

In Re:

*DE 14-238 PSNH: Determination regarding PSNH's
Generation Assets - Technical Session Deposition*

ORIGINAL	
N.H.P.U.C. Case No.	14-238
Exhibit No.	W
Witness	Cronin
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*Richard Hahn and Daniel Koehler - La Capra Associates
October 26, 2015*

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1 STATE OF NEW HAMPSHIRE
2 PUBLIC UTILITIES COMMISSION
3
4 October 26, 2015 - 9:04 a.m.
5 Concord, New Hampshire
6
7 RE: DE 14-238 PUBLIC SERVICE COMPANY OF
8 NEW HAMPSHIRE: Determination Regarding
9 PSNH's Generation Assets.
10 (Technical Session/Deposition of La Capra
11 Associates Witnesses: Richard S. Hahn
12 and Daniel Koehler)
13
14 PRESENT: Alexander F. Speidel, Presiding
15 (Reptg. Non-Advocate Staff)
16
17 APPEARANCES:
18
19 Reptg. Public Service Co. of New
20 Hampshire, d/b/a Eversource Energy:
21 Robert A. Bersak, Esq.
22 Matthew J. Fossum, Esq.
23
24 Reptg. the City of Berlin and the Town of
Gorham:
Eric Maher, Esq. (Donahue, Tucker)
Reptg. the Office of Energy & Planning:
Christopher G. Aslin, Esq., (NH DOJ)
Meredith A. Hatfield, Director
Reptg. New England Power Generators Assn:
Carol Holahan, Esq.
James Monahan
COURT REPORTER: SUSAN J. ROBIDAS, N.H. LCR NO. 44

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1 APPEARANCES: (Continued)
2 Reptg. Conservation Law Foundation:
3 Ivy L. Frignoca, Esq.
4 Reptg. TransCanada:
5 Douglas M. Patch, Esq. (Orr & Reno)
6 Reptg. Granite State Hydropower Assoc.:
7 Richard Norman
8 Reptg. Terry Cronin, Intervenor:
9 Arthur B. Cunningham, Esq.
10 Pentti Aalto, pro se
11 Reptg. PUC Staff Advocates
12 (Settling Staff):
13 F. Anne Ross, Esq.
14 Reptg. Residential Ratepayers:
15 Susan Chamberlin, Esq.
16 James Brannan
17 Office of Consumer Advocate
18 Reptg. PUC Non-Advocate Staff:
19 Michael J. Sheehan, Esq.
20 Leszek Stachow, Asst. Dir./Electric Div.
21 Jay Dudley, Electric Division
22 Richard Chagnon, Electric Division

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	3 Northeast Market Model
	PUBLIC
	1 2014 La Capra Report (Redacted)
	2 2015 La Capra Update (Unredacted)
	3 2014 Staff Report

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1 PROCEEDINGS
2 MR. SPEIDEL: Ladies and
3 gentlemen, we're about to begin. I would
4 request that we open the record now, please.
5 Staff would like to welcome the
6 parties to today's technical session in Docket
7 No. DE 14-238 regarding the Public Service
8 Company of New Hampshire, doing business as
9 Eversource, Asset Determination docket. We
10 would like to take a quick roll call of
11 everyone in the hearing room today, and then
12 we'll open the floor to any statements
13 regarding document production or other
14 ancillary matters.
15 I'm Alexander Speidel. I am a
16 Staff Attorney/Hearing Examiner representing
17 Non-Advocate Staff.
18 MR. DUDLEY: Jay Dudley with the
19 Public Utilities Commission.
20 MR. CHAGNON: Rick Chagnon, PUC.
21 MR. SHEEHAN: Mike Sheehan
22 Non-Advocate Staff.
23 MR. CANNATA: Mike Cannata, IAI,
24 Non-Advocate Staff.

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<p>1 MR. MURPHY: Dean Murphy, 2 principal with the Brattle Group. 3 MR. STACHOW: Leszek Stachow, 4 New Hampshire PUC. 5 (Ms. Chamberlin joins proceedings.) 6 MR. SPEIDEL: We're taking roll, 7 Susan. And if everyone could please speak into 8 the microphones as distinctly as possible. 9 MS. CHAMBERLIN: Is it my turn? 10 MR. SPEIDEL: Yes. 11 MS. CHAMBERLIN: Susan 12 Chamberlain, Consumer Advocate. With me today 13 is Jim Brennan. 14 MR. AALTO: Pentti Aalto, 15 representing myself. 16 MS. FRIGNOCA: Ivy Frignoca, 17 Conservation Law Foundation. 18 MR. CUNNINGHAM: Art Cunningham 19 for Terry Cronin. 20 MR. ASLIN: Chris Aslin from the 21 A.G.'s office, on behalf of the Office of 22 Energy and Planning. With me is Meredith 23 Hatfield, Director of the Office of Energy and 24 Planning, and Jim Letzelter from Liberty</p>	<p>1 Eversource. 2 MR. CHUNG: Eric Chung from 3 Eversource. 4 MR. SPEIDEL: And on the witness 5 stand we have... 6 MR. HAHN: Richard Hahn from La 7 Capra Associates. 8 MR. KOEHLER: Dan Koehler from 9 La Capra Associates. 10 MR. SPEIDEL: Thank you very 11 much, all. I would now like to open the floor 12 to the parties that would like to indicate 13 anything regarding document production or 14 ancillary matters. 15 MS. ROSS: Advocate Staff would 16 like to request that the 2014 report prepared 17 by La Capra Associates be admitted as an 18 exhibit so that we may question La Capra on the 19 foundation work that formed the basis for 20 Staff's -- Advocate Staff's testimony, and 21 also, we assume, is the basis for the 2015 22 update. 23 MR. SPEIDEL: Is there any 24 contemplation of a non-disclosure agreement</p>
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<p>1 Consulting Group. 2 MR. PATCH: Doug Patch from Orr 3 & Reno for TransCanada. 4 MS. HOLAHAN: Carol Holahan on 5 behalf of the New England Power Generators 6 Association. 7 MR. MAHER: Eric Maher, on 8 behalf of the City of Berlin and Town of 9 Gorham. 10 MR. NORMAN: Richard Norman, 11 Granite State Hydropower Association. 12 MR. MONAHAN: Jim Monahan for 13 the New England Power Generators Association. 14 MS. ROSS: Anne Ross for 15 Advocate Staff. 16 MR. RICE: Brian Rice, 17 Eversource. 18 MR. GOULDING: Chris Goulding, 19 Eversource. 20 MR. FOSSUM: Matt Fossum, 21 Eversource. 22 MS. LANDIS: Linda Landis, 23 Eversource. 24 MR. BERSAK: Bob Bersak,</p>	<p>1 being proffered to other parties, Ms. Ross? 2 MS. ROSS: Yes, there is. I 3 shared, I believe with Non-Advocate Staff last 4 week, a proposed modification to the 5 non-disclosure agreement that we've already 6 signed with regard to the 2015 update that 7 merely inserts a couple of references to the 8 2014 report, which would allow us to use that 9 confidential 2014 report in this litigation. 10 And I have that with me in hard copy, so that 11 if it's agreeable to the La Capra witnesses and 12 to the rest of the parties, we could have that 13 executed. I also have taken the liberty of 14 making copies of the 2014 report in its 15 unredacted form, which I would then be able to 16 distribute to the parties signing the 17 non-disclosure agreement for use in this 18 litigation. 19 MR. SPEIDEL: Thank you very 20 much. 21 To the La Capra witnesses: 22 Would you have any objection to examining this 23 non-disclosure agreement and executing it at 24 the present time, or would you like to take</p>

1 that under advisement?

2 MR. HAHN: May I ask a
3 clarifying question first?

4 MR. SPEIDEL: Yes.

5 MR. HAHN: Reference was made to
6 the 2014 report. There were actually two
7 documents provided by La Capra in 2014. One is
8 entitled "PSNH Generation Asset and PPA
9 Valuation Report, and the second report is
10 entitled, "Northeast Market Model,
11 January 2014." Which of those reports do you
12 contemplate making available, subject to the
13 non-disclosure agreement?

14 MS. ROSS: I had contemplated
15 the asset report, but not the background on the
16 model. I understand from reading your motion
17 for confidential treatment that the model is
18 more sensitive because it gets into more of
19 your methodology behind your assessment. And
20 at this time I wasn't going to request
21 admission of the second report on the market
22 model that was also dated 2014.

23 MR. HAHN: That's correct. That
24 clarification is very helpful. I believe,

1 10-minute recess to enable the La Capra
2 witnesses to examine the non-disclosure
3 agreement and to see if it meets their
4 standards, and then it would be proffered if,
5 at their election, to counter parties that wish
6 to execute it today. And in principle, Staff
7 does not object to the introduction of the
8 report, the 2014 report, as an exhibit;
9 however, we want to make sure that the
10 non-disclosure agreement meets the standards
11 for La Capra's protection of this material as a
12 matter of contractual law. Currently, there is
13 a pending motion for confidential treatment.
14 And under the Commission's confidential
15 treatment rules, during the pendency of the
16 ruling on the motion, under the provisions of
17 New Hampshire R.S.A. 91-A, this material is
18 prevented from disclosure. However, if folks
19 receive this material through the
20 non-disclosure agreement, there still remains
21 an obligation to protect it from further onward
22 disclosure under the provisions of R.S.A. 91-A.
23 I hope that's understood.

24 (No verbal response)

1 given that our 2015 update is based on that
2 first 2014 document, that it would be
3 appropriate to make it available, subject to
4 the non-disclosure agreement. Now, I'm not
5 sure exactly, you know, how that agreement was
6 modified. But in principal, we have no issue
7 with providing that first report, the first
8 2014 report, to parties who have executed the
9 non-disclosure agreement.

10 MS. ROSS: I can certainly make
11 it available now to Staff -- to Non-Advocate
12 Staff, and I would hope they could review it on
13 your behalf. As I said, I believe I shared an
14 electronic version with them last week. But I
15 can make that available now.

