

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

May 8, 2012 - 9:10 a.m.
Concord, New Hampshire

DAY 3
MORNING SESSION ONLY

NHPUC MAY23'12 PM 4:26

RE: DE 10-261
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE:
Least Cost Integrated Resource Plan.

PRESENT: Commissioner Michael D. Harrington, Presiding
Commissioner Robert R. Scott

F. Anne Ross, General Counsel

Sandy Deno, Clerk

APPEARANCES: Reptg. Public Service Co. of New Hampshire:
Gerald M. Eaton, Esq.
Sarah B. Knowlton, Esq.

Reptg. TransCanada:
Douglas L. Patch, Esq. (Orr & Reno)

Reptg. Granite Ridge Energy:
Howard M. Moffett, Esq. (Orr & Reno)

Reptg. N.H. Sierra Club:
Arthur B. Cunningham, Esq.

Reptg. Conservation Law Foundation:
N. Jonathan Peress, Esq.

Court Reporter: Steven E. Patnaude, LCR No. 52

ORIGINAL

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

APPEARANCES: (C o n t i n u e d)

Reptg. Office of Energy & Planning:
Eric Steltzer

Reptg. Residential Ratepayers:
Rorie E. P. Hollenberg, Esq.
Kenneth E. Traum
Office of Consumer Advocate

Reptg. the PUC Staff:
Alexander Speidel, Esq.
George R. McCluskey, Electric Division
Edward Arnold (Jacobs Consultancy)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

E X H I B I T S

EXHIBIT NO.	D E S C R I P T I O N	PAGE NO.
PSNH 8	Joint Rebuttal Testimony of Richard Levitan & Richard Carlson, including attachments (10-26-11)	11
PSNH 9	Exhibit LAI-7 to the Rebuttal Testimony of Richard Levitan and Richard Carlson (CONFIDENTIAL & PROPRIETARY)	20
PSNH 10	REDACTED VERSION of PSNH Newington CUO Study Modeling System Overview (05-03-12)	21
PSNH 11	PSNH Response to NHPUC Technical Session TS-02, Q-TECH-007 (06-22-11)	23
PSNH 12	Revised pages to the Newington Station CUO Study, including redlined pages and clean pages (07-08-11)	24
Staff 5	PSNH Responses to Data Request STAFF-04, Q-STAFF-002 and Q-STAFF-003 (12-13-11)	69
Staff 6	Document entitled "Economic Assessment of NSTAR's Third 345 kV Transmission Line from Carver to Cape Cod" prepared by Levitan & Associates (06-01-10)	83

1 **P R O C E E D I N G**

2 CMSR. HARRINGTON: Good morning. As you
3 can see, Chairman Ignatius is not here this morning,
4 because she had an illness in the family that I guess --
5 okay. So, obviously, she won't be with us this morning.

6 So, we'll open the hearing in Docket DE
7 261, Public Service Company of New Hampshire, 2010 Least
8 Cost Integrated Resource Plan. As far as procedural
9 matters go, I believe there's one issue left from last
10 week, which was -- from the last meeting, which was a
11 request by Public Service to put some of their witnesses
12 back on the stand. This is something we don't normally
13 do, and we don't see a need for making an exception in
14 this case. So, that request is going to be denied.

15 Which means today we'll start out,
16 unless anyone -- does anyone have anything else they wish
17 to bring up at this time? And, you got to help me here,
18 guys, because this is amateur hour, okay?

19 MR. SPEIDEL: Yes, Commissioner
20 Harrington. Just two very quick things. There was a
21 little bit of discussion in the hearing room among the
22 parties about the order of cross-examination of the
23 Company's witnesses.

24 CMSR. HARRINGTON: Yes.

1 MR. SPEIDEL: And, we think that we can
2 proceed with an order as follows: It would be Staff,
3 TransCanada, Granite Ridge, Sierra Club, Conservation Law
4 Foundation, the New Hampshire Office of Energy & Planning,
5 and the Office of the Consumer Advocate. And, not every
6 party may wish to engage in cross-examination, but that
7 would be the order that we would like to propose.

8 CMSR. HARRINGTON: Does anyone have an
9 objection to that?

10 (No verbal response)

11 CMSR. HARRINGTON: Okay. Then, we'll do
12 it in that order. Okay. Go ahead and swear the witnesses
13 in and we'll proceed.

14 (Whereupon **Terrance J. Large**, **William**
15 **H. Smagula** and **Elizabeth H. Tillotson**
16 were recalled to the stand having been
17 previously sworn, and **Richard L. Levitan**
18 and **Richard L. Carlson** were called to
19 the stand and duly sworn by the Court
20 Reporter.)

21 CMSR. HARRINGTON: And, just remind the
22 witnesses, the other people are also under oath.

23 MR. SPEIDEL: And, I'm terribly sorry,
24 Commissioners, but may I take a 90 second recess, just

1 quickly?

2 CMSR. HARRINGTON: Certainly.

3 MR. SPEIDEL: Thank you very much.

4 CMSR. HARRINGTON: I'm glad someone else
5 is confused.

6 (Short pause.)

7 CMSR. HARRINGTON: Go back on the record
8 then?

9 MR. SPEIDEL: Yes. Thank you.

10 CMSR. HARRINGTON: Staff will start with
11 cross.

12 MR. SPEIDEL: All righty.

13 MS. KNOWLTON: Alex, before you start
14 with them --

15 MR. SPEIDEL: Sure.

16 MS. KNOWLTON: Before the Staff starts
17 with its examination, I need to qualify two of the
18 witnesses. And, then, also there's two -- excuse me,
19 three of the Company witnesses that I just want them to
20 identify for the record what their role in the CUO was,
21 and then we'll make them available for cross-examination,
22 --

23 CMSR. HARRINGTON: Sure.

24 MS. KNOWLTON: -- if it's okay to

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 proceed in that manner? Thank you. And, what I'll do is
2 I'll start with, since Ms. Tillotson, Mr. Smagula, and Mr.
3 Large have already been sworn in and their testimony has
4 already been identified, if I may, what I'd like to do is
5 start by qualifying Mr. Levitan and Dr. Carlson?

6 CMSR. HARRINGTON: Certainly.

7 **TERRANCE J. LARGE, Previously sworn**

8 **WILLIAM H. SMAGULA, Previously sworn**

9 **ELIZABETH H. TILLOTSON, Previously sworn**

10 **RICHARD L. LEVITAN, SWORN**

11 **RICHARD L. CARLSON, SWORN**

12 **DIRECT EXAMINATION**

13 BY MS. KNOWLTON:

14 Q. So, I'll start with you, Mr. Levitan. If you would
15 state your full name for the record please.

16 A. (Levitan) My name is Richard Levitan.

17 Q. And, by whom are you employed?

18 A. (Levitan) I am employed by Levitan & Associates.

19 Q. What is your role with that company?

20 A. (Levitan) I am the President and Principal of the firm.

21 Q. What are your educational qualifications?

22 A. (Levitan) I completed my undergraduate degree at
23 Cornell University with a BA in Liberal Arts. I went
24 to the Kennedy School at Harvard University, where I

1 graduated with a degree specializing in Energy
2 Economics.

3 Q. And, would you briefly describe what kind of work you
4 engage in at Levitan, what your areas of expertise are?

5 A. (Levitan) The firm is known for doing technical,
6 economic, mathematical, and engineering analyses of
7 generation and transmission assets throughout the
8 United States. We specialize in the valuation of
9 generation resources, as well as both HVDC transmission
10 projects and large backbone transmission projects that
11 are AC in nature. We specialize also in the
12 procurement of wholesale energy. And, in that regard,
13 represent state commissions throughout the United
14 States, such as Maryland, California Public Utilities
15 Commission, the State of Connecticut PURA, as well as
16 other state entities that rely on us for conventional
17 resource procurement or the structuring of long-term
18 renewable contracts. We have also worked with private
19 equity investors and debt lenders for the valuation of
20 generation assets, both portfolio of conventional
21 resources and renewable resources. Lastly, I'd like to
22 state that, in my project management role, I have been
23 responsible for a number of resource planning studies
24 that have been conducted for ISO-New England and the

1 other independent system operators in the greater
2 Northeast, including Ontario, as it pertains to the
3 pipeline and storage infrastructure adequacy to serve
4 both core LDC loads and non-core power loads, when
5 there are conditions of constraints or outage
6 contingencies. I have testified many dozens of times
7 before FERC and state commissions or provincial
8 commissions throughout North America.

9 Q. Mr. Levitan, are you familiar with the Continuing Unit
10 Operation Study of Newington Station that is included
11 in what was marked in this case as "PSNH Exhibit 1"?

12 A. (Levitan) Yes, I am.

13 Q. And, in particular, Bates Pages 180 through 237
14 constitute the CUO, is that correct?

15 A. (Levitan) That is correct.

16 Q. And, what was your role in the development of that
17 document?

18 A. (Levitan) As responsible officer on the matter, I was
19 directly involved with the design of the methodology
20 and the financial and engineering and mathematical
21 analyses supporting the Real Option Valuation that was
22 completed. I worked very closely, every step of the
23 way, with Dr. Carlson, who took on direct management
24 responsibilities for much of the analytic efforts and

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 database management effort. I also was primarily the
2 architect in formulating the capacity price forecasts
3 under the Forward Capacity Market that is an integral
4 part of the valuation exercise, amongst other things
5 pertaining to fuel and market structure.

6 Q. Thank you. And, Mr. Levitan, did you and Dr. Carlson
7 file testimony, rebuttal testimony in this case?

8 A. (Levitan) Yes, we did.

9 MS. KNOWLTON: I'd like to propose that
10 we mark for identification as "PSNH Number 8" Mr. Levitan
11 and Dr. Carl's rebuttal testimony.

12 (Atty. Eaton distributing documents.)

13 CMSR. HARRINGTON: Any objections to
14 marking this as requested?

15 (No verbal response)

16 CMSR. HARRINGTON: Okay. So, that will
17 be number "8" for Public Service.

18 MS. DENO: Yes.

19 (The document, as described, was
20 herewith marked as **PSNH Exhibit 8** for
21 identification.)

22 BY MS. KNOWLTON:

23 Q. Mr. Levitan, do you have that testimony before you?

24 A. (Levitan) Yes, I do.

1 Q. Do you have any clarifications or corrections to that
2 testimony?

3 A. (Levitan) We do. And, I'm going to defer to my
4 colleague, Dr. Carlson, to read into the record the
5 various corrections and errata that we'd like to make
6 at this time.

7 Q. Okay. And, so, what I would -- let me qualify Dr.
8 Carlson, if I may, before we do that, and then I'll
9 come back to you and ask you whether you adopt that
10 testimony with those clarifications as your testimony
11 today. So, if I may, Dr. Carlson, if you would state
12 your full name for the record please.

13 A. (Carlson) It's Richard L. Carlson.

14 Q. And, by whom are you employed?

15 A. (Carlson) I'm employed by Levitan & Associates, Inc.

16 Q. What is your position with Levitan & Associates?

17 A. (Carlson) My job title is "Managing Consultant".

18 Q. What does your job -- what do your job duties include
19 in that capacity?

20 A. (Carlson) My job responsibilities are mainly in various
21 types of planning projects as an economic and
22 quantitative analyst. I've been employed by Levitan &
23 Associates for nearly four years now, and have worked
24 on a wide variety of projects involving energy,

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 capacity, and REC markets in various RTO/ISO regions
2 around the country. Have worked on an independent
3 evaluation of the electric procurement strategy on
4 behalf of the Connecticut Department of Public
5 Utilities Commission, or the newer Public Utility
6 Regulatory Agency, and for the Illinois Power Agency
7 Commission. I've also worked on both natural gas and
8 power procurement on behalf of the California Public
9 Utilities Commission. I've worked on a number of
10 economic valuations of existing and new power plant
11 projects on behalf of investors, including both thermal
12 projects and wind generation projects. And, have
13 worked over the past year for the New Jersey Board of
14 Public Utilities and the procurement of capacity
15 contracts for differences from new power generating
16 facilities. And, then, more recently have worked on
17 two merger cases, doing cost/benefit analysis; the
18 Constellation-Exelon merger, and, more recently, the
19 NSTAR --

20 (Court reporter interruption.)

21 WITNESS CARLSON: Constellation-Exelon
22 merger --

23 CMSR. HARRINGTON: Excuse me. Mr.
24 Patch.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 MR. PATCH: I'm just having a problem
2 hearing the witnesses. I don't know if they could get a
3 little closer to the microphone. I think the court
4 reporter is having the same problem.

5 **BY THE WITNESS:**

6 A. (Carlson) To continue, --

7 CMSR. HARRINGTON: I think you need to
8 get this close.

9 MS. KNOWLTON: Yes. Pull it a little
10 bit closer to you.

11 **BY THE WITNESS:**

12 A. (Carlson) The Constellation-Exelon merger and, more
13 recently, the NSTAR-NU merger.

14 BY MS. KNOWLTON:

15 Q. Would you state for the record your educational
16 qualifications please.

17 A. (Carlson) I obtained a Bachelor of Science degree in
18 Agricultural Economics from Washington State
19 University, also received there a Master of Arts in
20 Agricultural Economics, with an emphasis in Resource
21 Economics. And, then, I received my Ph.D from the
22 University of Wisconsin, also in Natural Resource
23 Economics.

