

ORIGINAL

STATE OF CONNECTICUT
SITING COUNCIL

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CONNECTICUT LIGHT & POWER COMPANY
AND UNITED ILLUMINATING COMPANY

MARCH 23, 2004
(10:06 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, CONNECTICUT

DOCKET NO. 272

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SITING COUNCIL

BEFORE: PAMELA B. KATZ, CHAIRMAN

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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 March 23, 2004 at 10:06 a.m., at which time the parties
8 were represented as hereinbefore set forth . . .

9
10
11 CHAIRMAN PAMELA B. KATZ: Ladies and
12 gentlemen, this hearing is called to order 10:00 a.m.,
13 March 23, 2004.

14 My name is Pamela B. Katz, Chairman of the
15 Connecticut Siting Council. Other members of the Council
16 here are Vice Chairman Colin C. Tait; Brian Emerick,
17 designee for Commissioner Rocque of DEP; Gerald J.
18 Heffernan, designee for Commissioner Downes of DPUC;
19 Edward S. Wilensky is joining us shortly; Brian O'Neill;
20 Philip T. Ashton; Daniel P. Lynch, Jr.; and James Murphy,
21 Jr.

22 Members of the staff are Derek Phelps,
23 Executive Director; Fred O. Cunliffe, Siting Analyst on
24 this docket; Robert Erling, Senior Siting Analyst; and

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1 Christina Lepage, Siting Analyst; and Robert Marconi,
2 Assistant Attorney General.

3 The court reporter is Tony Vanacore and
4 the audio technician is Ed Chamberlain.

5 This hearing is a continuation of the
6 evening hearing sessions conducted in the Towns of
7 Bridgeport, Weston, Westport, Milford, Wallingford,
8 Woodbridge, Orange and Middletown for the purposes of
9 listening to public statements.

10 This hearing is the beginning of the
11 evidentiary process held pursuant to the provisions of
12 General Statutes 16-50g through 16-50aa and Sections 16-
13 50j-1 through 16-50j-34 of the Regulations of Connecticut
14 State Agencies on an application of the Connecticut Light
15 and Power Company and the United Illuminating Company for
16 a Certificate of Environmental Compatibility and Public
17 Need for the construction of a new 345-kV electric
18 transmission line and associated facilities between the
19 Scovill Rock Switching Station in Middletown and the
20 Norwalk Substation in Norwalk. This includes
21 construction of the Beseck Switching Station in
22 Wallingford, the East Devon Substation in Milford, and
23 the Singer Substation in Bridgeport, and modifications to
24 the Scovill Rock Switching Station and the Norwalk

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1 Substation and certain interconnections. This
2 application was received by the Council on October 9,
3 2003.

4 This proceeding is a contested case under
5 the Uniform Administrative Procedure Act (UAPA) and will
6 be conducted in accordance with the applicable provisions
7 of the General Statutes of the State of Connecticut and
8 the Regulations of Connecticut State Agencies.

9 As required by law, ex parte or off-the-
10 record communication with a Council member or a Council
11 staff member on the merits of this application is
12 prohibited.

13 The parties and intervenors to this
14 proceeding can be found on the Council's service list,
15 which a copy can be obtained from Council staff.

16 A verbatim transcript will be made of each
17 hearing session. And all hearing transcripts will be
18 deposited with the town and city clerks' offices within
19 the municipalities of Middletown, Middlefield, Haddam,
20 Durham, Meriden, Wallingford, Cheshire, Hamden, Bethany,
21 Woodbridge, Orange, West Haven, Milford, Stratford,
22 Bridgeport, Fairfield, Westport, Norwalk, Easton,
23 Trumbull, Weston, Wilton, North Haven and New Haven.

24 At the end of each session of this

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1 hearing, I will confirm the date, time, and place of the
2 next session.

3 Persons in this assembly in possession of
4 cellular telephones and pagers are kindly asked to put
5 them on silent operation or shut them off. Please do
6 this now.

7 The Council is in receipt of a letter from
8 the First District Water Department of the City of
9 Norwalk requesting intervenor status. I suggest the
10 Council act on this request in a going-forward basis. Is
11 there a motion to make the First District Water
12 Department City of Norwalk an intervenor in this
13 proceeding?

14 MR. COLIN C. TAIT: So moved.

15 MR. PHILIP T. ASHTON: Second.

16 CHAIRMAN KATZ: A second. Further
17 discussion? All those in favor of making them an
18 intervenor say aye.

19 VOICES: Aye.

20 CHAIRMAN KATZ: I hereby grant the First
21 District Water Department of Norwalk intervenor status.

22 The Council is in receipt of a motion by
23 the Towns of Bethany, Cheshire, Durham, Easton,
24 Fairfield, Haddam, Middlefield, Milford, North Haven,

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1 Norwalk, Orange, Wallingford, Weston, Westport, Wilton
2 and Woodbridge, also known as the Towns, to dismiss the
3 application, compel responses, and schedule certain
4 deadlines and hearings. I'd ask for a motion on this and
5 then I'd like to say something under discussion. Is
6 there a motion?

7 MR. TAIT: I move that we deny the motion
8 because our current scheduling proposal for April, May
9 and June takes care of the problems that have been raised
10 by the motion.

11 CHAIRMAN KATZ: Is there a second?

12 MR. DANIEL P. LYNCH, JR.: I will second
13 the motion.

14 CHAIRMAN KATZ: Okay. I'd like to make a
15 few remarks under discussion. This motion has two parts.
16 The first is that we should dismiss the application and
17 basically start over, but the motion itself does not
18 outline how that is going to be helpful to the process.
19 And in addition, under the subtitle watch what you wish
20 for, I think if the State of Connecticut were to actually
21 start this whole process over again, it would be a signal
22 to the Federal Government the fact that perhaps federal
23 jurisdiction over the siting of transmission lines in
24 Connecticut should be done. I don't -- and I dare to say

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1 the Feds would not have eight evening hearings if they
2 had jurisdiction over this. So, I'm going to encourage
3 the Council to deny the Motion to Dismiss, because
4 starting over at this point I just don't think would be
5 helpful.

6 Secondly, in the second part the motion
7 accuses the Council of acting in abuse of its discretion
8 by taking up any matter other than need. And I have to
9 disagree with that. We are doing -- we are starting the
10 EMF process on Thursday's hearing. We're not slamming
11 the door on any subject matter. Everyone, all parties
12 and intervenors -- we are encouraging a full exchange of
13 information back and forth and everyone is going to get
14 their opportunity over the coming months to cross-examine
15 on every issue. If a matter comes up on something this
16 week and new information comes up later in this
17 proceeding, this Council is going to allow within reason
18 cross-examination on that topic. So, I disagree with the
19 accusation that the Council is acting in abuse of its
20 discretion that the Towns have but forward. And I'm
21 assuming that the First Selectmen and the Mayors of those
22 Towns approved this motion.

23 So at this point, if there's no further
24 discussion, I'd like a vote on the motion to deny -- Mr.

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1 Johnson, I'm not entertaining other than Council on this
2 motion.

3 MR. BRUCE JOHNSON: (Indiscernible) -- I
4 was going to ask you that question, which you
5 anticipated, however -- (indiscernible, mic feedback) --

6 COURT REPORTER: Wait a minute --

7 MR. JOHNSON: -- I object to not being
8 allowed to speak on the motion.

9 CHAIRMAN KATZ: So noted. If there's no
10 further Council discussion, are we ready for a vote --

11 MR. ASHTON: Yes --

12 CHAIRMAN KATZ: -- on the motion to deny
13 the motion by those Towns? All those in favor of the
14 motion say aye.

15 VOICES: Aye.

16 CHAIRMAN KATZ: Opposed. (No audible
17 replies). Okay, the motion to reschedule and dismiss is
18 denied. And I think on that note, we're ready to get
19 started.

20 We will proceed in accordance with the
21 prepared hearing program that identifies the parties and
22 intervenors that have prefiled witness and exhibit lists.
23 Parties and intervenors not identified in the hearing
24 program will be recognized as appropriate during the

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1 proceeding. Copies of the program are available from
2 staff.

3 Does anyone have objection to the Council
4 taking administrative notice -- (pause) -- yes, yes --
5 Mr. Marconi asked me to elaborate that the denial was for
6 both parts of the motion, the Motion to Dismiss and the
7 Motion to Reschedule, so let the record note that.

8 Does anyone have objection to the Council
9 taking administrative notice of Items 1 through 21 of the
10 hearing program, plus state agency comments from the
11 Department of Public Health dated March 16, 2004?
12 Hearing no objection, the Council will take
13 administrative notice.

14 At this time -- who is going to be taking
15 the lead for the Applicants?

16 MS. LINDA RANDELL: We're sharing.

17 CHAIRMAN KATZ: We're sharing, okay.

18 Okay, so I will address it as Applicants' attorneys
19 collectively. Will the Applicants present their witness
20 panel for purposes of taking the oath, and the Assistant
21 Attorney General will administer the oath.

22 MR. ROBERT MARCONI: If you can please --
23 please introduce your witnesses first.

24 MR. ANTHONY M. FITZGERALD: Yes. Let me

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1 introduce the witnesses from CL&P and then Miss Randell
2 will introduce the witnesses from her client, the co-
3 applicant United Illuminating. Closest to me is Roger
4 Zaklukiewicz, Vice President of Transmission Engineering
5 and Operations of Northeast Utilities Service Company.
6 Siting next to him is Peter Brandien, currently Director
7 of NUSCO Transmission Operations. And I think that we
8 should probably tell you that you will not have Mr.
9 Brandien to kick around in that capacity much longer
10 because in a week or so he starts a new job in a new
11 position with the Independent System Operator of New
12 England.

13 CHAIRMAN KATZ: So you're signaling that
14 questions for Mr. Brandien should be conducted today and
15 tomorrow if possible?

16 MR. FITZGERALD: Well, it would certainly
17 be helpful. I mean he --

18 CHAIRMAN KATZ: Yeah.

19 MR. FITZGERALD: He -- we hope that we can
20 persuade the ISO to get him back here if there is more
21 for him, but he will by then be up there running the New
22 England -- operating the New England system.

23 CHAIRMAN KATZ: Okay.

24 MS. RANDELL: And next to Mr. Brandien is

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1 Richard Reed, United Illuminating Company's Vice
2 President, Electric System.

3 MR. FITZGERALD: From Northeast Utilities,
4 Anne Bartosewicz is the Project Director of this project.
5 She is seated at the table behind the other witnesses.

6 MS. RANDELL: And immediately to her right
7 is John Prete, United Illuminating Company's Project
8 Director.

9 MR. FITZGERALD: And to Miss Bartosewicz's
10 left -- or actually no they're not witnesses, sorry,
11 they're just support folks and we don't need to swear
12 them in -- I think the others remain -- oh, no, we have
13 one more CL&P witness here -- or NUSCO witness here, John
14 Mutchler -- where are you -- okay -- John is the Director
15 of Conservation and Load Management for NUSCO. We also
16 have Philip Hanser from the Brattle Group, who has
17 submitted prefilled testimony.

18 MS. RANDELL: Charles Goodwin from
19 Northeast Utilities is unable to be here today. We did
20 alert the Council to that. He will be available
21 tomorrow, although we are confident that this witness
22 panel will be able to answer questions today with respect
23 to conservation, load forecasting and the like. From
24 United Illuminating we also have Michael Coretto, UI's

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1 Director of Retail Access and Regulatory Strategy, and
2 Anthony Marone, Senior Director of Client Services at UI.

3 Now for ease we have separated these
4 witnesses by groupings and we'll leave it to the Council
5 whether you'd like to deal with them as separate panels
6 or have them joined together, you know, as the cross-
7 examination develops.

8 CHAIRMAN KATZ: But they're all prepared
9 to speak to need, correct?

10 MS. RANDELL: They are all prepared to
11 speak to need. We -- the panel has filed separate
12 testimony.

13 CHAIRMAN KATZ: Yeah.

14 MS. RANDELL: Mr. Coretto's testimony
15 dealt specifically with load and resource forecasting,
16 conservation, demand response and distributed generation.
17 Mr. Zaklukiewicz's testimony and the witness panel that's
18 sitting here right deals with generally need and issues
19 other than those I just specified for Mr. Coretto's
20 group.

21 CHAIRMAN KATZ: My preference is that the
22 entire panel be available. And as people come up to
23 cross-examine, please cover everything with the entire
24 panel.

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1 MS. RANDELL: Certainly.

2 CHAIRMAN KATZ: So that the cross-examine
3 -- the people who are cross-examining only have to come
4 up once.

5 MR. FITZGERALD: So -- so --

6 CHAIRMAN KATZ: Okay, so we're ready --
7 are we -- are all the introductions done, are we --

8 MS. RANDELL: I believe we are ready to
9 have that group sworn.

10 MR. MARCONI: And I do want to ask the
11 court reporter whether or not you need the spellings of
12 the names of all these witnesses? Okay. And I assume
13 their addresses are going to be of United Illuminating or
14 Connecticut Light and Power? Okay. If I could have all
15 the witnesses be kind enough to stand and hopefully come
16 close to a microphone so I can see you when I administer
17 the oath. (Pause). I think that's everybody? Okay.
18 Okay, please raise your right hand.

19 (Whereupon, the Applicants' witness panels
20 were duly sworn in.)

21 MR. MARCONI: Please be seated. Thank
22 you.

23 CHAIRMAN KATZ: Okay. At this time,
24 Applicants' attorneys, your -- I'm not going to ask you

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1 to read the exhibit list --

2 MS. RANDELL: We thought we would
3 alternate pages if that's what you requested.

4 CHAIRMAN KATZ: Mr. Erling, do we want to
5 have some corrections read into the record at this point?

6 MR. ROBERT ERLING: As we go along, Madam
7 Chairman. I believe there was --

8 MR. ASHTON: Use a mic --

9 COURT REPORTER: A microphone please.

10 MR. ERLING: I don't have one.

11 MR. ASHTON: You do now.

12 MR. ERLING: Yes. I believe on page 8 of
13 the hearing program, the third line down, Maryanne Boord,
14 B-o-o-r-d, First Selectwoman of Durham. And Item No. 7
15 Supplemental Filing, should read December 16, 2003.
16 Those are the corrections for now, Madam Chairman.

17 CHAIRMAN KATZ: Thank you. Why don't I
18 just start the process. Is there any objection to taking
19 the exhibits listed in the hearing program for
20 identification purposes only? Hearing none, they're in
21 the record for identification purposes.

22 (Whereupon, Applicants' Exhibits Nos. 1
23 through 46 listed in the 3/23/04 hearing program were
24 marked for identification purposes only.)

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1 CHAIRMAN KATZ: How -- what is the way
2 that you would like to verify these exhibits?

3 MR. FITZGERALD: First of all, I'd like to
4 ask Mr. Zaklukiewicz whether he has any corrections. And
5 then I would propose that he sponsor all of the exhibits
6 except those relating to EMF, which will be --

7 CHAIRMAN KATZ: Handled Thursday.

8 MR. FITZGERALD: On Thursday.

9 CHAIRMAN KATZ: It sounds like a plan.

10 MR. ASHTON: That would include the
11 exhibits prepared by UI?

12 MR. FITZGERALD: Yes. Every -- everything
13 has been -- has been jointly reviewed.

14 MS. RANDELL: They have been jointly
15 reviewed and prepared. If you'd preferred, Mr. Ashton,
16 in addition to Mr. Zaklukiewicz, we could have Mr. Reed
17 verify on behalf of UI if you'd prefer.

18 CHAIRMAN KATZ: Could you pull your mic a
19 little closer.

20 MR. ASHTON: I just want to make sure the
21 niceties are covered.

22 MS. RANDELL: Yes.

23 MR. ASHTON: There's no corporate
24 relationship as far as I know between UI and CL -- and NU

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1 and --

2 MR. FITZGERALD: No, that is correct.
3 There is -- I might note that pursuant to statute, the
4 agreement between CL&P and UI relating to this project
5 has been filed with the Council.

6 CHAIRMAN KATZ: Just for completeness
7 though we are going to ask both --

8 MS. RANDELL: Certainly --

9 CHAIRMAN KATZ: -- Mr. Zak and Mr. Reed to
10 verify.

11 MR. FITZGERALD: Fine.

12 MS. RANDELL: That's fine.

13 MR. FITZGERALD: Mr. Zaklukiewicz, in
14 preparing for today's proceedings and reviewing the
15 materials that have been submitted, have you noted some
16 corrections that should be made to the application, in
17 Volume 1 of the application in particular?

18 MR. ROGER ZAKLUKIEWICZ: Yes, I have.

19 MR. FITZGERALD: And would you please
20 review for the Council and the parties and intervenors
21 what those corrections are?

22 MR. ZAKLUKIEWICZ: Okay. This is in
23 Volume 1 of 12 of the joint filing by Connecticut Light
24 and Power and United Illuminating Company. In the

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1 Executive Summary page ES-6, Table ES-2, in the column
2 ROW easements to be acquired (acres), Alternative A lists
3 the acreage as 66.3. The correct number is 61.6. And for
4 Alternative B, the table identifies the acreage as 117.9.
5 The number should be 121.8. That identical table is
6 also located on page H, as in Henry, 41, Table H-5,
7 Proposed and Alternative Route Comparison, and the exact
8 same changes should be made to that table. So for
9 Alternative A, the easements to be acquired should read
10 61.6 rather than 66.3 and for Alternative B the acreage
11 of easements to be acquired should read 121.8 rather than
12 117.9.

13 MR. FITZGERALD: And that Table H-5
14 appears at page H-41?

15 MR. ZAKLUKIEWICZ: That is correct. The
16 second change is in Section F, and that would be on page
17 F-21. The first full paragraph, the statement as
18 presently reads states that on May 14, 2003 NRG, Inc. and
19 certain of its affiliates, including Connecticut Jet
20 Power, LLC, Devon Power LLC, Milford Power LLC and
21 Norwalk Power LLC filed for reorganization under Chapter
22 11 of the U.S. Bankruptcy Code. The error is Milford
23 Power LLC is not an affiliate of NRG, Inc., so strike the
24 words Milford Power LLC from that sentence.

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1 An update rather than a total correction,
2 in Section F, on page F-4 and again on page F-20, we make
3 the statement that Milford Power is rated 560 megawatts,
4 and while completed has not gone into commercial
5 operation. The record as of February 12, 2004, Unit 1
6 became commercial and is presently rated at 267
7 megawatts. When the document was printed, it was a
8 correct statement. And I wanted to update you to make
9 certain you're aware that Unit 1 is in operation --
10 commercial operation at this time. And then again on
11 page F-30 and on page G-13, we make reference to when
12 Milford Power comes on-line, the same correction should
13 be made on both of those pages, recognizing that Unit 1
14 of Milford Power is commercially available as of February
15 12, 2004.

16 In Section G, page G-15, in the first
17 paragraph beneath required construction, we make a
18 statement a 115-kV transmission solution would require
19 the rebuilding of approximately 111 miles of 115-kV
20 transmission lines and the rebuilding of approximately 37
21 miles of overhead transmission line --

22 MR. FITZGERALD: Excuse -- excuse me, Mr.
23 Zak, the statement is that it will require the building
24 of approximately 37 miles of new overhead lines --

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1 MR. ZAKLUKIEWICZ: Excuse me, of new --
2 I'm sorry -- of new overhead transmission lines on
3 existing rights-of-way. The 37 miles should be 10 miles.

4 The following sentence, to construct the
5 overhead facilities, it would be necessary to expand the
6 approximately 108 route miles of existing right-of-way.
7 The 108 should be 99.

8 And continuing in the last two sentences
9 of that paragraph, as well as modifying or constructing
10 32 substations including the installation of two STATCOMs
11 and two phase shifting transformers, the 32 should be 31.

12 On page H-33, the last bulleted item on
13 that page says four more miles of overhead transmission
14 line. That should read 15 more lines of overhead
15 transmission line.

16 MR. FITZGERALD: Fifteen more miles you
17 mean?

18 MR. ZAKLUKIEWICZ: Fifteen more miles of
19 overhead transmission line. Those are the -- my
20 corrections.

21 MR. FITZGERALD: Alright. With those
22 corrections, Mr. Zaklukiewicz and Mr. Reed, can you
23 please swear or affirm that the exhibits listed as having
24 been submitted by the Connecticut Light and Power Company

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1 and by the United Illuminating Company with the exception
2 of those relating to EMF, which would be the EMF
3 assessment in Volume 6 of the application and the
4 prefiled testimony of Dr. Bailey, Dr. Cole and Dr.
5 Aaronson and --

6 CHAIRMAN KATZ: (Indiscernible) -- the
7 supplemental EMF also --

8 MR. FITZGERALD: Yes. And the
9 supplemental filing on EMF, the prefiled testimony of Mr.
10 Carberry and Miss Shanley, and the EMF interrogatory
11 responses, all of which will be sponsored by the Thursday
12 witnesses, with those exceptions -- (pause) -- okay --
13 and I'm going to ask you to confirm that to the best of
14 your knowledge and belief the information submitted to
15 the Council and listed in this hearing program is true
16 and accurate.

17 MR. ZAKLUKIEWICZ: To the best of my
18 knowledge, it is true and accurate.

19 MR. RICHARD REED: To the best of my
20 knowledge, it is true and accurate.

21 CHAIRMAN KATZ: Do you wish to make them
22 full exhibits at this time?

23 MR. FITZGERALD: Yes. Thank -- thank you,
24 Madam Chairman. Yes, I do. And I move their admission

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1 as such.

2 CHAIRMAN KATZ: Miss Randell.

3 MS. RANDELL: Yes. Just one point. I
4 think for completeness, we should have Mr. Coretto
5 adopting his testimony on behalf of the Applicants'
6 specifically. Mr. Coretto, do you have any changes or
7 amendments to the direct testimony of Michael A. Coretto
8 dated March 9, 2004 in this docket relating to load and
9 resource forecast and conservation, demand, response, and
10 distributed generation?

11 MR. MICHAEL CORETTO: No, I do not.

12 MS. RANDELL: And do you adopt as true and
13 correct here today that direct testimony?

14 MR. CORETTO: Yes, I do.

15 MS. RANDELL: Thank you.

16 CHAIRMAN KATZ: Is there any objection to
17 making these full exhibits? Hearing none, we will have
18 them be full exhibits.

19 (Whereupon, the Applicants' exhibits were
20 received into evidence with the exception of those listed
21 above.)

22 CHAIRMAN KATZ: Mr. Fitzgerald and Miss
23 Randell, do you want make your requests for
24 administrative notice at this time?

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1 MS. RANDELL: Can we do it in bulk?

2 CHAIRMAN KATZ: Yes, please.

3 MR. FITZGERALD: Yes please. We would ask
4 that the documents listed in the hearing program under C
5 starting on page 11 and numbered 1 through 15 be the
6 subject of administrative notice by the Council.

7 CHAIRMAN KATZ: Is there any objection to
8 the Applicants taking administrative notice of the items
9 listed in the hearing program? Hearing none, we'll take
10 administrative notice.

11 Do we have any procedural matters before
12 we begin cross-examination?

13 MS. RANDELL: No.

14 MR. FITZGERALD: No.

15 CHAIRMAN KATZ: Great. First on the list
16 is the Norwalk Association of Silvermine Owners, Leigh
17 Grant. Is Miss Grant present? Let the record show that
18 she is not.

19 Next is the Honorable State Representative
20 Al Adinolfi. Is Representative Adinolfi present? Let
21 the record show he is not, but we will note for the
22 record that they are in session today.

23 Next is the Towns of Wallingford, Durham,
24 Woodbridge, Milford and Orange. Mr. Boucher, Mr. Ball

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1 and Miss Kohler I have listed as cross-examining. Do you
2 want to --

3 MR. DAVID BALL: Madam Chairman --

4 CHAIRMAN KATZ: Yes?

5 MR. BALL: -- this is David Ball on behalf
6 of the Town of Woodbridge. This group is not cross-
7 examining the panel on the issue of need.

8 CHAIRMAN KATZ: Thank you, Mr. Ball, we
9 will note that. Mr. Boucher, do you have cross-
10 examination? Oh, were you speaking for the whole group?

11 MR. BALL: I can speak on behalf of the
12 entire group on that.

13 CHAIRMAN KATZ: Thank you.

14 MR. BALL: Thank you.

15 CHAIRMAN KATZ: Next is the City of
16 Norwalk, Attorney Louis Ciccarello and -- the City of
17 Norwalk? Let them show not present.

18 Next is the City of Meriden, Attorney
19 Deborah L. Moore. Let the record show that they have no
20 cross-examination.

21 Next is Assistant Attorney General Michael
22 Wertheimer.

23 MR. MICHAEL WERTHEIMER: No questions.

24 CHAIRMAN KATZ: Let -- Mr. Wertheimer says

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1 the Attorney General's Office has no questions.

2 Next is the Communities for Responsible
3 Energy, Trish Bradley. Let the record show they are not
4 present.

5 Next is the Office of Consumer Counsel,
6 Attorney Bruce C. Johnson. Mr. Johnson, do you want to
7 come down to a microphone.

8 MR. JOHNSON: Chairman Katz, which
9 microphone should I be using? Thank you.

10 CHAIRMAN KATZ: And do you just want to
11 start off introducing yourself for the record. And just
12 to preface, these will be -- these questions will be
13 solely based on need.

14 AUDIO TECHNICIAN: Mr. Johnson, before you
15 start, would you pull that microphone over so it's in
16 front of you. Thank you.

17 MR. JOHNSON: Good morning, Council
18 members and applicant panel members and audience members.

19 I'm Bruce Johnson. I am an attorney with the Office of
20 Consumer Counsel, a party to this case.

21 I have referenced -- and anyone on the
22 panel can answer these questions. Some of them may be
23 perhaps appropriate for Mr. Brandien and/or Mr. Coretto,
24 but anyone on the panel can answer them.

