 the load next year, there's not going to be any additional  
4 generation installed between now -- or significant  
5 generation between now and a severe high temperature  
6 period in 2005, so we dispatched and we looked at what  
7 would be the dispatch for the generation we have in place  
8 today.

9                   When we're trying to make assumptions on  
10 where is the generation going to be located in the year  
11 2010, 2012, that -- that's where the speculation comes  
12 into play where we're saying we're not quite certain. And  
13 it may be there could be 3,000 megawatts of low-cost,  
14 high-efficiency generation installed in Southwest  
15 Connecticut for which transfers into Southwest Connecticut  
16 may be lower than for the 27.6 case because the generation  
17 would be dispatched on a day-to-day basis driven by the  
18 economics. So that's where the speculation comes in if we  
19 didn't make ourselves clear to begin with.

20                   CHAIRMAN KATZ: Let's --

21                   MR. WERTHEIMER: I --

22                   CHAIRMAN KATZ: -- let's wrap up this  
23 thought if we could soon and move on.

24                   MR. WERTHEIMER: I understand. Do you have

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 an in-service date for this Phase 2 project projected?

2 MR. PRETE: We had December '07 as our  
3 phased in date.

4 MR. WERTHEIMER: Had, past tense?

5 MR. PRETE: We're still hopeful.

6 MR. WERTHEIMER: Optimism is good. And I  
7 believe you expect -- this has been asked in other  
8 contexts, but these transmission lines should have a  
9 useful life of at least 40 years, is that right?

10 MR. PRETE: That's correct.

11 MR. WERTHEIMER: Okay. Now, I understand  
12 what you said about making projections about what  
13 generation facilities are going to be around 5, 10, 20  
14 years, what transmission facilities are going to be around  
15 5, 10, 20 years. The fact of the matter is that those  
16 variables also impact the reliability of your 15-gigawatt  
17 case too, isn't that right?

18 MR. SCARFONE: I don't understand the  
19 question.

20 MR. WERTHEIMER: In your 15-gigawatt case  
21 you assume certain generation is going to be on, certain  
22 generation is not going to be dispatched. You don't know  
23 if those generating plants are going to be around in 10,  
24 20 years or not, or if new ones are going to come in that



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 are more economic and displace those?

2 MR. SCARFONE: You're right, I do not know  
3 specifically of those plants.

4 MR. WERTHEIMER: Right. That's all I have.  
5 Thanks.

6 CHAIRMAN KATZ: Thank you, Mr. Wertheimer.  
7 Mr. Frank. Just -- just to make sure I'm clear, Mr.  
8 Prete, whether -- if we do a 300-foot buffer, we don't  
9 really care whether it's 15 gigawatts or 27.7 gigawatts,  
10 correct, because we're going down to background of 300  
11 feet anyway under both scenarios?

12 MR. PRETE: That's correct, Madam Chair.  
13 The -- the intent of the testimony was to give visibility  
14 into really how many hours a year you're talking about  
15 those cases --

16 CHAIRMAN KATZ: Okay --

17 MR. PRETE: -- and from a practical point  
18 of view most hours a year versus very few hours a year.

19 CHAIRMAN KATZ: Okay. Thank you for  
20 putting that in context. Mr. Frank.

21 MR. FRANK: I have very short cross. Mr.  
22 Wertheimer --

23 CHAIRMAN KATZ: Did some of the heavy  
24 lifting.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. FRANK: It's nice batting cleanup for a  
2 change.

3 CHAIRMAN KATZ: Yes. His compadre Mr.  
4 Snook is very good about that too.

5 MR. FRANK: Hopefully I can do as well as  
6 David Ortiz does on the Red Sox. Mr. Prete, if you could  
7 please go to --

8 A VOICE: Let's not go there.

9 (Laughter)

10 MR. FRANK: If you could please go to the  
11 table on page 11 of your prefiled testimony.

12 (Off the record)

13 CHAIRMAN KATZ: On the record. Thank you,  
14 Tony. Yes.

15 MR. FRANK: Mr. Prete, do you have the  
16 table on page 11 in front of you?

17 MR. PRETE: I do. And just so I understand  
18 it, those are EMF calculations based on -- I think it's 44  
19 percent of the normal ratings of the line?

20 MR. PRETE: No. Those are the actual  
21 measurements associated with the existing lines that are  
22 presenting on the right-of-way between the various cross-  
23 sections between Middletown and East Devon.

24 MR. FITZGERALD: Excuse me. You said

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 measurements in that answer.

2 MR. FRANK: And you also said existing  
3 lines. Do --

4 MR. FITZGERALD: Yeah. Let's --

5 CHAIRMAN KATZ: Okay --

6 MR. PRETE: I meant existing lines. I  
7 guess I need to be corrected to say that they are  
8 calculated fields associated with 50 percent of the  
9 thermal ampacity of those lines.

10 MR. FRANK: Okay. And have you calculated  
11 the EMF based on the normal ratings of the line that has  
12 been proposed?

13 MR. PRETE: Not exactly at 50 percent. The  
14 27.7 case as referenced here in the various cross-sections  
15 load the lines to 44 percent of the thermal ampacity  
16 rating of the proposed line.

17 MR. FRANK: Okay. You have calculated the  
18 -- calculated the EMF based on 80 percent of the normal  
19 ratings of the proposed line, right?

20 MR. PRETE: I believe that was one of the  
21 interrogatories, yes.

22 MR. FRANK: Okay. And am I correct in  
23 reading that with respect to Segment 8 in Woodbridge, the  
24 EMF would be 122.9 milligauss on the east/south edge of

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 the right-of-way based on 80 percent of the normal rating  
2 of the line that's being proposed?