24 Q. Dr. Carlson, are you familiar with the CUO part of

1 Exhibit 1, Bates Pages 180 to 237?

2 A. (Carlson) Yes, I am.

3 Q. Would you identify what your role was with regard to
4 that document.

5 A. (Carlson) My role was primarily to lead development of
6 a quantitative analysis framework for the project, and
7 to supervise the data management and model development
8 of analysis activities done by other team members. I
9 personally performed the statistical volatility and
10 correlation analysis, and, along with Mr. Levitan, was
11 a principal contact in communications with our client.

12 Q. We've marked for identification as "PSNH Exhibit 8"
13 your testimony that -- your joint testimony, rebuttal
14 testimony of you and Mr. Levitan. Do you have that
15 before you?

16 A. (Carlson) Yes, I do.

17 Q. And, was that testimony prepared by you or under your
18 direction?

19 A. (Carlson) Yes, it was.

20 Q. Do you have any corrections or clarifications to that
21 testimony?

22 A. (Carlson) Yes. There are a couple. Starting on Page
23 12, we wanted to --

24 Q. And, actually, if I might interrupt you for a second,

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 is that Bates Page 012 or just the numbered "Page 12"
2 at the bottom?

3 A. (Carlson) The numbered "Page 12" at the bottom.

4 MS. KNOWLTON: Okay. And, for those who
5 have a Bates numbered version, it's Bates Page 014.

6 BY MS. KNOWLTON:

7 Q. You may continue.

8 A. (Carlson) Okay. As a preface in preparing for this
9 hearing and rereading one of the answers on this
10 Page 12, we decided that a more extensive answer would
11 be more complete. So, I'll read now what that
12 additional language will be. On Line 17, after the
13 word "retain", in the middle of the sentence, we would
14 like to insert "proprietary information, which could
15 include". Then, on Line 18, between "source" and
16 "documentation", insert the word "code".

17 CMSR. SCOTT: Could you repeat that
18 please. Insert the word --

19 WITNESS CARLSON: On Line 18, where it
20 says "and source documentation", to insert the word "code"
21 after "source".

22 **BY THE WITNESS:**

23 A. (Carlson) Then, on Line 26, at the end of the sentence
24 that ends in "code", to continue the sentence with

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 these words: "and allow indefinite retention of one
2 archival copy of covered confidential information
3 solely" --

4 CMSR. HARRINGTON: Excuse me. Could you
5 slow down just a little bit.

6 WITNESS CARLSON: Okay.

7 CMSR. HARRINGTON: Because we're trying
8 to write this, and we're nowhere near as fast as Steve is.
9 So, --

10 WITNESS CARLSON: Okay. I'll start
11 again.

12 **BY THE WITNESS:**

13 A. (Carlson) "and allow indefinite retention of one
14 archival copy of covered confidential information
15 solely for Jacobs' legal purposes", still a period
16 there. Then, moving to the start of the next sentence
17 that says "Jacobs", to begin the sentence with
18 "Evidenced by no reply to LAI,".

19 BY MS. KNOWLTON:

20 Q. Do you have any other clarifications or corrections to
21 the testimony?

22 A. (Carlson) Yes, we do.

23 CMSR. HARRINGTON: Is this going to be
24 really extensive?

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 WITNESS CARLSON: No, it's not.

2 CMSR. HARRINGTON: It may be better if
3 we had it in writing.

4 WITNESS CARLSON: No. The others are
5 not.

6 **BY THE WITNESS:**

7 A. (Carlson) On Bates Page 018, Line 41, at the end of the
8 line, add "price" after "capacity". Then, moving to
9 Bates Page 028, Line 26, the second to the last word
10 was "higher". Replace "higher" with "heat".

11 BY MS. KNOWLTON:

12 Q. Could you repeat that line number again.

13 A. (Carlson) Line 26. At the end of the sentence, where
14 it says "lower higher rate", to change that to "lower
15 heat rate".

16 Q. And, if you would just -- I see. So, it's Bates
17 Page 028, Line 26?

18 A. (Carlson) Correct.

19 MR. SPEIDEL: Dr. Carlson, there had
20 been a correction you made to Page 18, or Bates Page 020.
21 Could you just go back to that for us please.

22 WITNESS CARLSON: It was Bates Page 018.

23 MR. SPEIDEL: Bates Page 018.

24 WITNESS CARLSON: Line 41.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 MR. SPEIDEL: Forty-one.

2 WITNESS CARLSON: Add the word "price"
3 at the end of the line.

4 BY MS. KNOWLTON:

5 Q. And, why don't you read that whole question into the
6 record with the additional word. That may be easy for
7 us to follow that way.

8 A. (Carlson) The question would read: "Mr. Hachey asserts
9 that LAI should have included the Northern Pass
10 Transmission (NPT) project's impacts in its Low and
11 Medium capacity price cases".

12 MR. SPEIDEL: Thank you.

13 MS. KNOWLTON: Thank you.

14 BY MS. KNOWLTON:

15 Q. Do you have any other corrections or clarifications?

16 A. (Carlson) No other corrections.

17 Q. And, with those, do you adopt this testimony today as
18 your testimony?

19 A. (Levitan) Yes, we do.

20 A. (Carlson) Yes.

21 MS. KNOWLTON: I would also like to
22 propose that we mark for identification as "PSNH
23 Exhibit 9", there is an exhibit to the LAI testimony,
24 LAI-7, which was confidential. There was a Motion for

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Protective Treatment that was filed with regard to that
2 exhibit, and it was -- the order granting confidential
3 treatment to that exhibit was granted. And, so, I just
4 wanted to mark that Exhibit 7 separately, if I may. And,
5 we have copies to provide to the Commissioners, as Exhibit
6 --

7 CMSR. HARRINGTON: I'm sorry. Did you
8 say this would be "7"?

9 MS. KNOWLTON: Nine.

10 CMSR. HARRINGTON: Nine. All right.

11 MS. KNOWLTON: I'm sorry, 9. It's LAI
12 -- it's Exhibit 7 to the LAI rebuttal testimony.

13 (Atty. Eaton distributing documents.)

14 CMSR. HARRINGTON: This is the
15 October 26, 2011, Public Service, marked "confidential",
16 which is Levitan & Associates?

17 MS. KNOWLTON: Yes. That's the
18 confidential version.

19 (The document, as described, was
20 herewith marked as **Exhibit PSNH 9** for
21 identification.)

22 MS. KNOWLTON: And, then, we propose to
23 mark for identification as "PSNH Exhibit 10" the redacted
24 version of LAI-7, a public version.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 CMSR. HARRINGTON: Okay. And, that's
2 the way one that's dated May 3rd, 2012?

3 MS. KNOWLTON: That's correct.

4 CMSR. HARRINGTON: And, you want that
5 marked "PSNH Exhibit 10"?

6 MS. KNOWLTON: Thank you. Yes.

7 CMSR. HARRINGTON: Okay. Without any
8 objections, we'll go ahead with that.

9 (The document, as described, was
10 herewith marked as **Exhibit PSNH 10** for
11 identification.)

12 MS. KNOWLTON: Thank you. The Company
13 then would like to mark for identification as "PSNH
14 Exhibit 11" a revision to Exhibit LAI-12, which had
15 previously been filed with the Commission.

16 (Atty. Eaton distributing documents.)

17 CMSR. HARRINGTON: And, this is dated
18 "July 8th, 2011" cover letter, and it's titled "Redlined
19 pages"?

20 MS. KNOWLTON: No, I'm sorry. I'm
21 sorry, I think you have the wrong document. That we would
22 like to mark as "Exhibit 12". Let me find the exhibit.

23 CMSR. HARRINGTON: We'd like to slow
24 down just a little bit.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 MS. KNOWLTON: Yes.

2 CMSR. HARRINGTON: And, why don't we go
3 back to 11, and find out what we're supposed to have for
4 11.

5 MS. KNOWLTON: Yes. I'm going to see if
6 I can lay hands on that.

7 CMSR. HARRINGTON: Are you sure the
8 July 8th one -- it was given to the Clerk as "Exhibit 11"?

9 MS. KNOWLTON: Yes. I apologize. We
10 would like to mark that, but that's not "Revised LAI-12."

11 CMSR. HARRINGTON: Okay.

12 MS. KNOWLTON: I apologize. Yes.
13 Sorry. I apologize. I'm operating one-handed and with
14 Mr. Eaton's hands. And, so, I need to slow down a little
15 bit.

16 CMSR. HARRINGTON: No problem.

17 MS. KNOWLTON: So, Mr. Eaton will --
18 this has been distributed to the parties previously, and
19 it's been filed with the Commission.

20 CMSR. HARRINGTON: What number is this
21 going to be?

22 MS. KNOWLTON: This would be "PSNH 11".
23 (Atty. Eaton distributing documents.)

24 MS. KNOWLTON: It's Exhibit 12 to the

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 LAI rebuttal testimony, and we're proposing that we --
2 it's been revised. If you look at the LAI rebuttal
3 testimony, you'll see that there is an Exhibit 12. It was
4 subsequently revised and send to the Commission and the
5 parties. And, so, I just, because it was filed
6 independently, I would like to mark that document as a
7 separate exhibit.

8 CMSR. HARRINGTON: So, we're clear, this
9 is dated "6/22/2011", "Technical Session TS-02", "Richard
10 Levitan", "New Hampshire Public Utilities Staff" --
11 responding to a Staff question. Starts out "Re-run the
12 Levitan Newington CUO Study model with the following data
13 input changes:" Is that correct?

14 MS. KNOWLTON: Yes. That is correct.

15 CMSR. HARRINGTON: And, that will be
16 marked as "11"?

17 MS. KNOWLTON: Yes. Thank you. "PSNH
18 11".

19 (The document, as described, was
20 herewith marked as **Exhibit PSNH 11** for
21 identification.)

22 MS. KNOWLTON: And, then, the July 8th
23 letter that you have before you, we will propose to mark
24 for identification as "PSNH 12".

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 CMSR. HARRINGTON: And, that's the one
2 that's titled "Redlined pages", after the cover letter?

3 MS. KNOWLTON: Yes. Thank you.

4 CMSR. HARRINGTON: Okay. That will be
5 marked "12". Okay.

6 (The document, as described, was
7 herewith marked as **Exhibit PSNH 12** for
8 identification.)

9 MS. KNOWLTON: So, if I may, I would
10 just like to walk the witnesses through those exhibits
11 that we've marked for identification, and then I will make
12 the panel available for cross-examination.

13 MR. SPEIDEL: Before we do, would it be
14 possible for me just to take a quick glance at PSNH 11 and
15 PSNH 12, to see what you're marking?

16 MS. KNOWLTON: Sure.

17 MR. PATCH: Yes. Just to note for the
18 record, none of us have copies --

19 CMSR. HARRINGTON: Oh, nobody has copies
20 --

21 MS. KNOWLTON: Yes. They were
22 distributed. I apologize. PSNH 12, which is the redacted
23 version of LAI-7, Mr. Eaton sent to all of the parties and
24 the Commission in the case last week.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 MR. PATCH: Wasn't that number 10? I
2 thought that was Exhibit 10?

3 MR. SPEIDEL: Yes. The public version
4 of LAI-7 was PSNH 10.

5 MS. KNOWLTON: I'm sorry, 10.

6 MR. SPEIDEL: So, 11 --

7 (Court reporter interruption.)

8 CMSR. HARRINGTON: One at a time please.

9 MR. SPEIDEL: Yes. So, PSNH 11 submits
10 a re-run, and I have a similar version of this as a form
11 of a Staff exhibit that I would have submitted. Would
12 this happen to be the response to Tech Session Question 2,
13 with the cover letter dated "July 12, 2011"?

14 MS. KNOWLTON: Yes.

15 CMSR. HARRINGTON: Excuse me. Excuse
16 me. Maybe we should stop for a minute here and go off the
17 record, --

18 MS. KNOWLTON: Okay. Thank you.

19 CMSR. HARRINGTON: -- and get these
20 numbers straightened out here. So, we're off the record.

21 (Brief off-the-record discussion
22 ensued.)

23 CMSR. HARRINGTON: Okay. Let's go back
24 on the record. Are there any objections to the filing of

1 these?

2 (No verbal response)

3 CMSR. HARRINGTON: Seeing none, let's
4 just go over the list one more time please, so everybody
5 is clear as to what is what. "8" is "State of New
6 Hampshire before the New Hampshire PUC, Docket DE 10-261,
7 dated October 26, 2011, Joint Rebuttal Testimony of
8 Richard Levitan and Dr. Richard Carlson". Is that
9 correct?

10 MS. KNOWLTON: That's correct.

11 CMSR. HARRINGTON: Okay. And, then, "9"
12 is also dated October 26, and it's marked "confidential".
13 Cover page is a letter to Debra Howland from Gerald Eaton,
14 "PSNH 2010 Least Cost Integrated Resource Plan New
15 Hampshire PUC Docket DE 10-261", and that's followed by
16 what's titled "LAI Exhibit 7 Newington Station Continuing
17 Unit Operation Study". This is the confidential version,
18 is that correct?