16 MR. HAHN: I guess it's not
17 up -- I don't know if it's up to me to be
18 asking questions at this point, but --

19 MR. SPEIDEL: No, it's all
20 right. You may ask these questions.

21 MR. HAHN: Is this something we
22 could look at during a break in the proceeding?

23 MR. SPEIDEL: Yes, we may.
24 Perhaps it might not be a bad idea to take a

1 MR. SPEIDEL: Therefore, at the
2 present time we will have a recess until 9:30
3 so that the La Capra witnesses may review the
4 non-disclosure agreement and determine as to
5 whether it is appropriate for execution. Thank
6 you. We will be off the record until 9:30.

7 (Whereupon a brief recess was taken at
8 9:15 a.m. and the proceedings resumed at
9 9:30 a.m.)

10 MR. SPEIDEL: Okay, folks. It's
11 9:30. I would ask that we open the record.

12 Mr. Hahn, on behalf of La Capra,
13 could you state if the non-disclosure agreement
14 proffered by Ms. Ross is acceptable?

15 MR. HAHN: Yes, it is
16 acceptable.

17 MR. SPEIDEL: Therefore,
18 Ms. Ross, how would you like to handle the
19 distribution of the non-disclosure agreement?

20 MS. ROSS: I believe I've
21 already given it to parties in the room. So I
22 would encourage people to go ahead and date it
23 and sign at the end for the parties who are
24 going to have access, the receiving party line,

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1 and then we'll get it to Non-Advocate Staff.
2 MR. SPEIDEL: Very well. Could
3 we have a quick roll of the parties that do
4 have the report in their possession at the
5 present time and those that do not have the
6 report in their possession at the present time?
7 Non-Advocate Staff has the
8 report in its possession at the present time.
9 MS. ROSS: I have it.
10 MR. SPEIDEL: Advocate Staff has
11 it. Anyone else have it?
12 MR. AALTO: Pentti Aalto.
13 MS. CHAMBERLIN: Oh, the report.
14 I thought you meant the confidential --
15 MR. SPEIDEL: Oh, no, no, no,
16 not the non-disclosure agreement, the actual
17 report itself. So, Advocate and Non-Advocate
18 Staff have the report. Any other parties have
19 the report in their possession?
20 MR. PATCH: Can I just clarify?
21 You mean the unredacted report?
22 MR. SPEIDEL: Yes.
23 MR. PATCH: TransCanada doesn't
24 have it, and we're not signing the

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1 non-disclosure.
2 MR. SPEIDEL: Okay. Which
3 parties intend to sign the non-disclosure
4 agreement today? Could we please have a roll
5 of those? Speak into the microphone and state
6 your parties, please.
7 MS. CHAMBERLIN: Consumer
8 Advocate will sign the confidentiality
9 agreement.
10 MS. FRIGNOCA: Conservation Law
11 Foundation will sign the confidentiality
12 agreement.
13 MR. AALTO: Pentti Aalto will
14 sign the agreement.
15 MR. MAHER: City of Berlin and
16 the Town of Gorham will sign the
17 confidentiality agreement.
18 One point of clarification:
19 Will signing the confidentiality agreement
20 allow for disclosure to consultants retained by
21 the parties, so long as that consultant signs
22 this confidentiality agreement? Yes?
23 MR. HAHN: Yes.
24 MR. MAHER: Thank you.

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1 MR. NORMAN: Granite State --
2 MS. HOLAHAN: New England --
3 sorry.
4 MR. SPEIDEL: One at a time,
5 folks, one at a time.
6 MS. HOLAHAN: The New England
7 Power Generators Association will sign the
8 confidentiality agreement.
9 MR. NORMAN: Granite State will
10 also sign.
11 MR. SPEIDEL: Will any other
12 parties sign the confidentiality agreement?
13 MR. CUNNINGHAM: Terry Cronin
14 will not sign the confidentiality agreement.
15 MR. ASLIN: Office of Energy and
16 Planning will sign the confidentiality
17 agreement, although I would reserve our right,
18 since we haven't seen the unredacted portion
19 yet, reserve the right to request additional
20 information later. After we've seen the
21 unredacted report, we may reserve the right to
22 request additional information we deem
23 necessary and relevant to the docket.
24 MR. MAHER: The City of Berlin

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1 and the Town of Gorham echoes the Office of
2 Consumer Advocate's [sic] stance.
3 MR. BERSAK: Alex, Eversource
4 has signed the agreement.
5 MR. SPEIDEL: Okay. Is that a
6 full roll of all the parties who intend to sign
7 or have signed the agreement?
8 MS. ROSS: Advocate Staff will
9 sign the agreement.
10 MR. SPEIDEL: Very well. Staff
11 takes no position regarding the assertion or
12 preservation of rights by the third parties;
13 however, we do not object to the execution of
14 the non-disclosure agreements or the subsequent
15 distribution of the unredacted reports from
16 2014. Therefore, I would ask that Ms. Ross
17 handle the distribution of those reports at the
18 present time. Thank you.
19 MS. ROSS: Thank you.
20 (Ms. Ross distributes the unredacted 2014
21 La Capra report to parties having signed
22 non-disclosure agreement.)
23 MS. ROSS: If it would be
24 possible later, we would probably like to have

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1 copies just for the record, so that people who
2 signed have a copy of what they signed. With
3 that, I will...

4 MR. SPEIDEL: That would be
5 fine. We can provide those copies.

6 MS. ROSS: I assume you all have
7 this. I think we're finished with that piece.

8 MR. SPEIDEL: Very good. Are
9 there any other requests by parties related to
10 document production or other matters, such as
11 procedural matters?

12 MR. MAHER: The City of Berlin
13 and the Town of Gorham would like to state on
14 the record its prior request for document
15 production.

16 MR. SPEIDEL: Thank you. Is
17 there anything that the City of Berlin and the
18 Town of Gorham would like to mention, in terms
19 of the ordering of questioning today?

20 MR. MAHER: Not in terms of
21 ordering -- well, with the exception, I
22 believe, my co-counsel, Chris Boldt, has
23 requested that the City of Berlin be allowed to
24 go at the end of all other questioning, out of

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1 order of your proposal.

2 MR. SPEIDEL: Excellent. Is
3 there any objection to that proposal by the
4 City of Berlin?

5 (No verbal response)

6 MR. SPEIDEL: None heard. I
7 would like to invite my co-counsel, Mike
8 Sheehan, to begin the questioning of the
9 witnesses after they are sworn.

10 May the court reporter please
11 swear the witnesses.

12 (WHEREUPON, RICHARD S. HAHN and DANIEL
13 KOEHLER were duly sworn and cautioned by
14 the Court Reporter.)
15 RICHARD S. HAHN, SWORN
16 DANIEL KOEHLER, SWORN
17 EXAMINATION
18 BY MR. SHEEHAN:
19 Q. Good morning. Mr. Hahn, if you could give us a
20 brief description of your professional
21 background that brings you here today.
22 A. (Hahn) I'm a principal consultant with the firm
23 of La Capra Associates, Incorporated. We are
24 an employee-owned consulting firm located in

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1 Boston; Portland, Maine; and Essex Junction,
2 Vermont. I've been with La Capra for 12 years.
3 in which time I have had numerous assignments
4 in the energy industry: Asset valuations,
5 utility planning, utility operations. Just
6 about every aspect. Engineering. I won't list
7 them all. But prior to that I worked for 30
8 years for Boston Edison Company in various
9 management functions, including all of those
10 above areas. I have a master's in electrical
11 engineering, power systems, from Northeastern
12 University, and an MBA from Boston College.
13 And I'm a registered professional engineer in
14 the Commonwealth of Massachusetts.

15 Q. Mr. Koehler, the same, please.

16 A. (Koehler) My name is Dan Koehler. I'm a
17 consultant with La Capra Associates. I've been
18 with La Capra for five years, during which time
19 I've worked in all areas of the company's
20 business. Most relevant to the work here, I've
21 done a lot of work for our Market Analytics
22 Division in particular, running the AURORAxmp
23 Market Simulation model, as well as other
24 market forecasting. I've also been involved in

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1 several asset valuations, working with expert
2 witnesses at La Capra to develop asset
3 valuations of gas-fired generators,
4 hydroelectric assets and other generators,
5 mostly in New England.

6 My educational background, I have a
7 bachelor's in applied math from Yale
8 University, and I have a master's in public
9 policy and management from the University of
10 Southern Maine.

11 Q. Thank you. And for both of you, feel free to
12 answer the questions as appropriate between the
13 two of you. I assume some will be better for
14 one than the other, and I can leave it to you
15 to decide those. And second, with regard to
16 confidentiality, since not everyone in the room
17 has signed the NDA, I would appreciate, if we
18 get to areas that are getting close, that we
19 try our best to answer questions without
20 getting into confidential matters. But
21 certainly if we have to, we will cross that
22 bridge when we get there, as far as having to
23 excuse people for those particular answers.
24 But we'll try our best not to have to go there.