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1 CHAIRMAN KATZ: Can I -- I'd just like to
2 take -- one procedural matter I'd like to cover
3 concerning Mr. Brandien before we get started. Mr.
4 O'Neill, you had a question on his status here?

5 MR. BRIAN O'NEILL: Yes. Mr. Brandien, I
6 just wanted to clarify it for the record. Do you feel in
7 any way that your new position would in any way
8 compromise the testimony on behalf of the Applicant --

9 CHAIRMAN KATZ: I'm going to ask -- Mr.
10 O'Neill, we're going to ask you to start over --

11 MR. O'NEILL: Excuse me --

12 COURT REPORTER: We're getting feedback --

13 MR. O'NEILL: Mr. Brandien, just for the
14 record I'd like to clarify the point that your new
15 position would not in any way compromise your involvement
16 in these proceedings here?

17 MR. PETER BRANDIEN: No, it will not.

18 MR. O'NEILL: Thank you very much.

19 CHAIRMAN KATZ: I'm sorry, Mr. Johnson.
20 Let's proceed then.

21 MR. JOHNSON: That's fine. I have
22 reference to Section G of the application. On page G-3
23 do I correctly understand that the Applicants have stated
24 that distributed generation "by itself", quote/unquote,

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1 cannot solve the reliability problems?

2 MR. ZAKLUKIEWICZ: That is correct.

3 MR. JOHNSON: And on --

4 CHAIRMAN KATZ: Just -- I'm sorry to
5 interrupt you --

6 MR. JOHNSON: Yes?

7 CHAIRMAN KATZ: The first time each
8 witness speaks, just identify yourself for the record.

9 MR. ZAKLUKIEWICZ: Roger Zaklukiewicz.
10 That is correct.

11 MR. JOHNSON: And on page G-4 and G-5 am I
12 correct to understand that Southwest Connecticut is
13 described as a generation deficient area?

14 MR. ZAKLUKIEWICZ: That is correct.

15 MR. JOHNSON: And that the companies there
16 state that additional generation is, quote, "not an
17 acceptable alternative", unquote, because it would be
18 locked in, so-called?

19 MR. ZAKLUKIEWICZ: That is correct.

20 MR. JOHNSON: Is it not the case however
21 that if there was new generation sited and activated in
22 Southwest Connecticut that that by itself would help
23 moderate the load pocket status of Southwest Connecticut?

24 MR. BRANDIEN: Additional generation would

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1 give you some operating flexibility. There are some
2 issues with interconnecting it, and dependent upon where
3 it's being proposed whether or not it would aggravate
4 some of the ability to move generation around as well as
5 some of the short-circuit issues that we're trying to
6 deal with in Southwest Connecticut.

7 MR. JOHNSON: I'm trying to simplify it
8 here, is that a yes or a no answer to my question?

9 MR. BRANDIEN: Properly sized and located,
10 it would give you some operating flexibility, so it would
11 help.

12 MR. JOHNSON: Thank you. On page G-7
13 there's a reference to some new technologies like the
14 FACTS devices. Do I correctly understand that the
15 Applicants are saying that, quote, "by themselves",
16 unquote, these would not solve the energy problems?

17 MR. BRANDIEN: That's correct.

18 MR. JOHNSON: And on page G-8 isn't it
19 also stated that demand-side management, quote, "alone",
20 unquote, is not a feasible alternative?

21 MR. ZAKLUKIEWICZ: That is correct.

22 MR. JOHNSON: With that as a background
23 and a foundation, my broader question then would be do
24 these several contentions equate to the conclusion that

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1 some combination of all of those items, that is to say
2 distributed generation, you know, normal power
3 generation, technologies like FACTS and DSM and
4 transmission perhaps, that some combination of all of
5 those could not serve as a feasible alternative to the
6 line here proposed?

7 MR. BRANDIEN: Some of the -- Pete
8 Brandien -- some of the issues that we're dealing with in
9 Southwest Connecticut if we try to incorporate generation
10 into the overall solution is the short-circuit and the
11 ability to move power away from the buses. So in your
12 question you're asking possibly a transmission
13 alternative. Transmission is needed down there to
14 resolve the thermal and voltage issues that we have as
15 well as the short-circuit issues that we, as well as the
16 interdependency from the generation that needs to be at
17 the right locations to move the power from bus to bus
18 within Southwest Connecticut, so transmission has to be a
19 part of any solution in Southwest Connecticut.

20 MR. JOHNSON: Perhaps my question wasn't -
21 - wasn't clear. I -- the -- there was a -- in the
22 application as we recited there is some statements that
23 certain items other than transmission cannot by
24 themselves solve the understood and -- well understood

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1 reliability problems. If I understood you, Mr. Brandien,
2 you just said that transmission has to be part of the
3 solution. What I asked was whether these other items and
4 including transmission could serve as a feasible
5 alternative to the line actually proposed?

6 MR. ZAKLUKIEWICZ: Let me take a stab at
7 that, Mr. Johnson. Presently today we have a situation
8 in Southwest Connecticut where except for some unusual
9 conditions all of the generation within Southwest
10 Connecticut cannot be operated all at the same time
11 because of the conditional dependencies of that
12 generation. That restriction is in place because all of
13 the generation in Southwest Connecticut is tied,
14 interconnected to the 115-kV transmission system, which
15 today under today's load is inadequate to move the power
16 from the generating sources to the load centers. And we
17 experienced on a number of occasions both during light
18 load and medium load and heavy load periods where we have
19 come extremely close to losing the overall grid in
20 Southwest Connecticut, and those were described in a lot
21 of detail in Docket 217. And without repeating
22 everything all over again, I will refrain from that
23 unless you want us to go into that detail.

24 We -- we have situations where right today

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1 we are putting in STATCOM in Glenbrook to correct a
2 voltage collapse problem. So we are presently today
3 installing a hundred -- a 150, plus or minus, megawatt
4 STATCOM state-of-the-art, one of the largest
5 installations in the United States. Right at this time
6 they are doing commission testing on that facility and it
7 will be in service for the summer of 2004. We also last
8 year for the summer of 2003 installed D-VAR's, which are
9 identified on page G-7 in two substations in Southwest
10 Connecticut. We have relied upon conservation and load
11 management. We have relied upon the companies demand-
12 side management programs, along with the initiatives of
13 ISO New England to hold the load down to a point where
14 our load growth is at the levels they presently are. And
15 I believe the numbers that can be accounted for in
16 conservation and load management are somewhere around
17 450 megawatts, plus or minus.

18 So can -- the question is, is can we
19 continue to have a reliable electric system without
20 rebuilding a transmission infrastructure in Southwest
21 Connecticut? And the answer is absolutely not.

22 Do we endorse the uses of efforts such as
23 conservation and load management and relying upon demand-
24 side management? The answer would be yes. And we are

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1 really going to have to rely on those through the
2 construction period, because this project, if approved,
3 will not be completed until the end of 2007. So we will
4 have to rely heavily on those efforts along with what the
5 ISO is doing in 2004 is seeking peaking units just as
6 they did in the year 2003 for the summer. And I believe
7 the RFP that went out in 2004 was for peaking units over
8 a five-year period if my memory serves me correct, Mr.
9 Johnson.

10 So can it all be done with conservation
11 and load management and with demand-side management and
12 with using devices such as STATCOMs and D-VARs? My
13 contention to that is the answer is no. And I have not
14 spoken any about what we would incur for congestion costs
15 in so doing. I've just responded to you from a
16 reliability standpoint.

17 MR. JOHNSON: If I understood your
18 discussion just now, Mr. Zaklukiewicz, you do believe
19 that the various items discussed, like the STATCOM you
20 mentioned, make our conservation -- make some positive
21 contribution to the reliability problems in that area,
22 right?

23 MR. ZAKLUKIEWICZ: Yes, I do.

24 MR. JOHNSON: And my question or what I

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1 was trying to get at was, with all due respect, not
2 whether those could serve as a complete and freestanding
3 alternative to the line proposed, but whether the line
4 proposed has been systematically examined in conjunction
5 with this entire range of alternatives we've put on the
6 table here or discussed, which may include a different
7 transmission project, if a systematic study was done of
8 that type? Is that something the companies have done, to
9 make a systematic broad study of these range of
10 alternatives?

11 MR. BRANDIEN: When -- when we analyze the
12 transmission system, we look at various load levels,
13 generation dispatches. And when you look at demand-side
14 management and conservation, some of that is in the
15 forecast, in the historic -- embedded in the historic
16 data. When we look at the results of the output of the
17 contingency analysis and the magnitude of the overloads
18 and you put on top of that the short-circuit issues that
19 we have down there, the generation interdependency, what
20 we need to do is to build a backbone, an infrastructure
21 such that we have a reliable system, we're able to get
22 the system within the NERC NPCC criteria, and then that
23 allows us to do the other things that we're talking about
24 here, interconnecting, whether it's larger generation,

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1 distributed generation, looking to demand-side management
2 and conservation, to help give us some operating
3 flexibility when we're trying to operate the system and
4 manage the system reliably. But what is needed is that
5 next big investment in the infrastructure and build that
6 backbone so that we could bring the system into
7 reliability -- into the reliability criteria. And we're
8 starting well in the hole when you take a look at the
9 studies and look at the magnitudes of the overloads. If
10 we were doing some incremental builds on the system and
11 if we were starting from a system that met the criteria
12 and we were talking about load growth and how do we
13 maintain the reliability going forward, I think the
14 approach you're talking about with incorporating all
15 aspects, conservation, demand-side management and
16 transmission is the prudent thing to do. But we're
17 starting from a system that is so far out of the
18 criteria, and the overloads are anywhere between 30 to 60
19 percent on a number of contingencies.

20 MR. JOHNSON: Mr. --

21 MR. JOHN MUTCHLER: (Indiscernible, not
22 near mic) --

23 MR. JOHNSON: Yeah, go ahead.

24 MR. MUTCHLER: (Indiscernible) --

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1 MR. JOHNSON: Sure.

2 MR. MUTCHLER: John Mutchler --

3 COURT REPORTER: Wait a minute --

4 MR. MUTCHLER: This is John Mutchler. The
5 company's conservation programs have been focused in
6 Southwest Connecticut now for at least the last two or
7 three years to -- recognizing the issues of congestion in
8 the area. And we've taken additional effort to even
9 increase the level of incentives on certain programs to
10 help market them in that part of the state. And these
11 programs are something that -- when I say marketing --
12 (tape stopped) --

13 CHAIRMAN KATZ: Start that sentence again.

14 MR. MUTCHLER: Yes. When I say marketing,
15 this is something that the companies have been doing to
16 really sell customers on conservation and get them
17 interested at a time when their equipment needs to be
18 replaced with more efficient measures. So the efforts by
19 the companies in conservation have been focused in
20 Southwest Connecticut to help with this issue.

21 MS. RANDELL: Mr. Mutchler, would you be
22 able to speak up for the benefit of the people in back of
23 you.

24 MR. JOHNSON: Could I continue?

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1 MR. MUTCHLER: Yeah. I was done though.
2 I will take that into consideration for the next time.
3 Thank you.

4 MR. JOHNSON: Mr. Brandien, if you could
5 refer to the answer provided to OCC-7. You reference the
6 projected load level in the future of 27.7 megawatts for
7 New England?

8 MR. BRANDIEN: Yes.

9 MR. JOHNSON: As one of the elements
10 relating to the need and justification of this project,
11 how long do you expect this project to last once you
12 build it?

13 MR. BRANDIEN: I guess if I could -- I --
14 do you have our prefiled testimony?

15 MR. JOHNSON: I do.

16 MR. BRANDIEN: Okay. I'd like to used our
17 prefiled, and the diagram on page 15 in our prefiled
18 testimony, and hopefully I could walk you through this
19 and clarify what this project does. And when you talk
20 about what do we need next and what load levels,
21 hopefully --

22 MR. JOHNSON: Well, I'd appreciate that
23 explanation of 15, but could you start by simply asking
24 how long you expect the project to last once you build

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1 it?

2 MR. BRANDIEN: I think --

3 MR. JOHNSON: 2010, 2005, 2015?

4 MR. BRANDIEN: I think the project builds
5 the backbone that allows you to do the incremental builds
6 on the 115-kV system to move power from the 345-system to
7 the load. And I was going to try to use the diagram on
8 page 15 to explain that --

9 MR. JOHNSON: Well, I really would
10 appreciate it if you'd start with, you know, a specific
11 year of future need.

12 MR. ASHTON: Mr. Johnson, I'm a little bit
13 confused by your term what is the life of the facility.
14 Are you talking the physical life of the proposed
15 facility or are you talking --

16 MR. JOHNSON: No --

17 MR. ASHTON: -- the --

18 MR. JOHNSON: No, I --

19 MR. ASHTON: Excuse me --

20 MR. JOHNSON: Yeah.

21 MR. ASHTON: -- or are you talking about
22 the length of time before incremental changes have to be
23 made?

24 MR. JOHNSON: The latter, Mr. Ashton, the

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1 -- the -- what I'm trying to get at is when -- what the -
2 - when the Applicants think the next level of major
3 investment will be needed.

4 MR. FITZGERALD: Well, I have to -- if
5 he's looking for a yes or no question, I have to object
6 to it as being vague, because what is a major investment.

7 I certainly have no objection to letting the witness
8 explain when he thinks the next additions will be needed
9 and what they are, but not to be put in the position of
10 having to answer yes or no on the basis of what he
11 considers is major.

12 CHAIRMAN KATZ: Why don't we break this
13 down then, Mr. Brandien, to when you think the next round
14 of additions and upgrades will be needed after this if
15 this project is approved?

16 MR. BRANDIEN: I believe the 345 backbone
17 is going to bring us 20 to 30 years into the future where
18 we're not going to have to make this major investment.
19 What I was going to try to use in our prefiled testimony
20 on page 15 and explain what the 345 sets us up to do and
21 what kind of investments I believe would need to be made
22 in the future so that people can get an understanding of
23 what this does and then what kind of investments would
24 need to be made going forward.

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1 CHAIRMAN KATZ: Okay. Before you
2 elaborate though, let's let Mr. Johnson take that answer
3 and go from there if you wish.

4 MR. JOHNSON: Why don't you turn, Mr.
5 Brandien, to your page 15 diagram to explain what you
6 wanted to bring -- to draw out of it.

7 MR. BRANDIEN: Okay. What I wanted to
8 show is using the bottom drawing -- we've talked a lot
9 about interfaces and getting power off of the 345-kV
10 system and moving it onto the 115-kV system to the load.
11 Today we have autotransformers at our Plumtree
12 Substation in Bethel, our Frost Bridge Substation in
13 Watertown, our Southington Substation in Southington and
14 our East Shore Substation in New Haven and we need to
15 move the power down into our largest load pocket across
16 the 115-kV system. This 345-kV loop will install
17 autotransformers at our Devon -- in our Devon area, East
18 Devon Substation. You can think of that as the existing
19 Devon Substation today electrically. It will also put an
20 autotransformer in Bridgeport at a new substation,
21 Singer, but you can think of that as the Pequonnock
22 Substation. And with Phase 1 in closing the loop, we'll
23 have another autotransformer at the Norwalk Substation in
24 Norwalk. And if you take a look at that drawing and take

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1 a look -- think about the Naugatuck Valley between
2 Watertown and Milford and over to Bethel, we would have
3 autotransformers to take power off of the 345 at Bethel,
4 at Watertown and Milford to supply power to the 115-kV
5 system between those three substations. That will allow
6 us to move the bulk power to those locations. And then
7 watching the load growth at various points on the grid,
8 we could make the modifications required to move the load
9 from the 345 to the 115-kV substations to supply the
10 load. So there will be incremental 115-kV builds, maybe
11 some reconductoring of lines.

12 If you think about the other area,
13 Plumtree, Norwalk, and the Pequonnock Substation where
14 we'll have a 345, now we've got autotransformers feeding
15 into that sub-area. You can think of that as the Norwalk
16 area. If you go back and take a look at our 115-kV
17 system between Southington and our Devon Substation,
18 we'll have our Southington autos, we'll have the Devon
19 auto again, we have the East Shore auto, so we would have
20 115-kV sources supplying the 115 from different sources
21 once again and we could do incremental builds depending
22 upon how the load grows in Connecticut. Think of the
23 United Illuminating system between the East Shore
24 Substation and Bridgeport, we're going to have an

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1 autotransformer at both ends of those stations --

2 MS. RANDELL: Mr. Brandien, could you
3 clarify where East Shore is for the Council?

4 MR. BRANDIEN: East Shore is in New Haven,
5 Connecticut. So what this project sets us up to do is to
6 relieve the problems that we have today, moving the power
7 across the 115-kV system, it gets rid of the incremental
8 -- or the interdependencies between the generation, it
9 resolves the short-circuit, and it sets us up where we
10 could pick power off of the 345 at various points, and we
11 could utilize our existing 115-kV system and make the
12 modifications to it depending on where the load growth
13 happens around the State, very similar to what we're able
14 to do in the other part of the system where we have
15 autotransformers at Manchester, Southington. And at our
16 North Bloomfield Substation in Bloomfield, we could take
17 care of that in the Hartford area. We have similar in
18 the eastern part of Connecticut in the Middletown area.

19 MR. JOHNSON: Mr. Brandien, aren't you
20 discussing in some specific detail the general concept
21 that the Applicants have put forward about being able to
22 connect to a strong source?

23 MR. BRANDIEN: That's correct.

24 MR. JOHNSON: And that would be more in

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1 the Middletown area, etcetera?

2 MR. BRANDIEN: But it brings the source
3 into Southwest Connecticut, and that's exactly what we're
4 trying to --

5 MR. JOHNSON: And that -- so that for
6 instance, that should enable you -- you -- I mean ISO or
7 whoever is running the system, to draw power for instance
8 from Rhode Island and Massachusetts into use in
9 Connecticut, right?

10 MR. BRANDIEN: It really allows us to
11 bring the power from the eastern part of the State where
12 we have two or three 345 lines into the State, and our
13 larger generating plants, the stronger source of our
14 transmission system is in the east part.

15 MR. JOHNSON: Well -- alright, I'm -- I'm
16 aware that there are -- you know, that Connecticut itself
17 -- you know, the State as a whole is considered a load
18 pocket. And so that isn't there currently some ISO
19 projects, the Card Street (phonetic), etcetera, to help
20 solve some of that problem?

21 MR. BRANDIEN: That's correct.

22 MR. JOHNSON: And that -- you know, I
23 presume that you're going to go help and make that
24 happen, right?

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1 MR. BRANDIEN: I'll be going to operate
2 the system. I will not have a planning role. I'll be
3 doing more real time.

4 MR. JOHNSON: So that when the Card Street
5 upgrade is done, then there will be an ability to draw
6 power not just from the Millstone Nuclear Plant but from
7 Rhode Island and Massachusetts, right?

8 MR. BRANDIEN: That's correct. And it
9 even makes this 345-kV loop even a stronger source to
10 move power into Southwest Connecticut.

11 MR. JOHNSON: Well in that context then,
12 what happens if consumption in Rhode Island and
13 Massachusetts itself increases?

14 MR. BRANDIEN: The balance between load
15 and generation in the area comes more in balance. But
16 what that project does -- it's a different project, but
17 it also ties into other points of the 345 in New England
18 where it's not just relying on the generation in seam of
19 Rhode Island area -- or the Southeast Mass./Rhode Island
20 area, but we can move power from other points, whether
21 it's the Hydro Quebec tie or power to the north.

22 MR. JOHNSON: Doesn't the discussion we've
23 just been having really constitute a pretty strong
24 argument for the development of more local generation in

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1 Southwest Connecticut?

2 MR. BRANDIEN: The issue that we have is
3 the ability to move it around and to deal with the short-
4 circuit issues. This 345-kV loop resolves those issues
5 and allows you to do exactly what you're saying. And the
6 State of Connecticut will need additional generation
7 internal to the State of Connecticut, I agree with that.

8 MR. JOHNSON: Chairman Katz, that's all I
9 have by way of cross of this panel.

10 CHAIRMAN KATZ: Thank you, Mr. Johnson.
11 Next is the Woodlands Coalition. Mr. Golden.

12 A VOICE: (Indiscernible) --

13 CHAIRMAN KATZ: Mr. Golden said no
14 questions for this panel.

15 Next is ISO New England. Mr. MacLeod. He
16 stepped out for a moment and we'll allow him to come back
17 in. PSEG Power Connecticut, Attorneys Reif, Warren and
18 Casey.

19 A VOICE: No questions, Madam Chairman.

20 CHAIRMAN KATZ: They said no questions.
21 The Town of Wilton, Attorney Frank.

22 A VOICE: No questions.

23 CHAIRMAN KATZ: He said no questions. Mr.
24 Ball has already indicated no questions. Correct still,

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1 Mr. Ball? Thank you. CBIA, Mr. Earley.

2 MR. ROBERT EARLEY: No questions.

3 CHAIRMAN KATZ: Mr. Earley said no
4 questions.

5 CHAIRMAN KATZ: The Town of Bethany, First
6 Selectman Derrylyn Gorski. Let the record show not
7 present.

8 Woodbridge Jewish Organizations, Attorney
9 Schaefer. Let it show not present.

10 The First District Water Department,
11 Franco Chieffalo. Let it show not present.

12 Council questions. Mr. Cunliffe. We are
13 --

14 MR. FRED O. CUNLIFFE: Thank you, Chairman
15 --

16 CHAIRMAN KATZ: Just to -- before you
17 start, we are looking at doing -- having the ISO witness
18 after lunch. We are looking into that, so we'll -- yes,
19 Mr. Cunliffe.

20 MR. CUNLIFFE: In the prefilled testimony
21 provided by Connecticut Light and Power, it spoke about
22 the pool transmission facilities and the restated NEPOOL
23 agreements and the transmission tariffs regarding the
24 project. If the project were not to be in operation by

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1 the end of 2007, how would this project be paid for after
2 that date?

3 MR. ZAKLUKIEWICZ: Repeat the question,
4 Mr. Cunliffe, the last part of the question? How would
5 it be paid for?

6 MR. CUNLIFFE: How would it be paid for
7 after 2007?

8 MR. BRANDIEN: The 345 system is
9 considered a pool transmission facility and it would be -
10 - it would go through an approval process. I believe
11 it's Section 12.C or Schedule 12.C. And we would
12 anticipate that the cost recovery would be through the
13 NEPOOL tariff.

14 MR. CUNLIFFE: That would be spread across
15 New England? Isn't there a recent FERC order that such
16 facilities after -- not completed and in operation by the
17 end of 2007 would need to be -- go back to the state?

18 MR. BRANDIEN: It does not say that the
19 costs revert back to the state. The ruling -- there was
20 an issue of trying to allocate transmission upgrades to
21 the areas that gain the most benefit from them, so the
22 cost allocation would go into benefits. And I believe
23 the FERC order basically kind of drew a line in the sand
24 that said anything that went into service prior to that,

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1 you know, would not have to go through -- or that you
2 would have a better chance of just having it rolled in
3 and not going through the process of try to allocate so
4 much of it to a regional benefit and so much of it to a
5 local benefit.

6 MR. CUNLIFFE: There's still an
7 opportunity for that process to move -- paying for the
8 project through the tariff rates --

9 MR. BRANDIEN: Correct.

10 MR. O'NEILL: Mr. Brandien, just to --
11 just to clarify that point, is that 2007 date a line in
12 the sand or is it fairly fluid? If the project is under
13 construction but not completed as of that date, is there
14 some flexibility as far as the cost factoring of this
15 project?

16 MR. BRANDIEN: I would have to go back and
17 reread it or have somebody explain it to me. It's been
18 awhile since I've looked at it, so I'm not sure.

19 MR. O'NEILL: Thank you.

20 MR. TAIT: Mr. Brandien, that was a FERC
21 order, correct?

22 MR. BRANDIEN: That's correct.

23 MR. TAIT: And there's no reason why FERC
24 couldn't change its order if circumstances warranted it?

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1 MR. BRANDIEN: That's correct.

2 MR. ZAKLUKIEWICZ: Mr. Tait, there's no
3 question in our mind that maybe a number of the states
4 within New England are going to appeal that FERC order
5 also as to the cost allocation. So, I think we're having
6 difficulty here trying to convey the message to you that
7 under no -- under no circumstances will regional
8 allocation of the cost of the project not occur. It is -
9 - it is always a question mark. And it's our best
10 understanding that if we receive approval to go forward
11 with the project and we were to complete it prior to
12 December 31, 2007, we will be in the best possible
13 position to argue the case for total allocation
14 throughout New England. But I cannot swear on a stack of
15 bibles that if we do that, we are guaranteed total cost
16 allocation throughout all of New England for this
17 project.

18 MR. TAIT: And that was true for Docket
19 217 as well?

20 MR. ZAKLUKIEWICZ: That is correct.

21 MR. BRIAN EMERICK: Madam Chairman.

22 CHAIRMAN KATZ: Yes, Mr. Emerick.

23 MR. EMERICK: Just a follow-up. Mr. Zak,
24 you indicated that states may appeal the FERC order. I

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1 assume that you're referring to the existing order which
2 sets out the 2007 date. I would think that the appeal of
3 that order has since passed or is there an ongoing appeal
4 of that order?

5 MR. ZAKLUKIEWICZ: Well, I think what you
6 would have possibly in New England is you would have the
7 NEPOOL participants objecting to the allocation of this
8 and arguing it's a regional project, and as part of the -
9 - as part of an appeal, whether it's to FERC or to the
10 court systems, arguing who has total jurisdiction over
11 the allocation of capital project costs, whether FERC has
12 that final say or within New England is it the New
13 England participants who have the allocation of exactly
14 what portion of that project is going to receive New
15 England benefits and therefore the costs ought to be
16 shared and which portion of the project, if any, is
17 strictly a regional benefit in the Connecticut area, and
18 therefore Connecticut ought to share the burden of those
19 costs. I am not the legal advisor. And what can happen
20 is a question mark.