19 MS. KNOWLTON: Yes, that is. Okay.

20 CMSR. HARRINGTON: And, then, "Public
21 Service 10", that's again a letter to Debra Howland from
22 Gerald Eaton, dated "May 3rd, 2012", and it's "Newington
23 Station Continuing Unit Operation Study", and this is the
24 redacted version from Levitan & Associates, is that

1 correct?

2 MS. KNOWLTON: Correct.

3 CMSR. HARRINGTON: And, "11" is titled
4 "Technical Session TS-02", dated "06/22/2011", and it's a
5 response by Richard Levitan from a question from the
6 Public Utilities Staff, is that correct?

7 MS. KNOWLTON: That's correct.

8 CMSR. HARRINGTON: Okay. And, then,
9 "12", dated 2000 -- I mean, excuse me, "July 8, 2011", and
10 it's a cover letter to Debra Howland from Terrance Large.
11 And, it's -- the third page on that is titled "Redlined
12 pages"?

13 MS. KNOWLTON: Correct.

14 CMSR. HARRINGTON: Okay. So, is
15 everybody all squared away with these now then?

16 (No verbal response)

17 CMSR. HARRINGTON: All right. Then,
18 let's continue please.

19 BY MS. KNOWLTON:

20 Q. Mr. Levitan and Dr. Carlson, looking at exhibits --
21 what's been marked as "PSNH 9", "10", and "11", these
22 are exhibits to your testimony. I just want to be
23 clear for the record that, when you were adopting your
24 testimony, does it include these exhibits that we just

1 marked?

2 A. (Levitan) They do.

3 Q. And, Dr. Carlson, do you adopt the testimony with those
4 exhibits as well?

5 A. (Carlson) Yes, I do.

6 Q. Mr. Large, I'll turn to you now. If you would please
7 state briefly what your role has been with regard to
8 the CUO.

9 A. (Large) Yes. My responsibilities as relates to the CUO
10 is to oversee its development and submittal here to the
11 Public Utilities Commission, in response to the
12 Commission's order that required us to file such a
13 study.

14 Q. Do you have before you the July 8th, 2011 letter that
15 has been marked as "PSNH 12"?

16 A. (Large) I do, yes.

17 Q. And, would you identify what this document is.

18 A. (Large) It's providing revised information associated
19 with two items that relate to the historical
20 information presented in the CUO filing that PSNH was
21 responsible for providing to Levitan.

22 Q. And, attached to this document are revised pages to the
23 CUO?

24 A. (Large) That is correct.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Q. And, those changes are reflected in redline, as well as
2 in clean form, in that document?

3 A. (Large) That is correct.

4 Q. Do you have any corrections or clarifications that
5 relate to this July 8th filing?

6 A. (Large) Yes, I do. If we work from PSNH 12 as the
7 basis, if I could suggest that we work from the
8 redlined version, what is marked as "Bates Page 196".
9 In a response to a Staff data request, Set 1, Question
10 56, we've identified that there are some numbers that
11 show up in the column for year 2007 that should be
12 revised. Bates Page 196, the "2007" column.

13 CMSR. HARRINGTON: This would be
14 "Exhibit G.1: Recent Revenue Requirements"?

15 WITNESS LARGE: Yes, Commissioner. And,
16 with your indulgence, I will provide you with those pieces
17 of information now.

18 **BY THE WITNESS:**

19 A. (Large) Going down to the line of "Gross Plant Value",
20 about a third of the way in that exhibit, the round
21 number of "160,000", in thousands of dollars, so
22 "160,000", should be revised to be "141,546". And,
23 this information is all consistent with what was
24 provided in the response to the Staff Data Request Set

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

1 1-56. The next line down, "Accumulated Depreciation",
2 rather than "99,000", should be "77,234". The
3 resulting subtraction for "Net Plant Value", rather
4 than "61,000", should be "64,312". No further
5 adjustments until you come to the "Total Rate Base"
6 line. Should not be "82,370", instead "85,682".
7 "Return on Rate Base" line, strike "9,168", and replace
8 with "9,536". Then, the resulting "Revenue
9 Requirements", take out "51,933", and replace with
10 "52,301".

11 Now, these numbers carry forward onto
12 Bates Page 202, "Exhibit G.2". And, if we're ready?
13 So, Line (a), "Net Plant Value", in the column for year
14 "2007", replace "61,000" with "64,312". Line (f),
15 "Total Return on Rate Base", we would replace "9,168"
16 with "9,536". Line (g), "Less Return on Rate Base Net
17 Plant Value", replace "6,789", pardon me, with "7,158".

18 BY MS. KNOWLTON:

19 Q. Mr. Smagula, I'll turn to you next. If you would
20 briefly identify what your role in the CUO has been?

21 A. (Smagula) My role as Director of Generation has to do
22 with the management, operations and maintenance of all
23 of our generating facilities. As a result, I have
24 intimate knowledge of the operations and activities at

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Newington Station, and either participated personally
2 or oversaw the data that was supplied to the CUO Study.

3 Q. Ms. Tillotson, I would ask you to do the same. Would
4 you identify your role in the CUO Study?

5 A. (Tillotson) Yes. Similar to Mr. Smagula, as
6 appropriate, we provided data or responded to questions
7 as the CUO was being developed.

8 MS. KNOWLTON: I, at this point, would
9 make the witnesses available for cross-examination.

10 CMSR. HARRINGTON: Okay. Thank you. I
11 believe the order was Staff was going to cross-examine
12 first?

13 MR. SPEIDEL: That is correct. Thank
14 you, Commissioner Harrington.

15 **CROSS-EXAMINATION**

16 BY MR. SPEIDEL:

17 Q. Dr. Carlson, can we please turn to Page 44, that is the
18 ordinary "Page 44", not Bates Page 044, of the original
19 Newington Station Continuing Unit Operation Study
20 prepared under your direction?

21 CMSR. HARRINGTON: Excuse me. Could you
22 identify that a little bit further? Is this "Appendix G"?

23 MR. SPEIDEL: That is correct. And,
24 that would be at the back of PSNH Exhibit 1, which was the

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 original filing of September 30th, 2011 -- 2010, I'm
2 sorry.

3 CMSR. HARRINGTON: And, what was the
4 page number again?

5 MR. SPEIDEL: Forty-four.

6 MR. PATCH: Could I just ask a question?

7 CMSR. HARRINGTON: Certainly.

8 MR. PATCH: Could we just be clear if
9 we're talking about the original or the revised dated
10 April 26, 2011?

11 MR. SPEIDEL: We are talking about the
12 original.

13 MR. PATCH: Okay. Thank you.

14 CMSR. HARRINGTON: It's part of
15 Exhibit 1.

16 MR. PATCH: Oh, that's right. There are
17 revised pages to that, though. I just wanted to make sure
18 we were clear about which of these documents.

19 MR. SPEIDEL: Yes. We're talking about
20 the original Newington Station Continuing Unit Operation
21 Study.

22 BY MR. SPEIDEL:

23 Q. Do you see "Exhibit G.12", Dr. Carlson?

24 A. (Carlson) Yes. I have it now.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Q. Okay. Can you see the figure that can be found in the
2 lower left-hand corner, the so-called "Present Value
3 EOY 2010 Net Revenue Requirement" figure in
4 parentheses? "EOY" meaning "end of the year".

5 A. (Carlson) Yes.

6 Q. That amounts to \$152.3 million?

7 A. (Carlson) That is correct.

8 Q. Does this figure represent the incremental benefit to
9 customers or, in other words, the reduction in the
10 Company's incremental revenue requirements attributable
11 to Newington Station's remaining in operation through
12 the ten-year study period, or 2010 to '20?

13 A. (Carlson) Yes. It's a net present value calculation.
14 So, the negative values there would indicate a positive
15 value to customers.

16 Q. Does this mean that the original CUO, which was
17 submitted in September of 2010, predicted an economic
18 benefit to PSNH customers of \$152.3 million through
19 2020?

20 A. (Carlson) The number shown here was the average of 250
21 scenarios. So, when you use the word "predict", it is
22 not a deterministic or single scenario type of
23 prediction. It's the average over a large number of
24 scenarios; some with higher values, some with lower

1 values. And, in this particular case, most had lower
2 values.

3 Q. Would you be willing to concede that the expected value
4 of those scenarios, those outcomes, was 152.3 million
5 through 2020?

6 A. (Carlson) Yes.

7 Q. Thank you. Dr. Carlson, through its participation in
8 technical sessions and its review of discovery requests
9 in this docket, did Levitan & Associates uncover some
10 modeling errors in its Newington CUO Study?

11 A. (Carlson) Yes, we did.

12 Q. And, now, Mr. Large, did you send a submission to the
13 Commission's Executive Director, Debra Howland, on
14 April 26, 2011, which has been marked as "PSNH
15 Exhibit 2"?

16 A. (Large) I am confident that I did. I have the revised
17 April 25, 2011 Levitan Study with me.

18 Q. Very good. Since you have that on hand, can we turn to
19 Page 44, or Bates Page 227, of PSNH Exhibit 2, which is
20 revised Exhibit G.12?

21 CMSR. HARRINGTON: Excuse me. You're at
22 PSNH Exhibit 2?

23 MR. SPEIDEL: Yes. PSNH Exhibit 2.

24 And, the specific page would be Page 44, or Bates

1 Page 227.

2 BY MR. SPEIDEL:

3 Q. Okay. And, so, this submission, Mr. Large, it presents
4 corrections to three errors in the model design for the
5 original Newington CUO Study, is that correct?

6 A. (Large) Could you identify what you're referring to as
7 the three? I don't have the cover letter with me, so
8 --

9 Q. Well, let's just direct it in this direction. What is
10 the figure in the lower left-hand corner, next to "Net
11 Revenue Requirement", read on Exhibit G.12?
12 \$71.4 million perhaps?

13 A. (Large) That is what it states, yes.

14 Q. Okay. So, as of April 26, 2011, the Company presented
15 a revised predicted economic benefit expected value to
16 PSNH customers attributable to the continued operation
17 of Newington Station through 2020 of \$71.4 million, is
18 that correct?

19 MS. KNOWLTON: And, actually, before Mr.
20 Large answers that question, I just would like to put
21 before him a copy of Exhibit 2, so he can have the full
22 exhibit to look at, if I may?

23 MR. SPEIDEL: Sure.

24 CMSR. HARRINGTON: Sure.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 MR. SPEIDEL: That's fine.

2 MR. PATCH: Mr. Chairman, I mean, it
3 appears --

4 (Court reporter interruption.)

5 MR. PATCH: Okay. I'll speak in the
6 microphone.

7 CMSR. HARRINGTON: Go ahead, Mr. Patch.

8 MR. PATCH: It appears to me that the
9 witnesses are conferring about the response. And, I'm not
10 sure if that's acceptable to the Commission to be doing
11 that. But, if there's a question of a particular witness,
12 it would seem as though they ought to answer it, rather
13 than conferring about the response. I'm not sure what
14 your pleasure is on that.

15 CMSR. HARRINGTON: Do you wish to make
16 an objection?

17 MR. PATCH: No. I just wanted to note
18 that for the record, I guess.

19 CMSR. HARRINGTON: Okay. So noted.

20 MR. SPEIDEL: Well, yes. Staff would
21 prefer if the witnesses could answer fluidly over the
22 course of the proceeding so as to save time. I won't
23 formally object at the present time. But I would ask that
24 we move along and formulate fairly quick responses.

1 BY MR. SPEIDEL:

2 Q. So, the "Net Revenue Requirement" figure on the revised
3 Exhibit G.12 reads "\$71.4 million". So, as of -- Mr.
4 Large, so, as of April 26, 2011, did the Company
5 present a revised predicted economic benefit to PSNH
6 customers attributable to the continued operation of
7 Newington Station through 2020 of \$71.4 million, is
8 that correct?

9 A. (Large) With the characterization that Dr. Carlson made
10 with respect to "predicted", it wasn't really a
11 "predicted" value. But the net revenue requirement
12 expected value is 71.469 million, yes.

13 Q. Very good. So, Dr. Carlson, would you be able to
14 provide a brief summary of the three errors that had
15 been corrected through the submission of PSNH
16 Exhibit 2?

17 A. (Carlson) Yes, I can. We examined the model data
18 inputs and the model equations after the first
19 technical session. And, as a result, the first thing
20 uncovered was a difference between two forms of data
21 provided to Levitan by the Company characterizing the
22 heat rate curve. So, that issue was a data correction
23 issue.

24 The second two issues had to do with the

1 model equations handling the formation of energy
2 prices. And, they were separate errors, but in the
3 same part of the model that did the power price
4 simulation. So, one of those errors was a, not to be
5 too technical, a non-linear calibration feature, which
6 was absent. The larger error had to do with the
7 simulation of historical hourly patterns to overlay on
8 top of daily price indexes.

9 Q. Thank you very much, Dr. Carlson. Also, Dr. Carlson,
10 did your firm, at Staff's request, perform a re-run of
11 the revised model, to correct additional modeling
12 errors relating to higher start-up fuel costs, the
13 costs of heating fuel to prevent the boiler from
14 freezing during the winter months, and higher natural
15 gas costs, which has been submitted for marking as an
16 exhibit as "PSNH 11"?