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1 Has La Capra filed any testimony in this
2 docket, 14-238?
3 A. (Hahn) No.
4 Q. Did La Capra file testimony in the sister
5 docket, 11-250, which was the so-called
6 "Scrubber" docket?
7 A. (Hahn) No, we did not file testimony.
8 Q. And in the docket that produced the reports
9 that we'll be talking about this morning, which
10 was 13-020, you filed reports. Was there any
11 testimony associated with those reports that
12 you recall?
13 A. (Hahn) I don't believe so, no.
14 Q. Okay. La Capra did prepare a -- and as you
15 just said before you went -- we started this
16 session, that you prepared two reports in 2014:
17 A valuation report and a second one called
18 "Market Analysis"; is that correct?
19 A. (Hahn) Yes. The second report was the
20 Northeast Market Model. But yes, you're
21 correct, there are two reports.
22 Q. And if you could just repeat for us the title
23 of the valuation report which is the one that
24 was just the subject of the NDA and distributed

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1 to some of the parties in this room?
2 A. (Hahn) Sure. It's "PSNH Generation Asset and
3 PPA Valuation Report," dated March 31st, 2014.
4 Q. And that report does a lot. But at the end, it
5 comes to an opinion on the valuation of the
6 PSNH assets as of that date; is that correct?
7 A. (Hahn) That's correct.
8 Q. And that value, total value was what? Two
9 hundred and some million dollars; correct?
10 A. (Hahn) Two hundred and twenty-five million
11 dollars.
12 Q. And that value is comprised of different values
13 for the different PSNH generation assets; is
14 that correct?
15 A. (Hahn) Yes. Each asset was valued separately
16 by generating station. So, Merrimack Station
17 was valued as one asset, even though there's
18 multiple generating units there.
19 Q. I'm going to refer to that document as "the
20 2014 La Capra Report," okay.
21 A. (Hahn) Fine, sir.
22 Q. There was another report filed in the same
23 docket, 13-020, about the same time. That was
24 a report prepared by Commission Staff. Do you

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1 recall that?
2 A. (Hahn) I'm aware that Commission Staff filed a
3 report on April 1st, 2014, if that's the
4 document you're referring to.
5 Q. Correct. And I believe you have a copy of it
6 in front of you. At the top of the page is
7 listed IR 13-020; is that correct?
8 A. (Hahn) That is correct, sir.
9 Q. If you could read for us the title of that
10 report.
11 A. (Hahn) "Public Service of New Hampshire (PSNH)
12 Preliminary Status Report Addressing the
13 Economic Interest of PSNH's Retail Customers As
14 It Relates to the Potential Divestiture of
15 PSNH's Generating Plants." That's dated
16 April 1st, 2014.
17 Q. And that cover sheet indicates who prepared
18 that report; is that correct?
19 A. (Hahn) Yes.
20 Q. And that was who?
21 A. (Hahn) Staff of the New Hampshire Public
22 Utilities Commission.
23 Q. And that cover sheet indicates what documents
24 were filed with that report; is that correct?

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1 A. (Hahn) Well, the title page references,
2 "Accompanied By Detailed Valuation Analysis
3 Prepared by La Capra Associates and the ESS
4 Group."
5 Q. And as you just said, this document is dated
6 April 1, the day after the report that you
7 prepared; is that correct?
8 A. (Hahn) That is correct.
9 Q. At the time that the -- assuming for argument's
10 sake that this report was filed April 1, as of
11 April 1, 2014, had La Capra reviewed the Staff
12 report?
13 A. (Hahn) We did not review a prior version of
14 this report, to the best of my recollection.
15 We did provide Staff input information that was
16 taken from our 2014 La Capra report that Staff
17 used in producing this report, but we did not
18 review the report.
19 Q. I'm going to ask you to turn to Page 3 of the
20 Staff report. And there's a chart on Page 3
21 titled, "Forecast of Retail Default Service
22 Rates." Do you see that?
23 A. (Hahn) Yes.
24 Q. Did you prepare that table, La Capra?

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- 1 A. (Hahn) No, that table was prepared by Staff.
2 Q. And did you have any --
3 A. (Hahn) Actually, when you say "table," you're
4 talking about the graph?
5 Q. Correct.
6 A. (Hahn) Okay. Yes, that's Staff. That graph
7 was prepared by Staff.
8 Q. And other than perhaps providing Staff some
9 information, did you have any other involvement
10 in the preparation of that graph on Page 3?
11 A. (Hahn) Not in the preparation of the graph.
12 The way this came about was we were finishing
13 up our valuation report, the 2014 La Capra
14 report, and Staff, at the time, asked us if we
15 could provide data that would allow them to
16 develop a forecast of what default service
17 rates would be going forward. Our modeling
18 analysis did produce that information, so we
19 provided that to Staff. Staff then took that
20 information, gathered other data and made other
21 calculations. And that's my understanding of
22 what went into this graph.
23 Q. So is it fair to say that La Capra did not
24 prepare a forecast of PSNH default service

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- 1 rates?
2 A. (Hahn) That's fair.
3 Q. On the next page of the Staff report, Page 4,
4 there's another graph titled, "Forecast of PSNH
5 Default Service Rate Compared to Retail Default
6 Service Rate." Do you see that?
7 A. (Hahn) I do.
8 Q. Did La Capra prepare that chart or graph?
9 A. (Hahn) No.
10 Q. Did La Capra prepare any forecast of PSNH
11 default service rate compared to retail default
12 service?
13 A. (Hahn) No.
14 Q. Did La Capra prepare a report for Commission
15 Staff in 2015?
16 A. (Hahn) Yes.
17 Q. And the title of that report is what?
18 A. (Hahn) "PSNH Generation Asset and PPA Valuation
19 Report, August 2015 Update." And the date of
20 that report is August 17th, 2015.
21 Q. And as you're aware, the parties to this case
22 went through a similar process that we just did
23 regarding the non-disclosure agreements and
24 production of that report to parties who signed

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- 1 that. Do you recall that process?
2 A. (Hahn) Yes.
3 Q. And with regard to the 2015 report, there was
4 both a public version and a confidential
5 version. Do you recall that?
6 A. (Hahn) Correct.
7 Q. I also note that the documents prepared didn't
8 have the "Draft" stamp on all of them. Was a
9 final version of that report ever prepared by
10 La Capra?
11 A. (Hahn) I don't believe so.
12 Q. Can you tell us what you recall of the process
13 that resulted in the 2015, what I will call
14 "the 2015 update"?
15 A. (Hahn) Sure. Our 2014 report was issued on
16 March 31st, 2014. I'm not sure exactly when,
17 but sometime, I want to say, either June or
18 July of 2015, Staff called us -- called me at
19 La Capra and asked about what has changed since
20 the 2014 La Capra report was issued. We
21 discussed changes, and Staff asked about
22 whether it would be possible to produce an
23 update of the 2014 report. At that time, I
24 stated that there were really two alternative

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- 1 ways to proceed: One would be a complete
2 update, a complete redo of the 2014 La Capra
3 report, which would take several months and
4 approximately about the same level of effort as
5 went into the original report. We also talked
6 about doing a less-extensive update to account
7 for what I felt was the major changes that had
8 occurred since 2014. And those changes were
9 that there was more information on forward
10 capacity prices and the outlook for energy
11 prices in New England, particularly electric
12 locational marginal prices, LMPs. And also,
13 prices for delivered natural gas to New England
14 power plants had changed. And I indicated that
15 if we did just update it, took the original
16 study, all of the simulations that were done --
17 and just so everyone understands, we have a
18 model that simulates the operation of the
19 ISO-New England electricity market on an hourly
20 basis. It's fairly involved to run one of
21 these. But what we suggested was that we could
22 keep the dispatch the same and update our
23 models for what would amount to higher capacity
24 revenues to generators and lower energy

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1 revenues to generators, and we indicated that
2 that would take far less time and far less
3 effort.
4 Q. And the second option is what Staff elected to
5 have you do; is that correct?
6 A. (Hahn) That's correct.
7 Q. And that's what resulted in the 2015 update we
8 have in front of us now.
9 A. (Hahn) Yes.
10 Q. And the bottom line of that update was a new
11 number for the total value of the PSNH assets;
12 is that right?
13 A. (Hahn) Yes.
14 Q. And that bottom line change was what?
15 A. (Hahn) It didn't change very much. Increased
16 to \$235 million from \$225 million; so, an
17 increase of about \$10 million in the valuation
18 of the assets. That's all of the assets in
19 aggregate.
20 Q. Some went up, some went down, and that result
21 was --
22 A. (Hahn) Net increase of 10 million.
23 Q. As part of the 2015 update, did Staff ask you
24 to update or calculate the PSNH energy service

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1 rate?
2 A. (Hahn) I don't believe so.
3 Q. Did Staff ask you to calculate any impact that
4 the sale of the assets would have on PSNH's
5 energy service rates?
6 A. (Hahn) No.
7 Q. Did the report ask you to give any opinion on
8 the question of whether divestiture should
9 happen, or when?
10 A. (Hahn) The 2015 report did not ask La Capra
11 that question, nor were we asked to address it.
12
13 Q. And that holds for the 2014 report as well.
14 You weren't asked to address that question --
15 meaning, whether divestiture was appropriate,
16 and if so, when?
17 A. (Hahn) That's correct. We were not asked that.
18 We were not asked to address that question as
19 part of the 2014 report.
20 Q. The 2014 report projected an LMP which is --
21 what is an "LMP"?
22 A. (Hahn) LMP stands for locational marginal
23 price. It is a -- there are -- it is a price
24 at each commercial zone within the ISO-New

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1 England Energy Settlement System. So it varies
2 by where you are in New England.
3 Q. And that price, that LMP -- strike that.
4 You also prepared in the 2014 report a
5 forecast of capacity prices; is that correct?
6 A. (Hahn) Yes, that was one of the inputs into the
7 2014 report. The LMPs were an output.
8 Q. And part of the -- as you just said, part of
9 the reason for the 2015 update is that the
10 capacity forecast in the 2014 report was out of
11 date because there had been another Forward
12 Capacity auction; is that right?
13 A. (Hahn) That's correct. In between the 2014 La
14 Capra report and the 2015 La Capra report,
15 FCA -- which stands for Forward Capacity
16 Auction -- No. 9 had occurred, and we knew what
17 the prices were.
18 Q. Does the LMP in your 2014 report contain any
19 costs related to PSNH generation?
20 A. (Hahn) The LMP is a indication of the marginal
21 cost at that location. It represents the cost
22 of supplying one more megawatt in an hour -- or
23 one megawatt hour during that hour, at that
24 particular location. So, to the extent that

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1 Public Service of New Hampshire's generating
2 units were in the dispatch that created that
3 price, then I think arguably you could say it
4 had an impact. But the price itself -- the
5 LMPs in New England, the vast majority of the
6 time, are set by natural gas combined cycle
7 units. So I can't say for sure, but I don't
8 believe that any of Public Service of New
9 Hampshire's units set the price.
10 Q. Well, I'm asking what you looked at in coming
11 up with your opinion of what the locational
12 marginal price was forecasted to be. Did you
13 do any analysis of PSNH generation costs?
14 A. (Hahn) We did not do any analysis. But let me
15 explain what we did do.
16 We had -- we developed our own forecast of
17 generator fuels -- so, natural gas, coal, wood.
18 We did receive from the Company, Public Service
19 of New Hampshire, operating characteristics for
20 their plants and for, I think it was also
21 variable O&M, non-fuel O&M costs. And those
22 were inputs into our Northeast Market Model,
23 which runs an hourly dispatch of the New
24 England energy grid. So those -- and we have