21 What we do know is that the States of
22 Vermont, the States of Maine and I believe Rhode Island
23 are really not in favor of paying their share, if you
24 will, of the project as proposed. This is an enormous

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1 project. It is probably one of the largest transmission
2 projects contemplated in the United States at this time
3 and has a substantial price tag to it. So you can be
4 assured that the ratepayers in states other than
5 Connecticut, regardless of how the sharing of
6 infrastructure occurred in the past, are really not
7 looking forward to having Connecticut only pay 27
8 percent, or approximately 27 percent of the cost of this
9 project.

10 MR. EMERICK: But didn't FERC's order --
11 we described it as a line in the sand, and that line in
12 the sand described what would be allowed in terms of
13 recovery. And the states that you mentioned, are they
14 appealing that order?

15 MR. BRANDIEN: If I could --

16 MR. ZAKLUKIEWICZ: Not -- not at this time
17 to my knowledge.

18 MR. BRANDIEN: If I could add something
19 and maybe this will help maybe frame up some questions
20 for the ISO witnesses when they get here, but as part of
21 -- this whole cost allocation process is somewhat dynamic
22 and it's actually a little bit different as we're sitting
23 here in Docket 272 as compared to Docket 217. In Docket
24 217 FERC came out with their December order, and I forget

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1 exactly what year, but they gave indication in that order
2 that projects like this, if it was built by 2007, would
3 go into a regional rate. And that's what we have here in
4 New England.

5 Since then, ISO had to put in place a
6 process to determine cost allocation. It used to be
7 Section 15.5 of the NEPOOL tariff. Now you go through a
8 process, 12.C -- I think it's Schedule 12.C of the
9 tariff, and it's a different process. And I think the
10 states can appeal the cost allocation coming out of that
11 new process. I'm not sure if they are appealing the
12 process that ISO put in place for cost allocation or
13 whether or not they would be appealing the decision of
14 individual projects as they come through the 12.C
15 process. And hopefully when the ISO witnesses are here
16 and what I just stated helps you frame up some questions
17 for the ISO.

18 CHAIRMAN KATZ: Mr. Fitzgerald --

19 MR. EMERICK: Let me summarize then --

20 CHAIRMAN KATZ: Okay.

21 MR. EMERICK: I think the cost recovery on
22 this docket seems less clear, at least in my mind at this
23 point, than 217. Is that --

24 MR. BRANDIEN: The --

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1 MR. EMERICK: -- at least the way it was
2 presented in my recollection of 217.

3 MR. BRANDIEN: Yeah -- it may not be less
4 clear because there may be a process now where there
5 wasn't really a -- there was a process that was suppose
6 to be developed and was floating around and maybe there
7 is a process now, and maybe that 2007 date is still kind
8 of out there layered over the process.

9 MR. EMERICK: Okay.

10 CHAIRMAN KATZ: Mr. Fitzgerald.

11 MR. FITZGERALD: Thank you. The FERC
12 order is Administrative Notice No. 19, and it was also
13 noticed in Docket 217. And I think if you look at the
14 order itself, the key language is a statement of future
15 intent. FERC is saying we will allow this if it's -- if
16 it's in service by 2007, the so-called defined set of
17 improvements. If it's in service by 2007, that they will
18 allow it. But that's -- that hasn't happened yet. What
19 they're saying is this is -- this is our policy, we will
20 -- we -- this is how we intend to act on applications in
21 the future.

22 MR. TAIT: But that order doesn't say they
23 would not do it after that time.

24 MR. FITZGERALD: No, it doesn't --

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1 MR. TAIT: That's a safe harbor.

2 MR. FITZGERALD: Yes. That's -- well,
3 it's a pretty safe harbor.

4 MR. TAIT: Yeah.

5 MR. FITZGERALD: Yeah.

6 MR. EMERICK: Mr. Fitzgerald, was there an
7 opportunity for parties to appeal that order?

8 MR. FITZGERALD: No, I don't think so,
9 because you see they're saying -- they're saying what
10 they're going to do -- what they intend to do in the
11 future, and that hasn't come up yet. The -- the occasion
12 for actually allowing the cost recovery doesn't occur
13 until the costs have been incurred and an application is
14 made to share them, and so they're really just talking
15 about how they intend to deal with these issues when they
16 come up in the future.

17 MR. TAIT: So there would not actually be
18 a final judgment from which to appeal?

19 MR. FITZGERALD: Right --

20 MR. TAIT: Okay.

21 MR. FITZGERALD: -- exactly.

22 MR. TAIT: Okay.

23 MS. RANDELL: Mr. Tait and Mr. Emerick,
24 I'll volunteer the companies to do some homework over the

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1 lunch break so that we can tell you whether or not there
2 have been appeals of that FERC order if that seems
3 reasonable to you, so that we can just resolve it.

4 CHAIRMAN KATZ: Thank you. Mr. Johnson,
5 you wanted to be recognize.

6 MR. JOHNSON: Yes, thank you, Chairman
7 Katz. I strongly object to the discussion from Mr.
8 Fitzgerald, he's not a sworn witness. I think that
9 anything the Council of course wants to inquire about on
10 this subject or others related to this docket should be
11 directed to panels of witnesses. The -- you know, we can
12 offer on brief or otherwise through witnesses an
13 interpretation of the FERC's intentions, you know, clear
14 or unclear, but I don't -- I think it's not for Mr.
15 Fitzgerald in the hearing room to do that.

16 CHAIRMAN KATZ: Your objection is noted.
17 Mr. Cunliffe.

18 MR. CUNLIFFE: Regarding the transfer
19 limits into Southwest Connecticut upon completion of the
20 project, is it my understanding it will just about equal
21 the load of Southwest Connecticut?

22 MR. BRANDIEN: That's correct.

23 MR. CUNLIFFE: And how does the
24 relationship for delivering that load on the new system

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1 and future load that would be growing, how do you address
2 the differences between that going forward?

3 MR. BRANDIEN: Well, the transfer limit is
4 an indication of how much power you can actually move
5 down into that corner of the State. Generally any major
6 load pocket doesn't have a transfer limit larger than the
7 area load to allow for load growth. It -- you have
8 generation down in that area. So between the ability of
9 the transmission system to import the power and the local
10 generation, you're able to meet the demands of an area,
11 so generation is part of the solution in supplying the
12 requirements to the area.

13 MR. CUNLIFFE: Is it now considered a
14 barrier for generation to not have a robust system in the
15 area? Is that some of the problem that generators are
16 looking at Southwest Connecticut and saying I have no
17 place to send my power to?

18 MR. BRANDIEN: I don't think it's that
19 they don't have anyplace to send their power. We do have
20 issues that need to be addressed, and we've talked about
21 that, like if PSEG wanted to all of a sudden put more
22 generation on at Pequonnock, they can do it, but they
23 still can't get any more off of that bus than what they
24 can get today.

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1 I think some of the barriers are the
2 energy market itself and the amount of capacity that is
3 installed on the New England grid and the fact that they
4 have to compete on a daily basis with generation at other
5 locations on the transmission system. And if their costs
6 are higher and trying to site in a congested area where
7 the fuel supplies don't exist today and the transmission
8 infrastructure doesn't exist, then they would have to
9 spend additional dollars to interconnect there relative
10 to somewheres else probably has something to do with the
11 market. This Council sited generation in Oxford, the
12 Towantic Project, and for various reasons that project is
13 not under construction. The Meriden Project, another one
14 in Connecticut that was sited, was halted. And both of
15 these are in either the Connecticut load pocket or the
16 Southwest Connecticut load pocket. So there must be
17 other economic drivers that are preventing the developers
18 from moving forward with those projects.

19 MR. CUNLIFFE: Could this 345-kV loop
20 substitute generation in Southwest Connecticut?

21 MR. ZAKLUKIEWICZ: Mr. Cunliffe, let me
22 try to help you out a little bit. The load in the
23 Southwest Connecticut area for simplification sake, call
24 it 3,500 megawatts on peak, the present transmission

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1 facilities have a range, depending on what generation is
2 on or off, of approximately 2200 to 2400 megawatts. So
3 that means during high load and peak load periods if we
4 use the 2400 number, we must run and have available for
5 those high load hours approximately 1100 megawatts of
6 generation to reliably serve load. That's the 3500 load,
7 2400 megawatts of transmission capability. You then
8 require at a minimum 1100 megawatts of generation to be
9 scheduled on in Southwest Connecticut. The project as
10 proposed will increase that transfer to somewhere
11 between 32 and 3400 megawatts, such that in theory then
12 you would look at it and say for the present load
13 conditions I will need somewhere between 100 and 300
14 megawatts of generation to be scheduled on in Southwest
15 Connecticut when this project is completed. As the load
16 continues to increase in future years, the combination
17 then of the generation and the transfer capability of
18 this project will require then that as the load increases
19 to 30 -- from 35 to 3600 to 3700 to 3800, that the 100 to
20 300 number then will increase to 400 to 500 megawatts of
21 generation that must be scheduled on.

22 What does that mean to us? You will
23 recall a couple of years ago -- more than a couple of
24 years ago the legislators turned around and indicated

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1 that the utilities, the integrated utilities could no
2 longer own generation. Today we all know that at risk is
3 what is going to happen now to a number of the existing
4 generating plants in Southwest Connecticut, are the Devon
5 units, for which my understanding is, is they've lost
6 their -- at least one of them has lost their reliability
7 must run contract, it will be ending shortly. When those
8 payments cease, is one of the Devon units going to
9 continue to operate? And when the second Milford unit
10 comes on, I would assume then the second Devon unit will
11 also lose its reliability must run contracts. You do not
12 have control over the generation that is in the area.
13 We've made a decision statewide that that is now up to
14 the market to receive the proper signals. And with those
15 signals now generation will remain on or new generation
16 will be installed in Southwest Connecticut. The
17 transmission project as proposed dramatically decreases
18 that reliance upon the generation that must be run during
19 high load and peak load conditions in Southwest
20 Connecticut to reliably serve the area.

21 We also looked at -- I make reference to
22 the original Volume 1 of the filing on page G-1, we
23 identified 9 or 10 items that were in there, goals for
24 what would be a reliable project, and does what we have

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1 proposed meet all of those requirements. And if you want
2 to go to G-1, it's a pretty thorough comparison then of
3 what we were looking for for the goals or objectives of
4 our transmission project. And I can say emphatically
5 that every one of those bulleted items on G-1 are met by
6 the project. And that is not the case with any of the
7 other alternatives that we looked at. And we looked at
8 combinations of 115-kV alternatives, we looked at the
9 alternatives of using HVDC high voltage DC
10 interconnections, we looked at combinations of DG, DSM,
11 conservation and load management, and tried to identify
12 which of those goals are achieved with any of the
13 alternatives that we put forth, and clearly the proposed
14 project comes out on top in all of the areas.

15 So, I hope my response helped clarify that
16 we will increase dramatically the transfer into the area
17 and now become significantly less reliant upon the
18 generation that today must be run. That transmission
19 project will also afford us the not having to rely upon
20 the magnitude of local generation in Southwest
21 Connecticut over the next number of years as the load
22 continues to increase in Southwest Connecticut because
23 the combination of your transfer limit into the area plus
24 your local generation plus what you need for the reserves

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1 for the contingencies have to equal then that load number
2 irrespective of which projects are proposed.

3 MR. CUNLIFFE: Thank you. If I could
4 direct you to page 24 of your prefiled testimony, there's
5 a figure that represents the number of Southwest
6 Connecticut transmission line segments affected by
7 contingencies. My question is that with the complete
8 build-out you'll have less than 20 segments. What was
9 the target to the point of zero? Is that the goal is to
10 have zero?

11 MR. BRANDIEN: The goal is to bring the
12 area into criteria when we subject a system to the
13 criteria contingencies. And what this project does is it
14 gets -- it eliminates the voltage and the thermal
15 problems of moving power down into the area. When I was
16 explaining to Mr. Johnson before about getting the
17 autotransformers at strategic locations and then able to
18 do smaller rebuilds as the load grows is what's left in
19 the project. So ideally we would have liked to have built
20 a single project, a loop, and resolved all of the
21 criteria violations, but that's really unrealistic
22 because that loop doesn't get the power from the 345 to
23 all the stations. So what we've done is eliminated the
24 thermal and voltage problems of moving power into the

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1 area. Now we have some local issues that we have to deal
2 with that will mostly be taken care of through upgrading
3 substation equipment or possibly reconductoring sections
4 of lines or pulling in larger conductor on existing
5 structures.

6 MR. CUNLIFFE: These affected line
7 segments would fall under a loss of load expectation,
8 would they fall within the criteria of understanding
9 loss?

10 MR. BRANDIEN: They wouldn't really show
11 up in the loss of load expectation calculation. When you
12 think of reliability, the way NPCC defines reliability is
13 adequacy, meaning resource adequacy, do you have enough
14 generation to meet the load. And when they run that
15 analysis, they don't really run power flow type analysis
16 and contingency analysis, so it wouldn't see the internal
17 limitations that are shown in this bar graph. What it
18 really shows is with existing interface transfer limits
19 and generation that you have, do you meet the loss of
20 load expectation when they run that calculation. This is
21 the security aspect of reliability, reliability being
22 adequacy and security. This is the security, is the
23 transmission system able to withstand those criteria
24 violations, loss of a generator, loss of a transformer,

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1 loss of a line, loss of transmission line sharing common
2 structures, that's what this analysis shows.

3 MR. CUNLIFFE: Then my understanding would
4 be that your goal would be zero?

5 MR. BRANDIEN: It would be to get zero.
6 But to build a single project to get to zero is --

7 MR. CUNLIFFE: Okay, then how much more
8 would it take to get to zero?

9 MR. BRANDIEN: I think in one of the
10 interrogatories -- Interrogatory DW-10, we lists the
11 violations that are left behind, and it would be work at
12 various locations on the system to resolve those
13 problems. I don't have a number of how many different
14 projects that would be. You know, I could run down
15 through it and do it in my head, but I haven't run an
16 analysis to determine exactly how we would resolve all of
17 those --

18 MR. CUNLIFFE: Or how about maybe a cost?
19 I mean you're proposing a 600-million dollar project,
20 would it take another 600-million to get it to zero?

21 MR. BRANDIEN: Definitely not. These are
22 much smaller in magnitude projects. Really projects that
23 the Council is used to seeing from us, the incremental
24 transmission rebuilds that you saw through the 80's let's

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1 say.

2 MR. CUNLIFFE: These will be projects that
3 you would probably address after the system is operating?

4 MR. BRANDIEN: That's correct.

5 MR. CUNLIFFE: Thank you.

6 MR. ZAKLUKIEWICZ: Let me give you an
7 example, Mr. Cunliffe. If you look at Q-D-W-10, Project
8 8, we overload the lines from Plumtree to Middle River.
9 That is basically a local loop that goes from Plumtree
10 over to -- over and around Middle River. So three of
11 those items are not addressed by Docket 217, nor are they
12 addressed by Docket 272. Basically, it's those lines,
13 the loading -- the load on those in the area of Middle
14 River is greater than what the line capability is should
15 you lose one of the two transmission lines that feeds
16 that area today. So that overload continues. And it
17 basically means we either need to put a larger conductor
18 up into the Middle River area or put a third circuit into
19 that small looped area that's there to cover the
20 contingency of the loss of one of the two lines feeding
21 both of those substations on the loop --

22 MR. CUNLIFFE: Thank you --

23 MR. ZAKLUKIEWICZ: -- so it's not an
24 overall system problem in a lot of instances.

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1 MR. BRANDIEN: An example of that, that
2 reinforcement that Roger talked about would take care of
3 three of those 18 contingencies. It would take care of
4 violation 8, 9 and 10. So that single project would take
5 care of those three.

6 MR. CUNLIFFE: Thank you. If I could move
7 to Mr. Coretto's prefiled testimony. Page 5, you speak
8 to the forecasts -- and probably Connecticut Light and
9 Power would probably want to chime in here -- 2.2 percent
10 growth between 2004 and 2013. This is new to the Council
11 based on past forecasts. What are the reasons driving
12 that?

13 MR. CORETTO: The 2.2 percent is CL&P's
14 forecasted peak. I can --

15 MR. CUNLIFFE: I was going to say CL&P can
16 speak to that. They may want to talk to 2.2 and then --

17 MR. CORETTO: Maybe they'd be interested
18 in how I would answer it, I don't know. I'll give them a
19 chance to do it, or I can --

20 MR. CUNLIFFE: While they're looking for
21 that --

22 MR. CORETTO: Sure --

23 MR. CUNLIFFE: -- I'll direct one to you
24 because your forecast looks unchanged --

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1 MR. CORETTO: I certainly can address the
2 UI portion of that. We have not filed our nominally
3 March 1st filing with the Council. We do anticipate
4 filing that in the next week or so, but the numbers are
5 pretty done, we're working on some narrative edits.

6 The forecast for UI is essentially flat,
7 there is some minor growth, less than a percent, roughly
8 a half a percent, four-tenths, five-tenths, which is
9 about the same growth rate as we had in last year's
10 filing which was on June 11th.

11 Part of the reasons I believe that our
12 number is different or less than CL&P's is predominantly
13 due to the demographics and the service territories. Our
14 service territory is denser in population density and not
15 in residence. We have two main municipalities that are
16 distressed. There's not a lot of open space for growth.

17 And I believe CL&P's territory is different. For years
18 we've always had a lower use per customer. And again
19 that's a function of demographics and the customer-base.

20 There's just not a lot of open space to see quantum
21 growth. We do see however similar trends I believe in
22 where the growth is happening in the last couple of
23 years, it's predominantly been in the residential sector,
24 more electric devices, more electric homes, bigger homes,

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1 and we've seen declines for the last few years anyway in
2 industrial base where we continue to lose the
3 manufacturers, there's a few left but the trend is
4 continuing. So you put all that together and the load is
5 essentially flat, there's some growth. The key thing
6 however is that I can guarantee you the forecast is wrong
7 -- (laughter) --

8 COURT REPORTER: One moment please.

9 (Pause). Thank you.

10 MR. CORETTO: The very important factor in
11 our filing last year and what it will be this year, and
12 really the message we're trying to portray, is the
13 dominant effect that the weather can have. The future is
14 not going to be our base load forecast, it's not going to
15 be our extreme weather forecast. But what we're really
16 trying to say is the future is going to be within a
17 reasonable boundary. I can't predict the weather. The
18 weather has an enormous impact, especially on a system
19 that inherently isn't growing really fast. The estimates
20 for what the weather can do on a peak forecast is
21 anywhere from seven or eight to ten percent. On a system
22 that's inherently only growing at a fraction of a
23 percent, that's a huge driver, and it has a huge impact
24 on how you plan and build your infrastructure. So while

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1 the peak forecasts for normal weather may be essentially
2 flat or every slightly growing, the fact of the matter is
3 we've got quite a band width that we're concerned with
4 and we don't have to look very far back to see when that
5 weather occurred. It happened two years ago, almost
6 three years ago now, and it followed a year where there
7 was no summer. If you look at the year 2000 and 2001, and
8 I -- and our peak in 2000 dropped almost 10 percent from
9 the year before. We're still waiting for the summer of
10 2000 to show up, it hasn't showed up. Fast forward to
11 2001, one of the hottest summers on record, our peak
12 jumped almost 15 percent over the year before to an all
13 time peak, which we still have not exceeded, although we
14 did come close in 2002. Again the message here is that
15 the weather has an overwhelming impact on that peak. And
16 as one of the ex-vice president and operators of the UI
17 system always used to tell me when I was a young
18 engineer, we don't serve weather corrected peaks, the
19 system has to be there to serve what's there, we don't
20 serve the weather corrected load. So it's really
21 important that that band width be understood.

22 MR. ZAKLUKIEWICZ: Mr. Cunliffe, for -- is
23 this on? Mr. Cunliffe, for CL&P we have submitted --
24 CL&P has submitted its March 1, 2004 load forecast to the

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1 Siting Council. And in that we recognize in the forecast
2 that we were looking to assess the short and the long run
3 forecast accuracy of these forecasts.

4 In the 2003 CL&P rate case hearings, which
5 were conducted in the fourth quarter of 2003, there was
6 agreement that the previous CL&P forecast did not
7 adequately recognize the growth in the residential areas
8 that had taken place. And as part of the rate case
9 decision, the DPUC rate case decision, and part of our
10 filing for 2004, we increased the residential sales
11 portion of our forecast to recognize the increased uses
12 within the residential areas as a result of increased
13 uses of electronic equipment, recognizing the size of new
14 homes that are being constructed, and all the appliances
15 and extra amenities that are in present day homes that
16 were not in homes that I was brought up in, and the
17 additions to existing structures are changing
18 dramatically the electric usage in those residential
19 areas. As a result of that, what we submitted as a load
20 forecast then in March 1 of 2004 then recognizes the
21 increases in the residential uses of electricity in the
22 residential areas and is consistent with the CL&P rate
23 case.

24 MR. CUNLIFFE: Thank you. I direct you to

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1 page 7, you speak of 300 megawatts of resources that were
2 in response to an ISO request for proposal in Southwest
3 Connecticut. Did those resources also include demand
4 response?

5 MR. MUTCHLER: I can speak to that. What
6 I understand is that ISO New England issued a -- I guess
7 what I'd call a GAP RFP for 300 megawatts of various
8 resources, and those resources include both temporary
9 generation, emergency generation, demand reduction, load
10 response, and energy conservation.

11 MR. CUNLIFFE: How can additional
12 generation operate on a vulnerable transmission area when
13 ISO recognizes this area to be in need of both
14 transmission and additional generation, but they can't do
15 both?

16 MR. BRANDIEN: Pete Brandien. I'll take
17 that. The RFP was for up to 300 megawatts and that was
18 based on some analysis that ISO New England did on
19 Connecticut as a whole and Southwest Connecticut on the
20 deficiencies that we have and trying to reliably supply
21 the customer load. It looked at not only loss of load
22 expectation but some other analysis, power flow type
23 analysis. And they recognized that when certain
24 generation is out of service, we need additional

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1 resources, demand response resources, hopefully that
2 could be activated within 30 minutes because we have to
3 be able to re-dispatch the system within 30 minutes
4 following a contingency, and also some generation
5 hopefully would respond. So the RFP is open to either a
6 generation solution or a demand response solution. And
7 it recognizes that the infrastructure can accept
8 additional generation. And this is really a replacement,
9 it would be called for during OP-4, which is their
10 emergency procedures actions during a capacity
11 deficiency, and it would not be available to be run let's
12 say with the marketplace on a daily basis. It would more
13 or less only be there for a replacement aspect during an
14 emergency situation, so it wouldn't be called for for
15 other reasons, peak shaving to manage congestion or
16 anything like that.

17 CHAIRMAN KATZ: Miss Randell and Mr.
18 Fitzgerald, your witnesses have been on the hot seat now
19 for a little while. We had planned to continued to
20 12:30, but if your witnesses need a break before 12:30,
21 we can do that. Which -- what's their pleasure?

22 A VOICE: We can keep going.

23 MS. RANDELL: I think they're voting to
24 keep going.

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1 CHAIRMAN KATZ: Okay, we will do that.

2 MR. FITZGERALD: Thank you for asking.

3 MR. ZAKLUKIEWICZ: Mr. Cunliffe, I don't -
4 - to my knowledge, I do not think the ISO has announced
5 the awards yet on that RFP for 2004 the summer as of this
6 date. I may be wrong on that, but no one seems to
7 recognize that that has been done yet. And I know there
8 are a number of proposals that have been put forth. So
9 exactly where that generation would be going is still a
10 question mark, and maybe they're still trying to define
11 from the responses to the RFP whether that generation can
12 be physically put in those locations where proposals have
13 been put forth --

14 MR. CUNLIFFE: You read my mind --

15 MR. ZAKLUKIEWICZ: -- and maybe that's
16 another question along with Brian's that you can ask the
17 ISO people when they get here in the afternoon. They are
18 the keepers of the RFP and it's not CL&P and UI, so we're
19 kind of shooting from the hip as to exactly what
20 generation would be part of that RFP and where would it
21 physically be located to try to answer your question as
22 best we can with our knowledge and experience as to how
23 the system would operate if you put 50 megawatts here or
24 100 megawatts here. That I would assume they are

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1 studying as we speak.

2 MR. CUNLIFFE: Page 8, a figure is
3 presented at 29 megawatts, about one and a half percent
4 of what CL&M programs are able to reduce peak loads in
5 2003. Is that a statewide figure?

6 MR. MUTCHLER: Yes, that is, that is a
7 statewide figure. And that's conservation only, it does
8 not include --

9 MR. CUNLIFFE: Okay --

10 MR. MUTCHLER: -- the load reduction
11 piece.

12 MR. CUNLIFFE: And how would that break
13 down for Southwest Connecticut in a rough number? I see
14 9 megawatts is that of UI. So almost half probably?

15 MR. MUTCHLER: Approximately half.

16 MR. CUNLIFFE: Thanks. Those are my
17 questions, Chairman.

18 CHAIRMAN KATZ: Thank you, Mr. Cunliffe.
19 Mr. Heffernan.

20 MR. GERALD J. HEFFERNAN: No questions.

21 CHAIRMAN KATZ: Mr. Emerick.

22 MR. EMERICK: Yes, I have a question. If
23 you could describe for me what a FACT device is, how it's
24 used, and its benefit?