17 A. (Carlson) You're only partially correct. The Staff
18 data -- the Staff request for a model re-run did
19 include some data adjustments, which we had found in
20 our backcast analysis that related to start fuel
21 inputs, warming fuel costs. And, then, in addition, at
22 Staff's recommendation, there were two other
23 adjustments, not one. One was to increase the Dracut
24 to Newington Station basis spreads, so that was also a

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 data adjustment. And, the fourth data adjustment was
2 to use higher residual fuel oil and Number 2 oil prices
3 throughout the ten-year simulation.

4 Q. So, in summary, the re-run is presented within PSNH 11,
5 correct? That data response that had been provided to
6 Staff as "PSNH Exhibit 11"?

7 A. (Carlson) I haven't been marking the numbers, but I
8 will --

9 Q. It has a --

10 A. (Carlson) That is the Technical Session 02-007
11 response.

12 Q. Correct. Yes. It has a cover letter dated July the
13 12th. Thank you.

14 A. (Carlson) Correct.

15 Q. In summary, this re-run reduced the expected value of
16 the economic benefit further, to 36.8 million, is that
17 correct, Dr. Carlson?

18 A. (Carlson) Let me turn to that page to double check.
19 Yes.

20 MR. SPEIDEL: Thank you. And,
21 Commissioners, and others, so that you can follow along,
22 you can see that there is a table that is styled
23 "Attachment 1", and at the top it reads "Expected values
24 of incremental revenue requirements", and, at the lower

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 left-hand corner, that figure is presented.

2 BY MR. SPEIDEL:

3 Q. Dr. Carlson, did your rebuttal testimony, at Page 24 --

4 CMSR. HARRINGTON: Could you give us the
5 exhibit number please?

6 MR. SPEIDEL: That would be Exhibit
7 Number 8, PSNH 8.

8 CMSR. HARRINGTON: And, there's two sets
9 of numbers. So, which one are you referring to?

10 MR. SPEIDEL: I am referring to the
11 Hearing Exhibit 8, and the specific page number that I'm
12 referring to is the ordinary page number, which is Bates
13 Page 026.

14 CMSR. HARRINGTON: For those of us who
15 don't quite understand, could you refer to the page number
16 in the middle of the page or the one in the lower
17 right-hand corner?

18 MR. SPEIDEL: The middle of the page.

19 CMSR. HARRINGTON: Okay.

20 MR. SPEIDEL: When in doubt, I refer to
21 the middle of the page. If it's the little dinky one on
22 the right side, that's the Bates page number.

23 BY MR. SPEIDEL:

24 Q. So, here we are. And, does your rebuttal testimony, at

1 Page 24, also acknowledge that Levitan had
2 underestimated the cost of natural gas for the
3 Newington plant?

4 A. (Carlson) Could you clarify which lines you're
5 referring to?

6 Q. Sure. What we have here, on Line 27, is the meat of
7 the matter. But there's a little bit beforehand that
8 might be useful for background. But, starting on Page
9 27 [Line 27?], it reads "After recent discussion with
10 PSNH Staff to probe more deeply into the support for
11 the low 10 cent to 25 cent decatherm March to December
12 basis spread value to apply, LAI now believes that a
13 more reasonable basis spread is somewhere between the
14 0.175 per decatherm initially modeled for these months,
15 and the 0.84, or 84 cents a decatherm assumed by Staff
16 on the basis of the 2010 data." So, that seems to be
17 an acknowledgment, Dr. Carlson, that Levitan had
18 underestimated the cost of natural gas for the
19 Newington plant. Would you agree with that assertion?

20 A. (Carlson) Well, to clarify, we were using the midpoint
21 of a pair of values as a range that were initially
22 provided to us by the Company.

23 Q. And, that would be the 0.175, correct, per decatherm?

24 A. (Carlson) Correct.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Q. Okay.

2 A. (Carlson) And, at the other end of the continuum, the
3 0.84 was a value that was proposed by Staff, after
4 review of certain data.

5 Q. And, so, the reasonable point, as you characterized it
6 within your testimony, would fall somewhere between
7 0.175 a decatherm and 84 cents a decatherm, somewhere
8 in between?

9 A. (Carlson) Correct.

10 Q. Despite the fact that Levitan acknowledged the above
11 referenced modeling errors and its understatement of
12 natural gas expenses, Levitan and PSNH did not file
13 with the Commission a second revision to the CUO Study
14 that corrected for those problems, is that right, Dr.
15 Carlson?

16 MS. KNOWLTON: And, I'm going to object
17 to that question, to the extent it refers to the "above
18 referenced modeling errors". Can you please be more
19 specific about what you're referring to?

20 MR. SPEIDEL: Well, the modeling errors
21 that Dr. Carlson had just answered about at our hearing.

22 CMSR. HARRINGTON: Maybe you can clarify
23 as to exactly which error you're referring to, so --

24 MR. SPEIDEL: The start-up fuel, heating

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 fuel, for instance.

2 MS. KNOWLTON: And, I, just again, for
3 the record, I'm going to object to the characterization of
4 that as an "error". I think Dr. Carlson testified that
5 that was a "data input issue", it wasn't an error in the
6 model.

7 CMSR. HARRINGTON: We'll allow the
8 question.

9 BY MR. SPEIDEL:

10 Q. So, could you answer that, Dr. Carlson? As to whether
11 the Company did or did not file a second revision to
12 the CUO Study? You did not, correct?

13 A. (Carlson) The Company did not.

14 Q. Thank you. Dr. Carlson, you are likely familiar with a
15 specific document that has been marked as "confidential
16 Exhibit PSNH 9".

17 MR. SPEIDEL: And, I would just like to
18 ask of the Commission if your version of PSNH 9 is in
19 color or in black and white?

20 CMSR. HARRINGTON: The one I have is in
21 color.

22 MR. SPEIDEL: Very good.

23 BY MR. SPEIDEL:

24 Q. So, Dr. Carlson, do you have access to that document?

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Because I have a copy of it available, if you don't.

2 A. (Carlson) You are referring to the "Modeling Overview"
3 document?

4 Q. Correct.

5 A. (Carlson) Yes.

6 CMSR. HARRINGTON: Excuse me. Are you
7 going to be referring to any of the confidential portions
8 of this?

9 MR. SPEIDEL: No, Commissioner
10 Harrington. I'm going to be asking only very general
11 questions about it, so that the details of its contents
12 are not disclosed today.

13 CMSR. HARRINGTON: Okay. Thank you.

14 BY MR. SPEIDEL:

15 Q. This document had been referenced by Commission Order
16 Number 25,234 as the "Levitan Explanation of Model".
17 Did you supervise the preparation of this document, Dr.
18 Carlson?

19 A. (Carlson) The document had several contributions. This
20 was a team project. But, generally, yes, I led the
21 effort in its preparation.

22 Q. Okay. Thank you. Now, the pages of this document,
23 PSNH Exhibit 9, are not numbered, to my knowledge, but
24 the third sheet has a "Figure 1". Do you see that, Dr.

1 Carlson?

2 A. (Carlson) Yes.

3 Q. Is this a pictorial representation of a flow diagram of
4 how Levitan's model for the Newington CUO Study
5 operated?

6 A. (Carlson) At a high level, yes.

7 Q. Okay. Now, Dr. Carlson, do each of the trapezoids,
8 blue, gray, white, and orange, represent a computer
9 model that applies complex mathematical equations?

10 A. (Carlson) No. I would say that Trapezoid 7, the
11 "Emissions Allowance Pricing Model", was simple.

12 Q. That was simple. Okay. I didn't want to get too
13 specific on account of tipping the hand of what was in
14 the material. But, in general, Dr. Carlson, the
15 rectangles yellow and green, they represent input and
16 output data respectively, correct?

17 A. (Carlson) Correct.

18 Q. So, during the course of Staff's review of the Levitan
19 Newington CUO Study through this docket, was Staff and
20 its consultant granted access by Levitan and/or PSNH,
21 the Company, to all of the input data in the yellow
22 rectangles?

23 A. (Carlson) No.

24 Q. Was Jacobs, Staff's consultant, given all details of

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 the models or, in the alternative, direct access to the
2 models, such as through a computer terminal?

3 A. (Carlson) I would say "yes", given direct access.

4 Jacobs' consultant met in our offices twice. We had
5 all of the models in use, available there for viewing.
6 So, calculations, data input details, would have been
7 observable.

8 Q. Well, let's follow along that line of reasoning then,
9 Dr. Carlson. Were you giving Jacobs the opportunity
10 for access along the terms that it sought, such as
11 being able to manipulate the input and output data
12 through your models, through the use of a computer
13 terminal, for instance? Putting in input data of its
14 own choosing, of Jacobs' choosing, and seeing the
15 output data results through the use of a computer
16 terminal?

17 A. (Carlson) We were informed before the first meeting in
18 our office that Staff or Jacobs would be bringing a
19 dataset or datasets with them to the meeting to run
20 through the model. For whatever reason, Staff or the
21 Jacobs consultant did not do that.

22 Q. Well, I think there's a number of matters that we'll
23 touch upon shortly that might shed light on as to why
24 that was impossible at the time Staff met. But I think

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

1 what we can do is, I'll ask Mr. Levitan, to your
2 recollection, Mr. Levitan, did Attorney Jerry Eaton of
3 PSNH act as a go-between on behalf of Levitan &
4 Associates in its non-disclosure agreement negotiations
5 with Jacobs Consultancy during the Spring of 2011?

6 A. (Levitan) He was an integral part of that process.
7 There were simultaneously a number of labored efforts
8 between our organization in Boston and the Jacobs team
9 in Chicago and Houston. But Mr. Eaton was involved in
10 the chronology of events that culminated in the lack of
11 an executed non-disclosure agreement.

12 Q. Very good. Mr. Levitan, now could you please turn to
13 Page 9 of your rebuttal testimony, that would be PSNH
14 8?

15 A. (Levitan) I'm there.

16 Q. All right. And, we're looking at Lines 20 and 22,
17 Page 9. Could you please read what is written there on
18 Lines 20 and 22.

19 A. (Levitan) The question was put, with respect to "access
20 to LAI's Proprietary Models", "Was Staff willing to
21 sign an NDA?" And, the answer is "No."

22 MR. SPEIDEL: Thank you. Now, I'd like
23 to show a series of documents to you and your colleague,
24 Dr. Carlson, which I'll distribute. And, I would like to

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 have marked as "Staff Exhibit 4".

2 CMSR. HARRINGTON: No objections to
3 marking that as "Staff 4"?

4 MS. KNOWLTON: Well, I need to know what
5 the documents are first.

6 (Atty. Speidel distributing documents.)

7 CMSR. HARRINGTON: We'll just give
8 people a minute to take a look at these.

9 WITNESS LEVITAN: Mr. Speidel, is there
10 a copy for our review?

11 MR. SPEIDEL: Yes.

12 CMSR. HARRINGTON: Mr. Speidel, could
13 you identify the document as well?

14 MR. SPEIDEL: Yes. This document right
15 here, it's a series of e-mail communications between
16 various representatives of Staff, the Company, and
17 Levitan. And, there's a series of documents that I'll
18 walk through as we discuss this here.

19 BY MR. SPEIDEL:

20 Q. For starters, I think we can turn to what's marked as
21 "Page 4" here, on the upper left-hand corner.

22 CMSR. HARRINGTON: Just hold on one
23 second please.

24 (Commissioner Harrington, Commissioner

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Scott, and Atty. Ross conferring.)

2 CMSR. HARRINGTON: Could you give us an
3 offer of proof on this as to where you're heading?

4 MR. SPEIDEL: An offer of proof? Well,
5 what we have here is a series of documents that would
6 rebut the assertion made within the rebuttal testimony
7 proffered by the Company and its consultant, Levitan &
8 Associates. We will speed through this relatively
9 quickly. It just establishes some of the factual
10 background of the negotiations surrounding the
11 non-disclosure agreement issues.

12 CMSR. HARRINGTON: So, you're rebutting
13 the statement that's contained in Public Service 8, on
14 Page 9, "Was Staff willing to sign an NDA?" The answer,
15 "No."

16 MR. SPEIDEL: That's correct.

17 CMSR. HARRINGTON: Ms. Knowlton.

18 MS. KNOWLTON: My objection is that this
19 is not a complete representation of the course of dealing
20 with regard to the NDA. If Mr. Speidel would like to ask
21 questions with regard to this document, you know, I'm
22 going to want to do redirect on this, because it's not --
23 this is not -- there are more documents that follow after
24 the last page of this in time that address the course of

1 dealing on the NDA. So, --

2 CMSR. HARRINGTON: So, you're saying
3 there's additional e-mails that are germane to the subject
4 that are not included here?

5 MS. KNOWLTON: In the versions of the
6 document that were circulated. So, I mean, I don't object
7 to this as a partial -- as a subset of the negotiations,
8 but it's not -- I wouldn't want the Commissioners to think
9 that this is complete. This is not a complete version of
10 the back-and-forth with regard to the NDA. Things
11 occurred after the last dated e-mail, the June 2nd e-mail
12 that is here. So, my objection as to this exhibit goes to
13 that it's not complete.