3 MR. PRETE: Are you reading from one of the  
4 interrogatories?

5 MR. FRANK: No, I'm reading from my notes,  
6 but I took it from one of the interrogatories, which is  
7 Towns' 237.

8 MR. PRETE: (Pause). If you could read  
9 those numbers again, I can make sure I'm in the right  
10 place.

11 MR. FRANK: Yeah, what I show is -- I just  
12 want to make sure -- on the east/south right-of-way for  
13 sections -- Cross-Section 8 and 8A, it's 122.9 milligauss.

14 MR. PRETE: That's where I am, that's  
15 correct.

16 MR. FRANK: Okay. And on the west/north  
17 right-of-way it's 105.1 milligauss?

18 MR. PRETE: Right. Those where the  
19 calculations based on the proposed configuration in the  
20 application and not the EMF mitigated options that we had  
21 talked about yesterday in depth.

22 MR. FRANK: Okay. But that's based on 80  
23 percent of the thermal ratings of the conductors?

24 MR. PRETE: That's correct.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. FRANK: Okay. And I assume then you  
2 could calculate the EMF based on 50 percent of the normal  
3 ratings as well?

4 MR. PRETE: We can make that calculation.

5 MR. FRANK: And a hundred percent of the  
6 normal ratings?

7 MR. PRETE: I believe we can make that  
8 calculation.

9 MR. FRANK: Okay. We asked for that  
10 information in an interrogatory and it was objected to  
11 based on an agreement that was put into place prior to  
12 some questions Mr. Ashton asked about what the EMF would  
13 be based on normal ratings. We think that they're  
14 relevant and important to consider. And through the  
15 Council, we would like to have those responses answered.

16 MR. PRETE: Mr. Frank, on --

17 CHAIRMAN KATZ: Mr. Prete, are you offering  
18 --

19 MR. PRETE: I'm sorry, Madam Chair.

20 CHAIRMAN KATZ: Are you offering to make  
21 that calculation?

22 MR. PRETE: Well, the calculation was made  
23 in Interrogatory 037 at 80 percent and 038 at 100 percent.  
24 And the dialogue prior to that gives an explanation of why

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 that cannot physically happen. So we've already given the  
2 calculations as to the proposed line --

3 MR. FRANK: And that --

4 MR. PRETE: -- and given the rationale that  
5 this is not something that could ever happen.

6 MR. FRANK: They've admitted at least that  
7 it could happen at 44 percent of the normal rating and I'd  
8 like to have those numbers at least. And --

9 MR. PRETE: Those are the numbers that are  
10 in many many of our exhibits for any case that's the 27.7.

11 MR. FRANK: Okay, so we can assume then for  
12 purposes of this analysis that when the peak hits 27.7,  
13 that that equates roughly to 40 percent -- 44 percent of  
14 the normal rating of the proposed line?

15 MR. PRETE: In our calculations, 27.7 in  
16 the cross-section that you're referring to is 44 percent  
17 of the rating of the conductor.

18 MR. FRANK: Okay. And it's your contention  
19 that you would never go higher than 44 percent of their  
20 normal ratings?

21 MR. PRETE: That -- that is not my  
22 contention, no.

23 MR. FRANK: Okay. So there are times when  
24 those lines will be used at a -- higher than 44 percent of

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 the normal ratings, right?

2 MR. PRETE: Under some contingency  
3 conditions under peak loads with lines going out because  
4 of lightning or something, that's a potential, yes.

5 MR. FRANK: Okay. And at 44 percent of the  
6 normal rating of the line, the EMF on the southeast right-  
7 of-way edge in Woodbridge would be roughly in the 50-  
8 milligauss range, right?

9 MR. PRETE: I'm not sure where you're  
10 reading that from.

11 MR. FRANK: I'm looking at the table on  
12 page 11.

13 MR. PRETE: Okay. These are for the  
14 existing lines, not the proposed lines.

15 MR. FRANK: Okay. And I guess what you  
16 have represented is that these half capacity currents are  
17 representative of the 27.7 case, right?

18 MR. PRETE: These -- these --

19 MR. FRANK: If I misunderstood it, then  
20 please let me know.

21 MR. PRETE: The question actually is  
22 answered -- Mr. Ashton said give us some calculation of  
23 the existing lines that are presently in place at 50  
24 percent of their thermal ratings, and that's what this

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 table is, the existing lines only. In Exhibit 96, Dr.  
2 Bailey's testimony, I believe you'll find at both the 15  
3 and 27.7-gig case the various design options and the  
4 levels of magnetic fields that go out every 15-foot  
5 increments from the right-of-way. And I can get that -- I  
6 think that's the one you're turning to -- right there.

7 MR. FRANK: Okay. So Cross-Section 8,  
8 which was Exhibit 1 to Dr. Bailey's July 19, 2004  
9 testimony, represents the proposed line at 44 percent of  
10 the normal ratings?

11 MR. PRETE: In that cross -- that's exactly  
12 right. And the various mitigation options I believe, Mr.  
13 Frank, are on the left-hand side of that page.

14 MR. FRANK: Okay. So just so we're on the  
15 same page then, on the 27.7-gigawatt case at the southeast  
16 edge of the right-of-way for the proposed lines on  
17 existing right-of-way without mitigation the milligauss is  
18 31.4, is that right?

19 MR. PRETE: I just need to turn to that  
20 page -- if you could -- (pause) -- could you tell me what  
21 page you're on, Mr. Frank? Would that be page 26 of 26?