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1 MR. TAIT: We all want that question
2 answered -- (laughter) --

3 MR. ZAKLUKIEWICZ: A FACTS device -- let
4 me take a shot at that -- I remember trying to answer one
5 of Mr. Gelston's questions of what is reactive power and
6 I didn't do a very good job --

7 MR. TAIT: Could you spell the word --

8 MR. ZAKLUKIEWICZ: F --

9 MR. TAIT: -- or the acronym?

10 MR. ZAKLUKIEWICZ: The acronym is F-A-C-T-
11 S, Flexible AC Transmission Solution, okay. It's
12 basically an extremely fast-acting device which can do a
13 number of different things, but in our application, in
14 our problem area it will either add capacitance to the
15 system for sagging voltage -- what you want to do is prop
16 the voltage back up, meaning you want to instantaneously
17 or as quickly, as instantaneously as possible add
18 capacitance to the system, to prop the voltage up for a
19 condition where you have sagging voltage as a result of
20 the loss of generation or the loss of a transmission line
21 into the area. Generators with their exciters that
22 control the output of the machine turn around and will
23 vary the amount of VARs a generator -- the output of the
24 machine -- the VAR output of the machine is controlled by

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1 the exciter, which also has a response time to prop up
2 the voltage and/or decrease the voltage at the terminals
3 of the machine, and it does this by injecting VARs into
4 the system. When you have a loss of a generator, then
5 you now do not have -- that instantaneous capability is
6 lost when you also loss that machine, you not only lose
7 the watts of the power that the machine generates, you
8 also lose the capability of this machine adjusting VARs
9 continuously up and down as the terminal voltage at the
10 machine varies.

11 When you lose a transmission line, the
12 flow has to go on the other transmission lines such that
13 you now have higher flows on certain transmission lines,
14 you also incur increased losses and you also incur
15 additional voltage drop. And that is the current times
16 the resistance or the impedance of the wire. So that if
17 you lost a major transmission line which was carrying a
18 good amount of power, and that incurs a fault and it
19 trips out, the power then has to go around additional
20 transmission lines which may be significantly longer
21 between where the generator is and where the load is as
22 opposed to the direct route where you have this
23 transmission line. So in either case, what you can
24 experience in the load area then is a significant drop in

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1 the voltage at that point.

2 The FACTS machine as opposed to being able
3 to switch capacitor banks on or off, basically operates
4 in a quarter cycle and will inject current, whether it be
5 capacitive current to help prop up the voltage or it
6 injects reactive current to drop the voltage if you have
7 extremely high voltages in the area because of some
8 contingency.

9 Let's stick with the low voltage case to
10 begin with. You lose a generator, you lose a
11 transmission line, the voltage begins to sag, this FACTS
12 device without operator intervention automatically
13 injects the equivalent mega-VARS into the system to prop
14 the voltage back up to a level then which hopefully will
15 prevent a further voltage decline or a voltage collapse
16 in that area. It's the speed at which this is done, you
17 do not initiate what we call the traditional switching of
18 devices to put the mega-VARS on. In the past what you
19 would have is switchable capacitor banks, call it in
20 groups of 20 or 30 or 40 or 50 mega-VARS each, and you
21 would rely upon the operators back at CONVEX to recognize
22 that my voltage has gone down, they would then initiate a
23 signal to close a breaker, which would then end up
24 injecting blocks of capacitors into the system to prop

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1 the voltage up. The FACTS device senses at that
2 location, or at some other location senses the voltage
3 continuously 24 hours a day and recognizes that when my
4 voltage band width changes by some amount which is
5 programmable, it be statics rather than the static
6 switchable capacitor banks, it turns around and injects
7 capacitance into the system to prop the voltage back up
8 to acceptable levels. It also turns around and helps you
9 in a case where you have excessively high voltage in an
10 area and now I need to drive down the voltage before I
11 damage equipment, meaning the utility equipment and/or
12 customer equipment, it will do the opposite and inject
13 reactive power into the system, which will now drive the
14 voltage down.

15 So it is a very fast-acting, very costly
16 solution to a problem where you have the probability of
17 having significant voltage decline and the potential
18 collapse of the system by installing a FACTS device like
19 we are doing today in the Glenbrook Substation, which is
20 in Stamford, which will help us keep the system from a
21 voltage collapse under basically almost all operating
22 conditions, and we experienced these conditions in -- on
23 a Sunday morning in June in the year 2000 --

24 A VOICE: June 11, 2000 --

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1 MR. ZAKLUKIEWICZ: June 11, 2000. This
2 will -- this will hold it up and help us from going into
3 a voltage collapse.

4 MR. HEFFERNAN: So it automatically
5 regulates the voltage; if it has to go up, it brings it
6 up, if it has to go down, it brings it down?

7 MR. ZAKLUKIEWICZ: You said it in 14
8 seconds what I took nine minutes to try -- (laughter) --

9 CHAIRMAN KATZ: There's a message there,
10 Mr. Zak -- (laughter) --

11 MR. ZAKLUKIEWICZ: The key -- the key is
12 the extremely fast response time without operator
13 intervention.

14 MR. EMERICK: Just one follow-up and I'm
15 almost cautioned to ask this -- (laughter) -- is the
16 STATCOM a FACT device?

17 MR. ZAKLUKIEWICZ: Yes, it is.

18 MR. EMERICK: Thank you.

19 MR. ASHTON: And the other point to make
20 would be it does not supply energy, does it -- it just
21 supplies power factor correction?

22 MR. ZAKLUKIEWICZ: That is correct.

23 CHAIRMAN KATZ: Mr. O'Neill.

24 MR. O'NEILL: Would this device have saved

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1 us from a complete blackout in the State of Connecticut
2 had it been in use --

3 MR. ZAKLUKIEWICZ: No.

4 MR. O'NEILL: No. Thank you.

5 CHAIRMAN KATZ: Mr. Tait.

6 MR. TAIT: No questions.

7 CHAIRMAN KATZ: Mr. Ashton.

8 MR. ASHTON: I have a few. Mr. O'Neill
9 just opened the door a crack on it. The blackout last
10 August caused a massive disruption in the power systems
11 for Ohio all the way into New England. If my memory
12 serves me correctly, we broke off the southwestern part
13 of the state and that went flat while there were some --
14 and loss of load in the rest of New England, it was not a
15 full blackout. What would this proposed facility do to
16 the kind of situation that occurred last August?

17 MR. BRANDIEN: Let me -- let me take the
18 first crack at it --

19 MR. ASHTON: Okay, let's -- make it fairly
20 short. I'll come back if we have more questions.

21 MR. BRANDIEN: Okay. When we -- when the
22 system collapsed, it really started out in the Cleveland
23 area and it came across the country within seven to nine
24 seconds. And that really depressed the voltage on the

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1 border between New York and New England and we had very
2 high currents. And we've talked about the weakness of
3 our system and how the 345 system kind of gets weaker as
4 it goes towards the New York border. We really had a
5 race on that day on which relay thought the fault was on
6 its portion of the lines that it was protecting --

7 MR. ASHTON: Now a relay is a device which
8 senses the operating conditions of the line, is that fair
9 to say?

10 MR. BRANDIEN: That's correct. So the
11 relays on the 345 system to New York saw these extremely
12 low voltages and high currents, which is indicative to a
13 fault on the transmission system, and the stronger the
14 source the more current is going to be pushed through and
15 the voltage is going to be declining because of that
16 fault. We opened up at the Frost Bridge Substation in
17 Watertown before the relays opened up to isolate the 345
18 at the Long Mountain Substation on the New York/New
19 England border. That really weakened the system in
20 Southwest Connecticut, and now all the power is going
21 through the 115-kV system through Southwest Connecticut
22 to go out the Long Island Cable to get back on the 345 at
23 Plumtree and continue on into New York, feeding the
24 portion of the grid that was collapsing. And then all of

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1 the 115-kV system opened up in Connecticut for the same
2 sort of reason, it thought it was a fault on its portion
3 of the line.

4 If we had a stronger system, if the 345-kV
5 loop was there, the potential is that because of the
6 stronger source at the Long Mountain Substation, that the
7 relays at Long Mountain would have tripped prior to the
8 Frost Bridge Substation tripping, that would have
9 disconnected the 345 tie between New York and New
10 England, and then we would have been pushing a lot of
11 power across the Long Island Cable, and then that would
12 have tripped and we could have isolated New York and New
13 England better than we did. To really understand whether
14 or not that would have taken place, takes a lot of
15 analysis to understand exactly where the system was in
16 that seven to nine seconds as the system was falling
17 apart, but it's conceivable that that's what would have
18 happened if the loop was there.

19 MR. ASHTON: Is it your opinion then, and
20 I'll look at Mr. Zaklukiewicz because I know he's had
21 some background in this as well as yourself, that the
22 system would have a much higher probability of staying
23 intact in Connecticut for the situation that occurred
24 last August had the loop from New Milford to Norwalk to

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1 Middletown been complete, the 345?

2 MR. BRANDIEN: Yes. And I would like to
3 add one thing to that. We experienced a large power
4 outage in New England, it really wasn't a blackout on our
5 system because New England Island was still formed, and
6 we had energized all the transmission system -- this
7 happened about 16:10 on 14th, and by about 23:45 we had
8 all the transmission re-energized, and at about 5:44 in
9 the morning we lost the 345 line between Southington and
10 our Frost Bridge Substation in Watertown. And because of
11 the weakness of the system, we had to stop restoration of
12 customer load for about five hours on the morning of the
13 15th. So not only is it possible that the 345-kV loop
14 could have kept our system intact, but it definitely
15 would have allowed us to restore power faster to the
16 customers after the outage.

17 MR. ASHTON: Would -- Mr. Zaklukiewicz, do
18 you have anything you want to add or concur with, or
19 what?

20 MR. ZAKLUKIEWICZ: I concur with those
21 statements, Mr. Ashton. Until actual studies are done in
22 analyzing that, the conclusion -- the conclusion of the
23 data would indicate that if we were stronger, if the loop
24 was in place, potentially we should have separated

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1 between Pleasant Valley and Long Mountain and all of New
2 England, which at the time was at an approximate balance
3 between load and generation in New England, we would have
4 experienced the swings that occurred when the system was
5 collapsing around us, and hopefully then we would have
6 sustained potentially some other minor trips at
7 locations; however, the entire New England would have --
8 the entire area of New England would have stayed
9 together, and in most cases it would have been -- we were
10 basically the ones who suffered the separation, we would
11 have incurred far less outages and potentially would have
12 only had trips which would have been minor and maybe
13 would not have even resulted in any load shedding
14 whatsoever.

15 MR. ASHTON: Okay. In the event of a
16 major power outage, do either of the companies have a
17 bogie value for the cost or value of a kilowatt hour?
18 For example, in -- on my bill, if I can take little
19 liberties, I'm paying slightly more than 10 cents a
20 kilowatt hour, that's the cost to me. But where the
21 customer experiences a load curtailment, a loss of load,
22 is there any value that is in the -- that the companies
23 use -- it may be empirical, for the value of that --

24 MR. FITZGERALD: Excuse me --

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1 MR. ASHTON: -- lost load to the customer?

2 MR. FITZGERALD: Okay -- sorry.

3 MR. ANTHONY MARONE: Tony Marone for UI.

4 I can't cite a specific empirical number, but just in our
5 interaction with the customer, it really depends on the
6 customer and their operations. The quantified loss is
7 obviously more significant for business customers. And
8 many times, from my experience, specifically so from
9 manufacturing customers, especially those that may have a
10 process in place that relies heavily on electricity, that
11 all that process and the value of the assets in process
12 could oftentimes be ruined. And to try and quantify that
13 is difficult, but it's -- it's a significant impact for
14 many customers.

15 MR. ASHTON: Are we talking 12 cents a
16 kilowatt hour? A dollar, 12 dollars? What are we
17 talking about? What is the value that you think is in
18 the realm of reason for various classes of customers or
19 just as an average?

20 MR. MARONE: Again depending on the
21 customer, the cost for a power outage, it could be an
22 outage that lasted no more than several minutes, it could
23 have the same impact on that customer as an outage that
24 lasts several hours depending on what impact it actually

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1 had on their process in reestablishing --

2 MR. ASHTON: So what's the number?

3 MR. MARONE: I can't honestly give you a
4 number --

5 MR. ASHTON: You have no idea of a value?
6 Does anybody?

7 MR. PHILIP HANSER: There's one way to
8 think about it, which is slightly different, which is to
9 say --

10 COURT REPORTER: You are?

11 MR. HANSER: I'm sorry. I'm Phil Hanser,
12 I'm with the Brattle Group.

13 There's a bound on that number in the
14 sense that you can calculate the cost that would be
15 incurred by such a customer to ensure there is no such
16 interruption. And that certainly has to bound the value
17 in the sense that if a customer is willing to pay that as
18 a number, alright, then you know that in fact that's a
19 cost they consider to be a valid one. And so you could
20 look at the cost of backup generation in that situation -
21 -

22 MR. ASHTON: I understand all of that.
23 I'm looking for a quantified number --

24 MR. HANSER: Well, there's --

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1 MR. ASHTON: -- if there is one. Is there
2 such a thing that you use --

3 MR. HANSER: There's been some studies --

4 MR. ASHTON: -- in coffee groups or
5 talking with customers, or what is it?

6 MR. HANSER: There have been studies and
7 the range of values is enormously large. And the reason
8 is because there's been -- there's very little experience
9 able to quantify it, and because the cost to the customer
10 varies too much.

11 MR. ASHTON: Okay.

12 MR. ZAKLUKIEWICZ: Mr. Ashton, probably if
13 you refer to -- it doesn't give a specific kilowatt hour
14 number, but in the CBIA testimony, which was filed in
15 Docket 272 --

16 MR. ASHTON: Yeah --

17 MR. ZAKLUKIEWICZ: -- they questioned an
18 extensive number of industrial/commercial customers
19 regarding the value of the loss of power --

20 MR. ASHTON: Yeah, I'm aware of the CBIA
21 testimony. I was trying to get a feel for what you two
22 operating utilities felt was the value.

23 Let me go on to another question. Mr.
24 Johnson referred to bringing in power from Massachusetts

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1 and Rhode Island. Do you believe it's good planning
2 policy to have that kind of a situation as the norm or do
3 you believe it's good policy to try over time to have a
4 rough balance between load and generation in an area such
5 as the State of Connecticut?

6 MR. ZAKLUKIEWICZ: The strength of an
7 interconnected bulk power system far exceeds the benefits
8 that you would have of just having a balance between
9 local load and generation. And clearly the economics
10 speaks to having a strong interconnection and the ability
11 to obtain lower cost generation by having
12 interconnections. And clearly Connecticut with its
13 restrictive ability to import power is on the wrong side
14 of the equation at this time. Clearly, I do not know of
15 any other area that is as deficient in transmission as
16 the Connecticut area is. And clearly, there are enormous
17 benefits when you look at the economics in particular,
18 along with the reliability issues of having more
19 transmission, it just speaks for itself in volumes.
20 Clearly having a stronger transmission system is the
21 prudent engineering solution to the problem of serving
22 reliable energy.

23 MR. ASHTON: I'm not sure that's
24 completely responsive. My question in essence is, is it ~

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1 general planning policy in a region to balance load and
2 generation, and admittedly is transmission involved in
3 that?

4 MR. ZAKLUKIEWICZ: Well, I think it's
5 planning policy, Mr. Ashton, to balance load with the
6 combination of generation and transmission --

7 MR. ASHTON: Well, transmission --

8 MR. ZAKLUKIEWICZ: -- transfer of --

9 MR. ASHTON: -- by definition is needed to
10 move generation to load. But accepting that, is it
11 general policy to try and balance load and transmission
12 by areas?

13 MR. BRANDIEN: Well, if you look at the --
14 that's where the loss of load expectation comes in, which
15 tries to determine whether or not you have adequate
16 resources in an area. And I think that is the analysis
17 that they use to balance the load in generation in an
18 area --

19 MR. ASHTON: Well, let me go at it a
20 little differently. Mr. Zak, I believe -- Mr.
21 Zaklukiewicz, I believe you mentioned that right now
22 there's a 22 to 2400 megawatt transfer capability into
23 Southwest Connecticut and that goes up to -- I think it
24 was 3400 with the completion of the loop. Have I got the

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1 right numbers?

2 MR. ZAKLUKIEWICZ: That is correct.

3 MR. ASHTON: Do you have any idea of the
4 amount of generation or would you accept the fact that
5 there's about a thousand megawatts of generation that in
6 2007 is going to be approaching 50 years old?

7 MR. FITZGERALD: In Southwest Connecticut

8 --

9 MR. ASHTON: In Southwest Connecticut,
10 yes.

11 MR. ZAKLUKIEWICZ: That is -- that is the
12 approximate number.

13 MR. ASHTON: Norwalk Harbor, Devon, and
14 Bridgeport Harbor units?

15 MR. ZAKLUKIEWICZ: That is correct.

16 MR. ASHTON: What is the -- generally
17 speaking, the useful life of thermal plants?

18 MR. ZAKLUKIEWICZ: Somewheres between 40
19 and 50 years from a reliability standpoint.

20 MR. ASHTON: So is it reasonable to expect
21 that we're going to have to accommodate new generation of
22 roughly a thousand megawatts in the next decade or so?

23 MR. ZAKLUKIEWICZ: Yes.

24 MR. ASHTON: And would the selection of

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1 generation in terms of cost-efficiency, which includes
2 capital, operating, maintenance and energy costs, be best
3 served if there was a 345-kV loop through the area as
4 opposed to -- or equivalent thereof as opposed to just
5 the present type of transmission?

6 MR. ZAKLUKIEWICZ: That is correct. The
7 economic generation today, our combined cycle units, and
8 they're all in the 550 megawatt class, and as we know
9 today the 115-kV system is incapable of allowing us to
10 connect such large generation onto the 115-kV system, so
11 the 345 allows that newer generation, the more efficient
12 generation to be added to the transmission system in
13 Connecticut.

14 MR. ASHTON: Okay. And that's because of
15 the short-circuit duty and --

16 MR. ZAKLUKIEWICZ: Short-circuit duty put
17 aside, just the ability to thermally move that power.

18 MR. ASHTON: Is electric load growth
19 generally tied to economic and population growth? Is
20 that a fair statement? There's some relationship between
21 the growth of those three things?

22 MR. CORETTO: Yes, I would say that
23 there's a relationship there.

24 MR. ASHTON: Okay. And that allows for

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1 conservation and so forth?

2 MR. CORETTO: Yes.

3 MR. ASHTON: And I believe it was made
4 that -- somebody's boss, and I forget who it was, had a
5 policy that you don't design an electric system for
6 normal weather -- it might be you, Mr. Coretto -- okay --
7 is that generally true in the electric industry --

8 MR. CORETTO: That we don't --

9 MR. ASHTON: -- you have to build it --

10 MR. CORETTO: We have to --

11 MR. ASHTON: -- for abnormal conditions --

12 COURT REPORTER: One at a time --

13 MR. CORETTO: We have to build it to serve
14 the load that's going to be experienced.

15 MR. ASHTON: Okay. Are you aware of any
16 policies by any official agency which is in place which
17 prevents economic growth or population growth?

18 MR. CORETTO: No.

19 MR. ASHTON: Is anybody on the panel?

20 A VOICE: No.

21 MR. ASHTON: I think that's all I have,
22 Madam Chairman.

23 CHAIRMAN KATZ: Thank you, Mr. Ashton.

24 Mr. Murphy. Mr. Murphy has no questions. Mr. Lynch.

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1 Mr. Lynch has no questions. Is there -- yeah, Mr.
2 O'Neill.

3 MR. O'NEILL: One of the questions which
4 I've been meaning to ask is regarding the
5 interconnections. As we know Southwestern Connecticut
6 has a seam with the New York grid. Have there been any
7 studies to find out if there are any possible
8 interconnections that could be made that would improve
9 the grid down in that area to further enhance the
10 reliability of Southwestern Connecticut? Perhaps coming
11 over from West Chester?

12 MR. BRANDIEN: Yeah, there hasn't been any
13 explicit studies. You know, we have looked at the --
14 they have a number of 345-kV lines on the other side --

15 MR. O'NEILL: I realize that, that's why
16 I'm asking the question --

17 MR. BRANDIEN: -- of the Connecticut
18 border --

19 MR. ONEILL: -- yes --

20 MR. BRANDIEN: -- and you generally don't
21 need to do too much analysis to figure out whether or not
22 is the flow going down to New York City and Long Island
23 or is it going from New York City and Long Island up.
24 And generally that is a transmission system that's

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1 heavily loaded and it's going to serve the load down in
2 that -- that load density that's probably the highest in
3 the world in that New York City/Long Island area -- and
4 if we did tie from there onto our system, it would
5 definitely have to be controlled with a phase-angle
6 regulator or a back-to-back AC to DC tie to prevent flows
7 from sucking down to our system and going down to where
8 the greater draw is on our -- on the grid down in the New
9 York City area. That would probably cause more problems
10 than it would solve and it would be difficult to design,
11 to control those flows such that it wouldn't drag our
12 system down, and there may even have to be additional
13 transmission built back up towards say the Pleasant
14 Valley Substation where we're interconnecting and maybe
15 even bring -- or build additional transmission from the
16 Pleasant Valley Substation across our system to Long
17 Mountain to Frost Bridge to Southington, and maybe even
18 from Southington on over to Scovill, Haddam Neck,
19 somewheres in there to allow the power to move all the
20 way across our system, then to move down, and then to
21 move back into our system. We haven't done any studies,
22 but based on the way I see the flows happening on the
23 system and where there's congestion on the system, that's
24 what I think would happen. I think it would be very

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1 difficult to do that.

2 MR. ZAKLUKIEWICZ: Let me help out -- 30
3 seconds -- I'll try to make it short and sweet. Across
4 New York today, just as there is a transfer limit across
5 New York, there is a central to east transfer limit,
6 which basically today is loaded a hundred percent of the
7 time 24 hours a day. And there's also a south -- an
8 east/south transfer, which is taking the power from the
9 Albany area down to the two major substations, which are
10 in the White Plains area, Dunwoody and Sprain Brook, that
11 is also basically operated fairly close to its total
12 limits supplying the loads in New York and Long Island.
13 So to turn around and make an interconnection at two
14 interfaces that are already loaded, you would spend an
15 enormous amount of money making those transmission
16 interconnections and you couldn't push any power onto it
17 because the transfers from central/east and east/south
18 are already loaded and there would be no flow on the
19 line, so you'd be making an enormous capital investment
20 with no benefit.

21 MR. BRANDIEN: And another thing, in our
22 merger discussions with ConEd, I was on some of the
23 transition teams and we were looking at the construction
24 of our overhead relative to theirs, and those

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1 transmission lines, the conductor size are bundled with a
2 larger conductor than we use anywhere on our system.

3 MR. O'NEILL: The Long Island to
4 Connecticut interconnections, the Norwalk cable and the
5 New Haven cables, are these part of the larger regional
6 interconnection that would be supported by this loop as
7 well?

8 MR. BRANDIEN: You're talking the 1385
9 replacement project --

10 MR. O'NEILL: Yes --

11 MR. BRANDIEN: Yes, it would.

12 MR. O'NEILL: Thank you.

13 CHAIRMAN KATZ: Is there any party or
14 intervenor who has questions for this panel that I have
15 not called upon? Let the record show none.

16 If you could pull out your hearing
17 program, I'd just like to give everybody some updates.
18 If you could turn to page 14, Representative Al
19 Adinolfi's witnesses have to do with EMF and underground,
20 and we will be handling them later in the hearing
21 process, probably May/June.

22 If you turn to page 16, Communities for
23 Responsible Energy, I understand those witnesses are
24 primarily on EMF and we'll handle them probably during

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1 May.

2 Page 18, the Office of Consumer Counsel,
3 that witness will be tomorrow morning.

4 Page 20, the ISO witness will be this
5 afternoon at 2:00 o'clock, and we will resume then.

6 Page 23, under-grounding, we anticipate
7 that will be in June.

8 CBIA, page 25, Mr. Earley has informed me
9 that he has changed that from prefiled testimony to a
10 limited appearance, so that witness will not be
11 available. And please consider that information as
12 limited appearance from Mr. Peter Gioia.

13 Page 27, EMF's, we will begin on -- with
14 cross-examination of the Applicant on Thursday. We are
15 probably looking at the case by the Woodbridge Jewish
16 Organizations for a May day.

17 Okay, also I want to indicate that the
18 Towns have requested a prehearing conference Thursday
19 morning to discuss some discovery issues. We will of
20 course accommodate that. What I'd like to do -- and the
21 Council would also like to have a prehearing conference
22 on EMF Thursday morning -- I'd like to suggest 9:30 for
23 the prehearing conference Thursday morning for a
24 discussion of discovery issues, followed by a discussion

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1 of how we're going to handle EMF.

2 Is there any procedural matters anyone
3 wants to bring up before we take our lunch break?

4 MS. RANDELL: Yes, Chairman Katz. We may
5 have some brief redirect for this panel. Do you want us
6 to hold that --

7 CHAIRMAN KATZ: No, why don't we do that
8 at 1:30 --

9 MS. RANDELL: Fine --

10 CHAIRMAN KATZ: -- because Mr. Whitley
11 will not be available until 2:00 o'clock. Mr.
12 Fitzgerald.

13 MR. FITZGERALD: Since we're going to have
14 a full day Thursday with EMF, should we finish early
15 tomorrow --

16 CHAIRMAN KATZ: Yeah--

17 MR. FITZGERALD: -- could we have the
18 prehearing conference after the close of those
19 proceedings rather than delay --

20 CHAIRMAN KATZ: Well, I want to give the
21 Towns an opportunity to consult with their clients,
22 that's the only reason I'm hesitating, but we'll take
23 that up later. I'd like to hear from the Towns on that
24 idea.

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1 Okay, so we're going to resume at -- how
2 much redirect would you say you have?

3 MS. RANDELL: I don't think -- between
4 1:30 and 2:00 --

5 CHAIRMAN KATZ: Okay, why don't we resume
6 at 1:45 and then we'll take Mr. Whitley at 2:00 o'clock.
7 We are adjourned until 1:45.

8 (Whereupon, a luncheon recess was taken.)

9 CHAIRMAN KATZ: Yes. I'd like to put on
10 the record that the Applicants have decided not to
11 perform redirect on their panel.