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1 inputs for every other generating unit in the
2 ISO-New England system as well. And that's how
3 ISO-New England dispatches its system. It
4 gets -- it receives bids from generators'
5 offers to sell their output. They run a
6 dispatch that estimates the least cost way to
7 serve any particular load level, and then they
8 calculate the marginal price, which is the cost
9 of one additional megawatt in an hour, and that
10 becomes the LMP. Our Northeast Market Model
11 simulates that process in the future. So it
12 performs essentially the same dispatch that
13 ISO-New England would, except ours is
14 forward-looking farther into the future.
15 Q. Is it fair to say that the LMP is a market
16 price?
17 A. (Hahn) Yes.
18 Q. And that market price, although as you just
19 described, it takes into account many, many
20 pieces of information -- well, strike that.
21 Did you review Mr. Cannata's testimony
22 in this case?
23 A. (Hahn) I did.
24 Q. Mr. Cannata describes the values of load

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1 obligation payments that La Capra used in its
2 New Hampshire energy prices for the low gas
3 case. The question is: Did he accurately
4 reflect those values in his testimony?
5 A. (Hahn) I don't think Mr. Cannata's testimony
6 used LMPs. So I guess the answer to that
7 question is, I don't think so.
8 Q. The question wasn't directed at the LMPs but at
9 the load obligation payments. I can find the
10 reference.
11 A. (Hahn) Yeah, a reference would be helpful, Mr.
12 Sheehan.
13 Q. Sure.
14 (Pause)
15 Q. Do you have a copy of Mr. Cannata's testimony
16 in front of you?
17 A. (Hahn) I do.
18 Q. At Table 1 on Bates page on the bottom, Page 10
19 of 41.
20 A. (Hahn) I have Page 10, Table 1.
21 Q. There's a column third from the right titled,
22 "La Capra Weighted Average Dollars Per Kilowatt
23 Hour Month For Calendar Year." Do you see that?
24 A. (Hahn) Yes.

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1 Q. And my question is simply: Did Mr. Cannata
2 accurately reflect values he says are from La
3 Capra. Are they correct? And the issue is
4 it's a math thing. You had annual values. He
5 did the math to make them into monthly values.
6 A. (Hahn) Oh, all right. That I can explain.
7 Sorry if I was being obtuse.
8 Q. That's okay.
9 A. (Hahn) The ISO-New England capacity year runs
10 from June 1st of one year to May 31st of the
11 next year. So they refer to that as a
12 "capacity year." I'll use as an example
13 2014-2015; so, June 1st, 2014 through May 31st
14 of 2015. And the prices are set for those 12
15 months, seven of which occur in 2014 and five
16 of which occur in 2015. So it's not uncommon
17 to use -- to do cost analyses on a
18 calendar-year basis. So you would need to --
19 if I wanted to do a calendar-year forecast for
20 2015, I would take five months from the
21 2014/2015 capacity year and seven months from
22 the 2015/2016 capacity year and weight them.
23 So, five times the first price, plus seven
24 times the second price, divided by 12 gives you

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1 an average for the year. And it appears to me
2 from Table 1 that that's what Mr. Cannata did
3 as well.
4 Q. You don't have your calculator in front of you.
5 But if that's the approach he took, that was
6 the right approach to take in order to get a
7 number as he described it, a weighted average
8 in dollars per kilowatt month.
9 A. (Hahn) For a calendar year, yes, that appears
10 to be the same method he used.
11 Q. Mr. Cannata held capacity values constant at
12 the FCM 9 levels from 2019 through 2021. If
13 you were to do that kind of projection, would
14 you do that, or would you do some other
15 analysis for future capacity values?
16 A. (Hahn) I would not just take the FCA 9 price
17 and assume it fixed. We have a model that
18 forecasts capacity prices, and that's what we
19 would use. That's what we used in the 2014 La
20 Capra report, and that's what we used in the
21 2015 La Capra report, the August 2015 update.
22 Q. And the update, the future -- the forecasted
23 prices based on FCM 9 showed that those prices
24 rose from FCM 9 levels; is that correct?

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- 1 A. (Hahn) Eventually.
2 Q. At least over the course of that, well, yeah,
3 two- or three-year period?
4 A. (Hahn) I'm going to refer to the confidential
5 portion of the 2015 report, but we don't need
6 to go into a special session for that. Those
7 of you that have the report, you can see it.
8 Those of you that haven't signed a
9 non-disclosure agreement won't be able to see
10 it.
11 But on Page 7 in the update, immediately
12 after FCA No. 9 we assume a slight reduction in
13 prices and then followed by increases each
14 year.
15 Q. Okay. If you could locate Mr. Chung's
16 testimony. I understand you have it in front
17 of you. And in particular, Page 4, you have
18 that in front of you?
19 A. (Hahn) Yes, I do, sir.
20 Q. In the question and answer at Lines 4 through
21 11, the answer says, "The primary source of the
22 data for the savings estimate was the April 1,
23 2014 study conducted by La Capra Associates as
24 part of Docket No. IR 13-020."

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- 1 My question is: The April 1, 2014 study,
2 was that the one conducted by La Capra or by
3 Staff?
4 A. (Hahn) No, the April 1st report was performed
5 by Staff.
6 Q. And that's what we just went through 15 minutes
7 ago.
8 A. (Hahn) Yes, sir.
9 Q. The next sentence says, "The La Capra study
10 contained forecasts of prices for PSNH default
11 energy service, as well as that of
12 competitively supplied electricity, along with
13 other information." Again, is that the
14 forecasts that were in the Staff report, not in
15 the La Capra report?
16 A. (Hahn) I believe that they were the forecast --
17 that the reference is to the forecast in the
18 Staff report.
19 Q. Turn to Page 5 of the same, Mr. Chung's
20 testimony, question and answer, Lines 1 through
21 7. The answer is: "The most significant
22 financial modeling assumptions contained in my
23 analysis relate to: 1) the estimated
24 generation assets sale price" -- I'll stop the

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- 1 quote. That is what you, La Capra, did;
2 correct?
3 A. (Hahn) Correct.
4 Q. "2) forecasted competitive market energy
5 rates." You provided that information; is that
6 correct?
7 A. (Hahn) Well, no, I think that's what Staff
8 provided. We provided information in terms of
9 LMP and capacity prices, and then Staff -- the
10 April 1st Staff report produced the forecast of
11 competitive market energy rates, which would be
12 what customers would pay if default service
13 were procured from ISO markets.
14 Q. Okay. And returning to the quote,
15 "3) forecasted PSNH's energy service rates."
16 And again, that is something that Staff did,
17 not La Capra; is that correct?
18 A. (Hahn) I believe that's correct, yes.
19 Q. And, "4) costs associated with the Burgess and
20 Lempster PPAs." Is that work that La Capra did
21 or Staff?
22 A. (Hahn) Well, the costs of the PPAs were from
23 the PPAs themselves. So we had that in our
24 report, and Staff would have that information

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- 1 as well.
2 Q. Okay. And the following statement says, "All
3 of these assumptions come directly from the La
4 Capra study." That's not entirely accurate, as
5 we just summarized; correct?
6 A. (Hahn) Correct. I think, obviously, some of it
7 came from our report and some of it came from
8 Staff's report.
9 Q. There was another statement that you don't have
10 in front of you that was in a pleading filed in
11 this case that's in a similar vein. I just
12 want to read it to you and ask you the same
13 question, if there's similar confusion between
14 what La Capra did and what Staff did. This is
15 from Advocate Staff's motion regarding what
16 brought about this procedure.
17 Quote: "Mr. Cannata directly refutes the
18 conclusions of La Capra analysis that
19 divestiture is in the economic interest of PSNH
20 customers."
21 So my question is: Did the La Capra
22 analysis conclude that the divestiture is in
23 the economic interest of PSNH customers in any
24 of its reports in 2014 or 2015?

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1 A. (Hahn) That was not a conclusion we offered one
2 way or another.
3 Q. Thank you.
4 Just a clarification on what -- again,
5 going back to what La Capra did in the 2014
6 report as updated, as opposed to what Staff did
7 in its report. Am I correct to say that what
8 La Capra did is it calculated and projected
9 LMP, and it prepared a capacity forecast, but
10 it was Staff that put those two numbers with
11 whatever other adjustments it made to come up
12 with a competitive rate and a PSNH rate? Is
13 that a fair statement?
14 A. (Hahn) But we did talk with Staff about that,
15 as I previously indicated. Staff asked us
16 if -- you know, how would you do a comparison.
17 And we said, well, the -- if you buy default
18 service from a supplier, a third-party
19 supplier, or if you go to the ISO markets
20 directly, you'll pay capacity energy, ISO's
21 other costs, which include ancillary services
22 and things like that. And that information --
23 certainly the two biggest pieces are capacity
24 and energy. They account for 95, 97 percent of

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1 the cost. So we gave them that. We suggested
2 that that could be used to estimate what a
3 third-party supplier would bid in a competitive
4 market. So we did provide them with that
5 guidance. But as I said earlier, Staff did the
6 calculation itself.
7 Q. So if one were to critique what Staff did in
8 its report, putting the pieces together, that
9 was Staff's work, not La Capra's. I understand
10 you gave them some data points.
11 A. (Hahn) Correct. What happened was we gave them
12 a spreadsheet. They made some calculations.
13 They sent it back to us, and it looked okay to
14 us. But we did not actually do it, no.
15 Q. Okay.
16 MR. SHEEHAN: To the extent,
17 Alex, that you're the chairman of these
18 proceedings, I don't have any more questions
19 now. I think -- go ahead.
20 A. (Hahn) Mr. Koehler reminded me. In one of my
21 previous answers to your questions, you said
22 that we estimated the asset valuation as of
23 March 31st, 2014. My answer to that was too
24 quick. In the 2014 La Capra report, the asset