22 MR. FRANK: Correct.

23 MR. PRETE: And again if you could  
24 reiterate what numbers --



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. FRANK: Sure. On the south edge -- on  
2 the southeast edge of the right-of-way for the proposed  
3 lines without mitigation it would be 31 milligauss?

4 MR. PRETE: That's correct.

5 MR. FRANK: And 55.7 on the northwest edge?

6 MR. PRETE: That's as proposed without  
7 mitigation, correct.

8 MR. FRANK: I understand. And with the  
9 mitigation you're still over the 3-milligauss level,  
10 right?

11 MR. PRETE: Right, the Option 5 which you  
12 see there is the same option we had used to display the  
13 lines on the maps as of yesterday.

14 MR. FRANK: Okay. If you could just bear  
15 with me for one second, I just want to make sure I don't  
16 duplicate what Mr. Wertheimer has already done. (Pause).  
17 No further questions.

18 CHAIRMAN KATZ: Thank you, Mr. Frank. Is  
19 there any other party or intervenor who wishes to cross-  
20 examine on this? Seeing none, Mr. Cunliffe.

21 MR. CUNLIFFE: Thank you, Chairman.  
22 Indulge me a little bit because you said that you've  
23 already responded to the 80 percent and 100 percent  
24 loadings on the line. Why can't they physically be done?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1                   MR. PRETE: As we're well aware, the entire  
2 transmission grid in New England is built as a grid  
3 interconnected for liability reasons. And we also know  
4 that the lines have flows of current from where the  
5 generation is to where the load is. And we also know that  
6 instantaneously if there's interruption in that grid, if a  
7 line goes down or a generator goes down, that  
8 instantaneously the loads change, but still physics say  
9 that the load will go from the generation to the load. If  
10 you design a transmission system whereby under normal  
11 conditions you are at levels that are approaching 50, 60  
12 percent of the current capability of the lines, when  
13 planning does and ISO does their analysis, you will find  
14 under stress conditions that you will have failures, you  
15 have a very unreliable grid. That's why they are designed  
16 in the manner that they're designed so that they have  
17 excess capacity when they're needed at those very few  
18 hours of the year when peak is driven and/or contingencies  
19 happen at the same time.

20                   MR. CUNLIFFE: That goes to my other  
21 question that when it reaches 27.7, you're at 1500 amps,  
22 is that right?

23                   MR. PRETE: Correct.

24                   MR. CUNLIFFE: And you're only 44 percent

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 of the line. What would the amps -- amperes load would be  
2 at 30 gigawatts?

3 A VOICE: Nine hundred and ninety at peak -  
4 -

5 MR. SCARFONE: Approximately 990 mVa on the  
6 new line.

7 MR. CUNLIFFE: Well why does it drop?

8 MR. PRETE: No, it would go from about 900  
9 mVa to about 990 mVa and if somebody could do the quick  
10 math in amps, that would help Mr. Cunliffe -- so from 1500  
11 amps to about 1800 amps.

12 MR. CUNLIFFE: Roughly -- roughly more than  
13 half of the line's capacity?

14 MR. PRETE: That's correct.

15 MR. SCARFONE: That's correct.

16 MR. PRETE: But again, Mr. Cunliffe, as we  
17 had tried to explain, is that we have not in those  
18 dispatch scenarios turned on any more generation in the  
19 Southwest Connecticut corridor. So again under these  
20 extreme conditions we are saying that only 40 percent of  
21 the generation will be on during the times when they will  
22 be fully dispatched under these very hot peak conditions.

23 MR. CUNLIFFE: This comes back to -- not  
24 that the project isn't needed, but the size of the -- or

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 the magnitude of the cables or lines that are going in  
2 place appear to be much larger to carry capacity that  
3 you'll never ever reach?

4 MR. PRETE: Yes, that is true from the  
5 surface, I agree wholeheartedly. In testimony prior the  
6 lines size, the actual conductor size is not -- is not  
7 designed to handle the thermal or the reliability  
8 problems, it is sized and oversized for noise and other  
9 NESC requirements.

10 MR. CUNLIFFE: That's my questions,  
11 Chairman.

12 CHAIRMAN KATZ: Thank you. Mr. Emerick.

13 MR. EMERICK: No questions, thank you.

14 CHAIRMAN KATZ: Mr. Ashton.

15 MR. ASHTON: No, thank you.

16 CHAIRMAN KATZ: Mr. Murphy.

17 MR. MURPHY: No questions.

18 CHAIRMAN KATZ: Mr. Lynch --

19 MR. WILENSKY: No --

20 CHAIRMAN KATZ: -- Mr. Wilensky I mean.

21 MR. WILENSKY: No questions. Mr. Lynch is  
22 under the table here -- (laughter) --

23 MR. ASHTON: Mr. Fitzgerald has some --

24 CHAIRMAN KATZ: Mr. Fitzgerald, do you have

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 redirect?

2 MR. FITZGERALD: I do.

3 CHAIRMAN KATZ: Proceed.

4 MR. FITZGERALD: Thank you. Mr. Prete, at  
5 page 2 of your testimony you say as shown in the figure  
6 below the 15-gigawatt value is not just an average number  
7 but represents a load within a relatively narrow range in  
8 which the system operates most of the time. Minimum load  
9 and peak load conditions occur at only a small number of  
10 hours in the year. For the majority of the hours in the  
11 year the load is below, or if above fairly close to the  
12 average load of 15 gigawatts.

13 Now is that a somewhat different point than  
14 just saying for half the year the -- half of the hours the  
15 load is below 15 gigawatts and for half of the hours it's  
16 above 15 gigawatts?