12 At this time we are going to go in the
13 hearing program to the case of ISO New England. And Mr.
14 MacLeod, I'm going to ask you to introduce your witness
15 and have him sworn.

16 MR. ANTHONY MacLEOD: Thank you very much,
17 Madam Chairperson. My name is Anthony M. MacLeod
18 representing ISO New England.

19 I'm pleased to introduce today as ISO's
20 witness Mr. Stephen G. Whitley, who is the Senior Vice
21 President and Chief Operating Officer of ISO. We will
22 have joining us in the course of progress of testimony
23 Mr. Richard V. Kowalski, who is the Manager of
24 Transmission Planning. Mr. Kowalski is on route right

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1 now. And with that, I think that Mr. Whitley is ready to
2 be sworn.

3 MR. MARCONI: Thank you. Mr. Whitley, if
4 you could please stand and raise your right hand.

5 (Whereupon, Stephen Whitley was duly sworn
6 in.)

7 MR. MARCONI: Please be seated, sir.

8 COURT REPORTER: Mr. Whitley, would you
9 just place your name on the record and spell it for me
10 please.

11 MR. STEPHEN WHITLEY: Stephen Whitley, W-
12 h-i-t-l-e-y.

13 COURT REPORTER: Is that Stephen with an P
14 or a --

15 MR. WHITLEY: With a p-h.

16 CHAIRMAN KATZ: Mr. MacLeod, if you could
17 identify your witnesses -- I mean your exhibits.

18 MR. MacLEOD: Would you like me to take
19 them -- each one of them, or --

20 CHAIRMAN KATZ: Well if you don't mind --

21 MR. MacLEOD: Okay --

22 CHAIRMAN KATZ: -- we'll just identify
23 them as 1 through 6.

24 MR. MacLEOD: Okay. ISO has six exhibits,

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1 Madam Chairperson. We have as Exhibit No. 1 the prefiled
2 testimony of Mr. Whitley. Exhibit No. 2 is the Biography
3 of Mr. Whitley. Exhibit No. 3 is the Biography of Mr.
4 Kowalski. Exhibit No. 4 is the Southwestern Connecticut
5 Reliability Study, Volume I (Final Power Flow, Voltage
6 and Short-Circuit Report), December 2002. Exhibit No. 5
7 is the Southwestern Connecticut Electric Reliability
8 Study, a Comparative Analysis of a 345-kV Plumtree-
9 Norwalk Overhead Line Versus Two 115-kilovolt Cables from
10 Plumtree to Norwalk (Phase 1, Phase 2), December 2002.
11 And Exhibit No. 6 is the Southwest Connecticut Electric
12 Reliability Study, 345-kV Plumtree to Norwalk Project
13 Final Power Flow, Voltage and Short-Circuit Report,
14 Revision 3, November 11, 2003. I believe that is also
15 introduced as an exhibit of the Applicant.

16 CHAIRMAN KATZ: Is there any objection to
17 taking them for identification purposes? Hearing none,
18 we'll ask that you have your witness verify these
19 exhibits.

20 MR. MacLEOD: Okay.

21 (Whereupon, ISO New England Exhibits Nos.
22 1 through 6 were marked for identification purposes
23 only.)

24 MR. MacLEOD: I do have one correction I

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1 would like to make to Exhibit No. 5. Mr. Whitley, would
2 you turn to Exhibit No. 5, which is the comparative
3 analysis of the 345-kV Plumtree/Norwalk overhead line
4 versus two 115-kV cables from Plumtree to Norwalk.

5 MR. WHITLEY: Yes.

6 MR. MacLEOD: And do you have any
7 corrections to make on page 9 on --

8 MR. WHITLEY: Yes, on page 9 there's a
9 couple of corrections we'd like to make.

10 MR. MacLEOD: Okay. Would you please go
11 right ahead and identify where they are on the page and
12 what the corrections should be?

13 MR. WHITLEY: On Table 6 in the narrative
14 underneath the table, the sentence reads the 400
15 contingency overloads occur on 18 different lines. That
16 should be 48 different lines instead of 18.

17 And then the next part of that sentence it
18 says the 276 contingency overloads occur on 16 lines.
19 The 16 should be struck and it should say 40 lines.

20 And then to make those corresponding
21 changes on Table 7. If you go down to Table 7 in the
22 second column, which is the column entitled Contingency
23 Overloads, Footnote 2, the second set of numbers under
24 Phase 1, 345-kV plan should read 40 instead of 16. And

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1 the number right below that which reads 18, should read
2 48. And in the last column the number of non-convergent
3 cases presently says 16 under the 345 plan, it should
4 read 17.

5 MR. MacLEOD: And with those changes in
6 Exhibit No. 5, do you swear or affirm that the exhibits
7 submitted are true and accurate to the best of your
8 knowledge and belief?

9 MR. WHITLEY: Yes, I do.

10 MR. MacLEOD: And would you like to adopt
11 all of those exhibits?

12 MR. WHITLEY: Yes.

13 MR. MacLEOD: I would move that Exhibits 1
14 through 6 be adopted, Madam Chairperson.

15 CHAIRMAN KATZ: Is there any objection to
16 making them full exhibits? Hearing --

17 MR. HEFFERNAN: How can he adopt the
18 biography of Richard Kowalski?

19 CHAIRMAN KATZ: Yeah, why don't we hold
20 off on No. 3.

21 MR. MacLEOD: Well, actually I would -- I
22 would suggest that he's probably, as Mr. Kowalski's boss,
23 fairly familiar with that biography and probably can
24 vouch for its truth and accuracy, Mr. Heffernan --

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1 CHAIRMAN KATZ: Well, we'll just hold off

2 --

3 MR. MacLEOD: -- but I won't -- I won't go
4 there.

5 CHAIRMAN KATZ: We'll hold off. Any
6 objection to making 1 through 2 and 4 through 6 full
7 exhibits? Hearing none, we'll make them full exhibits.

8 (Whereupon, ISO New England Exhibit No. 1,
9 2, 4, 5 and 6 for identification were received into
10 evidence as full exhibits.)

11 CHAIRMAN KATZ: Mr. MacLeod, do you want
12 to make requests for administrative notice?

13 MR. MacLEOD: Yes, thank you, Madam
14 Chairperson. There are 12 items on pages 20 and 21 of
15 the hearing program which we would request the Council to
16 administratively notice.

17 CHAIRMAN KATZ: Any objection to ISO New
18 England taking administrative notice of Items 1 through
19 12 as listed in the hearing program? Hearing none, we
20 will take administrative notice.

21 MR. ASHTON: Madam -- Madam Chairman --

22 CHAIRMAN KATZ: Yes --

23 MR. ASHTON: -- may I make a request? The
24 volume of material that this Council has to read for this

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1 application is enormous. And even though I don't feel
2 particularly malnourished or weak, to lug it all around
3 at once is a huge problem. We've had a couple of -- one
4 for ISO and the Applicants where they read in
5 corrections. It would be enormously helpful to me at
6 least if we could just receive those corrections on a
7 hard copy and then make them -- insert them in the proper
8 place in our records. I hate to ask for more paper, but
9 to try and catch all these on the fly is very difficult.

10 CHAIRMAN KATZ: Yeah. How we'll do that
11 for Thursday's hearing on EMF if you have corrections to
12 exhibits, if you'd be willing to pass those in as hard
13 copies, I think everyone would be appreciative.

14 MR. S. DEREK PHELPS: Madam Chair --

15 MR. MacLEOD: We'd be happy to do that.

16 CHAIRMAN KATZ: Mr. Phelps.

17 MR. PHELPS: We would just need them
18 identified as errata pages so that we understand that
19 they're supplemental to the originals.

20 CHAIRMAN KATZ: Good point.

21 MR. ASHTON: Yeah.

22 CHAIRMAN KATZ: What we'll do is when Mr.
23 Kowalski comes in, we will have him sworn and have him
24 adopt his biography, but we'll get started.

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1 MR. MacLEOD: Thank you, Madam Chair.

2 CHAIRMAN KATZ: I believe -- okay --
3 great. At this point, we will begin -- any procedural
4 matters before we begin cross-examination of Mr. Whitley?
5 Hearing none, first up --

6 MR. MARCONI: Mr. Johnson.

7 CHAIRMAN KATZ: Mr. Johnson.

8 MR. JOHNSON: I had understood, Chairwoman
9 Katz, that the issue of under-grounding would not be
10 taken up today or this week indeed. And there are a few
11 comments about the issue of under-grounding made in Mr.
12 Whitley's testimony. I discussed this previous to
13 today's hearing with Mr. MacLeod and he indicated that
14 Mr. Whitley or other ISO witnesses would be back at the
15 time under-grounding is taken up by the Council and to
16 discuss those matters. Is that right?

17 CHAIRMAN KATZ: I think that's fair. And
18 we will make that request when we have a date for the
19 under-grounding hearings.

20 MR. JOHNSON: Thank you.

21 CHAIRMAN KATZ: Okay. Any other
22 procedural matters? Seeing none, at this point, Miss
23 Randell, you may lead off.

24 MS. RANDELL: Thank you. Good afternoon,

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1 Mr. Whitley.

2 MR. WHITLEY: Good afternoon.

3 MS. RANDELL: With respect to the regional
4 planning process for the electric system in New England,
5 what's the purpose of that process?

6 MR. WHITLEY: The purpose is to have a
7 forward looking process to identify system needs on the
8 power system in New England to protect reliability so
9 that you can identify those needs soon enough so that
10 proposals could come forward to solve those needs on a
11 timely basis to protect reliability.

12 MS. RANDELL: The ultimate goal being
13 keeping the lights on?

14 MR. WHITLEY: Keeping the lights on.

15 MS. RANDELL: And the proposals that
16 you're talking about, is that market or regulated
17 proposals?

18 MR. WHITLEY: Well, the process is open to
19 both. The system needs are identified in such a manner
20 so that the characteristics of the need are defined and
21 that merchant solutions could be proposed in terms of
22 various options that merchants may want to finance and
23 provide solutions and seek revenues in the marketplace.
24 Then also there's a path for regulated transmission

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1 solutions to be proposed in case that merchant solutions
2 are not proposed so that we can ensure that the lights
3 will stay on by having a transmission infrastructure that
4 can support keeping the lights on.

5 MS. RANDELL: And I take it in the nature
6 of a merchant solution you can't make it happen?

7 MR. WHITLEY: You can't make it happen.
8 You can, you know, provide a marketplace, and the market
9 is going to respond to market signals, you know,
10 depending on the situation you have in the pool at the
11 time. You know, if you're in a surplus situation, those
12 are different market signals than if you're in a very
13 deficit situation. And then there's a lot of physical
14 characteristics also that each alternative has to deal
15 with in terms of things like -- I know we've seen in this
16 process short-circuit duties on the transmission system
17 and available sites and all kinds of other factors.

18 MS. RANDELL: Who participates in the
19 regional planning process?

20 MR. WHITLEY: The process is open to all
21 of the NEPOOL participants. It's open to the general
22 public, the state agencies, the regulators. And it's
23 well attended.

24 MS. RANDELL: It's well publicized?

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1 MR. WHITLEY: Well publicized and well
2 attended.

3 MS. RANDELL: Pretty much everyone in New
4 England knows about it?

5 MR. WHITLEY: By now they certainly do
6 because this is the third year and we've really had a
7 reach-out process to conduct these meetings in the
8 various locations, especially where we have the needs
9 that have been identified. And we have done a lot of
10 discussions about this process with the various state
11 agencies and have done this all over New England.

12 MS. RANDELL: And Southwest Connecticut
13 through that process has been identified as a problem
14 area?

15 MR. WHITLEY: It was identified as the
16 very first and the top priority problem of the planning
17 process because of the severity of the problem in
18 Southwest Connecticut.

19 MS. RANDELL: And it still is?

20 MR. WHITLEY: And it still is. And each
21 year as the load continues to grow, the problem gets
22 worse.

23 MS. RANDELL: Where does the TEAC fit into
24 this process?

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1 MR. WHITLEY: The TEAC is an important
2 part of this. This is the Transmission Expansion --

3 CHAIRMAN KATZ: (Indiscernible) --

4 MR. WHITLEY: Yes, ma'am?

5 CHAIRMAN KATZ: Whenever we do acronyms,
6 we're going to have the witness --

7 MS. RANDELL: I was going to ask him --
8 and he was actually, I think, already going there.

9 CHAIRMAN KATZ: Great.

10 MR. WHITLEY: Right. The TEAC stands for
11 the Transmission Expansion Advisory Committee.

12 MS. RANDELL: Thank you. I'm glad you --
13 that C stumped me.

14 MR. WHITLEY: The committee. And so
15 that's the committee that's open for everybody to attend.
16 I think we actually had a TEAC meeting in this room on
17 one occasion, when the towns -- when the folks from the
18 different towns came to that particular presentation and
19 Rich went through the presentation of the system need.
20 So it's -- it's that committee process which is used to
21 get that stakeholder input into the -- you know, as the
22 studies are made to identify the problem, that's vented
23 to the TEAC. When different proposals come forward,
24 those are vented to the TEAC. And then when

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1 recommendations come forward, those are vented to the
2 TEAC. And there's a lot of input. You know, sometimes
3 TEAC members ask for additional studies to be run. So
4 that's the kind of process we have.

5 MS. RANDELL: And do TEAC members consider
6 things beyond transmission?

7 MR. WHITLEY: They -- it's open to all
8 alternatives that would solve the problem. But again,
9 only the alternatives that are presented that are, you
10 know, considered to be viable alternatives that are
11 presented.

12 MS. RANDELL: So if I'm understanding
13 this, if I think I have a solution, I can come to the
14 process and say this is it?

15 MR. WHITLEY: Right.

16 MS. RANDELL: Whether it's transmission or
17 conservation --

18 MR. WHITLEY: Yes --

19 MS. RANDELL: -- or anything like that?

20 MR. WHITLEY: Yes.

21 MS. RANDELL: If Southwest Connecticut
22 presently does not meet planning criteria, that's a
23 significant issue?

24 MR. WHITLEY: That's a very significant

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1 issue.

2 MS. RANDELL: And the planning criteria
3 would be NERC, which would be?

4 MR. WHITLEY: North American Electric
5 Reliability Council.

6 MS. RANDELL: Thank you. And NPCC?

7 MR. WHITLEY: Northeast Power Coordinating
8 Council.

9 MS. RANDELL: This really wasn't meant to
10 be a quiz, but you're doing real well.

11 COURT REPORTER: Could you give me those
12 again please?

13 MS. RANDELL: NERC, N-E-R-C. NPCC,
14 Northeast Power Coordinating Council. And then of course
15 in your testimony you mentioned NEPOOL.

16 MR. WHITLEY: Right. The New England
17 Power Pool. And the way the reliability criteria is set
18 up, NERC is the national -- actually international, the
19 North American organization that establishes really
20 minimal reliability requirements to operate the
21 interconnected grid. And then the NERC is divided into
22 regions. There's a southeast region called SERC and
23 there's a northeast region called NPCC. And our region
24 includes New York, IMO, the Maritimes and Hydro Quebec

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1 Trans-Energy. So we have more specific reliability
2 criteria for our region, which is aimed at the unique
3 characteristics of our region. And then within NEPOOL we
4 have further criteria that apply for New England based on
5 the unique characteristics of New England.

6 MS. RANDELL: So at the high level, NERC
7 is the broad base. And as you get closer to our specific
8 region, the criteria are more tailored to our region?

9 MR. WHITLEY: More tailored and more
10 detailed.

11 MS. RANDELL: And more detailed. The ISO
12 has a demand response program, is that correct?

13 MR. WHITLEY: Yes, we do.

14 MS. RANDELL: Is that voluntary or
15 mandatory?

16 MR. WHITLEY: It's voluntary and it's --
17 there are two components to the program, a reliability-
18 based or operator-controlled part of the program. And
19 then there's a price sensitive portion of the program
20 where the customers can choose to self-curtail, to earn a
21 price in the market.

22 MS. RANDELL: On the self-curtailment, can
23 you compel that to occur?

24 MR. WHITLEY: No. It's purely voluntary.

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1 MS. RANDELL: Have you had experience with
2 comparing the amount of curtailments signed up, whether
3 it's here or elsewhere compared to what you actually get
4 as a system operator in an emergency situation?

5 MR. WHITLEY: Yes, we have.

6 MS. RANDELL: And what is that experience?

7 MR. WHITLEY: Well, the -- the percentage
8 -- there's only a few occasions that we've actually hit
9 the \$100.00 threshold which is there for the price
10 sensitive demand response to engage. And I cannot
11 remember the exact percentages that responded on those
12 few occasions, so I'll have to provide that later.

13 On the emergency response, I do recall
14 that -- of course those -- those units that are in that
15 program are typically emergency generators that are only
16 licensed to operate during the OP-4 -- very deep into OP-
17 4. And I think the only time that they have operated
18 since we started the program was during the blackout on
19 the 15th of August, and I think --

20 MR. ASHTON: Mr. Whitley --

21 MR. WHITLEY: -- they did operate in
22 Southwest Connecticut during that period --

23 MR. ASHTON: Mr. Whitley, you made
24 reference to OP-4 --

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1 MR. WHITLEY: Yes --

2 MR. ASHTON: -- would you explain what
3 that is please?

4 MR. WHITLEY: Yes. OP-4 is our emergency
5 operating procedure that we have within NEPOOL, which
6 tells us our curtailment order and what measures we take
7 when we start getting into reliability problems on the
8 grid. And it has different levels, all the way down to
9 voltage reduction, and then -- then you start getting
10 into -- when you're through all those intermediate
11 measures, you have to go into firm load curtailment.

12 MR. ASHTON: And that would be going from
13 the most gentle treatment to the most severe?

14 MR. WHITLEY: Yes.

15 MR. ASHTON: Okay, thank you.

16 MS. RANDELL: Mr. Whitley, in your answer
17 you mentioned \$100.00. What does that relate to?

18 MR. WHITLEY: That's a cost threshold that
19 the clearing price has to be for load in the market, a
20 hundred dollars per megawatt hour. So you're going to
21 see a price like that when you have a very tight day on
22 the power system, close to OP-4 conditions, or you have a
23 contingency in a local area that may cause the price in
24 that local area to go up to a hundred dollars.

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1 MS. RANDELL: On page 34 of your testimony
2 you state that only a portion of the load in the
3 voluntary demand response program actually responds when
4 called upon. I take it that's not true just for New
5 England, that's a nationwide phenomenon?

6 MR. WHITLEY: That is a nationwide
7 phenomenon. And remember that a lot of these
8 participants who sign up in the programs they'll have
9 different load patterns to start with. Some of them may
10 not be operating at full capacity when you call upon them
11 to interrupt, and then some of them may not get -- they
12 value producing that product that day as higher value to
13 them than the dollars they might earn on the load
14 curtailment program -- on the load response program I
15 mean.

16 MS. RANDELL: There was discussion this
17 morning of the ISO's 300 megawatt RFP. I believe that's
18 suppose to go out through 2007 or 2008?

19 MR. WHITLEY: Yes. We call that a GAP
20 RAF.

21 MS. RANDELL: A GAP RPF. Has that been a
22 challenging process?

23 MR. WHITLEY: It really has because the
24 number of sites in Southwest Connecticut are so limited

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1 and there are so many interrelated problems with trying
2 to get even emergency generation able to be connected on
3 the weak transmission system that we have in Southwest
4 Connecticut due to short-circuit duty problems and other
5 factors.

6 CHAIRMAN KATZ: It's a five-year RFP. So
7 the dates Miss Randell mentioned to you, the math doesn't
8 work. If you want to go by that again -- it's 2004 and
9 it's a five-year RFP --

10 MS. RANDELL: I was thinking if it came in
11 in 2004, it ran out in '08, unless I'm counting wrong on
12 my fingers. Is that correct, Mr. Whitley?

13 MR. WHITLEY: I think -- as I recall, I
14 believe it's a four-year with an option for the fifth
15 year. If the transmission line makes it in, then we may
16 not need it for that fifth year. So that's the reason we
17 put that option, is depending on the timing of the line.

18 CHAIRMAN KATZ: Thank you for that
19 clarification.

20 MS. RANDELL: It's not a long-term
21 solution I take it?

22 MR. WHITLEY: No, it is not a long-term
23 solution.

24 MS. RANDELL: And as soon as you have the

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1 transmission line in, you don't need it any more?

2 MR. WHITLEY: That's --

3 MS. RANDELL: You hope.

4 MR. WHITLEY: We hope. We hope that this
5 transmission project satisfies that need and that it will
6 give us the reliability that's needed to keep the lights
7 on in Southwest Connecticut. And I might mention that
8 during the process when this GAP -- when these GAP
9 resources are there, I mean they're not going to totally
10 solve all of our reliability problems. During this
11 period we're still going to be basically limping through
12 this period. It's trying to protect for some of the
13 larger contingencies, but it's not going to solve all of
14 our problems.

15 MS. RANDELL: You've mentioned short-
16 circuit I think twice in your testimony this afternoon --

17 MR. WHITLEY: Yes --

18 MS. RANDELL: -- that's a significant
19 problem?

20 MR. WHITLEY: It is a significant problem
21 because we're right up against the capability of the
22 circuit breaker capabilities on the 115-kV system in this
23 region. And we need to get the 345 loop in place so that
24 we can reconnect some generation to the 345 to dispatch

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1 it more efficiently. And that will reduce some short
2 circuit levels on the 115. And then the TO's in the
3 region can reconnect the system and allow it to operate
4 more efficiently and reliably.

5 MS. RANDELL: And by TO's, that would be
6 transmission owners?

7 MR. WHITLEY: Transmission owners.

8 MS. RANDELL: Will the 345 loop also help
9 you reduce or eliminate conditional dependency of
10 generation in Southwest Connecticut?

11 MR. WHITLEY: They will greatly reduce it.
12 We'll have to wait and see, you know, how much it does
13 reduce it as we see how the load grows during this
14 period, but it's a very very significant improvement. It
15 will allow us to meet criteria.

16 MS. RANDELL: How important is flexibility
17 of operation to you as an operator?

18 MR. WHITLEY: It's very important because
19 right now our operators pretty much all through the year
20 and certainly more aggravated in the summer, but they
21 face very heavily loading conditions in Southwest
22 Connecticut with a high dependency on the generation
23 that's in Southwest Connecticut to be available, and then
24 they have to dispatch the various resources in Southwest

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1 Connecticut in a manner to avoid overloads. And it's
2 very complex. Conditions change with unit outages with
3 different load patterns. And it's extremely complicated.

4 And it's -- it's an area they just absolutely have to
5 stay on top of every day. You just don't, you know, set
6 it on cruise control in Southwest Connecticut, you have
7 to be on top of it all the time.

8 MS. RANDELL: And do the short-circuit
9 issues, voltage, and system stability matters affect your
10 flexibility as an operator?

11 MR. WHITLEY: Yes, they do. For certain
12 load generation patterns you just have to manage -- even
13 within the load pocket itself you have to look at the
14 flows into the area, but also the flows within the area
15 because it's a very very weak system with a lot of
16 problems.

17 MS. RANDELL: There was some discussion
18 this morning, probably while you were in route here,
19 about cost recovery of this project. I'd like for you to
20 assume, if you would, that the project as proposed here
21 by UI and CL&P is built, it's reliable and it's in
22 service by December 20, 2007, and let's also assume that
23 it's the least cost transmission solution, could you
24 discuss for me the likelihood of regional cost recovery

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1 for this project?

2 MR. MacLEOD: May I interrupt, Madam
3 Chair, and just note that Mr. Kowalski has arrived and
4 perhaps we can --

5 CHAIRMAN KATZ: Miss Randell, if you
6 wouldn't mind the witness holding that answer --

7 MS. RANDELL: No problem.

8 CHAIRMAN KATZ: -- what I'd like to do is
9 have Mr. Marconi swear in the witness, and then we're
10 going to have him verify his biography.

11 Welcome, Mr. Kowalski. We're not really
12 letting you get settled.

13 MR. RICHARD KOWALSKI: I'm happy to be
14 here.

15 CHAIRMAN KATZ: If you could state your
16 name and spell your name.

17 MR. KOWALSKI: Richard Kowalski --

18 MR. MARCONI: Make sure you say it when
19 you're speaking into the microphone.

20 MR. KOWALSKI: Okay. Richard Kowalski.

21 COURT REPORTER: Spell --

22 MR. MARCONI: Can you spell the last name
23 please.

24 MR. KOWALSKI: K-o-w-a-l-s-k-i.

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1 MR. MARCONI: Now Mr. Kowalski, if you
2 could please stand and raise your right hand.

3 (Whereupon, Richard Kowalski was duly
4 sworn in.)

5 MR. MARCONI: Please be seated, Mr.
6 Kowalski.

7 CHAIRMAN KATZ: Mr. MacLeod, if you could
8 have Mr. Kowalski verify his exhibit.

9 MR. MacLEOD: Thank you. Mr. Kowalski,
10 you have exhibit -- you have submitted an exhibit in this
11 case, which is marked for identification as Exhibit No.
12 3, it's entitled Biography of Richard V. Kowalski. Is
13 this biography -- is this exhibit true and accurate to
14 the best of your knowledge?

15 MR. KOWALSKI: Yes, it is.

16 MR. MacLEOD: Okay. And would you like
17 the exhibit to be admitted as a full exhibit in this
18 proceeding?

19 MR. KOWALSKI: Yes, I would.

20 MR. MacLEOD: I would move that it --

21 CHAIRMAN KATZ: Thank you --

22 MR. MacLEOD: Thank you.

23 CHAIRMAN KATZ: Is there any objection to
24 making No. 3, the biography of Richard V. Kowalski, a

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1 full exhibit? Hearing none, it shall be.

2 (Whereupon, ISO New England Exhibit No. 3
3 for identification was received into evidence as a full
4 exhibit.)