14 CMSR. HARRINGTON: Mr. Speidel.

15 MR. SPEIDEL: Well, I can rebut that
16 objection with an indication of the fact that an
17 additional Staff exhibit will be tendered for distribution
18 and marking that provides a timeline of events that occur
19 beyond this set of documents. This set of documents
20 refers to Staff's alleged "failure" to sign a
21 non-disclosure agreement with Levitan and the Company.
22 There will be an additional submission relating to the
23 piece at which time Jacobs had been involved in direct
24 negotiations with the Company and with Levitan for a

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 non-disclosure agreement. So, we're not assuming or
2 asserting that this is everything, but this is an
3 important piece of the puzzle. And, I think the Company
4 has been put on notice for quite a while that this is
5 going to be an issue that will be explored, because we
6 asked discovery questions about, in the discovery on the
7 Company's rebuttal testimony, we asked discovery questions
8 about the issue of the non-disclosure agreement. So, I
9 think we have a right to present our own case and our own
10 point of view on this. And, the Company is certainly
11 welcome to engage in redirect. But, at this point, I'd
12 like to just go over this material.

13 CMSR. HARRINGTON: But you agree,
14 though, that this is not a complete record of the e-mails
15 involved in this issue?

16 MR. SPEIDEL: Well, this is a complete
17 record of the e-mails involved that involved myself, as
18 Staff attorney directly, and my own role in the
19 negotiations. I passed the baton to the Jacobs
20 Consultancy to engage in negotiations directly with
21 Levitan and with the Company after a certain point in
22 time. So, this represents what I had been involved in as
23 Staff attorney and the material that I can support my case
24 on, really.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 CMSR. HARRINGTON: All right. Just bear
2 with us for a second please.

3 (Commissioner Harrington, Commissioner
4 Scott, and Atty. Ross conferring.)

5 CMSR. HARRINGTON: And, Ms. Knowlton,
6 did you have a response?

7 MS. KNOWLTON: I do. I'm happy to wait
8 and see the next exhibit that Mr. Speidel would introduce,
9 to see whether it completes the course of dealing on the
10 NDA.

11 CMSR. HARRINGTON: Okay. That's fine.
12 We'll continue then. We will probably be doing this on
13 redirect as well.

14 MR. SPEIDEL: Very good. Thank you,
15 Commissioners.

16 CMSR. HARRINGTON: So, we'll have this
17 -- again, so we're clear. The first page of this is
18 "Speidel, Alexander", and it's from "eatongm@nu.com",
19 dated "May 31st, 2011". It's an e-mail, attached
20 confidentiality agreement, and subsequent e-mails.

21 MR. SPEIDEL: Correct. And, I'm
22 beginning my interrogatories with something that I had
23 marked on the upper left-hand corner with the numeral "4",
24 Page 4. And, it is an e-mail from myself, dated Tuesday,

1 May the 31st of 2011, and the time was "4:41 p.m."

2 BY MR. SPEIDEL:

3 Q. And, I guess I can ask Mr. Levitan, to whom was this
4 e-mail addressed?

5 A. (Levitan) It is addressed to Mr. Eaton.

6 Q. Okay. Could you please read the first paragraph of
7 this e-mail, under "Jerry".

8 A. (Levitan) Yes: "As a general matter, the Commission
9 does not enter into such agreements. Staff and Staff's
10 consultant, Ed Arnold of Jacobs Consulting (as Staff's
11 agent) are bound by our obligation under PUC rules and
12 statutes to guard confidential proprietary information
13 submitted/provided by regulated utilities and their
14 agents (in this instance, Levitan). Furthermore, we
15 cannot contract away our obligations under RSA 91-A
16 through such an instrument."

17 Q. Okay. Now, Mr. Levitan, though it appears that Staff
18 could not properly sign the proposed non-disclosure
19 agreement under New Hampshire law, now "Staff" meaning
20 the "Staff of the New Hampshire Public Utilities
21 Commission", as indicated in my e-mail to Attorney
22 Eaton, do you recall that Attorney Eaton continued
23 non-disclosure agreement negotiations with Jacobs
24 Consultants on behalf of PSNH and Levitan & Associates

1 after May 31st?

2 A. (Levitan) Yes. I do recall that he continued in that
3 role. And, I do recall having asked you directly, on
4 June 3rd, in our office, whether Staff intended to
5 execute the NDA with Jacobs and Levitan & Associates,
6 and you said to me, directly, "no", you would not be
7 executing such an NDA. And, it was upon that event, in
8 the presence of Mr. McCluskey, Mr. Arnold, Dr. Carlson,
9 Mr. Curlett from Levitan & Associates, that I concluded
10 that Staff was not going to be a signatory to the NDA.

11 Q. That is correct. That was a follow-up. I think it's
12 -- would you agree that that would be a follow-up to my
13 e-mail of May the 31st?

14 A. (Levitan) Yes. But you have asked me these questions
15 in the context of my declarative sentence "no", on Line
16 22 of Page 9 of our rebuttal testimony.

17 Q. Fair enough.

18 A. (Levitan) I'm just trying to fill out the chronology of
19 events as I recall them.

20 Q. Well, we're jumping around a little bit, because there
21 were quite a few things that happened in between May
22 the 31st and June the 3rd. Now, Dr. Carlson, can you
23 read into the record your rebuttal testimony, at Page
24 12, Lines 2 through 6. And, this would be PSNH 8

1 again.

2 A. (Carlson) Excuse me, could you --

3 Q. Page 12, Lines 2 through 6. It would begin here, "Did
4 LAI offer to provide" --

5 A. (Carlson) Yes.

6 Q. So, could you just read that, since I'm not allowed to.

7 A. (Carlson) Yes. "Did LAI offer to provide further model
8 details or physical access to the models if Staff and
9 Jacobs Consultancy signed the NDA?" "Answer: Yes.
10 LAI, working with PSNH, drafted several versions of an
11 NDA. However, Staff and Jacobs refused to sign any of
12 the proposed NDAs."

13 Q. That's fine. Good. Thank you. Now, Dr. Carlson, is
14 your e-mail address at Levitan & Associates
15 "RLC@levitan.com"?

16 A. (Carlson) Yes.

17 Q. Okay. Do you recall receiving electronic copies of
18 correspondence between myself and Attorney Jerry Eaton
19 relating to drafts of a potential non-disclosure
20 agreement?

21 A. (Carlson) Yes.

22 Q. Okay. So, I think we can turn to Page 6 of Staff
23 Exhibit 4. And, this is an e-mail dated "Wednesday,
24 June the 1st" at "3:59 PM". And, could you just read

1 the second full paragraph, that first sentence of the
2 second full paragraph of this e-mail. And, --

3 A. (Carlson) Yes. "Having Jacobs sign a non-disclosure
4 agreement is different kettle of fish, and would be
5 fine with Staff. However, Staff would need to have the
6 following modifications made to the draft agreement, to
7 prevent overbroad consequences that could restrict Ed
8 Arnold's ability to provide information to Staff and
9 the Commissioners. I have put these modifications
10 below my signature block."

11 Q. That's fine. Thank you very much. So, you do seem to
12 recall receiving an e-mail of this sort around the
13 beginning of June. And, we can continue on. Let's
14 turn to Page 11 of this packet. And, this is a reply
15 from Attorney Eaton, to myself, carbon copying a number
16 of recipients, including you, because I can see it
17 reads "RLC@levitan.com". And, you can see that there's
18 a little sentence there at the very beginning, it
19 begins with "I think". Could you read that, Dr.
20 Carlson, for us.

21 A. (Carlson) "I think we're almost there."

22 Q. And, what does the next sentence read?

23 A. (Carlson) "Your additions are acceptable to PSNH."

24 Q. Okay. So, Dr. Carlson, do you still believe that your

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 testimony on Page 12 tells the whole story?

2 A. (Carlson) Well, it doesn't tell the whole story,
3 because it's very brief. The NDA discussions went on
4 for a long time. The full story would take a booklet.

5 A. (Levitan) I would like to supplement that response.
6 And, I'd also like to note that, for whatever reason,
7 on the e-mail of Wednesday, June 1st, from you --

8 CMSR. HARRINGTON: Excuse me. Could you
9 give us the page number on that exhibit?

10 WITNESS LEVITAN: Page 8. I notice that
11 I was not copied. Nevertheless, if Dr. Carlson was
12 copied, we would have spoken about it.

13 BY MR. SPEIDEL:

14 Q. Well, this is actually on, just for the record, what's
15 on Page 8 is an internal e-mail, that is from myself to
16 Mr. McCluskey and our consultant, Ed Arnold. And, this
17 has been provided to fill out the record and to provide
18 the background as to why Staff was accepting or
19 rejecting certain features of the Company's
20 non-disclosure agreement that had been tendered for our
21 original review.

22 Now, Mr. Levitan, do you have anything
23 else to add with regards to that or --

24 A. (Levitan) Yes, I stand corrected. It's Page --

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 CMSR. HARRINGTON: Excuse me. There's
2 two e-mails on Page 8. So, which one are you referring
3 to?

4 WITNESS LEVITAN: It's Page 6.

5 CMSR. HARRINGTON: Six.

6 WITNESS LEVITAN: E-mail of June 1st
7 from Mr. Speidel to Jerry Eaton and George McCluskey.

8 MR. SPEIDEL: Okay. There we go.

9 WITNESS LEVITAN: My mistake.

10 **BY THE WITNESS:**

11 A. (Levitan) But you asked if our testimony on Page 12
12 "tells the whole story?" And, Dr. Carlson says that
13 "it does not, because it is brief." And, I would like
14 to take a moment and just supplement that. Because
15 part of the whole story is what seemed to us to be a
16 very extended, contentious process that culminated in
17 the lack of an executed NDA. Part of the whole story
18 is the fact that LAI worked extremely hard, without the
19 protective cover of an NDA, to provide Staff and Jacobs
20 Consulting, a deep dive and insight into model
21 structure functionality and assumptions. We would
22 never normally do that. That is outside typical
23 corporate conventions. I think that this ordeal over a
24 six-week period, failing to culminate in an NDA,

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

1 strikes me as probably the most time-consuming
2 administrative effort that did not properly come to
3 closure amongst the consultants.

4 BY MR. SPEIDEL:

5 Q. Well, --

6 A. (Levitan) So, I find it rather difficult to explain the
7 chronology of events. But, since you're asking for
8 "the whole story", as Dr. Carlson indicated, it would
9 take too long to address all of the chronology of
10 events, other than to note that Levitan & Associates
11 accommodated both Staff and the consultant's interest
12 in direct access to the models, even though we did not
13 have an executed NDA at any time throughout that
14 inspection process.

15 Q. I think there would be a difference of opinion
16 regarding whether Staff's consultant and Staff had been
17 afforded so-called "access" or "direct access to the
18 model". But we can leave that aside. That's your
19 position. But let's start from the beginning, because
20 that's where we are in our chronology of this
21 discussion. And, we agree that it was quite a lengthy
22 process from beginning to end. But this is an
23 important matter, and we have to go through each step.
24 So, I guess you can answer this, Mr. Levitan. So,

1 Jerry Eaton of PSNH sent the original draft
2 non-disclosure agreement, which is presented within the
3 e-mail on Page 1, the very front of this packet, Staff
4 Exhibit 4, at "11:46 AM", on "May the 31st". Wasn't
5 Staff scheduled to visit Levitan on Friday, June the
6 3rd, in Boston?

7 A. (Levitan) Yes.

8 Q. Well, okay. So, here we are, the NDA, that had not
9 been acceptable to Staff, was submitted on May the
10 31st, is that correct?

11 A. (Levitan) Yes.

12 Q. And, the visit was scheduled for June the 3rd, correct?

13 A. (Levitan) Yes.

14 Q. So, as you might expect, would it be fair to say that
15 negotiations over an NDA were rather compressed between
16 May the 31st and June the 3rd?

17 A. (Levitan) No.

18 Q. You do not agree?

19 A. (Levitan) I do not agree, for a couple of reasons.
20 First, the NDA was relatively straightforward and plain
21 vanilla, and afforded Jacobs many privileges and
22 extended to them many commercial considerations
23 consistent with what we understood their requirements
24 to be.

1 Secondly, as I recall, not long before,
2 we had reached closure on the NDA with Jacobs when they
3 were a subcontractor to Levitan & Associates very
4 quickly. So, I had no reason to believe that
5 completing the NDA would represent a significant
6 administrative challenge.

7 Q. Hmm. And, what are you referring to exactly, as a
8 "subcontractor"? We have no context to provide the
9 Commissioners for that remark.

10 A. (Levitan) Sometimes we work with engineering firms and
11 consultancies in opposition to one another representing
12 our various clients. Sometimes engineering firms will
13 be subcontractors to LAI. In the case of the peaking
14 docket in Connecticut, where we represented PURA, with
15 respect to the long-term competitive solicitation of
16 locational forward reserve or quick-start peakers,
17 Jacobs was a subcontractor to LAI. In order to satisfy
18 their requirements and to protect our interests, we
19 entered into an NDA. It was done on an expedited
20 track, smoothly, without any administrative challenge.

21 MR. SPEIDEL: I would recommend to the
22 Commissioners that the remarks related to Jacobs' service
23 as -- or, alleged service as a subcontractor to Levitan &
24 Associates be stricken as irrelevant to this proceeding.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 We have no context for this. We have not engaged in
2 discovery on this point. And, it was not an assertion
3 made in the rebuttal testimony of Levitan or the Company.