17 MR. PRETE: Most definitely.

18 MR. FITZGERALD: And could you explain why  
19 that difference is relevant to the propriety of using the  
20 15-gigawatt case as a reference case?

21 MR. PRETE: Sure. I did indeed put the  
22 graph that referred to that statement up on the screen  
23 here. And as Mr. Wertheimer noted, the majority of the  
24 time -- and you see 83 percent of the time -- and I would

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 ask you to remember two things, that 2002 was a peak year  
2 that New England has had -- and as you see this 83  
3 percent, even though this is the bar here in the middle  
4 for 15, that over 83 percent of the hours of the year,  
5 remember there's 8,760 hours, that not only does the  
6 loading on that line -- not only does that loading cause  
7 lower current flows on the line, but it does so in drastic  
8 magnitudes as you get into the 9 through 13 gigawatts.  
9 Another way to say that, and Mr. Wertheimer did a very  
10 good job, is that only a few hours of the year does the  
11 line really operate, and these are hours of the year,  
12 operate above the 18 or 19-gigawatt. And again, those are  
13 directly correlated to the load that would be on that  
14 line, the current, and therefore the EMF values.

15 MR. FITZGERALD: And -- Dr. Bailey, let me  
16 ask you to chime in here. Can you comment on the  
17 appropriateness of looking at a set of conditions that is  
18 representative of what values are likely to be for most of  
19 the time approximately versus looking at the highest  
20 possible exposure that might occur for any amount of time  
21 as the reference case for evaluating magnetic field  
22 exposure?

23 DR. WILLIAM BAILEY: These -- Bill Bailey -  
24 - these --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 COURT REPORTER: Hang on, Dr. Bailey.

2 (Pause).

3 DR. BAILEY: These -- these numbers were  
4 developed for very different reasons. As Mr. Prete  
5 testified, the 27.7-gigawatt case was developed for  
6 purposes of engineering planning. And the question is  
7 what relevance does the 27.7 or the 15-gigawatt case have  
8 to human exposure to magnetic fields. And it's clear from  
9 this case here that the 27-gigawatt case occurs -- it's  
10 the load for the highest hour in the year and so is  
11 representing human exposure over a year. That is an  
12 infinitesimal contribution to a person's overall exposure.  
13 If you want to character a person's exposure, the way it  
14 has been done in epidemiology studies, you want to look at  
15 that person's long-term typical exposure. And that would  
16 be better represented by the 15-gigawatt case. And that's  
17 why it's been a focus for the magnetic fields calculations  
18 and later on in the buffer zone discussions.

19 MR. FITZGERALD: Thank you. Let me stay  
20 with you for a minute, Dr. Bailey. There has been  
21 reference again in some of these questions to a 300-foot  
22 buffer zone. And I believe that value was first mentioned  
23 by Dr. Ginsberg in his May 12<sup>th</sup> testimony and it was listed  
24 in the EMF fact sheet as being a distance beyond which

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1       there would be only background exposure regardless of what  
2       transmission lines were in the right-of-way. Dr. Ginsberg  
3       could not recall where he'd seen that figure before. He  
4       recalled getting it from some study or pamphlet. Do you  
5       have any idea where that 300-foot value originates?

6                   DR. BAILEY: As I understood a later  
7       comment that he made, that that came from a figure that  
8       was in a brochure published by the National Institute of  
9       Environmental Health Sciences.

10                   MR. FITZGERALD: Now, do -- do we -- and I  
11       address this to the panel -- do we know where the fields  
12       from the proposed lines if they were constructed with all  
13       of this mitigation that has been under discussion would be  
14       reduced to background -- first of all, is there any  
15       information in the record that gives that answer with  
16       respect to any of the segments of the line?

17                   MR. FRANK: I'm going to object.

18                   CHAIRMAN KATZ: Mr. Frank.

19                   MR. FRANK: This is well beyond --

20                   CHAIRMAN KATZ: I was wondering why it took  
21       you two whole minutes.

22                   MR. FRANK: Yeah.

23                   MR. FITZGERALD: Well, it's --

24                   CHAIRMAN KATZ: I think we're --



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. FRANK: And also --

2 MR. FITZGERALD: It's because -- it's  
3 because you said well if we're going to have a 300-foot  
4 buffer, then we don't need to worry about the 27.7 or 15-  
5 gig case. That what inspires my questions.

6 CHAIRMAN KATZ: Okay, I'll slap my own  
7 wrist, but this is more of a subject for -- I had  
8 envisioned today's cross-examination to be more on the 15-  
9 gigawatt case versus the 27.7-gigawatt case. I had  
10 envision on October 14<sup>th</sup> that we'd be talking a little more  
11 about buffer zones again. And you're right, I walked into  
12 that one, but I'm going to extricate myself.

13 MR. FRANK: If I could add one more point  
14 to it. If Dr. Bailey is going to be talking about Dr.  
15 Ginsberg's opinions, I think it's only fair that Dr.  
16 Ginsberg be here to be able to hear what is being said  
17 about his opinions. And secondly, I think it's also fair  
18 to the Yale expert --

19 MR. FITZGERALD: Mr. -- Mr. -- there's no  
20 question pending --

21 MR. FRANK: I'm sorry, I --

22 MR. FITZGERALD: -- it's my examination --

23 MR. FRANK: -- I'm sorry, I didn't realize  
24 you had withdrawn the question --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 (gavel)

2 CHAIRMAN KATZ: This is where Miss Randell  
3 comes in. (Laughter).

4 MS. RANDELL: According to Mr. McDermott,  
5 this is my cue. We -- we hear you. October 14<sup>th</sup> is not  
6 very far from now.