5 CHAIRMAN KATZ: Okay. I'm sorry, we have
6 a question on the table. And Mr. Whitley, if you
7 remember the question.

8 MR. WHITLEY: Okay, the question was about
9 the cost allocation certainty for the project with a lot
10 of assumptions in there. Let me just generally cover the
11 process and then you can follow up with any other
12 questions.

13 MS. RANDELL: Sure.

14 MR. WHITLEY: There's a lot of certainty
15 with a ruling that FERC made -- I guess more certainty
16 than what could happen in the future, but there was a
17 ruling that affects projects that were listed in our
18 RTEP-02. I'm trying to remember the schedule, I think it
19 was 12.B, but it said that any projects that were listed
20 in that schedule under our approved RTEP process would be
21 grandfathered and rolled into the regional tariff if they
22 were built before December 20, '07 I believe. And -- so
23 that -- that's a -- that's a ruling that's already out
24 there.

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1 And then we went through a process in New
2 England to develop a longer term cost allocation process
3 for transmission system upgrades, which resulted in a
4 proposal to FERC for a new process, and it was called the
5 FERC -- the NEPOOL 100th Amendment --

6 MS. RANDELL: That was the 100th Amendment
7 to the NEPOOL agreement?

8 MR. WHITLEY: The 100th Amendment. And it
9 did -- it was approved by FERC, although contested by
10 some folks within the pool. I think it got a vote of 80
11 percent at NEPOOL, 20 percent against, 80 percent for.
12 It also was approved. And under either of those
13 processes, this project would be considered a reliability
14 project and would be rolled in. In both cases it would
15 be subject to a process we call 12.C, which is a process
16 to look at the overall project to see if all of it should
17 be rolled in or a portion of it should be localized. And
18 so in either case it would go through a process like
19 that. But certainly there is more certainty for the
20 project in that first bucket because we can't predict the
21 future and what might be ruled upon.

22 MS. RANDELL: More certainty if it's in
23 service by December 20, 2007?

24 MR. WHITLEY: Right.

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1 MS. RANDELL: Mr. Whitley, this morning a
2 question arose as to whether either the FERC December 20,
3 2002 order or the 100th Amendment approval have been the
4 subject of any court appeals. Do you know whether they
5 have been?

6 MR. WHITLEY: I'm not sure if they've been
7 the subject to any court appeals at this point. I can't
8 answer that.

9 MS. RANDELL: But you don't know of any?

10 MR. WHITLEY: I don't know of any.

11 MS. RANDELL: Okay.

12 MR. ASHTON: Miss Randell, can we
13 differentiate a little bit between a general appeal in
14 the United States, which would apply to the FERC order or
15 just in New England, which the witness may be more
16 familiar with? Certainly the 100th Amendment would only
17 apply in New England I believe. Can you -- do you want
18 to make that differentiation?

19 MS. RANDELL: Certainly. Mr. Whitley, to
20 your knowledge has any entity in New England contested --
21 or anyplace else, has anybody contested the 100th
22 Amendment in court?

23 MR. WHITLEY: I'm not aware of any in
24 court. I know certainly there have been some comments

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1 made to the FERC, you know, from some of those 20 percent
2 that weren't in favor of it.

3 CHAIRMAN KATZ: Mr. Tait, followed by Mr.
4 Emerick.

5 MR. TAIT: Who has to approve the NEPOOL
6 100th Amendment?

7 MR. WHITLEY: FERC has approved it.

8 MR. TAIT: Has NEPOOL finished its process
9 of approval?

10 MR. WHITLEY: Yes. NEPOOL --

11 MR. TAIT: That's the 80 percent?

12 MR. WHITLEY: That's the 80 percent. And
13 then NEPOOL filed it to FERC. And the FERC then approved
14 it. But it's -- there also were some appeals, so it's
15 got to go through some appeal processes I think.

16 MR. O'NEILL: Is that agreement --

17 MR. TAIT: I'm confused --

18 MR. O'NEILL: -- a matter of record?

19 MR. WHITLEY: Pardon?

20 MR. TAIT: I'm confused. You said FERC
21 has approved it?

22 MR. WHITLEY: Yes.

23 MR. TAIT: And now you're saying that
24 there's some other appeals in the process. What process

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1 and what appeals are you referring to?

2 MR. WHITLEY: I'm really not an expert to
3 tell you about all that, but I think -- I think there are
4 still some folks that weren't happy with that, and I
5 don't know what might happen in the future, but it has
6 been approved by the FERC, so the --

7 MR. TAIT: And does FERC --

8 MR. WHITLEY: -- operative thing for us is
9 it's the way -- it's the way we're planning.

10 MR. TAIT: And as far as you know, you
11 don't know whether there's an appeal from the FERC
12 approval?

13 MR. EMERICK: Well, he just said there is
14 --

15 MR. MacLEOD: Professor Tait, if you would
16 like, since this is somewhat of a legal issue, we can
17 research that --

18 MR. TAIT: Yes --

19 MR. MacLEOD: -- and get it to you --

20 MR. TAIT: -- because the status of that
21 would be of interest to the Council.

22 MR. MacLEOD: We can get back to you on
23 whether or not there are existing appeals --

24 MR. TAIT: Or whether --

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1 MR. MacLEOD: -- and to what court.

2 MR. TAIT: Whether it's a done deed or
3 whether --

4 MR. MacLEOD: Right.

5 MR. TAIT: Thank you.

6 CHAIRMAN KATZ: Great. Mr. Emerick,
7 followed by Mr. O'Neill.

8 MR. EMERICK: I think a clarification to
9 that point that we just made will answer my question.

10 CHAIRMAN KATZ: Thank you. Mr. O'Neill.

11 MR. O'NEILL: Mr. Whitley, has 217 been
12 through the 12.C review process?

13 MR. WHITLEY: No.

14 MR. O'NEILL: When would that review
15 process take place?

16 A VOICE: Do you know when --

17 A VOICE: Is that Phase 1 --

18 A VOICE: Is that Phase 1 --

19 CHAIRMAN KATZ: Phase 1.

20 A VOICE: Yeah.

21 A VOICE: It's not scheduled yet --

22 MR. WHITLEY: It still isn't scheduled,
23 but it should be coming up. I imagine in the next, you
24 know, six months.

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1 CHAIRMAN KATZ: What exactly will they be
2 doing in the next six months?

3 MR. WHITLEY: They'll be presenting the --
4 the transmission owners will be presenting their
5 recommendations and their facts about the case, about --
6 you know, what their justification is for the various
7 components of the project as designed. And that will be
8 before the reliability committee.

9 CHAIRMAN KATZ: We already have some --
10 and I'm going to ask you -- perhaps during the break you
11 might want to confer -- because we already have some
12 information that ISO has done some work as far as
13 approving Phase 1 for reliability, but we'll let you come
14 back to that, okay.

15 MR. WHITLEY: Okay.

16 MR. EMERICK: Madam Chair.

17 CHAIRMAN KATZ: Yeah, Mr. Emerick.

18 MR. EMERICK: Just to follow up on the
19 12.C process I think it is.

20 MR. WHITLEY: Yes.

21 MR. EMERICK: If a decision is made on
22 that and let's say there are some parties that
23 participate in that proceeding don't feel it's the right
24 decision that ultimately comes out, what is the appeal

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1 process from that decision, and to who?

2 MR. WHITLEY: A good question. The
3 process is a very open process, and it's a process that,
4 you know, tries to look at the balance of the various
5 options that are there for the project and various parts
6 of the project. And the reliability committee would be
7 making a recommendation to the ISO, which would come to
8 me. We would be making a final determination and sending
9 it down to FERC. And ultimately FERC will decide if
10 there are appeals that are coming forward. So FERC would
11 be the ultimate decision-maker.

12 MR. ASHTON: Could a FERC decision be
13 appealed to the courts?

14 MR. WHITLEY: Yes.

15 MR. ASHTON: So the Supreme Court is
16 presumably the ultimate --

17 MR. WHITLEY: Absolutely --

18 MR. ASHTON: -- two generations later --

19 MR. WHITLEY: Yes, sir.

20 MR. EMERICK: Are there rules in place in
21 terms of the 12.C process in terms of how a
22 recommendation makes it way out of that process?

23 MR. WHITLEY: Well, we have the tariff
24 itself that describes it. And it's a process very

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1 similar to a process we've had for years in NEPOOL called
2 the 15.5 process, it's just been modified as part of this
3 100th Amendment. So it will be following, you know, very
4 similar procedures that have been followed for years in
5 New England.

6 MR. EMERICK: Well, could you give me a
7 hint as to what that is? I mean is it a majority of the
8 people that make up that process that have to vote on it
9 --

10 MR. WHITLEY: Let me ask --

11 MR. EMERICK: -- or is it a super majority
12 --

13 MR. WHITLEY: Yes sir, let me ask Rich to
14 answer that.

15 MR. KOWALSKI: Well, I mean typically the
16 process is to demonstrate that the alternative that's
17 being pursued is the most cost-effective alternative, so
18 the -- in part of the demonstration the proponent would
19 need to bring forward what other alternatives were
20 considered, what was technically viable to solve the
21 problem, what was not, and why the particular solution
22 was picked. So it amounts to a final review of what the
23 alternatives were from a technical standpoint and then
24 finally as being built or proposed to be constructed.

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1 MR. EMERICK: Whoever is receiving this
2 information, obviously interprets it. And do they then
3 vote on it to send a recommendation for it in terms of
4 the way it is treated?

5 MR. KOWALSKI: The current process, it
6 would be voted on -- under the 100th Amendment that vote
7 would be a recommendation -- a NEPOOL stakeholder
8 recommendation to ISO.

9 MR. EMERICK: And assumingly you need
10 what, simply majority to move that forward?

11 MR. KOWALSKI: I believe we'd still need -
12 -

13 MR. WHITLEY: Super --

14 MR. KOWALSKI: Super majority -- NEPOOL
15 uses the super majority --

16 MR. WHITLEY: Sixty-seven.

17 MR. KOWALSKI: Sixty-seven percent.

18 MR. EMERICK: Thank you.

19 CHAIRMAN KATZ: Mr. O'Neill.

20 MR. O'NEILL: Mr. Kowalski, I must ask why
21 does this process of 12.C take so long? As you know,
22 this 217 project has already been approved. Now we're
23 considering Phase 2. There's some very sophisticated
24 questions which we need to address regarding the way this

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1 next phase is built. We're being put at a little bit of
2 a disadvantage not knowing what kind of charges are going
3 to be associated with the first phase. How would you
4 address our concerns?

5 MR. KOWALSKI: Well, I mean the -- it's
6 not an automatic process. Part of it amounts to
7 collecting a lot of -- a good bit of information on the
8 alternatives. The NEPOOL stakeholders really want to
9 know what the alternatives were. It relies on the
10 project proponent to bring all of that information
11 forward to NEPOOL and to ISO for a comprehensive review.

12 So in and of itself is a collection of a goodly bit of
13 information. It's not -- it's not just bringing the
14 single alternative forward and saying here it is, you
15 know, this is what we are building, take it or leave it.

16 It's -- these are what -- this is what we put aside,
17 this is what we're not building and why. That's part of
18 the comparison.

19 MR. O'NEILL: Well, I'm sure you
20 understand our sensitivity --

21 MR. KOWALSKI: Sure.

22 MR. O'NEILL: -- it would have been
23 helpful if the horse was before the cart so to speak if
24 we knew what your response was going to be to a

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1 particular configuration before it came before us for
2 discussion rather than after the fact. Thank you.

3 CHAIRMAN KATZ: Thank you. Miss Randell,
4 you can continue.

5 MS. RANDELL: Sure. Mr. Kowalski and Mr.
6 Whitley, you've been speaking about the 12.C process.
7 When I've been here at other times, people have spoken
8 about the 18.4 process. Those are two different
9 processes, correct?

10 MR. KOWALSKI: Correct.

11 MS. RANDELL: And could you distinguish
12 them for me?

13 MR. KOWALSKI: The 18.4 is really a
14 pass/fail process. And that is, you know, when we do a
15 transmission design, the transmission design is done to
16 achieve a specific objective, but it's done in the
17 context also of a no harm. So just because a project is
18 good for one reason, we don't want it to be bad for
19 another reason. So it's got to be a comprehensive design
20 that works to achieve objectives in the context of the
21 overall NEPOOL system, which is very important, it's why
22 the system works.

23 MS. RANDELL: It's a reliability --

24 MR. KOWALSKI: It's predominantly --

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1 MS. RANDELL: -- test?

2 MR. KOWALSKI: It's a reliability test.

3 MS. RANDELL: Okay.

4 MR. KOWALSKI: So that's the 18.4
5 standard. The 12.C standard is -- it goes back to more --
6 somewhat two aspects. And the first aspect of it is in
7 achieving a specific design objective for some
8 reliability purpose or whatever, is what alternatives
9 were there, and that goes back to the basic question of
10 is this the most cost-effective alternative to achieve
11 the objectives. So that's the first test. Then beyond
12 that very first test of this is the right design. The
13 second is this -- how is this particular solution being
14 implemented, is the design itself excessive beyond
15 regional need. And that's the 12.C test, is it the most
16 cost-effective solution from a regional perspective.

17 MS. RANDELL: Are you familiar with the
18 term gold-plating?

19 MR. KOWALSKI: Yes, I am. That --

20 MS. RANDELL: Could you tell me your
21 understanding of it and how it relates to what you've
22 just told me --

23 MR. KOWALSKI: Well the --

24 MS. RANDELL: -- about the 12.C process?

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1 MR. KOWALSKI: 12.C and it's predecessor,
2 Section 15.5 of the NEPOOL agreement, were designed to be
3 an anti-gold-plating standard. And that was done at the
4 time of the restated NEPOOL agreement when this whole
5 concept of socialization of regional transmission costs
6 was adopted. And the purpose for that standard was such
7 that people would not be inclined to take advantage of
8 the socialization of costs and gold-plate, that is create
9 transmission alternatives that were really more than they
10 needed to be in order to maintain system reliability, and
11 thus gold-plated.

12 MR. ASHTON: Mr. Kowalski -- may I
13 interject a question, Miss Randell -- in that respect --

14 COURT REPORTER: A mic.

15 MR. ASHTON: -- is least cost the sole
16 criterion upon which NEPOOL judges a facility?

17 MR. KOWALSKI: Well, I said the objective
18 is really to find the most cost-effective solution --

19 MR. WHITLEY: Operability --

20 MR. KOWALSKI: Operability and other
21 factors that are taken into account. But that's really
22 the major objective.

23 MR. ASHTON: What other factors are taken
24 into account?

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1 MR. KOWALSKI: In determining the best
2 design, that's the primary objective.

3 MR. ASHTON: Is --

4 CHAIRMAN KATZ: Mr. Kowalski, is public
5 health and safety one of your criteria on whether
6 something is gold-plated or not?

7 MR. KOWALSKI: Public health and safety
8 certainly would -- with respect to all of the applicable
9 codes -- the national codes I think all reflect the
10 concerns for public health and safety.

11 MR. ASHTON: How about environmental
12 impact?

13 MR. KOWALSKI: I don't know that I can
14 give a clean answer on environmental impact. Certainly
15 where there are wetlands, that's a factor in substation
16 design in transmission siting.

17 MR. WHITLEY: I think -- I think the best
18 way for us to answer those questions is the facts just
19 have to be presented and the case made for why this
20 design versus that design. And ultimately if it goes
21 through this process and there are pieces of the project
22 that are judged to be not necessary or could have been
23 done cheaper, then those pieces don't get rolled into the
24 regional tariff, those get rolled into the local tariff.

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1 The project -- you know what the total project costs
2 are, it's just how much of it gets rolled in. And so
3 that's the process we'll have to go through --

4 MR. ASHTON: And so judgment of the
5 individual members is brought to bear and a consensus
6 sought, is that the idea?

7 MR. WHITLEY: Right. And you know, we've
8 got a history of, you know, building transmission, and
9 you've got engineering facts, what can be constructed,
10 what are the engineering facts, what are the issues with
11 right-of-way, all of the other factors, and the engineers
12 take a look at that and make a recommendation to us, and
13 then we would make the final decision and send it down to
14 FERC.

15 MR. ASHTON: Thank you.

16 MR. TAIT: If you remember from Docket
17 217, we asked questions about whether under-grounding
18 would be considered gold-plating. Do you want to have
19 any comments on that?

20 MR. WHITLEY: Well, I think since under-
21 grounding is certainly highly unusual for high voltage
22 transmission -- I know there will be a lot of questions
23 about it, and so there will be a lot of discussion about
24 whether it's justified or not, and so --

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1 MR. TAIT: And that question is -- we have
2 issues here not only of visibility but EMF. Does that
3 get into any of your discussions as to socializing or
4 not?

5 MR. WHITLEY: I'm sure all -- all of those
6 issues will be brought forward to -- for us to --

7 MR. TAIT: Have you ever socialized under-
8 grounding outside of an urban area?

9 MR. WHITLEY: I think -- I think there may
10 be one example, you know, going under a lake. For
11 example in Vermont I think there was a case there. There
12 are some unique places where it's very cost justified.

13 CHAIRMAN KATZ: Well, we're going to give
14 you that as a homework assignment, Mr. Whitley --

15 MR. WHITLEY: Okay --

16 CHAIRMAN KATZ: -- when we get into under-
17 grounding during our June public hearing. If you could -
18 -

19 MR. TAIT: Yes. And the other one is we
20 don't have standards on EMF's --

21 MR. WHITLEY: Right --

22 MR. TAIT: -- and so what would be your
23 reaction to under-grounding to avoid EMF's.

24 MR. WHITLEY: Uh --

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1 MR. TAIT: Don't answer me now.

2 CHAIRMAN KATZ: Yes --

3 MR. WHITLEY: Okay. I'll save that for
4 later.

5 MR. TAIT: It's homework.

6 MR. WHITLEY: Okay.

7 CHAIRMAN KATZ: Yeah.

8 MR. WHITLEY: So our assignment would be
9 to come up with a list of all the projects in New England
10 that are underground --

11 CHAIRMAN KATZ: And whether they were
12 socialized --

13 MR. WHITLEY: Whether they were socialized
14 --

15 MR. TAIT: And the justification for doing
16 it or not doing it.

17 MR. WHITLEY: Okay.

18 MR. TAIT: And were any related to health,
19 such as EMF's.

20 MR. WHITLEY: Okay.

21 CHAIRMAN KATZ: Great. Thank you.

22 MR. O'NEILL: One more follow-up question
23 -- (indiscernible) -- whether or not under-grounding was
24 ever done to avoid historic properties.

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1 MR. WHITLEY: Okay.

2 MR. O'NEILL: Thank you.

3 CHAIRMAN KATZ: Miss Randell, back to you.

4 MS. RANDELL: Thank you. Mr. Kowalski, in
5 the context of cost recovery is there any difference
6 between the term socializing and the term regionalizing
7 costs? It's the same concept?

8 MR. KOWALSKI: It's the same concept.

9 MS. RANDELL: And the 12.C process, that's
10 pretty new now, is that right?

11 MR. KOWALSKI: The -- the 12.C particular
12 scheduling in the NEPOOL tariff is new, but it's really
13 the same concept that's been in place since the restated
14 NEPOOL agreement in 1997. It's just been a migration of
15 some transmission items that had been in the NEPOOL
16 agreement, directly into the NEPOOL tariff.

17 MS. RANDELL: Have any projects to date
18 gone through the 12.C process as such?

19 MR. KOWALSKI: I don't think they have.

20 MS. RANDELL: Who makes the determination
21 in the 12.C process on whether costs are regionalized or
22 localized?

23 MR. KOWALSKI: ISO makes the final
24 decision based on the recommendation of the reliability

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1 committee.

2 MR. ASHTON: Would that -- would that be
3 subject to appeal in the courts or to others --

4 MR. KOWALSKI: Yes --

5 MR. ASHTON: -- to FERC for example?

6 MR. KOWALSKI: The first appeal is to the
7 FERC.

8 MR. ASHTON: And then up to the courts?

9 MR. KOWALSKI: Yes.

10 MS. RANDELL: And am I correct that the
11 FERC could overrule the ISO or deny the ISO's treatment?

12 MR. KOWALSKI: It certainly could.

13 MS. RANDELL: Is that different than the
14 old 15.5 process or is it the same?

15 MR. KOWALSKI: Structurally it's
16 different, potentially the same outcome, just via a
17 different path could have occurred.

18 MR. ASHTON: Miss Randell, again just for
19 the record's clarity, the 12's and the 18's and so forth
20 all refer to sections in the NEPOOL operating procedures
21 or agreement, or something like that?

22 MR. KOWALSKI: I think -- Section 18.4 and
23 15.5 refer to specific sections of the NEPOOL agreement.

24 MR. ASHTON: Thank you.

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1 MS. RANDELL: And again just to clarify
2 the record, I believe that the ISO has taken
3 administrative notice of that and the Council has granted
4 that as Item 12.

5 MR. ASHTON: We tend to drop numbers
6 without really thinking of them --

7 MS. RANDELL: Speaking in code.

8 MR. ASHTON: -- and a poor judge --

9 A VOICE: Right --

10 MR. ASHTON: -- I think to sort all this
11 out --

12 CHAIRMAN KATZ: Don't even go there --
13 (laughter) -- Miss Randell.

14 MS. RANDELL: I have no further questions
15 of this witness panel.

16 CHAIRMAN KATZ: Does that conclude the
17 cross-examination for the Applicants? Thank you. Next
18 on the list is Leigh Grant, Norwalk Association of
19 Silvermine Owners. Let the record show not present.

20 State Representative Al Adinolfi. Let the
21 record show not present.

22 The Towns of Wallingford, Durham,
23 Woodbridge. Attorneys Bouchard, Ball, Kohler, questions
24 for this witness?

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1 MR. BALL: No questions.

2 CHAIRMAN KATZ: Mr. Ball says no
3 questions. The City of Norwalk. Let the record show not
4 present. The City of Meriden.

5 MS. DEBORAH MOORE: No questions.

6 CHAIRMAN KATZ: Miss Moore says no
7 questions. Assistant Attorney General Michael
8 Wertheimer.

9 MR. WERTHEIMER: No questions.

10 CHAIRMAN KATZ: Mr. Wertheimer says no
11 questions. Communities for Responsible Energy. Let the
12 record show not present. Office of Consumer Counsel, Mr.
13 Johnson.

14 MR. JOHNSON: Based on the understanding
15 previously --

16 COURT REPORTER: You need --

17 MR. JOHNSON: Based on the understanding
18 previously discussed about under-grounding as a topic, no
19 questions from OCC.

20 CHAIRMAN KATZ: Thank you. Woodlands
21 Coalition for Responsible Energy, Mr. Golden.

22 MR. LAWRENCE J. GOLDEN: No questions.

23 CHAIRMAN KATZ: Mr. Golden says no
24 questions. PSEG Power Connecticut, Attorneys Reif,

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1 Warren and Casey.

2 MR. DAVID REIF: No questions.

3 CHAIRMAN KATZ: And you are?

4 MR. REIF: I'm Reif.

5 CHAIRMAN KATZ: Mr. Reif says no
6 questions. By the end of this docket I'll have all these
7 names down. The Town of Wilton, Mr. Frank.

8 MR. BALL: No questions.

9 CHAIRMAN KATZ: Okay, we'll take that.
10 Mr. Ball, I'm assuming that's for both Wilton and Weston?

11 MR. BALL: It is.

12 CHAIRMAN KATZ: Mr. Ball says that's for
13 both Wilton and Weston, no questions. CBIA, Mr. Earley.

14 MR. EARLEY: No questions.

15 CHAIRMAN KATZ: Mr. Earley says no
16 questions. The Town of Bethany, First Selectman Derrylyn
17 Gorski not present. Woodbridge Jewish Organizations, Mr.
18 Schaefer not present. First District Water Department,
19 let the record show not present or no questions. Okay,
20 at this point, Mr. Cunliffe.

21 MR. CUNLIFFE: Thank you, Chairman.
22 NEPOOL's planning standards has an amended date of '99,
23 the Northeast Power Coordinating Council amended or
24 revised in August 9, 1995, and NERC's planning standard

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1 September '97, are those scheduled for revised or
2 revisions in the near term?

3 MR. KOWALSKI: I'd say they're constantly
4 under review. As a matter of fact, some of the NERC
5 planning -- NCPP's planning standards are being reviewed
6 right now and there will be some revisions. There's some
7 movement towards making some items more stringent than
8 they are currently.

9 MR. WHITLEY: Especially as a result of
10 the blackout.

11 MR. KOWALSKI: There's been a lot of
12 review since the blackout. It's more a reaction of
13 lessons learned and things that need to be tightened up.

14 MR. CUNLIFFE: So maybe in the next year
15 or two we could see some --

16 MR. KOWALSKI: Or --

17 MR. CUNLIFFE: -- revisions to the
18 documents?

19 MR. KOWALSKI: Or shorter or sooner --

20 MR. CUNLIFFE: Or sooner --

21 MR. KOWALSKI: -- yes.

22 MR. CUNLIFFE: Okay, thank you. On page
23 27 of the prefilled testimony ISO agrees with the proposed
24 underground/overhead application, is that correct?

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1 MR. MacLEOD: Will you give me a moment to
2 get there, Mr. Cunliffe. (Pause). Thank you. Is there
3 a line reference, Mr. Cunliffe?

4 MR. CUNLIFFE: Not a particular line. I
5 think I was just making notes on that page in reaction to
6 ISO's understanding that there is an underground segment
7 of this proposal.

8 MR. WHITLEY: Just glancing at our answer
9 to that question, starting on page 26, we said that there
10 could be some concerns depending on the design.

11 MR. CUNLIFFE: And then I would take you
12 to page 28 down to the bottom, line 617, it does say --
13 state it supports the Middletown/Norwalk line. Do you
14 have any concerns of the proposed underground segments as
15 of concern and reliability of operation of the system?