4 CMSR. HARRINGTON: Ms. Knowlton.

5 MS. KNOWLTON: I'm going to object to
6 the motion and ask that it be denied. The Staff's
7 attorney asked Mr. Levitan a question about, you know,
8 whether he thought the time frame was "compressed", and he
9 is answering that question based on his own personal
10 knowledge and personal experience. And, I do think that's
11 relevant. That Staff, you know, never asked in discovery
12 whether Levitan had any prior dealings with Jacobs
13 Consultancy is, you know, neither here nor there. Mr.
14 Levitan is certainly entitled to answer the question based
15 on his own personal experience. And, I do think it's
16 relevant, you know, given the allegation that the Staff is
17 making.

18 (Commissioner Harrington, Commissioner
19 Scott, and Atty. Ross conferring.)

20 CMSR. HARRINGTON: We'll allow the
21 question to stay -- or, "the answer to stay", I guess I
22 should say. Why don't you continue.

23 MR. SPEIDEL: Very good. Let's get
24 going.

1 BY MR. SPEIDEL:

2 Q. Dr. Carlson, I'm asking this question in reference to
3 Page 8 and Page 9 of your rebuttal testimony, PSNH
4 Exhibit 8, Lines 39 through 44. So, 8 and 9, 39
5 through 44 and 1 through 4. And, I'll give everyone a
6 chance just to read it on their own, just to refresh
7 their memory. Would you agree that the Levitan model
8 made use of a very large number of historical natural
9 gas prices to estimate future gas prices at the Dracut,
10 Massachusetts trading point?

11 A. (Carlson) Yes. It used several years of daily price
12 information.

13 Q. Your firm declined Staff's request for the historical
14 natural gas prices, is that correct?

15 A. (Carlson) That is correct. At the beginning of the
16 study, we were not even aware that our Bloomberg
17 license would restrict our dissemination or
18 distribution of the Bloomberg proprietary data.

19 Q. Would you agree that, if Staff were to follow your
20 recommended course of action outlined in the rebuttal
21 testimony related to verifying the Dracut prices, that
22 Staff would be forced to purchase historical natural
23 gas pricing data, and then developed a lengthy
24 spreadsheet that involves inputting daily prices at

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Dracut and Henry Hub each day for the eight-year period
2 used in the model?

3 A. (Carlson) Well, the data, first of all, comes
4 electronically. So, it's not a large chore. The issue
5 is one of licensing rights. Secondly, we had also had
6 discussions about the possibility that we could, you
7 know, run our model with a different set of data.
8 Staff was requesting alternate datasets be fed through
9 the model.

10 Q. Would you agree that there is a potential for such an
11 alternative dataset to be different from the Bloomberg
12 dataset actually used by Levitan & Associates in its
13 analysis?

14 A. (Carlson) It all depends on what data source you're
15 referring to. When it comes to daily spot information,
16 as far as I'm aware, all of the major vendors of such
17 data have very similar prices, because they're
18 reporting on -- or, relying on reporting of actual
19 trades as they occur each day with various
20 counterparties. So, those reports go to multiple
21 providers of data. By cross-check, between our
22 Bloomberg data and the Platts data that was provided to
23 us for one year by Staff, showed that the numbers were
24 very, very close.

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 A. (Levitan) If I may supplement that answer? Sometimes
2 you'll see divergences across rival vendors of such
3 information, in terms of the bid/ask spreads at a
4 particular pricing point, like Transco Zone 6 or
5 Tennessee Zone 6 or Algonquin citygates, or Dracut,
6 which has less length than many of the other pricing
7 points. But the midpoints in those ranges are
8 extremely strongly correlated.

9 Q. The midpoints. Well, it seems -- it seems also the
10 case that, either Dr. Carlson or Mr. Levitan can answer
11 this, that Levitan also declined Staff's request for
12 the historical oil prices that underlie the crude oil
13 to residual fuel oil and crude oil to Number 2 fuel oil
14 basis differentials used in the Levitan model, is that
15 correct?

16 A. (Carlson) Correct. For the same reason, it was
17 Bloomberg data. But Bloomberg -- or, excuse me, oil
18 price data for WTI is publicly available on a daily
19 basis from the Energy Information Administration,
20 unlike natural gas prices, which are not.

21 A. (Levitan) And, I would like to also briefly supplement
22 that response. Our licensing requirements to Bloomberg
23 are crystal clear, so we cannot disseminate such
24 confidential information or proprietary information to

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 third parties, without entering into other more
2 extensive licensing obligations, which would have been
3 costly.

4 Also, we have done many procurements and
5 long-term resource planning studies for various
6 utilities around the country, including all four EDCs
7 in Massachusetts, in terms of price projections and the
8 like. The utilization of Bloomberg data is part of our
9 typical forecasting technique. I do not recall a
10 commercial matter where we have been requested to
11 disgorge proprietary information from Bloomberg. To
12 the best of my knowledge, this is the first time it has
13 been a bone of contention.

14 Q. Okay. Mr. Large, did the Company -- did PSNH make any
15 arrangements for Staff to have access to the Bloomberg
16 data directly by license?

17 A. (Large) I don't recall the majority of the dealings
18 associated with that, were directly worked between the
19 Levitan team through Mr. Eaton. I think they would be
20 better able to answer that question.

21 Q. Would any of the other witnesses on the panel know as
22 to whether the Company made any arrangements for Staff
23 to have access to the Bloomberg data directly by
24 license paid for by the Company? Anyone at all?

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

1 A. (Levitan) Yes, I can recall. The issue was raised. A
2 partner of Levitan & Associates inquired of Bloomberg
3 what the cost of the supplemental license would be. It
4 was deemed material. And, the high cost of entering
5 into that license was rejected, in light of other
6 affordable and substitutable and reliable indices from
7 various services available to Staff and Jacobs.

8 MR. SPEIDEL: Thank you. I think,
9 before we move along, it would be advisable for Staff to
10 present as general information an additional exhibit
11 related to the non-disclosure agreement negotiations,
12 while we're on the topic of confidential information. I
13 will distribute this now. And, I have requested a marking
14 as "Staff Exhibit 5".

15 (Atty. Speidel distributing documents.)

16 MS. KNOWLTON: I'm going to object on
17 the same grounds that I did previously. I don't have any
18 -- this still is not a full depiction of the course of the
19 dealing. I don't know that Mr. Speidel -- whether
20 Mr. Speidel has yet another exhibit that relates to this.
21 But the Company did file a revised response to Staff 4-3
22 last week. And, so, I --

23 MR. SPEIDEL: Yes.

24 MS. KNOWLTON: -- don't know whether you

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 plan to mark that so we have a complete depiction of the
2 course of dealing.

3 MR. SPEIDEL: Well, as a matter of fact,
4 Staff has not seen that entered into evidence by the
5 Company, that filing. We note that the filing was
6 received last Friday, in the middle of a contested hearing
7 case, in May of --

8 CMSR. HARRINGTON: Could you, for
9 clarification purposes, could you identify the filing
10 you're referring to from Friday?

11 MR. SPEIDEL: Well, there was
12 essentially a revised response to a Staff data request in
13 the fourth round of data requests on the Company's
14 rebuttal testimony. It was tendered by the Company on May
15 the 4th of 2012. And, the rebuttal testimony itself had
16 been submitted in October of 2011. And, we have already
17 gone through a couple days of hearings on this case, and,
18 lo and behold, something is sent in on May the 4th.

19 I'm not purporting to claim that this is
20 the be all and end all of the document trial for this
21 issue. But I do think it's another piece of the puzzle.
22 Staff has a right to present this as essentially a data
23 response that had been provided by the Company, in
24 response to Staff Round 4.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 And, if it wishes to object on the basis
2 that it somehow is incomplete, I don't think that's
3 necessarily fair, because every document that we're
4 supplying is adding to the record of the case. And, we're
5 just going to walk through this very briefly, and I'll ask
6 a couple of questions about it. And, if the Company wants
7 to tender its revised response as purported to a data
8 response round that was happening back in very late 2011
9 and early 2012, that's fine. But, for our own purposes,
10 I'd like to enter this into evidence.

11 CMSR. HARRINGTON: Ms. Knowlton, do you
12 plan on entering that response into evidence?

13 MS. KNOWLTON: That's fine. I can
14 handle that through redirect of the witnesses.

15 CMSR. HARRINGTON: Okay. Thank you. Go
16 ahead, proceed.

17 (The document, as described, was
18 herewith marked as **Staff Exhibit 5** for
19 identification.)

20 BY MR. SPEIDEL:

21 Q. So, let's start from the beginning. And, we can just
22 turn from the cover sheet here. And, it reads as
23 follows, in reference to the "LAI Rebuttal on Page 9",
24 it reads: "Please provide all support for the claim

1 that Jacobs was not willing to allow Mr. Arnold to sign
2 an NDA. Would it [be not] more accurate to say that
3 the draft NDA prepared by PSNH did not satisfy Jacobs'
4 concerns?"

5 And, so, Mr. Levitan, your response here
6 is a little more comprehensive. It states, and I can
7 allow you to read it, it begins "The statement on Page
8 9 referenced in this request is not inaccurate, but did
9 not include reasons why Jacobs would not sign an NDA."
10 It would appear that there are specific objections that
11 Jacobs had to signing an NDA that are outlined in all
12 of these discovery responses that you had provided, is
13 that correct?

14 A. (Levitan) Subject to check, I would agree with that.

15 Q. Very good. So, you would agree that Jacobs did not
16 merely state that "we are not going to execute an NDA"
17 as a blanket matter. Instead Jacobs had raised, in the
18 context of its negotiations with PSNH and Levitan,
19 specific concerns that could be, in theory,
20 ameliorated, is that right?

21 A. (Levitan) They kept raising the bar asking for more.
22 We were extremely accommodative. And, in the end, they
23 still didn't sign the NDA, after granting them the wish
24 list of primary things to address the Legal

1 Department's concerns about having various confidential
2 information held in perpetuity.

3 Q. Hmm. Well, I guess we can leave it at that. But you
4 do agree that there had been concerns raised by Jacobs
5 in the context of their negotiations with Levitan,
6 right?

7 A. (Levitan) Yes. And, to the best of my knowledge, each
8 concern was reasonably and professionally responded to
9 by LAI, with the assistance of Mr. Eaton from PSNH in
10 transmitting these various changes.

11 Q. So, your final position is that Levitan and PSNH met
12 all of the requirements that Jacobs had asked for as
13 part of an executable NDA, is that right?

14 A. (Levitan) No. The wish list continued to evolve. We
15 were never cognizant of what was going to be asked for
16 next. All I can say is we did our professional best on
17 a prompt basis to acquiesce, with a highly restrictive
18 set of demands from Jacobs' Legal Department. That
19 said, as Dr. Carlson indicated in the direct phase of
20 this earlier this morning, the agreement was never
21 signed. The reasons why, we don't know.

22 Q. You don't know why the agreement wasn't signed?

23 A. (Levitan) Correct.

24 Q. Okay. I think we'll shift gears a little bit here.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 CMSR. HARRINGTON: Maybe this would be a
2 good time to take a break, seeing as we've been going for
3 all almost two hours here.

4 MR. SPEIDEL: Yes.

5 CMSR. HARRINGTON: So, why don't we
6 recess until ten minutes after 11:00.

7 (Whereupon a recess was taken at 10:56
8 a.m. and the hearing reconvened at 11:18
9 a.m.)

10 CMSR. HARRINGTON: I'm going to reopen
11 the Docket DE 10-261, Public Service Company of New
12 Hampshire Least Cost Integrated Resource Plan. And, I
13 believe Staff was cross-examining the panel.

14 MR. SPEIDEL: That is correct,
15 Commissioner Harrington.

16 BY MR. SPEIDEL:

17 Q. And, Staff would like to ask a question of Dr. Carlson.
18 And, I think we can begin with a reference to PSNH 8,
19 the rebuttal testimony of Mr. Levitan and Dr. Carlson.
20 At Page 23, Lines 14 -- I'm sorry, Lines 41 to 42. So,
21 Dr. Carlson, isn't it true that, when modeling energy
22 net revenues, LAI did not simulate ISO-New England
23 calls for Newington to be dispatched to provide
24 operating reserves?

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 A. (Carlson) That is correct.

2 Q. And, so, rather, Levitan simulated only economic
3 dispatch?

4 A. (Carlson) Well, we have to be careful how you define
5 "economic dispatch". Because, when you do provide
6 operation reserves, you're being paid a net commitment
7 period compensation or make-whole payment, which still
8 keeps you economic, on a plant basis.

9 Q. Can you give us, Dr. Carlson, a capsule overview of the
10 difference between "economic dispatch" and "operating
11 reserves" beyond that, just for the Commission's
12 benefit?