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1 valuation was as of January 1st, 2015. And in
2 the 2015 La Capra report update, the valuation
3 was of January 1st, 2016. I just need to make
4 that clarification on the report.
5 BY MR. SHEEHAN:
6 Q. Fair enough. And I had one more follow-up
7 along what we were talking about.
8 Did La Capra give information on the PSNH
9 energy service rate? Did you provide any
10 information on PSNH energy service rate?
11 A. (Hahn) No. We agreed that Staff probably knew
12 more about how that rate was set than we did
13 since that's a rate that is set in a room like
14 this. So, Staff did that estimate without
15 assistance from us.
16 Q. Thank you.
17 MR. SHEEHAN: Alex, you want to
18 take it from here?
19 MR. SPEIDEL: Very good. Thank
20 you, Mr. Sheehan. We would now like to open,
21 per the order of questioning, the floor to
22 Advocate Staff, Ms. Ross.
23 EXAMINATION
24 BY MS. ROSS:

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1 Q. Thank you. Sounds like the mic is working.
2 Good morning, Mr. Hahn and Mr. Koehler.
3 How do you pronounce your last name? Is it
4 "Kaylor" or "Kohler"?
5 A. (Koehler) "Kaylor."
6 Q. "Kaylor." Thank you.
7 A. (Hahn) He wishes he was related to the Kohls.
8 Q. Thank you for correcting the valuation date. I
9 was actually -- that was going to be my first
10 question.
11 Let me just ask you. What preparation did
12 you undertake for this deposition?
13 A. (Hahn) I reread our reports: The 2014 La Capra
14 report, the 2015 La Capra report, update. I
15 reviewed certain pieces of testimony that had
16 been filed: The testimony of Mr. Chung I read;
17 the testimony of Mr. Frantz; the testimony of
18 Mr. Cannata; the testimony of Mr. Stachow; I
19 read the settlement agreement. Is it agreement
20 or stipulation? I'm not sure which. But I
21 read that. And I may have seen some discovery
22 responses that were provided either in this
23 proceeding or in previous proceedings. I think
24 that's pretty much what I looked at.

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- 1 Q. And what subject areas did the discovery
2 responses deal with?
3 A. (Hahn) I think in Mr. Cannata's testimony he
4 cited a discovery response by Mr. Smagula. I'm
5 not even sure what docket it was. But I went
6 and found that and looked at it. I don't
7 recall the others specifically.
8 Q. Okay. Did you communicate with the
9 Non-Advocate Staff prior to the deposition?
10 A. (Hahn) You mean -- yes.
11 Q. And what were the nature of those discussions?
12 MR. SHEEHAN: I object, Anne.
13 Of course he talked to counsel about today.
14 But those would be privileged conversations.
15 If you want to ask what he was provided or did,
16 any further conversations with counsel present
17 would be protected.
18 BY MS. ROSS:
19 Q. Could you describe the subject matter areas
20 that the Staff identified to you that you would
21 need to be prepared to discuss today?
22 A. (Hahn) I was provided by -- I'm sorry. Staff
23 provided to me summaries from certain parties
24 in this case that indicated what issues they

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- 1 wanted to address. I viewed that to be sort of
2 a heads-up as to what we might get asked on. I
3 think I saw one from CLF, one from the city and
4 town, maybe one from OEP. But there were,
5 like, four or five of them. I was provided
6 those and I read them. I was provided with a
7 verbal description of how this proceeding would
8 occur today, you know, what the format would
9 be, sort of general background information.
10 Q. Okay. Thank you.
11 When you prepared the draft 2015 update
12 for Staff and submitted it in the draft form,
13 were there any communications regarding whether
14 or not that would be finalized?
15 A. (Hahn) I don't believe so. It's not unusual
16 for us to provide a client with a draft report.
17 We don't allow clients to dictate what goes in
18 the report. But sometimes they can suggest
19 either areas that need to be explained better
20 or need to be clarified. So we did provide a
21 draft report. I don't recall any conversations
22 about taking the word "Draft" off and reissuing
23 it. Maybe they occurred, but I don't recall
24 them.

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- 1 Q. What did you do to produce the 2015 report? I
2 know you touched on it earlier. But could you
3 just give me a little more detail. Did you
4 actually take model runs you used in 2014 and
5 changed them? Or how did you produce the 2015
6 report?
7 A. (Hahn) The 2014 valuation report created a pro
8 forma financial statement for each PSNH
9 generating plant. That financial statement
10 would include, as any generator would in the
11 ISO-New England settlement system generates,
12 capacity revenues, energy revenues, ancillary
13 service revenues. And the generator has
14 certain costs. They have to buy fuel; they
15 have variable O&M; they need supplies to run
16 the power plants; they have to hire people;
17 they make capital investments. And the net
18 impact of that financial statement determines
19 what the value would be to a prospective
20 investor. So we looked at the -- we approached
21 the valuation. And it's referred to as a
22 "discounted cash flow methodology," or "DCF."
23 And that's a fairly standard tool for valuating
24 assets. And so we basically had that financial

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- 1 statement as one of the key determinants of the
2 asset value that we estimated. Does that
3 answer your question or not? I'm not sure.
4 Q. And other inputs that would go into that asset
5 value would be some forecast of those revenue
6 streams going forward that you would then use
7 in your DSF [sic] analysis; correct?
8 A. (Hahn) Sure. So we would forecast the capacity
9 revenues the capacity price. The energy
10 revenues came from our simulation of the ISO
11 energy markets. Many of the units we deemed
12 did not qualify for ancillary service revenue.
13 And so there was a small component of that.
14 But that constitutes sort of the revenue line
15 in this model.
16 Q. So in the 2015 update, some of the revenue
17 lines would have been adjusted from the 2014
18 report or analysis; correct?
19 A. (Hahn) That's correct. So we updated our
20 capacity prices, which updated the assumed
21 capacity revenues. And we had -- we estimated
22 the impact of new gas prices because now we
23 have a new gas price forecast for the New
24 England area. And so we updated the energy --

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1 the forecast of energy revenues. And we held,
2 I think, pretty much everything else, pretty
3 much everything else the same.
4 Q. And is it your opinion that by capturing the
5 Forward Capacity Market shift and the gas
6 market shift, you address the two major changes
7 so that the resulting valuation is still
8 relatively valid?
9 A. (Hahn) Yes.
10 Q. In your 2015 update, you mentioned there's been
11 a decline in forecasted natural gas prices. Is
12 this the case, even though we've had winter
13 volatility in gas prices in New England?
14 A. (Hahn) Yes. We do forecast a continuation of
15 the price spikes, but at a much lower level
16 than when they peaked in the winter of 2013. I
17 mean, gas prices are definitely seasonal, as
18 are electric prices.
19 Q. And do you anticipate they will continue to
20 peak in the winter months going forward?
21 A. (Hahn) Yes, we believe that gas prices in the
22 winter months will be higher than in the summer
23 months. But as a general rule, the market
24 forward prices are telling you that the annual

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1 average prices of those is going down.
2 Q. And for purposes of forecasting, then you're
3 comfortable using an annual average, even
4 though there are price spikes?
5 A. (Hahn) Well, we don't use an annual average.
6 We use a monthly average. That's a fairly
7 standard technique in long-term simulations.
8 Even though it's an hourly dispatch model, we
9 use monthly fuel prices. So they would show
10 very high prices in January and February for
11 natural gas, which is an input fuel to many
12 generators in New England, and they would show
13 very low prices in April -- March, April, May,
14 June. You might see another slight price
15 increase in July and August, but not as high as
16 it would be in the winter. And then they'd
17 climb again.
18 Q. I think there has been some criticism by
19 Non-Advocate Staff of your use of average
20 monthly prices, and that's why I'm questioning
21 you a little about whether that's a valid
22 measure for purposes of forecasting. And I
23 assume the answer to that is yes, that you
24 consider that valid still?

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1 A. (Hahn) Absolutely.
2 Q. And so is it fair to say that your natural gas
3 forecast in your 2015 update takes into account
4 those winter price peaks in gas pricing?
5 A. (Hahn) Yes.
6 Q. And how does your asset value in the 2015
7 update capture Forward Capacity Market pricing
8 increases?
9 A. (Hahn) Well, it's higher Forward Capacity
10 Market revenues which are offset by lower
11 energy market revenues.
12 Q. Okay. So, even though the overall number is
13 slightly higher for the assets, is that a
14 reflection of the capacity market?
15 A. (Hahn) It's a reflection of both.
16 Q. Of both.
17 A. (Hahn) Now, I need to be maybe -- offer a
18 little more detail here. For the hydro units,
19 they get -- hydro unit gets more of its revenue
20 from the energy market than it does capacity
21 market. So those would not -- they would have
22 some increase in capacity, but less of a
23 reduction in energy. Some units like Newington
24 don't run very much, so the energy impact on

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1 those is primarily the higher capacity market
2 revenues.
3 Q. Hence the increase in your valuation on
4 Newington?
5 A. (Hahn) Correct.
6 Q. Is there a new Confidential Figure 4, which is
7 the New Hampshire LMPs which is shown on
8 Page 29 of your 2014 report?
9 (Witness reviews document.)
10 MR. SHEEHAN: What page?
11 MS. ROSS: Twenty-nine.
12 A. (Hahn) Page 29 of the 2014 report?
13 BY MS. ROSS:
14 Q. That's correct.
15 A. (Hahn) I have it.
16 Q. Do you have an updated one based on your 2015
17 update?
18 A. (Hahn) It does not look like we included that
19 same figure in the 2015 update.
20 Q. Would it be possible to produce that update?
21 MR. SPEIDEL: We would object to
22 that. This witness is Non-Advocate Staff's
23 consultant. You can ask questions about the
24 materials that have been produced thus far, but