7 CHAIRMAN KATZ: Okay. I'm thinking maybe  
8 we should just break at 2:30 because these things always  
9 seem to happen later in the afternoon.

10 MS. RANDELL: Mr. McDermott suggests that I  
11 also talk to Mr. Frank at the break.

12 MR. FITZGERALD: Let's get back to the --  
13 to your testimony, Mr. Prete, and I'd like to ask you to  
14 just quickly display for the panel the figures that are in  
15 the graph and explain why we believe -- or you believe  
16 that the 15-gigawatt case values are an appropriate  
17 reference point not just for today but for moving forward  
18 into the near term foreseeable future?

19 MR. PRETE: The graph that is up on the  
20 screen here is on page 10 and I think there's some  
21 important -- very important factors here. The blue line  
22 is the one that's labeled peak I think we've talked about  
23 in great detail. The bold shows the peak in the years  
24 between 1999 and 2003. And as you can see because of the

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 weather, it isn't linear. The amount of hours that that  
2 peak will occur, regardless if you started in '99 or go to  
3 2005 or 2010, will be very few hours, and we see that in  
4 every bar chart that we have in the testimony, very few  
5 hours. Nonetheless, you need to plan for that.  
6 Obviously, that's why we're here.

7 Similarly, the red line as you see there is  
8 the average. In bold is the average between '99 and 2003.  
9 And as we state in our testimony, as you see the year  
10 2002, which is in between, the average is below the 15  
11 gigawatts. And as you then extrapolate that particular  
12 line, it's dotted, when you get to the year 2005 or 2010,  
13 and again those are the years that 27.7 will occur, that  
14 average grows to approximately 16.8 gigawatts.

15 The difference between the average today,  
16 14 and a half gigawatts, and the 16 is two gigawatts  
17 obviously. And what we have stated in the testimony is  
18 that particular average will also result in the loading on  
19 the line in and around the 15-gigawatt loading that we  
20 have presented many times in our testimony, it will not  
21 falter far from that. And indeed, more than half the  
22 hours of the year, as Dr. Bailey has stated, is relevant  
23 from the point of view of a policy that is before us. And  
24 similarly the minimum as you see in the blue line, and I

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 won't go through that, also has that escalation.

2 As peak grows, and we've seen this in  
3 history and this is something that is predictable, the  
4 peak grows at a rate of two to one on the average. So to  
5 get to 27.7 loading that we see that has testified as a  
6 stress system, we will then have years to grow the average  
7 to any levels that come close, any levels that would come  
8 close. And when they come close, that would be the time  
9 when that would be experienced more than half the hours of  
10 the year.

11 MR. FITZGERALD: And when the average load  
12 grows to 27.7 gigs far off in the future, will the loading  
13 on these -- is there any reason to believe that the  
14 loading on these lines would be that represented by the  
15 so-called 27.7-gigawatt case?

16 MR. PRETE: Not as an average. That's  
17 virtually impossible.

18 MR. FITZGERALD: Nothing further.

19 CHAIRMAN KATZ: Thank you. This concludes  
20 all the items I had listed on the agenda for today's  
21 public hearing. Are there any other items which I had  
22 promised that we'd discussed today which I have missed?

23 Hearing none, this Council moving forward  
24 is going to meet October 14<sup>th</sup> here at CCSU. We understand

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 that a number of the mayors and the first selectmen cannot  
2 be here because of a CCM meeting, but their lawyers can  
3 be. And that's why we all have CTN. The subject of  
4 October 14<sup>th</sup> is going to be the buffer zone/EMF maps. And  
5 I ask the Applicants in the meantime to facilitate with  
6 the Towns to make sure that everybody gets maps and dots  
7 as they need.

8 MS. RANDELL: Madam --

9 MR. ASHTON: Will Dr. Ginsberg be here for  
10 that?

11 CHAIRMAN KATZ: Would you like Dr. Ginsberg  
12 --

13 MR. ASHTON: I would like very much --

14 CHAIRMAN KATZ: Yes --

15 MR. ASHTON: -- to have him present for  
16 that.

17 CHAIRMAN KATZ: Yeah, several Council  
18 members have asked and we will look into whether we can  
19 have Dr. Ginsberg here.

20 Also what we can take care of on October  
21 14<sup>th</sup> -- will we have the ROC group report by October 14<sup>th</sup> if  
22 we wanted to do EMFs of the underground cable where we  
23 know where the underground cable is proposed?

24 MR. ZAKLUKIEWICZ: I think the probability

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 of that is extremely low.

2 CHAIRMAN KATZ: Okay, we will take that off  
3 then.

4 MR. ASHTON: I think you want a couple of -  
5 - (indiscernible) -- reading time for that -- (pause) --

6 CHAIRMAN KATZ: Okay. So at this point we  
7 will -- (pause) -- we plan to have the KEMA report out and  
8 about by October 8<sup>th</sup>. What we could do on October 14<sup>th</sup> is  
9 start the process on that, of course reserving your right  
10 to give you a little more time for you and your  
11 consultants to study it, but perhaps we can start it on  
12 that -- and of course Mr. Phelps, as always, will take  
13 suggestions on what should be included on that.