13 A. (Carlson) Sure. One example would be, if you succeed
14 in having your offers accepted in the day-ahead market
15 for a certain number of hours the following day, say
16 Newington was set to run at 300 megawatts, but then,
17 after the acceptance of those bids, the ISO-New England
18 needs to adjust its dispatch schedule to account for
19 some contingency, a need for an increased operating
20 reserves. And, in that case, they could order the
21 Newington Station to go to a lower level, perhaps 140.
22 And, the net commitment period compensation is a way to
23 get compensated, taking into account the opportunity
24 costs, what could have been made if still generating in

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 the day-ahead market, even though you're now generating
2 at a lower level. The net commitment period posturing
3 credit formula, which it's called, takes the difference
4 between what you had scheduled as your megawatts in the
5 day-ahead market and what you actually ran at in
6 real-time. So, in this example, it would be the
7 difference between 300, down to 140. And, then, that
8 is multiplied by the greater of whatever was that
9 incremental offer price or the real-time LMP. So, you
10 get paid a credit, which takes into account what you
11 would have made in the day-ahead market, if it had been
12 economic to run. Therefore, when you do an economic
13 simulation run, and you only model the economic
14 dispatch in the day-ahead market, you are still going
15 to get the same net result, in terms of the energy net
16 margin for the day.

17 A. (Levitan) Which is why we did not model Newington in
18 the real-time market providing operating reserves. Had
19 we, as Dr. Carlson indicated, we would have come up
20 with essentially the same financial performance, due to
21 the structure of the NCPC payments, to ensure that all
22 opportunity costs are fully recognized.

23 But it's worth noting here that, when
24 Newington is ramped down to provide AGC and other key

1 ancillary services required by ISO in the real-time
2 market, the plant's heat rate goes way up, its fuel
3 consumption on a unitized basis goes way up, and its
4 fuel costs can be significantly higher, as I think
5 market participants recognize. The gas markets,
6 particularly on PNGTS, do include a significant
7 intraday day premium when gas, on very short notice, is
8 being pulled from marketers or from the pipeline, which
9 explains in part the large prime observed in 2010.

10 Q. What premium are you referring to, Mr. Levitan?

11 A. (Levitan) The premium associated with Newington's micro
12 basis differential against the Dracut pricing point off
13 the Joint Facilities system.

14 Q. Hmm. Very good. Thank you for that explanation. Now,
15 Mr. Levitan, let's turn to Pages 27 through 28 of your
16 rebuttal testimony.

17 A. (Levitan) I'm there.

18 Q. And, specifically, --

19 A. (Levitan) PSNH 8?

20 Q. PSNH 8, that's correct. At Lines 20 through 43 and
21 Lines 1 through 10.

22 A. (Levitan) I would like to take a moment to reread that
23 section of the testimony, if I may please?

24 Q. Sure. I think it would be a good idea for everyone to

1 reread that.

2 (Short pause.)

3 **BY THE WITNESS:**

4 A. (Levitan) I have done so.

5 BY MR. SPEIDEL:

6 Q. Very good. Now, in this material, as you know, you
7 respond to the Office of the Consumer Advocate's and
8 Staff's criticism that Levitan & Associates' Newington
9 CUO Study failed to examine the potential impact of
10 proposed environmental regulations on PSNH's future
11 capital expenditures for Newington Station. You argued
12 that, even when new environmental regulations have been
13 proposed, "a CUO Study [need not] account for these
14 changes in advance of the changes becoming known with
15 "reasonably foreseeable" certainty." You subsequently
16 clarified that "reasonably foreseeable certainty" means
17 that there exists "sufficient clarity over the timing,
18 applicability, and level of the new regulatory
19 constraints". Does that sound about right, Mr.
20 Levitan?

21 A. (Levitan) It does.

22 Q. Is it fair to say that you believed such clarity was
23 missing at the time Levitan & Associates prepared the
24 initial CUO Study as related to environmental

1 regulations?

2 A. (Levitan) I'm not sure I understand the question
3 exactly. Could you restate please?

4 Q. Well, I can give you a little bit more background.

5 A. (Levitan) Thank you.

6 Q. Now, specifically, OCA and Staff disagreed with your
7 decision to apply the \$500,000 annual capital
8 expenditure projections provided by PSNH to your model.
9 And, the reason that Staff and OCA disagreed with your
10 decision to apply that annual capital expenditure
11 figure is because Staff and OCA believed that there
12 were potential environmental regulations that would
13 come into play and require additional capital
14 investments in Newington Station. So, --

15 A. (Levitan) If I -- if I may clarify, and I apologize for
16 breaking in during your question. But my understanding
17 is that the Staff and the OCA recognized the
18 possibility for it, not that it would be compulsory for
19 making heavy CapEx of any sort for environmental
20 compliance.

21 Q. Well, by all means, potential, yes. Potential.

22 A. (Levitan) But "could", not "would".

23 Q. "Could", that's fine. Very good. I can clarify, by
24 using the word "could" have implications for capital

1 investment?

2 A. (Levitan) Yes.

3 Q. But the basis for the disagreement remains the fact
4 that Staff and OCA thought, in light of the potential
5 impact of such environmental regulations, that the
6 integration of a half million dollar annual capital
7 expenditure figure by Levitan was less than reasonable
8 or less than ideal, let's put it that way. So, just to
9 restate my question, your position, as consultant to
10 the Company, was that, on the basis of its analysis, of
11 "reasonably foreseeable environmental regulations in
12 place at the time Levitan & Associates prepared the
13 initial CUO Study", that the half million dollar annual
14 capital expenditure budget projections for Newington
15 Station were reasonable on the basis that the
16 environmental regulations cited by OCA and Staff --
17 potential environmental regulations cited by OCA and
18 Staff were not reasonably foreseeable factors in
19 determining capital expenditure for Newington?

20 A. (Levitan) In sum, that's a reasonable and accurate
21 comment with respect to our position. But I must add
22 that we certainly considered the appropriateness of
23 treating environmental CapEx on a stochastic basis. We
24 spent a great deal of time talking to PSNH staff,

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Mr. Long, Mr. Smagula, Ms. Tillotson, and others, and
2 we were satisfied, based on the structure of the
3 environmental regulations looming on the horizon in the
4 Summer of 2010, that the rules evolving would highly
5 likely be inapplicable to the Newington Station.

6 Therefore, to incorporate in the
7 financial model the potential high CapEx attributable
8 to the installation of an SCR, Newington would not need
9 that, or cooling water intake structure associated with
10 the EPA Rule 316(b), conceivable, but way down the
11 road, would only introduce financial skew in the model.

12 So, in light of our comfort with the
13 lack of applicability of the looming requirements under
14 MATS in particular, the adequacy of the electrostatic
15 precipitator to comply with MATS, in light of the fact
16 that the unit can burn natural gas, rather than only
17 RFO, we determined that the \$500,000, which comes from
18 PSNH, was a reasonable marker in light of recent
19 capital expenditures made by the firm.

20 Q. Now, for the benefit of the hearing room, could you
21 please briefly define "stochastic"?

22 A. "Stochastic" is the use of random number generators and
23 a mathematical Monte Carlo type approach to sample a
24 broad spectrum of market outcomes. In the case of the

1 CUO model that we used for Real Option Value, we ran
2 250 scenarios.

3 Q. For energy, correct?

4 A. (Levitan) Correct.

5 Q. Yes. So, on the basis of your consultations with the
6 Company, you determined that the potential
7 environmental capital expenditure cost as referred to
8 by OCA and Staff in its testimony were not sufficiently
9 reasonably foreseeable to integrate into your analysis
10 on a stochastic -- or, stochastic level, is that
11 correct?

12 A. (Levitan) For purposes of the CUO Study, that is
13 correct. To the extent the rules harden and if, at a
14 future point in time, it is determined that they, for
15 whatever reason, do apply to the Newington Station,
16 then that would be the time to contemplate the
17 implications for the retirement of the Station. Rather
18 than to co-mingle a very speculative set and one
19 professional interpretation of these environmental
20 rules, as it relates to heavy CapEx from the vantage
21 point of 2010.

22 Q. Very good. Thank you. Now, Mr. Levitan, Staff, in its
23 testimony, pointed to two new proposed environmental
24 rules as potential sources of capital investment costs

1 for Newington Station. And, I won't make a specific
2 page reference, I think folks know what was referred to
3 in general terms, and I'll provide some specifics here.
4 One was the "Thermal Power Plant Cooling Water Intake
5 Structures Rule". And, this proposed rule, was it
6 promulgated under Section 316(b) of the Clean Water
7 Act, Mr. Levitan, is that correct?

8 A. (Levitan) Yes. That is correct.

9 Q. All right. I will refer to it as the "Cooling Water
10 Rule" for short. Do you recall that part of the
11 Staff's testimony?

12 A. (Levitan) Yes, I do.

13 Q. Okay. Mr. Levitan, in your view, at the time the
14 Newington CUO Study was prepared in the Summer of 2010,
15 was the Cooling Water Rule a "reasonably foreseeable"
16 regulatory change that would require Newington to incur
17 capital investments?

18 A. (Levitan) I think there was in the Summer of 2010, when
19 the study guidelines and modeling approach was being
20 locked down by LAI, still much conjecture regarding
21 EPA's pending rules for 316(b) compliance on the
22 cooling water intake structure.

23 Q. So, your answer is "no" on that basis?

24 A. (Levitan) We were not sure.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Q. You were not sure. Okay.

2 A. (Levitan) And, I would -- I would defer to the
3 Company's witness, who lives, breathes, and dreams
4 environmental compliance, Mr. Smagula, who can recall
5 precisely what the Company's position was with respect
6 to the CWIS compliance issues.

7 Q. Well, I actually have a few questions for Mr. Smagula
8 later on, but, if it's all right, we'll just stick with
9 you. I'd like to show you a document now, as a matter
10 of fact.

11 MR. SPEIDEL: And, I'll have to change
12 the figures, because the good people of PSNH had submitted
13 an exhibit that superseded one of the Staff exhibits. So,
14 let me just do that. High-tech here, folks. And, I would
15 like to have this styled and marked as "Staff Exhibit 6".

16 (Atty. Speidel distributing documents.)

17 CMSR. HARRINGTON: Any objections to
18 marking?

19 MR. SPEIDEL: And, I will provide some
20 providence for this document in a moment or two.

21 MS. KNOWLTON: I'll just need to take a
22 quick look at this document.

23 MR. SPEIDEL: Sure.

24 CMSR. HARRINGTON: Does everybody have a

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 copy of this?

2 MR. SPEIDEL: Some of our intervenors
3 don't have copies. But I can provide run-offs after the
4 end of today's hearing for them, if they'd like.

5 CMSR. HARRINGTON: Okay. Any objections
6 to marking this as "Exhibit 6" then?

7 (No verbal response)

8 CMSR. HARRINGTON: Seeing none, go
9 ahead.

10 (The document, as described, was
11 herewith marked as **Staff Exhibit 6** for
12 identification.)

13 BY MR. SPEIDEL:

14 Q. So, Mr. Levitan, I've distributed a document here. It
15 is a report that your firm, Levitan & Associates,
16 prepared for NSTAR, and is dated "June 1st, 2010".
17 And, I've distributed an extract, not all the pages,
18 but the bulk of the pages. And, ultimately, I'd like
19 to mention offhand that this report was referenced in
20 the Office of the Consumer Advocate's testimony. So,
21 there has been some reference to this report in past
22 filings on this matter. Can you confirm that Levitan &
23 Associates prepared this report?

24 A. (Levitan) We did.

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Q. Okay. Now, let's turn to Section 1. And, under that
2 Section 1, there's an "Introduction". The pages are
3 not numbered. But, on this material, let's turn from
4 the first page, second page, third page, right on the
5 front of the fourth page. Let's give everybody a sec
6 to familiarize themselves with this.

7 CMSR. SCOTT: What does the beginning of
8 the fourth page say?

9 MR. SPEIDEL: "Introduction". And,
10 then, the first paragraph reads "NSTAR Electric (NSTAR) is
11 proposing to construct a 345 kV transmission line."

12 CMSR. HARRINGTON: Just for the sake of
13 clarity, I think the subsequent pages, at least starting
14 with the next page, is numbered "2", and then ---

15 MR. SPEIDEL: Yes. That's right. The
16 introductory pages are not numbered, unfortunately.

17 CMSR. HARRINGTON: Okay.

18 BY MR. SPEIDEL:

19 Q. So, does the "Introduction" state, in summary, that the
20 Levitan report here addresses, among other things, the
21 economics of continued operation of the Canal Power
22 Plant in southeast Massachusetts on the Cape Cod Canal?

23 A. (Levitan) I apologize for being momentarily distracted.
24 Could you point to where you're referring to?

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 Q. Just the "Introduction" here. This three-paragraph
2 introduction that would be before Page 2 of this
3 report?

4 A. (Levitan) Yes. I'm with you.

5 Q. Okay. So, I'll repeat. Does the "Introduction" state
6 that the Levitan report addresses, among other things,
7 the economics of continued operation of the Canal Power
8 Plant located in southeastern Massachusetts on the Cape
9 Cod Canal?

10 A. (Levitan) It does.

11 Q. Okay. And, then, the "Executive Summary" that follows
12 on Page 2, in general terms, describes Canal as a low
13 capacity factor, dual-unit power plant, with one unit
14 built in 1968 and the other in 1976. "Unit 1 burns
15 only residual fuel oil", while "Unit 2 can burn
16 residual fuel oil and/or natural gas". So, Mr.
17 Levitan, Canal Unit 2 is a vintage 1970's dual-fuel
18 power plant on a saltwater channel, is that right?