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- 1 I don't think that there is an ability to
2 request the production of additional materials
3 by our consultant.
4 BY MS. ROSS:
5 Q. May I ask if the LMP forecast was updated as
6 part of your 2015 update?
7 A. (Hahn) Yes, but we updated it without rerunning
8 the market simulation. We used a manual
9 adjustment to the LMPs that were output from
10 the 2014 study and used a manual procedure to
11 adjust those for the lower gas prices.
12 Q. Hypothetically, if you were asked to produce
13 that, how long would it take to do it?
14 A. (Hahn) Not long. But we --
15 Q. Days? Hours?
16 A. (Hahn) A week.
17 Q. A week. Thank you.
18 Are there any updates to the Section 5
19 scenario results? And this is actually in the
20 market model report, so other parties don't
21 have it. But Section 5, if you recall, is a
22 discussion of your inputs.
23 A. (Hahn) Do you have a page number, Ms. Ross?
24 Q. Hold on. I'll get it for you. It's

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- 1 case. Just trying to understand what work you
2 actually did for the update.
3 A. (Hahn) Well, we did not -- let me be clear. We
4 did not re-perform a simulation or a dispatch.
5 We didn't have time for that. But we believed
6 that by adjusting the 2014 results for the
7 change in natural gas prices that we could
8 accurately capture that. So we didn't produce
9 this chart. We didn't do all these high and
10 low cases, alternative scenario cases. Made
11 the adjustment.
12 Q. Okay. If you were to do that work, how long
13 would that take?
14 A. (Hahn) All of the alternative scenarios?
15 Q. Those would take --
16 A. (Hahn) That would take a long time.
17 Q. Okay.
18 A. (Hahn) That would basically require a
19 re-simulation. So, four to six months? Don't
20 hold me to that, but...
21 Q. That's all right. I'm just trying to get an
22 idea of the work involved.
23 On Figure 8, Page 33 of the report we just
24 passed out, which is an FCM price forecast --

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- 1 essentially beginning at Page 63. There's a
2 series of figures: 5.1, 5.12, 13. They're
3 just your inputs on -- some of your key inputs
4 into the report?
5 MR. SPEIDEL: Please speak into
6 the microphone, Ms. Ross.
7 BY MS. ROSS:
8 Q. I'm sorry. It ends on Page 68. So it's Page
9 63 to 68 of the Northeast Market Model input.
10 A. (Hahn) I'm sorry. Is there is a question
11 pending?
12 Q. Yes. I asked whether any of those inputs had
13 been updated as part of your 2015 update.
14 A. (Hahn) In the 2015 update, we only updated the
15 reference case. We didn't do all of these
16 other scenarios.
17 Q. But you would have had an update, for instance,
18 on your reference case for 5.12 -- 5.1.2, and
19 the same for your LMP?
20 A. (Hahn) I'm sorry. Can you direct me to where I
21 should be looking, please?
22 Q. Yes. On Page 63 you have a reference case on
23 Figure 5.1.1. So that would have been updated.
24 You're saying you only updated your reference

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- 1 A. (Hahn) Are you referring to the 2015 La Capra
2 report?
3 Q. 2014. Excuse me. Page 33. There's a
4 Confidential Figure 8. Has that been updated
5 as part of your 2015 report?
6 (Witness reviews document.)
7 A. (Hahn) Yes.
8 MS. ROSS: And I guess I would
9 request a copy of that update.
10 MR. SPEIDEL: Perhaps we should
11 confirm that the FCM price forecast referred to
12 in Figure 8 has indeed been updated in the 2015
13 report. I think we want to confirm that.
14 MR. HAHN: It has, and it's
15 shown in Figure 1 on Page 7 of the 2015 La
16 Capra report.
17 BY MS. ROSS:
18 Q. Right. And this just asks for it in table
19 form, as it was shown in Figure 8 originally.
20 MR. SPEIDEL: Well, again, I
21 think that would be subject to some discussion
22 by Non-Advocate Staff with La Capra. It might
23 be a possibility, but it would require our
24 authorization.

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1 MS. ROSS: All right.
2 Obviously, any request I make would require --
3 I understand it will require your
4 authorization. And I'm just making a request
5 on the record, and we don't need to resolve
6 them today.
7 BY MS. ROSS:
8 Q. On Page 50 of your 2014 report, there's a
9 figure that talks about the high retirement
10 scenario in the FCM price forecast. Has that
11 data been updated as parts of your 2015 --
12 A. (Hahn) I don't believe so. As I said, we only
13 updated the reference case.
14 Q. And if you were to undertake an update to that
15 particular data, how long would that take?
16 A. (Hahn) Well, I'm not sure exactly because that
17 would require us rerunning the capacity and
18 price forecasting model. So, at least a month.
19 Q. And then one last question on the report that
20 has not been distributed, which is the
21 Northeast Market Model. On Page 60 of that
22 report --
23 A. (Hahn) Which page, ma'am?
24 Q. Sixty, 6-0. It's Table 4.1. It's on

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1 cumulative retirements. Has that been updated
2 as part of your 2015 update?
3 A. (Hahn) No.
4 Q. And again, if you were to undertake that
5 update, what kind of time would be required?
6 A. (Hahn) Well, I think that would be part of the
7 month-long effort to update capacity prices. I
8 mean, you have to start with a set of
9 assumptions about what existing units are going
10 to be there.
11 Q. Right.
12 A. (Hahn) So we would need to do that.
13 Q. Just a question. Earlier when we were talking
14 about the LMP forecasts that you did, which is
15 the locational marginal pricing for the New
16 England region -- and the LMP is a wholesale
17 price, isn't it?
18 A. (Hahn) It is, but it determines what is charged
19 to load assets or load supplies.
20 Q. And that was going to be my next question.
21 Could you walk through what would be the
22 appropriate adjustments to make to the LMP and
23 the Forward Capacity Market prices to arrive at
24 an assumed retail price in New England.

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1 A. (Hahn) Sure. For the energy price, the retail
2 load, which would be measured at an on-premise
3 meter, to that figure you would have to add
4 losses and represent the burden that that
5 places on the generators. Those numbers are
6 usually known and usually don't vary from year
7 to year. So you would need to either gross up
8 the LMP itself or gross up the kilowatt hours
9 to be at the generation level, and then you'd
10 arrive at same revenues. So the LMP can be
11 used to determine both the wholesale revenues
12 to generators and the retail cost to -- I mean
13 and the load cost to retailers.
14 Q. Okay.
15 A. (Hahn) Now, as far as -- you said capacity was
16 your other question?
17 Q. Yes.
18 A. (Hahn) There are different capacity prices that
19 a generator receives and the load pays
20 obviously because sometimes ISO-New England
21 procures more than its installed capacity
22 requirement in any Forward Capacity auction.
23 So the way this works is ISO holds an auction.
24 Generation suppliers that offer capacity and

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1 bid into the capacity market and succeed are
2 awarded a capacity supplier obligation, a
3 certain amount of megawatts, and they get paid
4 a rate for that. ISO aggregates all those
5 payments with generators and needs to collect
6 that amount from load. So, sometimes there's a
7 different price, capacity price to load. But
8 again, it's knowable and it's calculable -- I'm
9 sorry. It's not knowable. But after an
10 auction is done, you know how much you need to
11 collect. So it is knowable.
12 Q. Okay. I believe you have Mr. Cannata's
13 testimony in front of you. If you would turn
14 to Page 8. On Page 8 it discusses --
15 A. (Hahn) Can I have a moment, please, to find
16 that? All right. I have Page 8 of Mr.
17 Cannata's testimony.
18 Q. And on Page 8, he discusses both the ISO-New
19 England capacity payments made to PSNH on its
20 generation plants, and he also talks about load
21 obligation payments to ISO made by PSNH as a
22 result of its role as a supplier of load to its
23 default service customers.
24 My question is: How does your 2014 report

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1 account for both the capacity and load
2 obligation payments?
3 A. (Hahn) Well, the 2014 report was focused on
4 generator revenues. So the capacity price that
5 generator revenues received was a direct and
6 important input into the 2014 La Capra report.
7 Since that report did not attempt to estimate
8 what the cost to load would be, we didn't
9 calculate that. It's calculate-able from that
10 information, but we didn't do it.
11 Q. Are both the capacity and load obligation
12 payments included in your LMP forecast?
13 A. (Hahn) Well, the capacity market is separate
14 from the energy market. So there's no
15 interaction between the two, other than there
16 are requirements. For example: If you receive
17 a capacity -- if you are a generator and
18 receive a capacity supplier obligation, there
19 are certain requirements, like you must offer
20 energy to the energy market. But the
21 mechanisms, the market mechanisms are separate
22 and distinct. So you can have a change in
23 capacity prices and a change in LMPs, and they
24 aren't necessarily related. They could be.

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1 For example: If you added a highly efficient
2 combined cycle unit, a new one, that might --
3 especially if it's in a place where capacity is
4 needed, and therefore the FCA clears at a high
5 price, you might get an increase in capacity
6 prices but a decrease in LMPs because the more
7 efficient plant bumped a higher cost unit off
8 the margin.
9 Q. If one were to look at competitively procured
10 retail rates in New Hampshire, would it be safe
11 to assume that those rates would include
12 load-serving entities, load payments at the
13 wholesale level to ISO-New England?
14 A. (Hahn) Are you referring to a third-party
15 competitive supplier --
16 Q. Yes.
17 A. -- (Hahn) or Public Service of New Hampshire as
18 a default --
19 Q. Yes, I'm referring now to a third party, where
20 you go out, as a couple of our utilities do,
21 and just issue an RFP: Load following power to
22 this class of customers for six months.
23 A. (Hahn) All right. So this is Public Service
24 bidding for a third-party-provider --

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1 Q. Right.
2 A. -- (Hahn) to supply default service load for
3 which Public Service remains the load asset
4 owner?
5 Q. No, for which the supplier takes the asset
6 obligations.
7 A. (Hahn) Okay. Generally, all wholesale -- all
8 providers of load, entities that serve load,
9 their underlying cost are the capacity costs,
10 the energy costs, and if they are required to
11 pay for any of the ancillary services that ISO
12 organizes, all of those costs, including the
13 load obligation payment would be included in
14 those rates. There is also likely things like
15 a risk margin, profit margin and things like
16 that.
17 Q. Thank you.
18 In Mr. Cannata's calculation, Table 1 on
19 Page 10 that you were referred to earlier --
20 scratch that question.
21 I think that's it for the questions that I
22 have. Thank you very much.
23 A. (Hahn) You're welcome.
24 MR. SPEIDEL: Okay, Ms. Ross.