14 So that's what I'm looking at right now is  
15 buffer zones, EMF maps, Dr. Ginsberg, and perhaps starting  
16 a preliminary cross-examination of the KEMA report. After  
17 you get the KEMA report on the 14<sup>th</sup>, if you could give us  
18 an idea of how much longer your various consultants and  
19 things need to examine it, we'd appreciate that. I have  
20 no idea of how simple or complicated it's going to be, but  
21 --

22 MR. ASHTON: (Indiscernible) --

23 CHAIRMAN KATZ: Yeah, right --

24 COURT REPORTER: One moment please.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 (Pause). Thank you.

2 CHAIRMAN KATZ: Once we do get the ROC  
3 report and I determine that those phrases that I dislike  
4 so much are not in it, undesirably complex and --

5 MR. PRETE: Overly complex --

6 CHAIRMAN KATZ: Overly -- yes -- then we  
7 will go ahead and we'd like to start scheduling future  
8 hearings on the ROC group report. Mr. Prete.

9 MR. PRETE: Not that that's not enough for  
10 October 14<sup>th</sup>, but as you put KEMA as a placeholder, maybe  
11 we could put ABB's report --

12 CHAIRMAN KATZ: Yes --

13 MR. PRETE: -- as a placeholder as well?

14 CHAIRMAN KATZ: Will -- the ABB report will  
15 be out when?

16 MR. PRETE: September 17<sup>th</sup> was the date it  
17 was suppose to be out -- (laughter) -- we're hopeful to  
18 get that soon.

19 CHAIRMAN KATZ: Okay. Why don't we put it  
20 as a placeholder. And again if it comes out late, we're  
21 going to reserve the right for people to examine it. Miss  
22 Kohler.

23 MS. KOHLER: Can we set up a reasonable  
24 prefiling date for the October 14<sup>th</sup> hearing?

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: I think that's reasonable.  
2 Mr. Phelps, do you have some suggestions?

3 A VOICE: Next week --

4 CHAIRMAN KATZ: Well, first the -- the  
5 buffer zone maps have already been filed, so -- you mean  
6 for interrogatory -- can you come back up to the mic if  
7 you don't mind -- do you envision interrogatories and --

8 MS. KOHLER: Just for whatever other  
9 information, if there is any other information, that's  
10 going to be provided for that hearing date, we'd  
11 appreciate --

12 CHAIRMAN KATZ: Okay, new information.

13 MS. KOHLER: Right.

14 CHAIRMAN KATZ: Okay.

15 MS. KOHLER: At least a week for us to  
16 review --

17 CHAIRMAN KATZ: Okay --

18 MR. PHELPS: Well, Chairman, clearly what's  
19 most advantageous to us from a staff point of view is  
20 receiving material by noontime on the previous Friday --

21 CHAIRMAN KATZ: Yeah --

22 MR. PHELPS: -- but that would be, you  
23 know, fully -- well five days ahead of time.

24 MR. MARCONI: There's a holiday thrown in -



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 -

2 MR. PHELPS: And there's -- well, that's  
3 right -- and there's a holiday there, Monday --

4 CHAIRMAN KATZ: For some of us --

5 MR. PHELPS: -- Monday the 11<sup>th</sup> is a  
6 holiday. I mean I'd like to invite comment now if I could  
7 through you, Madam Chair, from the attorneys as to whether  
8 or not they think noontime on the 8<sup>th</sup> of October would be  
9 achievable.

10 MS. KOHLER: Is that Friday? The  
11 difficulty with the Friday noon filing is -- when we  
12 discussed in the beginning of the process before all this  
13 started, we had asked for two weeks, and I think the AG  
14 had agreed or had supported that, and that 14 days or two  
15 weeks was a reasonable period of time. And as this has  
16 kind of gone along, we've narrowed it down to a week.  
17 Doing it Friday the noon beforehand means we don't get an  
18 opportunity -- I mean we may be working straight through  
19 the weekend, but our clients don't have an opportunity to  
20 review it. We really need a full week, I mean five  
21 business days in order to be able to discuss it with  
22 clients, our residents that are experts.

23 MR. PHELPS: Fair enough, except that the  
24 pressure sort of works two ways. Those who are going to

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 be preparing the material need as much time as they can  
2 possibly get to prepare the material. If we back the date  
3 up too much, I often find that persons preparing the  
4 material remark that they don't have enough time. The  
5 other side of that is that -- (pause) -- the other side of  
6 that is that the persons who receive the material need to  
7 receive it in adequate time to allow to facilitate their  
8 review of the material.

9 CHAIRMAN KATZ: I -- I guess I don't  
10 envision a lot of new material for the 14<sup>th</sup>. I think if  
11 we're discussing primarily the maps and Dr. Ginsberg, I  
12 guess I don't see -- I think your suggestion that normally  
13 we have more time is a good one, but I just think in this  
14 particular instant we just don't have a lot of new  
15 material.

16 MR. PHELPS: Well, Madam Chair, if we back  
17 it up to Wednesday the 6<sup>th</sup> and the staff anticipates  
18 receipt of all the material by noontime Wednesday the 6<sup>th</sup>  
19 and plans to put it in the mail, I think it's very likely  
20 that everybody would receive it before the holiday Monday.  
21 Is that -- is that a case of backing the date up too much  
22 so that people don't have time to prepare?

23 CHAIRMAN KATZ: Comments?

24 MS. RANDELL: Well, we --

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. PRETE: That's only a week.

2 MS. RANDELL: Yeah. We don't anticipate  
3 much to file, but of course things develop. And to point  
4 out the obvious, that's a week from today. It really is  
5 not a realistic prefiling date. We could -- you know, I  
6 think the Friday noon suggestion is a good one. And I can  
7 tell you from our past experience that will be tight. And  
8 I recognize peoples' concerns, but we do send them out  
9 electronically, people are aware of the filing. And I  
10 agree with Mr. Phelps that it's far better to have a  
11 comprehensive prefile rather than a rushed one that's  
12 later supplemented.