16 MR. WHITLEY: I think we have had some
17 concerns. We've been airing those concerns during the
18 design process. And the designers have been trying to
19 mitigate those concerns, but it is going to be a very
20 complicated project. And we -- overall, we still have
21 some concerns about it because there's a lot of
22 overhead/underground and overhead/underground and it's
23 getting very long, and there's going to be a lot of
24 issues trying to manage the voltage with the line

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1 charging from the cables, and it's technically going to
2 be very complex.

3 MR. CUNLIFFE: Does ISO participate or
4 take part in any of the design of a transmission line or
5 does it just react to the planning and where it's needed?

6 MR. KOWALSKI: Well, I mean our -- I'm
7 going to try and clarify our participation. We are --
8 we're very much involved in the -- in the recognition and
9 design of a loop system. And we're aware of the proposal
10 to put in the underground sections as part of the
11 Middletown/Norwalk, and we've been working through our
12 participation in a technical working group to try and
13 mitigate the problems introduced by the underground
14 sections, so we have been involved in the -- I would
15 still say the more system design types of issues, not
16 necessarily in the transmission line design per say --

17 MR. CUNLIFFE: Is that -- is that left to
18 the transmission provider of the area to decide whether
19 they think an overhead or an underground system would be
20 appropriate? And then it's left to ISO to react to the
21 proposal?

22 MR. KOWALSKI: The -- certainly the
23 individual transmission owners may make recommendations
24 based on things like available right-of-way and relative

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1 costs.

2 CHAIRMAN KATZ: Just to follow up, does it
3 make a difference when the transmission owner is ordered
4 to do something by a regulatory agency versus volunteers
5 to do something?

6 MR. KOWALSKI: If -- certainly if the
7 transmission owner is ordered to do something, we'll
8 respond by whatever -- reviewing the changes as a result
9 of the order, such as the underground, and try and make
10 that mandated system work. And that is there -- by
11 putting in underground sections, it introduces certain
12 performance differences compared to an overhead. So if
13 it -- if it's been directed that a certain section shall
14 be underground, then from a system planning and design
15 standpoint, we'll review the overall network and see what
16 mitigating measures need to be taken in order to make
17 that mandated section functional in the overall system.

18 MR. TAIT: As you know, this Council has
19 been asked to review a total underground solution or more
20 under-grounding than currently proposed. Could I have
21 your ISO's reaction to those sort of recommendations?
22 What concerns would you have with more under-grounding
23 that's been proposed or porpoising for the sections that
24 are not underground?

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1 MR. KOWALSKI: Well, what I can -- what I
2 can definitely say is it has been very very difficult to
3 make what's been proposed work operational.

4 CHAIRMAN KATZ: What's proposed now?

5 MR. KOWALSKI: What's proposed now.

6 MR. TAIT: So any more under-grounding
7 would give you concern?

8 MR. KOWALSKI: I -- we're certainly at the
9 limit. I'm not sure if we're past the limit.

10 CHAIRMAN KATZ: Can you just elaborate
11 what the difficulties are?

12 MR. ASHTON: Yeah, define that?

13 CHAIRMAN KATZ: Yeah --

14 MR. KOWALSKI: The --

15 CHAIRMAN KATZ: -- of what's been proposed
16 now, the difficulties now of making it work?

17 MR. KOWALSKI: Sure. The -- the
18 electrical characteristics of underground cable are very
19 different from overhead. Over -- underground is not
20 buried overhead. The physics and the electrical behavior
21 of underground cable is significantly different than
22 overhead. The impedance characteristics are different,
23 the capacitive nature of underground is different. The
24 capacity of underground is different, it's lower. What

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1 happens is when you put underground in -- the loop that
2 we'd originally designed because the impedance is lower,
3 all of the power naturally wants to flow on those paths,
4 so you have lower capacity paths wanting to -- naturally
5 carrying more flow. So we've had to take measures to try
6 and see what could be done to reduce some of the
7 imbalances without creating other problems.
8 Additionally, voltage control is difficult with the
9 cables. And there are some other higher order issues
10 which also become problematic with cables. Harmonics,
11 transient voltages from switching. So those are some of
12 the challenges that we've been trying to maneuver around
13 in trying to make what's already been proposed
14 functional.

15 CHAIRMAN KATZ: Mr. Heffernan.

16 MR. HEFFERNAN: I don't know whether we're
17 suppose to be into this, but I just --

18 CHAIRMAN KATZ: Well, I don't mind --

19 MR. HEFFERNAN: -- I just have --

20 CHAIRMAN KATZ: -- let me just preface, I
21 do not mind these under-grounding questions because I
22 think it's laying some groundwork where -- we're going to
23 have ISO back in June and it's going to lay some
24 groundwork for perhaps some further questions that we are

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1 going to take up in June. So right now we're sort of
2 establishing where the field is so to speak. And I know
3 some of you like it more level than others. But what I'd
4 like to do is I'm going to allow these under-grounding
5 questions because it's going to be food for thought that
6 we're going to get back to in June.

7 MR. HEFFERNAN: Okay, good, because that's
8 where mine was going --

9 MR. ASHTON: To the food or June --
10 (laughter) --

11 MR. HEFFERNAN: Yeah. Talking about the
12 difference between regionalizing or socializing the costs
13 and gold-plating, and is it my understanding that the
14 reliability committee of ISO makes that determination --
15 or who makes that -- how is that determination made?

16 MR. KOWALSKI: It's a NEPOOL committee --
17 A NEPOOL reliability committee, which is a mix of
18 stakeholders who have long experience in the NEPOOL
19 transmission system and the characteristics of NEPOOL.
20 They make a recommendation to ISO.

21 MR. HEFFERNAN: Okay. And you say a
22 NEPOOL committee and a variety of stakeholders. It's my
23 understanding that three states are against this. I'm
24 just wondering the composition of said committee. I mean

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1 are there people from Vermont, Connecticut,
2 Massachusetts, Rhode Island? I mean what's -- what's the
3 composition and what -- how does the vote come out of
4 this committee to make the recommendation?

5 MR. KOWALSKI: I mean the NEPOOL
6 committees are composed of various sectors. There's a
7 supplier sector and a transmission sector and a
8 generating sector and an end user sector --

9 MR. HEFFERNAN: Where they from --

10 MR. KOWALSKI: -- and a municipal sector.
11 All over New England.

12 MR. HEFFERNAN: Yeah -- yeah, but -- it's
13 a committee and there has to be a number of people on a
14 committee?

15 MR. KOWALSKI: No.

16 MR. HEFFERNAN: No. I mean it's --

17 MR. KOWALSKI: So long as the five sectors
18 are represented. And there are various rules on quorums
19 and participation in the committees. And I'm not up on
20 all of the whys and wherefores, but it's a broad range.

21 MR. HEFFERNAN: Okay, I was just really
22 trying to count votes -- (laughter) --

23 MR. ASHTON: How does the voting -- how do
24 you -- how do you count votes? Is it done by -- one vote

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1 per member of the committee? Is it done by the
2 population of the state weighed --

3 CHAIRMAN KATZ: Kilowatts --

4 MR. ASHTON: -- kilowatt hours --

5 MR. KOWALSKI: No, it's --

6 MR. ASHTON: -- you know, I could think of
7 a million ways --

8 MR. KOWALSKI: Each -- each sector has a
9 20 percent vote. Again, it's -- this -- it's an advisory
10 vote too --

11 MR. ASHTON: Okay --

12 MR. KOWALSKI: -- so keep that in mind.
13 But each sector has a 20 percent vote. And as long as
14 each -- if there's one -- as long as various quorum
15 requirements are met, then it's a share of the 20
16 percent. So if there are -- if three people constitute a
17 quorum, then each of those gets three-twentieths of the
18 vote for their sector.

19 MR. ASHTON: Okay.

20 CHAIRMAN KATZ: Where are we on the cross-
21 examination --

22 MR. HEFFERNAN: I don't really understand
23 --

24 CHAIRMAN KATZ: Mr. Cunliffe, had you

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1 concluded?

2 MR. CUNLIFFE: I just have a few more
3 follow-up.

4 CHAIRMAN KATZ: Okay.

5 MR. CUNLIFFE: Back to the GAP RFP. Is
6 generation part of that puzzle, providing a source --

7 MR. WHITLEY: I wouldn't call it permanent
8 generation, but I would call it emergency backup
9 generation. It has very limited use.

10 MR. CUNLIFFE: Page 33 of your testimony
11 specifically said that it would be restricted to
12 significant emergency conditions. My question would
13 follow up that. Do you agree that the existing 115-kV
14 system there is already vulnerable enough to try to
15 support generation?

16 MR. WHITLEY: Yes.

17 MR. CUNLIFFE: And to add these, you're
18 just trying to limit it to particular areas in Southwest
19 Connecticut that could support small generation?

20 MR. KOWALSKI: Actually, I think that's a
21 little bit generous. The -- what's been proposed really
22 -- because this system is so tight -- and we talk about
23 various conditional dependencies, the system can't --
24 cannot operate the current generation. So what's being

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1 proposed in the GAP RFP is really -- as has been pointed
2 out, can operate under very limited emergency conditions,
3 sometimes only if a particular generator happens to be
4 forced out of service. So there's really very limited
5 margin. And in evaluating the GAF RFP, we've been
6 demonstrating that and trying to fit some of the
7 respondents in. The system really doesn't even have much
8 room for a fairly small generator.

9 MR. CUNLIFFE: So load response would
10 probably be more valuable?

11 MR. KOWALSKI: And even the load response
12 would have to be very very well balanced, otherwise it
13 has the same net effect on the transmission system as a
14 small generator.

15 MR. CUNLIFFE: Thank you. And you would
16 agree that distributed generation is not a way to solve
17 the need for resources?

18 MR. WHITLEY: It will not solve this
19 problem. You need major infrastructure.

20 MR. CUNLIFFE: You do admit that DG
21 resources are scattered about, not just in Southwest
22 Connecticut, but in Connecticut as well? And is there a
23 way of measuring the impact that DG has on the grid?

24 MR. WHITLEY: If we had -- you know, if we

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1 had proposals for DG and, you know, somebody were
2 bringing DG to us, I mean there is a way to model it and
3 evaluate it, but we don't have that.

4 CHAIRMAN KATZ: Why -- why don't you think
5 people are bringing proposals for DG forward?

6 MR. WHITLEY: Well, it cost money. Where
7 -- you know, they've got to -- where are they going to
8 earn their money in the market when we're in a surplus
9 market. It cost infrastructure to, you know, bring the
10 fuel to the DG, which is typically going to be gas. So I
11 mean it's a complex process and so I -- you know, it's
12 going to take some time for that market to develop I
13 guess over time. I guess if the pool were in more of a
14 tight power supply situation you might see more of it
15 develop, but it just hasn't. I mean we're in a surplus
16 situation in the entire pool right now.

17 CHAIRMAN KATZ: Well, a previous witness
18 used the term backbone, that you need to have the
19 backbone first and then you have the enhancements and the
20 upgrades.

21 MR. WHITLEY: That's true.

22 CHAIRMAN KATZ: Is the DG -- is the role
23 of DG more enhancements and upgrades as part of after
24 establishment of a backbone?

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1 MR. WHITLEY: Well, certainly our highest
2 priority right now we have is to build the backbone
3 transmission system so we can keep the lights on. And we
4 have a lot of surplus generation in the pool that
5 actually we can't get that generation to the load. So we
6 have the capacity, we don't have the transmission to get
7 it there. And that's the role of this RTEP process, is to
8 come up with solutions. DG would be a merchant solution,
9 where somebody is proposing to do that with their
10 investors' money and not ratepayers' money. And they --
11 they obviously don't see a market value for it or they
12 see too much costs because they haven't proposed it.

13 CHAIRMAN KATZ: So you feel that a
14 Middletown to Norwalk line will be an avenue for some of
15 this landlocked generation to be able to -- that's in
16 Southwest Connecticut to get out of Southwest Connecticut
17 or get better around?

18 MR. WHITLEY: Well, I think we can
19 reconnect some generation that's on the 115 to the 345
20 and that's going to help us on our short-circuit duties,
21 and then we'll have more import capability into Southwest
22 Connecticut from the rest of Connecticut and from the
23 rest of the pool to efficiently move generation around so
24 that we can get generation to the load in Southwest

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1 Connecticut.

2 CHAIRMAN KATZ: Well, there's a new power
3 station in Milford. Would this line or proposed line
4 help get that power out of Milford?

5 MR. WHITLEY: Rich, do you want to --

6 MR. KOWALSKI: It definitely would. And
7 just to echo what Steve said, this is a -- I really want
8 to emphasize that, you know, the design of this project
9 is not just a pipeline project. I mean we did a lot of
10 work with five major substations, East Devon, Pequonnock,
11 Beseck, Norwalk and Plumtree. It really integrates the
12 system. There are other upgrades associated with it. So
13 it -- it really is being designed to enable the existing
14 generation to move around, reconnecting Bridgeport Energy
15 Center and electrically Milford to the 345 so that it is
16 more available, as well as providing enhanced access to
17 generation external to the Southwest Connecticut area.

18 CHAIRMAN KATZ: Thank you. Mr. Cunliffe.

19 MR. CUNLIFFE: Those are my questions,
20 Chairman.

21 CHAIRMAN KATZ: Mr. Emerick.

22 MR. EMERICK: No questions, thank you.

23 CHAIRMAN KATZ: Mr. O'Neill.

24 MR. O'NEILL: Yes. Mr. Whitley --

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1 MR. WHITLEY: Yes.

2 MR. O'NEILL: -- are you familiar with the
3 Christensen report?

4 MR. WHITLEY: Yes, sir.

5 MR. O'NEILL: That report made certain
6 predictions, assumptions, and recommendations. Do you
7 agree with most of those that were made?

8 MR. WHITLEY: I don't -- I don't think I
9 agreed with all of them, and I can't remember the details
10 at this point. I think we had some problems with that
11 study, but I think it was trying to project congestion
12 and so forth. And as -- as you remember from my
13 testimony from the last time I was here, it's very
14 difficult to project things like that because of the
15 volatility in the fuel process for example. Gas prices
16 are now as high as we've ever seen them, and that's made
17 projections of that type very difficult to make over the
18 long haul.

19 MR. O'NEILL: One of their recommendations
20 was that Connecticut should be divided into some pricing
21 zones, which were, quite frankly, a little bit disturbing
22 to me. Where does the ISO stand on that?

23 MR. WHITLEY: Well, I think there's
24 arguments both ways as far as Connecticut being one zone

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1 or two zones. I think from a pure engineering
2 perspective you can make a case that perhaps Connecticut
3 could be two zones, because we have -- but we have issues
4 on imports into Connecticut as a whole and then within
5 Connecticut into Southwest Connecticut, and even within
6 Southwest Connecticut there's issues moving power around
7 even in that area, so it's complicated. And so we -- we
8 support what the State has recommended, which is one zone
9 for the whole State. I think we could support making it
10 into other zones if that's what the State wants to do,
11 but -- and it changes over time. As we get this loop in,
12 it will make, you know, the State even more robust, so --
13 that's pretty much where we are now.

14 MR. O'NEILL: I find this particular area
15 of thought regarding congestion to have a similar analogy
16 with traffic on I-95 whereby the northern states here in
17 New England certainly need I-95 as a corridor.
18 Connecticut has to make a great deal of improvements in
19 infrastructure and conversely of course the grid needs
20 more improvements down this way. So, I think it's more
21 or less a cooperative arrangement that needs to be
22 understood throughout New England. And if we are to
23 continue as a region, then we have to cooperate as a
24 region.

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1 MR. WHITLEY: I certainly agree with that
2 100 percent. And that's -- that's the reason the 100th
3 Amendment got approved, was people believed exactly in
4 that principle, that what we do for the grid in
5 Connecticut is actually going to help the whole pool, and
6 that's why the whole pool should be willing to pay for
7 it, because if we have poor reliability, as we all know
8 by what happened in August, it can sure spread, and so
9 bulk system reliability is important to everyone in our
10 grid.

11 MR. O'NEILL: Thank you very much.

12 CHAIRMAN KATZ: Mr. Tait.

13 MR. TAIT: No questions.

14 CHAIRMAN KATZ: Mr. Ashton.

15 MR. ASHTON: I have a few. Mr. Whitley,
16 just as a matter of principle it would seem that there
17 are three ways you can run transmission. One is a source
18 to a source. The second would be a load to a load. And
19 the third one would be a source to a load. Which does --
20 which principle does transmission generally follow of
21 those three?

22 MR. WHITLEY: Generally, transmission is
23 source to a load --

24 MR. ASHTON: Okay --

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1 MR. WHITLEY: -- source -- we call it
2 source to a sink sometimes. But then for reliability,
3 sometimes you might connect two loads together, so --
4 such that if you lost a source line to one of those
5 loads, the other -- the other line could be a reliability
6 feed to go back and pick up that load.

7 MR. ASHTON: But that would still be
8 ultimately connecting that load to another source?

9 MR. WHITLEY: To a source, yes, sir.

10 MR. ASHTON: Yeah. You have -- on page 31
11 I think it is -- on 31 talked about the East Shore
12 alternative. And particularly on line 686 you say the
13 alternative does not strengthen the power supply to
14 Southwest Connecticut by introducing a new source. And
15 that's because the 387 line, I believe it is, loads
16 excessively. Is that fair to say?

17 MR. WHITLEY: Rich, do you --

18 MR. KOWALSKI: That's correct.

19 MR. ASHTON: What would happen if a second
20 circuit were brought down from the center of the State to
21 East Shore? Would that not create a stronger source at
22 East Shore?

23 CHAIRMAN KATZ: If you know -- if you know
24 the answer now, feel free to answer it. But I'll

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1 indicate to you that at a future hearing we will be
2 discussing East Shore in more detail and we might --
3 well, we will be asking the ISO to come back at that
4 point too. So, I'll give you that -- I'll give you that
5 out if you feel you need it.

6 MR. MacLEOD: (Indiscernible) -- that I
7 told the witnesses yesterday, based on my understanding
8 of the program --

9 COURT REPORTER: Mr. MacLeod --

10 MR. MacLEOD: Yes?

11 COURT REPORTER: -- could you start over
12 again please.

13 CHAIRMAN KATZ: Yeah.

14 MR. MacLEOD: Sure. Madam Chair, I told
15 the witnesses yesterday just so that the Council is aware
16 of it, that the issues today would be related to public
17 need --

18 CHAIRMAN KATZ: Right --

19 MR. MacLEOD: -- and that we would be
20 covering other issues --

21 CHAIRMAN KATZ: Yes.

22 MR. MacLEOD: -- under-grounding, the East
23 Shore alternative, etcetera --

24 CHAIRMAN KATZ: Yes.

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1 MR. MacLEOD: -- at a later date --

2 CHAIRMAN KATZ: But I am allowing --

3 MR. MacLEOD: -- so they may not be fully
4 prepared today --

5 CHAIRMAN KATZ: And I fully understand
6 that, but I am allowing Council members to plant food for
7 thought.

8 MR. MacLEOD: And I have not objected and
9 would not.

10 MR. KOWALSKI: I would just like to get a
11 clarification of Mr. Ashton's question. When you talk
12 about -- could you repeat that --

13 MR. ASHTON: Sure --

14 MR. KOWALSKI: -- I wasn't quite sure --

15 MR. ASHTON: Right now the line supplying
16 East Shore comes from the center of the State. And if
17 you made a connection from East Shore to East Devon, it
18 doesn't work well because the Beseck to East Shore, or
19 wherever its northern terminal is, overloads.

20 MR. KOWALSKI: The --

21 MR. ASHTON: If you brought a second
22 circuit down that right-of-way, would that then improve
23 that alternative to make it worthwhile?

24 MR. KOWALSKI: Effectively, that's what

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1 the Beseck to Devon section does for Southwest
2 Connecticut, is it brings another source in. Now, I
3 think you need to be very careful in just assuming that
4 another line from East Shore -- a second Scovill Rock to
5 East Shore line would in itself be sufficient. And that
6 -- going then from East Shore over to Devon --

7 MR. ASHTON: Well, let me -- let me do
8 this -- in conformance with the Chair's desire here, I
9 don't really want to get into a lengthy discussion of
10 alternatives. However, I will posit today that I would
11 like to discuss this with you or the Applicant and
12 related parties, put it that way, as well as the option
13 of DC coming in here. Now underground -- I well
14 understand the problems of lengthy under-grounding, which
15 DC would seem to avoid. And the question I would like to
16 raise at this time and not have answered at this time is
17 what DC options were looked at, if any, coming from
18 either East Shore with reinforcement to the center of the
19 State as far away as Millstone for example, were they
20 considered and what were the -- how did the evaluation go
21 of that, with a net result of what --

22 MR. KOWALSKI: Well, we --

23 MR. ASHTON: -- so there's a number of
24 things that I think I'd like to have you be aware of and

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1 be prepared to talk about at such time as we get into it.

2 MR. TAIT: And if they weren't considered,
3 please consider them.

4 CHAIRMAN KATZ: So we will want ISO's
5 thoughts --

6 MR. ASHTON: Yeah --

7 CHAIRMAN KATZ: -- on some of those
8 alternatives.

9 MR. TAIT: That's for all parties.

10 MR. ASHTON: Yeah.

11 MR. KOWALSKI: Very good.

12 MR. ASHTON: I'm not sure the record today
13 really defines it well, but we've talked about short-
14 circuit issues. Am I correct in assuming that this is
15 the ability of a circuit breaker, air, oil, gas,
16 whatever, to pass short-circuit current and interrupt it
17 successfully when a short-circuit occurs?

18 MR. KOWALSKI: It -- short-circuit and
19 other station equipment as well --

20 MR. ASHTON: Okay. But --

21 MR. KOWALSKI: -- circuit breakers and
22 other station equipment, yes --

23 MR. ASHTON: Right, switches, line traps,
24 all the rest of it?

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1 MR. KOWALSKI: Yes.

2 MR. ASHTON: And in the event that a
3 device -- short-circuit exceeds the rating of the device,
4 what is the likely consequence?

5 MR. KOWALSKI: The likely consequence is a
6 catastrophic failure of the piece of equipment,
7 particularly with a circuit breaker.

8 MR. ASHTON: And could that further damage
9 other equipment in the substation yard?

10 MR. KOWALSKI: It certainly could, as well
11 as --

12 MR. WHITLEY: Public safety --

13 MR. KOWALSKI: -- the safety of personnel
14 in the yard. That piece of equipment itself is now
15 permanently damaged --

16 MR. ASHTON: Okay. And this really
17 amounts to an explosion, doesn't it?

18 MR. KOWALSKI: That's -- that's what I
19 mean by a catastrophic failure, yes.

20 MR. ASHTON: Okay. So all the
21 consequences inherent of an explosion are involved here.
22 So it -- short-circuit duty then reflects the inability
23 of equipment to meet the assigned responsibility that it
24 has to protect the system?

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1 MR. KOWALSKI: Correct.

2 MR. ASHTON: Okay. I would like just to
3 go on the record here of saying I'd like to hear more
4 testimony on your concerns of under-grounding with more
5 specificity, and especially, in collaboration with
6 Professor Tait, the impact of under-grounding all 69 kV -
7 -69 miles with under-grounding, so we hear -- so we have
8 a chance to have a dialogue on that. So just a sneak
9 preview of coming attractions. Just -- we --

10 MR. TAIT: Just to follow up on that a
11 little bit. And if you can't do all 69, how much can you
12 do beyond what is being proposed?

13 MR. ASHTON: If any?

14 MR. TAIT: If any, right.

15 CHAIRMAN KATZ: This is your -- part of
16 your homework.

17 MR. TAIT: This is everybody's homework.

18 MR. ASHTON: The -- there was some
19 discussion in your testimony on the blackout of August
20 14th. In your opinion would -- had the -- had a 345-kV
21 loop been intact, been built and operating at the time
22 that blackout occurred, would Connecticut have had the
23 consequences that we did see, where we lost the western
24 third of the state?

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1 MR. WHITLEY: I certainly think the impact
2 would have been reduced. Certainly more of the load in
3 Connecticut would have been on the 345, which is -- you
4 can almost think of it as pulling it back into
5 Connecticut rather than letting it hang out there right
6 on the border on that weak 115-kV system. I can't -- I
7 can't say that it would have eliminated all of it because
8 it's very difficult to actually even simulate a blackout
9 condition like that when you have stability problems and
10 overload problems and voltage collapse all happening so
11 fast. But the -- I think intuitively it would have
12 really reduced the impact.

13 MR. ASHTON: So it's -- is it fair to say
14 as a system operator, you'd far rather go into a
15 contingency condition such as that blackout with a strong
16 345 network --

17 MR. WHITLEY: Absolutely --

18 MR. ASHTON: -- than what we experienced
19 here?

20 MR. WHITLEY: Yes.

21 MR. ASHTON: Thank you. That's all.

22 CHAIRMAN KATZ: Thank you. Mr. Wilensky.

23 MR. EDWARD S. WILENSKY: My turn. I'm
24 going to ask a couple of questions on under-grounding and

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1 I hope it's okay. If it isn't, just shut me off. On
2 page 27, on the bottom -- on the top of the page,
3 transmission -- this is Mr. Whitley -- transmission
4 solutions often with several components like the full
5 345-kV loop are planned as an integrated and balanced
6 whole. Indiscriminately substituting an underground
7 cable in one component can easily upset the balance and
8 substantially undermine the solutions. Now on Phase 1 a
9 considerable amount of that line initially was not
10 proposed -- it was proposed as an overhead line and it
11 was substituted -- a good portion was substituted as an
12 underground line. Would you refer to that as
13 indiscriminately? And the word indiscriminately bothers
14 me to be very honest.

15 MR. WHITLEY: Okay --

16 MR. WILENSKY: And I refer to -- and why I
17 ask that question is if we decide a portion, the whole,
18 or somewhat, or none in this 272 docket that's before us
19 today should go underground, would that be doing it
20 indiscriminately?