19 A. (Levitan) Yes.

20 Q. Okay. I will now read a segment of Levitan &
21 Associates' NSTAR report and ask a number of questions
22 about it. So, let's take a look at the specific line
23 here. This would be towards the middle of the third
24 paragraph under the "Executive Summary", Page 2. And,

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

[WITNESS PANEL: Large~Smagula~Tillotson~Levitan~Carlson]

1 there's a date "2016.", kind of marking that off. And,
2 it begins: "Over the next several years, Canal's
3 financial challenges will be exacerbated by more
4 stringent environmental restrictions, increasing its
5 costs and requiring significant new capital investment.
6 Specifically, we expect that Canal will need to either
7 retrofit its cooling water intake structures with new
8 screens or similar modifications, or it will be
9 required to convert its once-through cooling water
10 system with a capital-intensive, closed loop system and
11 cooling towers."

12 Now, Mr. Levitan, was this statement
13 that the Canal owners would be "required [to make]
14 significant new capital investments" to comply with the
15 regulations based on detailed cost estimates to
16 retrofit the cooling water intake structures or install
17 cooling towers?

18 A. (Levitan) I would not say that the LAI firm conducted
19 exhaustive, detailed engineering analysis of the
20 environmental compliance costs. But we were able to
21 bracket the effect associated with new screens or the
22 more formidable solution, if compelled by EPA, to
23 convert from once-through cooling. And, those numbers
24 became the basis for the financial analysis conducted

{DE 10-261} [Morning Session Only] {05-08-12/Day 3}

1 on behalf of NSTAR to support its application before
2 the State Commission Facility Siting Board.

3 Q. Okay. So, the short answer would be "yes"? That it
4 was based on cost estimates related to the potential
5 for cooling water screening or a cooling tower
6 structure?

7 A. (Levitan) Yes. But I want to clarify that, subject to
8 check, we relied on information from -- in the public
9 record from EPA and from other technical studies done
10 for ISO, as to the costs of environmental compliance.
11 It was not independently generated by Levitan &
12 Associates.

13 Q. Fair enough. Now, Mr. Levitan, would you agree that
14 any requirement to retrofit cooling water intake
15 structures or install cooling towers would have been
16 incorporated or would be incorporated in a final NPDES
17 permit for Canal issued by the Environmental Protection
18 Agency? And, I'll give everyone the acronym. "NPDES"
19 is acronym for "National Pollution Discharge
20 Elimination System".

21 A. (Levitan) I believe that that is a correct statement.

22 Q. At the time you developed your cost estimates for new
23 screens and/or cooling towers at Canal, was the plant's
24 NPDES permit still in draft form and pending before the

1 EPA?

2 A. (Levitan) Subject to check, I believe the answer is
3 "yes". I also think that it's covered either in the
4 report itself and/or through the discovery responses to
5 multiple intervenor requests. So, you may be able to
6 point to the record where we've answered that question.

7 Q. I believe it would be discussed on Page 17 of the
8 report, and among other places. I would concur with
9 that, Mr. Levitan. But we can continue on. So, if the
10 permit was still in draft form at the time the cost
11 estimates were prepared, did Levitan still consider the
12 requirements of the final NPDES permit to be reasonably
13 foreseeable?

14 A. (Levitan) We looked at the draft NPDES permit. And, we
15 looked at the permit that it had been operating under
16 since 1989. And, reached the conclusion, through our
17 own technical discovery effort, that Canal would be
18 likely to have to do something. And, I think we
19 commented in the analysis that, at a minimum, the
20 installation of new screens to retard impingement and
21 entrainment would be required at a much lower cost than
22 the more expensive CapEx associated with best
23 technology available.

24 Q. But still, at that time, you thought it prudent to

1 integrate a possibly wide range of solutions, a wide
2 range of capital investment solutions for the
3 maintenance or the acquisition of the permit for Canal,
4 ranging from screens at one end of expenditure and
5 cooling towers at the other end, is that correct?

6 A. (Levitan) Given the nature of the matter, a
7 transmission owner seeking, in 2010 and 2011, the
8 Facility Siting Board's authorization to build the
9 line, we had no choice but to contemplate this
10 environmental cost exposure.

11 Q. Thank you. So, Mr. Levitan, you seem to have
12 considered the new requirements for existing facilities
13 under Section 316(b) of the Clean Water Act to be
14 reasonably foreseeable in the case of Canal, but not
15 reasonably foreseeable in the case of Newington,
16 another low capacity factor, dual-fuel New England
17 Power plant, on a saltwater channel, is that right?

18 A. (Levitan) I'm going to defer to my colleague, Dr.
19 Carlson.

20 Q. Okay, Dr. Carlson. Should I repeat the question?

21 A. (Carlson) I think I got it. The issue here is not
22 trying to crystal ball how hard or firm certain
23 proposed environmental requirements are or what the
24 alternative means of compliance would be. As you posed

1 the question, you were trying to make an
2 apples-to-apples comparison between the Cape Cod
3 facility and the Newington facility. And, as Mr.
4 Levitan correctly pointed out, we were forced to
5 consider, in the economic analysis in the Cape Cod
6 case, because a transmission line was being proposed,
7 to do a type of analysis which would look at the
8 overall economic impacts of such investment.

9 In the case of Newington, as the top of
10 that Page 28 of our rebuttal indicates, that you had
11 directed us to before, it's a totally different
12 problem. Here, the Company owns Newington. It can
13 have relatively low business-as-usual CapEx
14 expenditures of 500,000 a year. And, it was only at
15 some future date, if the need arises, that you need to
16 consider what the actual implementation strategy would
17 be for compliance and what the costs would be, and you
18 can redo an analysis at that date of its then
19 going-forward economic value.

20 What PSNH has here is a free financial
21 option. It owns Newington Station. It can use that
22 free option to take a wait-and-see attitude and defer
23 any decisions about environmental compliance into the
24 future. That is a different situation entirely than in

1 the Cape Cod case, where investment for transmission
2 was being contemplated right away.

3 Q. But isn't the issue, Dr. Carlson, "reasonably
4 foreseeable" versus "not reasonably foreseeable"? In
5 the instance of the Canal case, the Canal
6 investigation, the overview that Levitan had entered
7 into on the economics of the plant, Levitan believed
8 that the Cooling Water Structures Rule was a reasonably
9 foreseeable factor to consider in likely future capital
10 investments. In Newington, it appears it did not
11 consider that to be "reasonably foreseeable". Are you
12 trying to explain that the reason that you have such a
13 divergence in approaches is because there is one
14 purpose for the Canal study and another purpose for the
15 Newington study?

16 A. (Levitan) I couldn't have said it better myself. That
17 is exactly right. The wait-and-see option that PSNH
18 has is invaluable to its customers. There is no reason
19 to rush prematurely into retirement by monetizing
20 potential heavy CapEx, which could be an inadvertent
21 byproduct of allowing for the possibility of
22 \$100 million or \$50 million for one environmental
23 solution versus another.

24 PSNH has a very high credit rating.

1 But, GenOn, the owner of the Canal Station, in
2 contrast, is junk. And, therefore, the Facility Siting
3 Board needed to know whether it would be safe to assume
4 that the Canal Plant, or plants, would continue to be
5 part of the resource mix of Lower Tremont if compelled
6 to make a significant capital investment for one fix
7 versus another in the 2014 to 2016 time frame. Given
8 the nature of the evidentiary burden NSTAR faced before
9 its state Commission, the analysis was entirely
10 appropriate to address this potential economic outcome.

11 Q. Okay. Well, on that point, Mr. Levitan, let's ask a
12 few questions about some of those estimates. Let's
13 turn to Pages 18 and 19 of your report on Canal, and
14 that would be Staff Exhibit 6. And, I'm going to read
15 this brief excerpt from the bottom of Page 18, and ask
16 you if you stand by this conclusion made by Levitan &
17 Associates. And, it reads as follows: "Under Canal's
18 current operating conditions, it is possible that
19 retrofitting the cooling water intake structures with
20 screens to reduce entrainment of aquatic organisms",
21 and I think "entrainment" is a fancy term for "capture"
22 of aquatic organisms, "combined with the reduction in
23 operating hours due to the short-term transmission
24 upgrades, may satisfy the requirements under

1 Section 316(b) [of the Clean Water Act]. LAI estimated
2 the cost for retrofit of the cooling water intake
3 structures with screens by escalating Canal's 2003
4 estimate and adjusting the cost based on data compiled
5 by the EPA as part of the agency's economic impact
6 analysis of the section 316(b) Phase II final rule.
7 Based on the cost for installing similar retrofitted
8 equipment on comparable plants in similar environmental
9 settings, and assuming that additional site-specific
10 costs will be required to address the engineering
11 challenges at Canal, LAI conservatively estimated that
12 the CapEx for retrofitting the cooling water intake
13 structures at Canal would be \$17 million."

14 Now, do you still support that general
15 conclusion made at the time that you've prepared this
16 report, your entity filed this report?

17 A. (Levitan) At the time that the report was prepared,
18 yes.

19 Q. Okay.

20 A. (Levitan) That was a reasonable estimation of cost.
21 Since then, however, through the discovery process and
22 through information shared during the hearings, by
23 GenOn itself, I would say that our estimate was
24 materially low.

1 Q. It was materially low. And, was your firm's capital
2 cost estimate to build the cooling towers at Canal, if
3 necessary, about \$128 million?

4 A. (Levitan) I would ask that you refer me specifically to
5 a page please.

6 Q. Sure. Just give me a moment.

7 (Short pause.)

8 BY MR. SPEIDEL:

9 Q. Ah, here we are. It's on Part 2, the "Executive
10 Summary", Page 2 of the report. And, I can read you
11 the paragraph at issue at the bottom of the report.
12 "Using a conservative estimation of Canal's fixed
13 operation and maintenance [or] O&M expenses to maintain
14 plant availability, LAI expects that Canal will operate
15 at a significant financial loss over the planning
16 horizon. If we assume the need for minimal
17 environmental upgrades, the present value of the cash
18 operating loss is estimated to be 68 million", and then
19 there's a discussion of a "cash operating loss" of
20 "184 million" for the "more extensive upgrades".

21 Now, the "more extensive upgrades" are
22 discussed on Page 3. There's a discussion here on the
23 third paragraph, that "if Mirant were forced to convert
24 to closed-loop cooling, the incremental cost would

1 escalate to 116.1 million." Now, that would be -- I
2 believe 116.1 would be added to 22.9, to get your
3 general figure of roughly \$128 million. So, we're in
4 the neighborhood of 130 million or thereabouts. So,
5 that was your firm's capital cost estimate to build the
6 cooling towers at Canal, is that right? The
7 incremental cost --

8 A. (Levitan) We adopted the \$116 million for purposes of
9 performing the financial analysis.

10 Q. Okay. And, these estimates, again, they were made
11 without a final NPDES permit in place, and, hence,
12 without reasonable foreseeable certainty, as you have
13 defined it, related to environmental requirements
14 coming into play in the future for this power plant?

15 A. (Levitan) It is correct that the final rule wasn't
16 available to us, but we had done a lot of due diligence
17 and talked to representatives of the EPA. So, we knew
18 on the horizon would be the compulsory requirement for
19 Canal to do something to reduce these environmental
20 effects. So, we bracketed it with the screens and with
21 the cooling tower.

22 Q. And, so, you still, though, insist that, for the
23 purposes of the Newington CUO Study, there needs to be
24 reasonably foreseeable certainty before the potential

1 impact of proposed regulatory changes are taken into
2 account in such a study, is that right?

3 A. (Levitan) We should wait and see, and re-run the Real
4 Option Value model to address exactly how the potential
5 economic onus will affect going forward the continued
6 value from customers' perspective. That is our
7 position.

8 Q. Thank you, Mr. Levitan. I think we're all set on this
9 exhibit. And, just one second please. Very good.
10 Now, let's talk about the CUO Study in general terms.
11 And, Mr. Levitan, in order to estimate the amount of
12 revenue that Newington would receive from ISO-New
13 England's Forward Capacity Market, you developed a
14 long-term forecast of capacity prices, is that correct?

15 A. (Levitan) Yes.

16 Q. Now, would you agree that a significant factor in the
17 development of that forecast -- sorry. Strike that.

18 Now, Mr. Smagula, I have a question
19 directed to you. And, this is a document that has been
20 granted partial confidential treatment by Commission
21 order. It is the Company's response to Staff Data
22 Request Set 2, Question 8. So, I'm only going to
23 provide it to you, your counsel, to the Commissioners,
24 and the Office of the Consumer Advocate's counsel at

1 the present time. I will also ask general questions so
2 that its specific contents are not disclosed today.

3 MR. SPEIDEL: So, I'm going to style
4 this as "Confidential Staff Exhibit 1", and provide it to
5 the parties mentioned.

6 (Atty. Speidel distributing documents.)

7 BY MR. SPEIDEL:

8 Q. Now, --

9 MR. SPEIDEL: Could we take a brief
10 recess just for a second please?

11 CMSR. HARRINGTON: Okay. We'll break
12 for -- if we're going to break anyways, we might as well
13 break for lunch now. So, we'll just wait -- stop now and
14 we'll return at 1:00. So, we'll recess until then.

15 MR. SPEIDEL: Very good. Thank you.

16 (Whereupon the lunch recess was taken at
17 11:59 a.m. and the hearing to resume
18 under separate cover so designated as
19 "***Afternoon Session Only***".)

20

21

22

23

24