13 CHAIRMAN KATZ: Other comments? Mr.  
14 Wertheimer, I see you --

15 MR. WERTHEIMER: I appreciate what --  
16 (indiscernible) -- I appreciate what you said about not  
17 expecting too much new, but I think two or three days ago  
18 we could have said the same thing. You don't know.

19 And I understand what counsel for the  
20 Applicants are saying, of course they want more time. But  
21 you know, how -- the quality of the -- to get an extra  
22 couple of days -- the quality of their prefiled testimony  
23 I think is diminished if there's not adequate time on  
24 behalf of everyone else to prepare and probe that

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 information. I understand what you're saying about this  
2 Friday. And next Friday versus Monday or Tuesday I'm not  
3 sure. But my concern is that we've consistently lowered  
4 the bar as these proceedings have gone on and we've  
5 squeezed things, and I think that the record in this case  
6 is the thing that's going to suffer because there has not  
7 been adequate time to really get into all of these things  
8 and we're having to go back and replot some of the ground  
9 that should have been done right the first time. So, I'm  
10 not going to take a position on whether it should be  
11 Friday noon or the preceding, you know, Thursday at 5:00,  
12 but I'd urge you as we go forward to be sensitive to all  
13 these concerns.

14 CHAIRMAN KATZ: First can I get a show of  
15 hands of parties and intervenors and Applicants who plan  
16 to prefile new information for those subject matters that  
17 we are taking up October 14<sup>th</sup>?

18 MR. FITZGERALD: We -- we --

19 CHAIRMAN KATZ: Mr. MacLeod?

20 MS. RANDELL: We don't plan --

21 MR. FITZGERALD: We don't plan -- we don't  
22 have a plan to file anything right now, but after we go  
23 back and talk, we might come up with something.

24 MS. RANDELL: Right.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 CHAIRMAN KATZ: Yes --

2 A VOICE: The maps --

3 CHAIRMAN KATZ: -- Mr. MacLeod --

4 MS. RANDELL: Oh, we do have maps.

5 MR. MACLEOD: Madam Chair, it seems like  
6 one of the items that would be new is the KEMA report,  
7 which as Mr. Phelps said would in all likelihood not be  
8 out until the 8<sup>th</sup> anyway. May I -- may I ask for some  
9 guidance from the Council as to what the proceeding will  
10 be, what process you envision undertaking with respect to  
11 the KEMA report and whether you're looking for input from  
12 participants in the proceeding regarding the KEMA report,  
13 because it seems to me that would bear on what we're able  
14 to do in the way of prefiled testimony if you envision any  
15 comments in that regard?

16 CHAIRMAN KATZ: Well, we -- I guess what we  
17 could do is we could have KEMA here available for  
18 questions on October 14<sup>th</sup>. And those questions might  
19 generate more information that KEMA may need to develop.

20 MS. RANDELL: We're flying a little blind  
21 here. Without knowing and seeing the KEMA report and  
22 knowing what's in it --

23 CHAIRMAN KATZ: Well --

24 MS. RANDELL: -- it's a little difficult to

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 know whether we're going to ask for, you know,  
2 interrogatories, whether we'd prefer to do cross-  
3 examination, whether our consultants would rather do a  
4 piece on it --

5 CHAIRMAN KATZ: Yeah --

6 MS. RANDELL: I think you need to be, you  
7 know, a little flexible on that just to see what it is.

8 CHAIRMAN KATZ: I'm -- I want to consult  
9 with staff and we might have to have the 14<sup>th</sup> go by the  
10 boards. It sounds like it's creating more problems than  
11 solutions, but we'll get -- we'll --

12 MS. RANDELL: We'd like to at least  
13 complete the EMF and buffer zones if we could then.

14 CHAIRMAN KATZ: Could we go off the record  
15 for a minute.

16 (Off the record)

17 CHAIRMAN KATZ: We will meet on October 14<sup>th</sup>  
18 but we will limit those subjects to the buffer zone maps  
19 and Dr. Ginsberg. We will not get into KEMA and we will  
20 not get into anything else.

21 A VOICE: Good --

22 CHAIRMAN KATZ: We will allow people to by  
23 October 8<sup>th</sup> -- Mr. Phelps --

24 MR. PHELPS: The suggestion that I have,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 Madam Chair, for persons who are concerned about getting  
2 their material ahead of time and were perhaps supporting  
3 the idea of the prefiled date being Wednesday the 6<sup>th</sup>, I  
4 think a reasonable compromise might be that anybody who is  
5 anxious to receive their material as soon as possible  
6 could opt to pick the material up at the Siting Council  
7 offices so that we would keep to noontime Friday the 8<sup>th</sup>,  
8 but if the Towns for example want to have the material by  
9 the close of business Friday, as they might if it were  
10 mailed on Wednesday the 6<sup>th</sup> let's say, they could  
11 communicate with me ahead of time, we'll get the word out  
12 to the right persons, and they can pick the material up at  
13 our offices by the close of business Friday because of  
14 course we would expect the material to be -- at least in  
15 the case of material coming from the Applicants to be  
16 hand-delivered to the offices on Friday midday, that's  
17 been the routine.