21 MR. WHITLEY: It depends on what the
22 reasons are, the cost justification and so forth, if
23 that's what it takes to get it done, because that's the
24 most economical way and the best engineering solution,

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1 that's one thing. Then there's also the technical
2 aspects that Rich has been talking about to make sure
3 that it works, that you, you know, may identify some
4 problems, but you've been able to solve those problems
5 and still make it electrically perform the way it needs
6 to. So it depends on what the logic is for doing it and
7 how it performs.

8 MR. WILENSKY: Well in Phase 1 was the
9 logic -- did we use proper logic or did we
10 indiscriminately agree to something before us?

11 MR. WHITLEY: I really can't say until we
12 go through that 12.C process and have the project
13 presented and all its components and the process that
14 Rich talked about reviewed.

15 MR. WILENSKY: We went through a hearing
16 process through eight towns. Was ISO represented at any
17 of those hearings that we had?

18 MR. WHITLEY: In the actual towns?

19 MR. WILENSKY: Yes.

20 MR. WHITLEY: We were not -- we were not
21 officially at any of those meetings. I think some of our
22 staff may have attended one or two, but our official
23 participation has been with the Siting Council.

24 MR. WILENSKY: Okay.

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1 CHAIRMAN KATZ: So I guess the question
2 was were you listening or did you not have people
3 listening or have the transcripts been made available to
4 you, or --

5 MR. WHITLEY: I don't recall. I'll have
6 to get an answer to you for that.

7 CHAIRMAN KATZ: Well --

8 MR. MacLEOD: Well, I believe the
9 transcripts are available in the towns --

10 CHAIRMAN KATZ: Okay --

11 MR. MacLEOD: -- and certainly we can get
12 them.

13 CHAIRMAN KATZ: Great --

14 MR. TAIT: But you haven't so far and
15 haven't read them?

16 MR. MacLEOD: I have not read them.

17 MR. TAIT: And as far as you know, you
18 don't have copies of them?

19 MR. MacLEOD: I have read newspaper
20 articles. I have a sense.

21 MR. TAIT: Mr. Whitley --

22 CHAIRMAN KATZ: We just -- we listened and
23 we encourage all the parties and intervenors --

24 MR. TAIT: -- will what we do in Phase 2

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1 impact the Phase 1 solution? You don't need to answer
2 that now --

3 MR. WHITLEY: Okay --

4 MR. TAIT: -- but if we go into more
5 under-grounding in Phase 2, what's the effect on Phase 1,
6 if any, or are they independent on the amount of under-
7 groundings and the interconnections we can do?

8 MR. WHITLEY: Okay.

9 MR. TAIT: Add that to your homework.

10 MR. WHITLEY: Alright.

11 CHAIRMAN KATZ: Mr. Ashton --

12 MR. ASHTON: Nothing more, thank you --

13 CHAIRMAN KATZ: -- oh, I'm sorry, Mr.
14 Wilensky, we were on you.

15 MR. WILENSKY: Just one last question. We
16 talked about a completion date of I believe 2007. Did I
17 hear you, Mr. Kowalski, saying completion 2007? And if
18 I'm wrong -- I could very easily be wrong --

19 MR. KOWALSKI: I believe the December 20,
20 2007 is relative to the NEPOOL 100th Amendment in that
21 there was somewhat of a grandfathering pursuant to that
22 100th Amendment NEPOOL agreement filing, that facilities
23 that were in service -- that had been in the RTEP-02 plan
24 that were in service by December 20, 2007 would be

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1 subject to the old rules of cost socialization --

2 MR. WILENSKY: Okay --

3 MR. KOWALSKI: -- so should they change in
4 the future --

5 MR. WILENSKY: Thank you, you've answered
6 my question. Thank you. Thank you, Madam Chairman.

7 CHAIRMAN KATZ: I'd just like to interject
8 a question at this -- we'd gotten a letter from ISO on
9 Phase 1 indicating that they had completed a reliability
10 study, I guess known as 18.4, does that sound right?

11 MR. KOWALSKI: Yes.

12 CHAIRMAN KATZ: Can you explain what the
13 difference between 18.4 and 12.C is?

14 MR. KOWALSKI: It's --

15 MR. ASHTON: It's about 6.1 -- (laughter).

16 MR. KOWALSKI: Is that sufficient?

17 (Laughter). The --

18 CHAIRMAN KATZ: Don't encourage him.

19 MR. KOWALSKI: Section 18.4 of the NEPOOL
20 agreement is a section that basically refers to a no harm
21 -- it's a no harm standard. And that is whatever you're
22 proposing -- or any proponent is proposing on the system,
23 it's okay provided that it causes no harm and no
24 degradation anywhere else. That's the 18.4 standard.

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1 The 12.C refers to Section 12 -- Schedule
2 12.C of the NEPOOL open access tariff. And that is --

3 MR. TAIT: That's the anti-gold-plating --

4 MR. KOWALSKI: That's the anti-gold-
5 plating. And that is --

6 MR. TAIT: So underground will work, but
7 whether we socialize it is another question?

8 MR. KOWALSKI: That's right.

9 MR. TAIT: Thank you.

10 CHAIRMAN KATZ: So you've not done the
11 gold-plating aspect of Phase 1 yet then?

12 MR. KOWALSKI: That's correct.

13 CHAIRMAN KATZ: And you -- so -- let me
14 just give you a hypothetical. Let's say you do the 12.C
15 on Phase 1. Phase 1 has to -- the design of Phase 1 has
16 to change now because how the costs are going to be
17 allocated is changing --

18 MR. TAIT: That won't necessarily change
19 the design --

20 CHAIRMAN KATZ: No --

21 MR. TAIT: -- it will just change the
22 cost.

23 CHAIRMAN KATZ: Okay.

24 A VOICE: It may change the way the costs

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1 --

2 CHAIRMAN KATZ: Yeah, true.

3 MR. KOWALSKI: Right --

4 CHAIRMAN KATZ: It's just who pays for it
5 -- okay. I'll withdraw that question. Okay, thank you.

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

7 CHAIRMAN KATZ: Mr. Murphy says no
8 questions. Mr. Lynch.

9 MR. LYNCH: Just to follow up on the
10 socialized costs. It's my recollection from Phase 1 that
11 the -- and the Chairman just hit on it a little bit --
12 that the increase in costs for under-grounding may not
13 actually meet the directive of the FERC's order or now
14 Amendment 100. And now that we're getting in Phase 2,
15 under-grounding being proposed again, are we looking at a
16 situation come 2004 -- I mean 2007 rather, even though
17 there are grandfathered projects, that the socialized
18 costs may not apply because of the increase?

19 MR. WHITLEY: Well, I think the answer to
20 that is the 12.C we've been talking about, which is the
21 anti-gold-plating thing, it applies both before -- if
22 they're built before December 20th or after, and so let's
23 say the project -- 95 percent meets this 12.C
24 requirement, 5 percent doesn't, then 95 percent gets

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1 rolled in, the 5 percent gets rolled into the local
2 tariff, so the local area pays for that delta rather than
3 the whole pool.

4 CHAIRMAN KATZ: Mr. O'Neill.

5 MR. O'NEILL: Yes. Gentlemen, based upon
6 all your years of past experience, do we have a realistic
7 expectation that these lines, if they're approved, will
8 be built by December 20th of the year 2007?

9 MR. WHITLEY: I certainly think they can
10 be, yes, I do. I think they can be, because --

11 CHAIRMAN KATZ: What -- what's -- what
12 would it take to have it work right and have it done by
13 that? And what are the possible pitfalls that could
14 delay it past 2007?

15 MR. WHITLEY: Well, I think the biggest
16 issue is getting through the siting process so that the
17 engineering can be done. But once the decision -- you
18 know, the design is locked in, this is what we're going
19 to do, then I think -- I think you can move pretty
20 quickly. I don't have a lot of experience building
21 underground myself. I've done a lot back in my previous
22 life with overhead, and you can move very quickly with
23 overhead. There may be some under-grounding issues that
24 affect construction that may slow this down. But I

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1 certainly think it's realistic if we could get through
2 the siting process so that the design could, you know, be
3 locked in and get started. I think it's realistic, yes.

4 MR. O'NEILL: I'm concerned because on the
5 basis of what we've seen and what we've heard, we've had
6 delays even reviewing this 217 based upon the reliability
7 studies that have been performed. And my concern is that
8 with further delays because of the sophistication of 217,
9 are we going to be able to keep to this timetable.

10 COURT REPORTER: One moment please.

11 (Pause). Okay, thank you.

12 MR. O'NEILL: Again, this is based upon
13 your experience?

14 MR. WHITLEY: Right. I think -- sort of
15 tying that question back to the under-grounding question
16 that we have homework on, you know, the more under-
17 grounding we have done, the more technical problems we
18 have uncovered and the more studies it takes to solve
19 that technical problem. And you go through this
20 iterative process and the siting isn't really locked down
21 yet. So we're going through this iterative process to
22 keep making it more complicated, so I think -- I think
23 those two are linked. And if we continue to do more
24 under-grounding, which Rich believes we've pretty much

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1 reached the limit of the technology already, then all the
2 studies it takes to find out it won't work, you know, is
3 going to take a lot of time. So that's -- that's a
4 complication in the process.

5 MR. O'NEILL: Thank you.

6 CHAIRMAN KATZ: Mr. Emerick.

7 MR. EMERICK: Just a follow-up. The
8 reservations in terms of additional under-grounding that
9 we've already reached the limit, are you currently
10 looking at the under-grounding that's in Phase 2?

11 MR. KOWALSKI: Yes.

12 MR. EMERICK: Oh, okay. So that
13 reservation really applies to all the under-grounding
14 that's been put forward today, including Phase 1 and 2?

15 MR. KOWALSKI: That's correct. You know,
16 we're really looking at it, you know, from an integral
17 system and making that integral system work.

18 CHAIRMAN KATZ: Mr. Kowalski, can you
19 summarize what you think your experience is in under-
20 grounding? Are you somewhat familiar with the design of
21 under-grounding systems, very much familiar? Can you
22 qualify where you think you are on the --

23 MR. ASHTON: And I might add that I think
24 you ought to differentiate between the technical studies

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1 involving underground cable as part of a network versus
2 the manufacturing of underground. I think that's what
3 the Chairman is really getting at.

4 MR. KOWALSKI: Okay. Certainly -- I mean
5 the study of any networks I'm quite familiar, I've been
6 doing that my entire career. And whether it's a cable or
7 an overhead, the study process is really the same. And
8 the issues -- once an issue is identified, then I'm
9 familiar with the means of trying to address those
10 issues. There are additional complexities that arise when
11 you start introducing cables that are -- have greater
12 problems that you don't ordinarily see, such I referred
13 to harmonics earlier. I am certainly not an expert in
14 that. Typically you don't see those types of problems.
15 Even in urban areas where you've got a number of short
16 cables, studies are done and it hasn't been an issue,
17 even in New England. But generally, yes, I'm pretty
18 comfortable with studying cables in the context of the
19 network.

20 CHAIRMAN KATZ: Thank you. Any other
21 Council questions of these two witnesses? (No audible
22 reply). Mr. MacLeod, do you have any redirect of your
23 witnesses?

24 MR. MacLEOD: I do have a little bit,

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1 Madam Chair, thank you.

2 I just wanted to cover first an issue of
3 distinction between ISO and NEPOOL. There were some
4 questions regarding NEPOOL committees and I'd like to
5 clarify that the reliability committee that was referred
6 to earlier today is a NEPOOL or an ISO committee?

7 MR. WHITLEY: It's a NEPOOL committee.

8 MR. MacLEOD: Does ISO have anything to do
9 with the committee structure and how the committee
10 structure of NEPOOL is established?

11 MR. WHITLEY: Yes. ISO actually has a
12 representative on our staff that chairs the NEPOOL
13 committee --

14 MR. MacLEOD: But --

15 MR. WHITLEY: -- and acts as chairman of
16 the committee. But ISO itself is independent. NEPOOL is
17 a stakeholder process that we use to vent issues and give
18 us advice and recommendations. But ISO has a chair of
19 that committee to facilitate the meetings.

20 MR. TAIT: Does that chair vote?

21 MR. WHITLEY: That chair does not vote,
22 no.

23 MR. MacLEOD: And in terms of the
24 committee structure though, granting that ISO chairs the

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1 committee, is it a NEPOOL decision as to what committees
2 there shall be and who shall be on the committees?

3 MR. WHITLEY: Yes, there's a -- there's a
4 structure that Rich went through with the different
5 stakeholder groups, you know, the sectors, the
6 transmission owners and so forth --

7 MR. MacLEOD: Right.

8 MR. WHITLEY: -- and that's all specified
9 in the NEPOOL governance.

10 MR. MacLEOD: Thank you. In terms of the
11 18.4 and either 15.5 or 12.C processes, is there
12 typically an order in which 18.4 approval is sought and
13 then either 15.5 or now 12.C approval would be sought?
14 Does one usually precede the other?

15 MR. WHITLEY: Yes. The first thing is the
16 18.4 process, which Rich described, you know, to
17 determine if this project as proposed causes any harm to
18 anything else or anyone else on the pool, and that's done
19 early. And then after the detailed design is done -- the
20 project is turned from a conceptual project into a
21 detailed design, then the 15.5 comes through later.

22 MR. O'NEILL: When you say it does no
23 harm, do you mean in a competitive sense?

24 MR. WHITLEY: No, from a reliability

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1 sense; you know, reduce transfer capability, reduce the
2 ability to provide adequate voltage and so forth.

3 MR. O'NEILL: Thank you.

4 MR. MacLEOD: The 18.4 process being the
5 system impact study and the impact of the proposal on the
6 system itself?

7 MR. WHITLEY: Right.

8 MR. MacLEOD: Okay. So in terms of Phase
9 1, the line from Bethel to Norwalk, I think there were
10 some questions regarding the timing of the 12.C approval
11 there. You really would not ordinarily be in a position
12 to consider approval under 12.C until 18.4 approval had
13 been given, is that correct?

14 MR. WHITLEY: That's correct.

15 MR. MacLEOD: And when was 18.4 approval
16 given for that Phase 1 line?

17 MR. WHITLEY: We believe it was the -- or
18 somewhere around the early part of this year.

19 MR. MacLEOD: Okay. So that explains
20 perhaps one of the reasons why you have not yet been in a
21 situation where you can give 12.C approval for that?

22 MR. WHITLEY: Right.

23 MR. TAIT: Is the 12.C approval process
24 started?

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1 MR. WHITLEY: It hasn't been brought to
2 the reliability committee yet.

3 MR. MacLEOD: Does it have to be -- I'm
4 sorry.

5 MR. TAIT: And once it's brought, how long
6 does it take?

7 MR. WHITLEY: It depends on the complexity
8 of the project. Sometimes a simple project might take --

9 MR. TAIT: As long as a -- (indiscernible)
10 --

11 MR. WHITLEY: -- yeah, it might take one
12 meeting. This project as complex as it is, probably will
13 take multiple meetings. But the reliability committee
14 can meet more often if it needs to.

15 MR. TAIT: Give me a ballpark figure, one,
16 two, three, four months, five months, six months?

17 MR. WHITLEY: I'm going to assume -- let's
18 just assume three months.

19 MR. TAIT: Okay. Once it's been handed to
20 you?

21 MR. WHITLEY: Once the committee gets the
22 proposal with all the facts.

23 MR. TAIT: And that has not yet come to
24 you?

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1 MR. WHITLEY: Right.

2 CHAIRMAN KATZ: So the transmission owner
3 has to initiate the 12.C process?

4 MR. WHITLEY: Yes.

5 CHAIRMAN KATZ: And has not done so?

6 MR. TAIT: The transmission owner might
7 respond to that at some appropriate time.

8 MR. FITZGERALD: Will there be an
9 opportunity --

10 MR. TAIT: I think it would be a very good
11 opportunity --

12 MR. FITZGERALD: -- for additional
13 questions to Mr. Whitley related to the redirect --

14 CHAIRMAN KATZ: Yes, I think we can do
15 that. Mr. Emerick.

16 MR. EMERICK: A follow-up on the 18.4
17 decision on Phase 1, and I think I have my numbers right,
18 that's the no harm analysis. My recollection of that is
19 there's kind of an extensive list, or I view it as
20 somewhat extensive of things that have to be done
21 throughout the system as a result of presumably under-
22 grounding that's in Phase 1. I don't know the extent to
23 which those upgrades or changes result in cost, but
24 presumably it's going to cost some money. Where does

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1 that fit into that? Does that go also into the
2 socialization, into the transmission system?

3 MR. WHITLEY: Those are the kind of
4 questions that come up in the 12.C review, what -- you
5 know, what other bells and whistles had to be added to
6 make this underground work compared to overhead -- let's
7 say if that's the alternative, those are the kinds of
8 things that would be brought forward in the 12.C process.

9 MR. EMERICK: Okay.

10 CHAIRMAN KATZ: Thank you.

11 MR. EMERICK: Thank you.

12 CHAIRMAN KATZ: Since we have Mr. Whitley
13 until 4:00 o'clock, I'm going to allow parties and
14 intervenors to ask questions based on information that
15 was raised during cross-examination. And we'll go first
16 to the Applicant.

17 MR. FITZGERALD: Thank you --

18 MR. MacLEOD: I'm sorry, Madam Chair, may
19 I conclude my --

20 CHAIRMAN KATZ: Oh, I'm sorry.

21 (Laughter).

22 MR. MacLEOD: And may I ask also, just in
23 the interest of time, etcetera, I assume if I were to
24 have any questions on under-grounding, those would be or

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1 could be postponed until we --

2 CHAIRMAN KATZ: Yes, yes --

3 MR. MacLEOD: -- treat that in full.

4 CHAIRMAN KATZ: And I apologize, Mr.
5 MacLeod.

6 MR. MacLEOD: Okay. No, that's quite
7 alright. I -- hopefully, the questions will be helpful
8 to you.

9 Mr. Whitley, when was -- when did 12.C
10 become effective and in essence replace 15.5?

11 MR. WHITLEY: It was with the approval --
12 FERC's approval of the 100th Amendment.

13 MR. MacLEOD: Was that December or so of -
14 -

15 MR. WHITLEY: I cannot remember the exact
16 date, but that's -- we'll have to get back with that
17 answer.

18 MR. MacLEOD: Okay. I believe that
19 document has been administratively noticed.

20 MR. WHITLEY: Okay.

21 MR. TAIT: And the date?

22 MR. HEFFERNAN: It's in the notice --

23 CHAIRMAN KATZ: He doesn't have it.

24 MR. MacLEOD: I will find that as part of

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1 my homework, sir.

2 MR. TAIT: I know it's been noticed, but
3 not by --

4 MR. MacLEOD: I think it was noticed
5 today, but I will look --

6 MR. TAIT: Yes.

7 MR. MacLEOD: -- I think that's what
8 you're asking.

9 In terms of the expertise that you bring
10 to this forum, do you regard that basically as electrical
11 expertise?

12 MR. WHITLEY: Yes --

13 MR. MacLEOD: And --

14 MR. WHITLEY: -- power systems.

15 MR. MacLEOD: You're here for basically
16 considerations involving the bulk power system and how it
17 runs, what works, etcetera?

18 MR. WHITLEY: And how -- how to keep it
19 reliable.

20 MR. MacLEOD: Okay. In that process, do
21 you feel that, in essence, you have a duty -- if you feel
22 that something will not work or will have shortcomings,
23 do you feel that you have a duty as an organization to
24 inform not only the Council but people paying attention

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1 to this proceeding?

2 MR. WHITLEY: Absolutely. It's our job to
3 keep the lights on both in real time operations and in
4 planning the system. Because if we don't plan it
5 properly, then we won't be able to keep the lights on in
6 real time.

7 MR. MacLEOD: Okay. I guess, lastly, is
8 there anything in your testimony on -- I believe it was
9 page 27, which was cited earlier, and the preceding page
10 was 26, you expressed some concerns about under-
11 grounding, and I'm -- this is going to be a very broad
12 question with a short answer I hope -- is there anything
13 in that question that was intended to be a comment on
14 Phase 1 or was it just a broad expression of general
15 concern about the use of under-grounding?

16 MR. WHITLEY: I believe it was broad --
17 broadly intended.

18 MR. MacLEOD: Thank you. No -- no offense
19 intended. Thank you. I have no further questions, Madam
20 Chair.

21 CHAIRMAN KATZ: Thank you, Mr. MacLeod.
22 The Applicants, you have an opportunity to ask questions
23 based on the new information.

24 MR. FITZGERALD: Yes. Thank you, Madam

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1 Chairperson.

2 In order for a transmission owner to start
3 the ball rolling, the 12.C approval process, do they have
4 to have an engineered final design and a cost -- a good
5 cost estimate based on that final design?

6 MR. WHITLEY: Ultimately they do, yes.

7 MR. FITZGERALD: So that it's premature to
8 start the 12.C process if the transmission owner, for
9 instance, doesn't know part of the route for the facility
10 and hasn't done the engineering that's required for a
11 detailed cost estimate, right?

12 MR. WHITLEY: Right.

13 MR. FITZGERALD: Are you familiar with the
14 development and management plan process, Mr. Whitley?

15 MR. WHITLEY: The what now?

16 MR. FITZGERALD: Never mind.

17 A VOICE: Has he seen --

18 A VOICE: You made your point.

19 MR. FITZGERALD: Let's see -- there was
20 some reference to the 100th amendment --

21 MR. WHITLEY: Yes.

22 MR. FITZGERALD: -- and was that approved
23 on December 18, 2003 to be effective January 1, 2004?

24 MR. WHITLEY: Looking at my counsel, I

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1 believe that's correct, yes.

2 MR. FITZGERALD: Thank you --

3 MR. TAIT: He's noticed it by now.

4 (Laughter).

5 MR. FITZGERALD: That's all that I have.

6 CHAIRMAN KATZ: Thank you, Mr. Fitzgerald.

7 Attorney Ball, follow-up questions?

8 MR. BALL: No, thank you.

9 CHAIRMAN KATZ: Mr. Ball says no.

10 Attorney Moore, follow-up questions?

11 MS. MOORE: No questions.

12 CHAIRMAN KATZ: Attorney Moore says no.

13 Assistant Attorney General Michael Wertheimer, follow-up
14 questions?

15 MR. WERTHEIMER: No, thank you.

16 CHAIRMAN KATZ: Thank you. Mr. Johnson,
17 follow-up questions?

18 MR. JOHNSON: No.

19 CHAIRMAN KATZ: Right that down. Mr.
20 Golden, follow-up questions?

21 MR. ASHTON: You can't shout no from the
22 back.

23 MR. GOLDEN: The cross-examination from
24 the Council brought out a lot of issues on under-

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1 grounding and East Shore. I'm assuming from what was
2 said earlier that by not having those cross-examination
3 questions now, we're not waiving our right to cross later
4 on.

5 CHAIRMAN KATZ: You are absolutely
6 correct.

7 MR. GOLDEN: Okay. So we have no further
8 questions.

9 CHAIRMAN KATZ: There will be several
10 bites of the apple. Attorney Reif, follow up questions?

11 MR. REIF: No, ma'am.

12 CHAIRMAN KATZ: Mr. Reif said no.
13 Attorney Frank?

14 MR. BALL: None --

15 CHAIRMAN KATZ: Mr. Ball speaking for Mr.
16 Frank says no --

17 MR. BALL: No questions for Wilton or
18 Weston.

19 CHAIRMAN KATZ: Right. Thank you. Mr.
20 Earley. Not present. Okay. Is there any party or
21 intervenor who objects if Mr. Whitley and Mr. Kowalski do
22 not come back tomorrow for questions of need,
23 understanding that they will be back further in the
24 hearing process for under-grounding and probably for

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1 alternatives? Is there any one? Please speak up now,
2 otherwise I'm going to excuse these witnesses for not
3 coming back tomorrow. (No audible reply). Mr. Cunliffe,
4 are you all set too?

5 MR. CUNLIFFE: I'm all set, thank you.

6 CHAIRMAN KATZ: Great. Okay. Thank you,
7 Mr. Whitley and Mr. Kowalski. You will be informed of
8 the hearing program for the continuation.

9 MR. WHITLEY: Thank you.

10 MR. KOWALSKI: Thank you.

11 CHAIRMAN KATZ: And we appreciate it,
12 thank you.

13 Okay, do we have any other business today?
14 This is my understanding of tomorrow -- tomorrow, Mr.
15 Johnson, your witness will be available 10:00 a.m.?

16 MR. JOHNSON: That's correct.

17 CHAIRMAN KATZ: Mr. Johnson says yes. And
18 then what I want to do is -- Mr. Brandien, I'd like to
19 make -- will he be available tomorrow since our bites of
20 the apple of him are limited?

21 MR. FITZGERALD: All our witnesses will be
22 here tomorrow.

23 CHAIRMAN KATZ: The entire panel will be
24 available. So, I will allow redirect on the -- I will

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1 allow further cross-examination of the NU/UI need panel
2 tomorrow after we have Mr. Johnson's witness on cross-
3 examination.

4 Then 9:30 Thursday morning we are going to
5 have a prehearing conference on issues of discovery
6 issues and EMF. I'm asking that the discovery issues be
7 as specific as possible and that the solutions be
8 creative and specific as possible.

9 MR. TAIT: I would hope that -- I would
10 hope that the counsel for the discovery parties would
11 make a bona fide effort to resolve their issues before
12 9:30 on Thursday morning.

13 CHAIRMAN KATZ: Yes. I'd like to highly
14 encourage that dialogue.

15 MR. TAIT: If there's information that
16 they need and if it can't be resolved soon, when is it
17 resolvable and we need not have that sort of dispute to
18 delay this proceeding.

19 CHAIRMAN KATZ: Is there any other
20 procedural matters we need to take up today? (No audible
21 reply). We are in adjournment until 10:00 a.m. tomorrow
22 morning.

23 (Whereupon, the hearing adjourned at 3:50
24 p.m.)

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