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1 Thank you. May we be off the record for just a
2 quick second?
3 (Discussion off the record.)
4 MR. SPEIDEL: May we please
5 return to the record. I would now like to
6 invite the Company to ask questions of the
7 witnesses.
8 MR. BERSAK: Thank you. Do the
9 witnesses need a break?
10 MR. HAHN: No.
11 MR. BERSAK: Great.
12 EXAMINATION
13 BY MR. BERSAK:
14 Q. My name is Bob Bersak. I'm an attorney with
15 Eversource. I'm sitting at the Eversource
16 table. I want to thank you both for helping us
17 with this process, long time coming, and for
18 your perseverance during this unusual procedure
19 today. I just have a few questions for you.
20 We've referred throughout the questioning
21 this morning to your reports that were done
22 back in 2014, as well as an update in 2015.
23 Now, if I understand what these reports are all
24 about -- and please tell me if I'm wrong -- the

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1 purpose of the reports was to come up with an
2 estimate of the value of PSNH's generating
3 assets which may be divested sometime in the
4 future; is that correct?
5 A. (Hahn) That's correct.
6 Q. And as part of that valuation you did an
7 update, and that update from 2015 was dated
8 August 17; is that correct?
9 A. (Hahn) 2015. That's correct.
10 Q. The 2015 was done August 17 of 2015.
11 Now, I assume that both you, Mr. Hahn, and
12 you, Mr. Koehler, are aware of the announced
13 shutdown of the Pilgrim Nuclear Station; is
14 that correct?
15 A. (Hahn) Yes, sir.
16 Q. And that announcement by its owner occurred
17 less than two weeks ago, on October 23rd. So,
18 would that have been included in your August 17
19 update, the impacts of the shutdown of Pilgrim?
20 A. (Hahn) No.
21 Q. Do you have any idea exactly when Pilgrim will
22 be shut down?
23 A. (Hahn) Only what I read in The Boston Globe,
24 which is by 2021. I'm not sure of the date.

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1 Q. We don't know.
2 A. (Hahn) I have no insider information as to what
3 entity will do with Pilgrim.
4 Q. Possible that they could shut down sooner if
5 they buy into the reconfiguration auctions to
6 deal with their capacity obligations; is that
7 correct?
8 A. (Hahn) Sure, they can retire -- well, my only
9 hesitation is I actually don't know what the
10 status of their retirement request is with ISO.
11 So they can't just shut down. They need to ask
12 ISO-New England for approval and to -- I do not
13 know what the status of that request is,
14 whether it's been made, whether ISO has granted
15 it, whether ISO has granted it with conditions.
16 I don't know that.
17 Q. So we really don't know when Pilgrim will shut
18 down at this point, do we?
19 A. (Hahn) I don't believe so, no.
20 Q. Will the Pilgrim shutdown have an impact on the
21 energy and capacity markets that you discussed
22 earlier today?
23 A. (Hahn) Certainly could, you know, all else
24 being equal, yes.

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1 Q. Are you aware that, earlier in October, that
2 the Pine Tree Bethlehem biomass-fired plant
3 here in New Hampshire had a catastrophic
4 failure?
5 A. (Hahn) I was not aware of that.
6 Q. And that event also occurred after your
7 August 17 update. So is that event included in
8 your analysis?
9 A. (Hahn) Well, since I don't know anything about
10 it, I highly doubt it. But --
11 Q. Okay. I'll accept that.
12 Last winter, are you aware that energy
13 prices in New England were moderated because of
14 the availability of a LNG barge that was tanked
15 off the coast of Boston?
16 A. (Hahn) I recall something to that effect.
17 Q. But in your update from 2015, is it correct
18 that we see that gas prices this year are lower
19 than they were last year?
20 A. (Hahn) Yes. That's what market forwards are
21 telling us.
22 Q. With lower gas prices, do we know at this time
23 whether the owner of a barge full of LNG will
24 park that barge in New England or whether

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1 they'll sail it somewhere else where they can
2 get better prices for their gas this year?
3 MR. SPEIDEL: Mr. Bersak, just a
4 moment. I think that's a little bit too
5 speculative.
6 MR. BERSAK: The entire report
7 is speculative. We're guessing as to what
8 prices will be in the future. I'm just trying
9 to probe as to how correct these prices will be
10 when we actually get to a divestiture.
11 MR. SPEIDEL: Well, Mr. Hahn is
12 not an LNG shipper. Mr. Hahn is a consultant.
13 You can phrase it in terms of, "Do you expect
14 that there could be fluctuations in the LNG
15 market?" something along those lines. But to
16 ask him, well, if a specific barge floating in
17 Boston Harbor... that's a very speculative
18 question.
19 MR. BERSAK: Okay. I'll change
20 the question.
21 BY MR. BERSAK:
22 Q. How about if LNG is not available this winter?
23 Will that affect energy prices in New England?
24 A. (Hahn) Certainly could. Although, in this

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1 morning's Globe, since we're referencing Globe
2 articles about Pilgrim, we can reference the
3 article about the availability of additional
4 LNG to come into the Distrigas LNG facility in
5 Everett due to a bunch of factors, not the
6 least of which is low worldwide demand for LNG.

7 So, sure. I mean, there's some
8 uncertainty about some of these forecasts. But
9 you try to do the best job that you can using
10 the best available information at the time you
11 made it.

12 Q. Exactly. But I think we both agree that the
13 market is volatile that we're dealing with and
14 constantly changing. Do you agree with that?

15 A. (Hahn) Sure.

16 Q. If you were to redo your August 17th, 2015
17 update today, would the values potentially be
18 different in what you have in that update?

19 A. (Hahn) They could. I haven't done it, so I
20 don't know exactly for sure. But it's a
21 possibility. It's possible they could go up.
22 It's possible they could go down.

23 Q. Do you deem the values that you put in both
24 your 2014 report and your updated 2015 report

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1 to represent exactly what a willing bidder
2 would pay for each of the generating stations
3 following a divestiture process?

4 A. (Hahn) Exactly --

5 Q. Yes.

6 A. -- (Hahn) what somebody would write a check
7 for? It's my best estimate of what that would
8 be. But do I know precisely who the bidders
9 are and how much bigger check they're going to
10 write? No, sir.

11 Q. So a willing bidder could pay less than what
12 you've put in for a valuation for a particular
13 plant.

14 A. (Hahn) Could pay a lot more, too.

15 Q. Could pay more.

16 And even if you were to update your
17 report, as Attorney Ross was probing, would
18 your updated report provide values that would
19 be exactly what a willing bidder would pay for
20 each of the assets?

21 A. (Hahn) Well, any valuation exercise is a
22 forecast. Forecasts don't always predict the
23 future with a hundred-percent accuracy. I
24 don't know anybody that's good enough to do

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1 that. If I were, I'd be doing other things and
2 making a lot more money, but --

3 Q. We have forecasts from La Capra that you two
4 experts were involved in preparing, we have
5 testimony from Mr. Cannata and from Mr. Chung,
6 all of which are forecasting or guessing at
7 what's going to happen in the future; is that
8 correct?

9 A. (Hahn) I don't agree with the word "guessing."
10 It's a forecast based on market information
11 that we have. That's the best intelligence we
12 have. Is it perfect? No. Is it guaranteed to
13 be precisely accurate to the dollar? No. But
14 it's a reasonable forecast.

15 Q. Would you agree that the only way to precisely
16 determine what the generating assets that the
17 Company owns would be following a divestiture
18 process is to actually go through that process
19 and receive bids?

20 A. That will tell you how big a check somebody's
21 willing to write. Yes, sir, it would.

22 Q. Do you recall some questions that Attorney
23 Sheehan from the Non-Advocate Staff asked you
24 regarding Mr. Chung's testimony?

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1 A. (Hahn) Yes, sir.

2 Q. Do you recall those questions were primarily
3 directed at whether portions of his testimony
4 correctly refer to La Capra Associates reports
5 as the source of the information or whether it
6 should have been Staff reports?

7 A. (Hahn) I recall those questions, sir.

8 Q. Do you have a copy of the April 1 Staff report
9 available?

10 A. (Hahn) I do. Give me a moment to locate it. I
11 believe I have it.

12 Q. Towards the bottom half of that, "Prepared by
13 Staff of the New Hampshire Public Utilities
14 Commission" in big print, and then following
15 that next in big print is "La Capra
16 Associates," and then the next one is "ESS
17 Group"; is that correct?

18 A. (Hahn) Yes.

19 Q. Is there potential for some confusion about the
20 way this report is captioned that could be the
21 basis as to why Mr. Chung, in his testimony,
22 referred to the information coming from La
23 Capra?

24 A. (Hahn) I think that's a possibility.

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- 1 Q. Do you have any reason to believe that Mr.
2 Chung intended to mislead the Commission or
3 parties to this proceeding?
4 A. (Hahn) I have no reason for such a belief.
5 Q. One or two final questions.
6 MR. SHEEHAN: Bob, nor do we,
7 just to be clear. That was not the suggestion
8 of that question at all.
9 MR. BERSAK: I just want to make
10 sure. I've got a nice witness sitting next to
11 me. I just want to make sure you're not trying
12 to impugn what he has to say.
13 BY MR. BERSAK:
14 Q. Finally, towards the end of her questioning,
15 Attorney Ross asked you about some questions
16 about load-serving entities, you know, if they
17 were to take over the obligation to serve
18 PSNH's customers following a divestiture
19 process. And regardless of who that willing
20 bidder is who takes on PSNH's load, is it your
21 testimony -- or did you say some of that
22 incremental costs for that load-serving entity,
23 whoever it is at the margin, would be dictated
24 by the market for both energy and capacity?