18 CHAIRMAN KATZ: Okay. And also -- so --  
19 Miss Randell, if any town needs CD's or things like this  
20 on the maps, we're going to ask them to let you know by  
21 today --

22 MS. RANDELL: That --

23 CHAIRMAN KATZ: -- for printing services,  
24 whatever.

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MS. RANDELL: Thank you, that would be  
2 helpful. If they could -- Mr. McDermott requests that the  
3 e-mail go directly to Mr. McDermott, that would be  
4 McDermott @ Wiggin.com --

5 CHAIRMAN KATZ: Thank you --

6 MS. RANDELL: -- and we'll attend to that.

7 CHAIRMAN KATZ: Okay.

8 MS. RANDELL: And one other request without  
9 being too pushy, if -- I agree completely that starting  
10 KEMA on the 14<sup>th</sup> might have been a little ambitious, but  
11 would it be possible since the report will be out on the  
12 8<sup>th</sup> or thereabouts to try to look at something later in the  
13 month so that we can get that going --

14 CHAIRMAN KATZ: Well, I --

15 MS. RANDELL: -- and we can maybe get ABB  
16 there too.

17 CHAIRMAN KATZ: Yeah, and I agree, I wanted  
18 some -- I wanted to do some long-term scheduling, but I  
19 envisioned doing DC cable, doing KEMA and doing ROC during  
20 those same two day thing, and you can't tell me when the  
21 ROC report is coming in, that's my problem.

22 MS. RANDELL: That would be correct.

23 MR. FITZGERALD: Correct --

24 CHAIRMAN KATZ: So --



HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 MR. FITZGERALD: -- yeah --

2 CHAIRMAN KATZ: -- you know, as soon as you  
3 know and you tell us, then we can schedule some October  
4 hearings.

5 MR. FITZGERALD: Okay.

6 MS. RANDELL: Fair enough.

7 CHAIRMAN KATZ: But we -- we are holding  
8 some dates. I mean there's some advantages to all parties  
9 to keep this first moving along toward a completion. And  
10 as one of the parties indicated though we need to have a  
11 complete record, which we are trying to do.

12 MR. PHELPS: So just to be clear, anybody  
13 who wants to pick material up at the offices on the 8<sup>th</sup>  
14 will need to communicate with either me or Lisa and we'll  
15 make the necessary arrangements so that you can pick it up  
16 at our offices.

17 CHAIRMAN KATZ: Just to tell you some of  
18 the dates that we're looking at possibly was October 20<sup>th</sup>,  
19 depending on when we get the ROC report, yes -- I think we  
20 have the room?

21 MR. PHELPS: 20 and 21.

22 CHAIRMAN KATZ: Yeah. And again, if you  
23 weren't in the room when I made the offer to the mayors  
24 and first selectmen, if we do go on the 20<sup>th</sup> at 10:00 a.m.,

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

1 that is when we would set aside that time for those  
2 appearances for mayors and first selectmen who might want  
3 to give us additional comments on the buffer zone.

4 Okay, any other business we need to do  
5 today by anybody? Mr. Walsh.

6 MR. WALSH: Madam Chairman, with regard to  
7 the dates of October 20<sup>th</sup> and 21<sup>st</sup>, I believe that hearings  
8 are scheduled in Docket 292 for that day.

9 CHAIRMAN KATZ: Oh -- yes --

10 MR. WALSH: Thank you.

11 CHAIRMAN KATZ: I'm glad you mentioned  
12 that, thank you. Well, 292 has been moved from my front  
13 burner to my back burner because I want to finish this  
14 docket. So we are looking at using the 292 dates for 272,  
15 Mr. Walsh, and thank you for reminding us of that. Darien  
16 and Stamford and those people might just have to wait. We  
17 are going to do the public hearing on Darien, but the  
18 evidentiary we might wait until after we -- yeah, thank  
19 you.

20 Any other business? We are adjourned for  
21 today.

22 (Whereupon, the hearing adjourned at 3:15  
23 p.m.)

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

## INDEX

	PAGE
Update by Applicants Bartosewicz, Anne	9
Town of Fairfield (limited appearance) Kennelly, Eileen	24
Town of Westport (limited appearance) Cederbaum, Eugene	39
12-C Process Presentation Derek Phelps	127

## INDEX OF WITNESSES

## CITY OF BRIDGEPORT'S WITNESSES:

Michael P. Nidoh	
Direct Examination by Ms. Howlett	14
Cross-Examination by Mr. Walsh	15
Cross-Examination by the Council	19

## CITY OF NORWALK WITNESSES:

Mayor Alex Knopp	
Harold Alvord	
Cross-Examination by the Council	28, 34
Cross-Examination by Mr. Walsh	30

## DEPARTMENT OF TRANSPORTATION WITNESSES:

Arthur Gruhn	
Joseph Obara	
John Carey	
Direct Examination by Ms. Meskill	47
Cross-Examination by Mr. Cederbaum	48
Cross-Examination by Ms. Howlett	63
Cross-Examination by Ms. Kennelly	66
Cross-Examination by the Council	69
Redirect Examination by Mr. Walsh	81

HEARING RE: CL&P and UI  
SEPTEMBER 29, 2004

APPLICANTS' PANEL OF WITNESSES:

Re: EMF from Undergrounding

Dr. Gary Johnson  
Roger Zaklukiewicz  
John Prete

Cross-Examination by Mr. Ball	85
Redirect Examination by Mr. Fitzgerald	117
Cross-Examination by the Council	120

Re: EMF, 15-Gigawatt Case

John Prete  
Roger Zaklukewicz  
Alan Scarfone  
Dr. William Bailey

Cross-Examination by Mr. Wertheimer	142
Cross-Examination by Mr. Frank	170
Cross-Examination by the Council	177
Redirect Examination by Mr. Fitzgerald	181

INDEX OF D.O.T. EXHIBITS

	NUMBER	PAGE
Responses to Council's Request, 8/19/04	12	47
Prefiled Testimony of A. Gruhn, 9/24/04	13	47

## 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 7th day of October, 2004.



Paul Landman  
President

**Post Reporting Service**  
**1-800-262-4102**