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- 1 A. (Hahn) I believe that if you were to go out for
2 bids to suppliers, to be the supplier of Public
3 Service of New Hampshire's standard offer of
4 default service, that the bids that you would
5 receive would be based on the outlook at the
6 time those bids are prepared for capacity
7 markets and energy markets. Yes, sir.
8 Q. Thank you, Mr. Hahn. Thank you, Mr. Koehler.
9 MR. BERSAK: We have no other
10 questions, Mr. Speidel.
11 MR. SPEIDEL: Thank you very
12 much, Mr. Bersak.
13 I would like to open the floor
14 to the Office of the Consumer Advocate, based
15 on the ordering of witnesses. Ms. Chamberlain.
16 MS. CHAMBERLIN: Thank you. I
17 just have a couple of questions.
18 EXAMINATION
19 BY MS. CHAMBERLIN:
20 Q. Early in your testimony you were discussing
21 which elements you updated and which elements
22 you kept the same between the 2014 and the 2015
23 reports. And one of the elements was that you
24 kept the dispatch of the Eversource units the

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- 1 same, is that correct, between the two reports?
2 A. (Hahn) Correct. It was a dispatch of all units
3 in New England, not just Eversource. But yes,
4 you're correct.
5 Q. So that included Eversource.
6 A. (Hahn) Yes, it did.
7 Q. In making the dispatch numbers, did you use any
8 historical data, or was it all forecasted data?
9 A. (Hahn) Well, we actually began -- when we did
10 the 2014 study, we were doing an evaluation of
11 the assets as of November 1st, 2015; however,
12 we began our simulations of the ISO-New England
13 market on January 1st, 2013. So we did this
14 study in the last quarter of 2013 and then into
15 the first quarter of 2014. So we did a
16 simulation, and we had some actual data that we
17 could compare it to as a benchmark.
18 Q. Okay. And that data you received from ISO-New
19 England?
20 A. (Hahn) Well, the --
21 Q. Actual data of dispatch.
22 A. (Hahn) The actual megawatt hours is available
23 through various sources, the Energy Information
24 Administration. We subscribe to various data

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- 1 sources that have things like, you know,
2 megawatt-hour output. So it doesn't come from
3 ISO. It comes from a variety of industry
4 sources that we use.
5 Q. It's either publicly available or available by
6 subscription? Is that fair?
7 A. (Hahn) Yes, that's correct.
8 Q. Thank you. That's all I have.
9 MR. SPEIDEL: Thank you, Ms.
10 Chamberlain.
11 I'd like to open the floor to
12 the Office of Energy and Planning. Mr. Aslin.
13 MR. ASLIN: Thank you, Mr.
14 Speidel.
15 First, I wanted to ask if procedurally we
16 could mark the various documents that Mr. Hahn
17 has been referring to as exhibits to this tech
18 session, just for clarity of the record. I
19 think we could dispense with that for
20 testimony. But the three things we were
21 talking about so far are the 2014 La Capra
22 report, the 2014 Staff report, and the 2015
23 update.
24 MR. SPEIDEL: And the results of

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1 the model explanation. That was the fourth
2 document that I think has been discussed today.
3 And I believe that Ms. Ross proposed that the
4 2014 La Capra report in its confidential form
5 be marked as an exhibit. So that might be a
6 good starting point as Exhibit 1, but as
7 Confidential Exhibit 1. And then the 2015 La
8 Capra update -- now, as I recall, and perhaps
9 Mr. Hahn can attest to this.

10 Has there been a so-called
11 "public redacted version" of that 2015 update
12 produced?

13 MR. HAHN: I'm sorry. I was
14 consulting with Mr. Koehler. Could you hit me
15 with that one again?

16 MR. SPEIDEL: Sure. The 2015 La
17 Capra update, is there a redacted version and
18 an unredacted version -- that is, a
19 confidential and a public version -- that have
20 been produced for that?

21 MR. HAHN: Yes.

22 MR. SPEIDEL: So I would suggest
23 that the confidential version be marked as
24 Confidential Exhibit 2 for the 2015 La Capra

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1 update. That is the confidential version. And
2 then we have the market model explanation. And
3 again I'm using a paraphrase, but I think we
4 know what I'm referring to. And that would be
5 Confidential Exhibit 3.

6 Then we would have two or three,
7 actually, public exhibits. Public Exhibit 1
8 would be the 2014 La Capra report in its
9 redacted version. And then Public Exhibit 2
10 would be the 2015 La Capra update that's
11 redacted --

12 MR. ASLIN: Alex, do you think
13 it makes sense to do them consecutively
14 numbered, the public --

15 (Court Reporter interrupts.)

16 MR. SPEIDEL: Well, in our
17 practice we like to label them as
18 "Confidential" versus "Public." I think it
19 makes things simpler, and it alerts the
20 Commission to the existence of the
21 confidentiality motion.

22 So the final Public exhibit
23 would be the so-called "Staff report of 2014,"
24 and that would be Public Exhibit 3. So I think

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1 that's a numbering scheme that could make some
2 sense. So, did everyone get that?

3 MR. AALTO: Which one was one?

4 MR. SPEIDEL: The Public or
5 Confidential?

6 MR. AALTO: Confidential 1.

7 MR. SPEIDEL: Confidential 1 was
8 the unredacted version of the 2014 La Capra
9 report.

10 (Discussion among Non-Advocate Staff.)

11 MR. SPEIDEL: Oh, I referred to
12 that as Confidential Exhibit 3, for what it's
13 worth, at least to keep it in mind.

14 Now, this numbering scheme is
15 designed to help us keep track of what we're
16 referring to. It's not official. It's
17 essentially just for the purposes of today's
18 session we're concurring with this numbering
19 scheme. And there is going to have to be an
20 offer of proof at hearing to have them
21 incorporated into the hearing record at
22 hearing. So I accept Mr. Aslin's suggestion,
23 insofar as it helps us keep track of what the
24 heck we're referring to. But once we get to

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1 hearing, there's going to be a necessity to
2 actually introduce them into the hearing
3 record. Okay? Is there general assent on that
4 point?

5 MS. ROSS: Just a clarification.
6 The 2014 Staff report, I would suggest we
7 number it as Exhibit 4, because we have a
8 Confidential Exhibit 3, which is the model, and
9 I think you had proposed to also number it
10 Exhibit 3. But then you have two Exhibit 3s
11 that really are referring to different
12 documents.

13 MR. SPEIDEL: Well, it's kind of
14 the trick because you have the reference to the
15 Confidential exhibits, and then you have the
16 Public exhibits.

17 MS. ROSS: So you're going to
18 leave it as Public Exhibit 3 then?

19 MR. SPEIDEL: For the purposes
20 of this session, just for the simple reason
21 that we need to understand whether the
22 materials we're referring to are confidential
23 or not confidential. It's going to help us out
24 on the written record.

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1 MS. ROSS: Okay.
2 MR. SPEIDEL: Because if there
3 are just a bunch of numbers, consecutive
4 numbers, we're not going to be able to tell
5 which is confidential and which isn't. Okay?
6 All right. So, Mr. Aslin, would
7 you like to take the floor?
8 MR. ASLIN: Yes. Thank you, Mr.
9 Speidel.
10 EXAMINATION
11 BY MR. ASLIN:
12 Q. Mr. Hahn and Mr. Koehler, thank you for being
13 here today and sitting through the tech
14 session. I only have a couple questions to add
15 on to what has already been discussed. The
16 primary question is: In your 2015 update, as I
17 understand it, you essentially updated capacity
18 and energy forecasts, and that was it?
19 A. (Hahn) Yes.
20 Q. What other inputs would you update -- and
21 there's probably many -- but what are the next
22 two or three most important factors that would
23 go into a full update that would address
24 valuation of generation assets?

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1 A. (Hahn) Well, we might have asked the Company
2 to -- scratch that.
3 During our initial 2014 report, the
4 Company provided us with a bunch of its
5 confidential data on the plants: How they're
6 run, what it costs to run them, what their
7 expected investments would be in the future.
8 We could probably update that. I don't know
9 whether those have changed or not. I would not
10 expect them to have anywhere near the impact
11 that capacity and energy market prices would
12 have. But I mean that's -- if we were doing a
13 new study today, we'd certainly ask for that.
14 I mean, there could be a change in the New
15 England generation mix. We heard talk about
16 Pilgrim this morning; so, maybe Pilgrim's
17 departure. We also see talk of the Tri-State
18 Clean Energy RFP. That could have an impact on
19 this. So I guess we were aware that there may
20 be other factors, but we certainly believed
21 that these two captured by far the lion's share
22 of the change that occurred from our original
23 report to our updated report.
24 Q. And in regard to your capacity forecast

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1 updates, did those updates take into account
2 current information about expected retirements
3 expected new generation that's coming into --
4 may come into the region?
5 A. (Hahn) That we knew at the time, sir.
6 Q. At the time of the update.
7 A. (Hahn) At the time of the update. So if that
8 was August, you know, whatever we knew as of
9 August 1st, which is probably the date that
10 we -- approximate date that we did the update,
11 you know, we had FCA 9 as a known number. We
12 knew what was bid. We knew what qualified.
13 I'm sure there was some capacity that was
14 removed and there was some capacity that was
15 added. But all of that would be included in
16 our 2015 update.
17 Q. In regard to the energy portion of your update,
18 expected future transmission from Canada and/or
19 gas or gas pipelines, would those factors have
20 been something that changed since 2014 in your
21 analysis?
22 A. (Hahn) Well, we did assume a generic Canadian
23 import into the original 2014 model. In 2015,
24 you know, we decided to update for that. Could

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1 it be higher or lower? Sure. You know, the
2 Clean Energy RFP was talked about back then but
3 was not as far along as it is today. It's now
4 been approved by the Rhode Island Commission.
5 And if it hasn't been already approved by
6 Massachusetts and Connecticut, it will be soon.
7 So that has the potential to bring in a large
8 amount of renewable imports into New England.
9 Q. But those potential changes were not something
10 that was updated between the 2014 and 2015
11 report?
12 A. (Hahn) No. As I said, we offered or discussed
13 with Staff two options: One is a full-blown
14 update which would have captured all the things
15 that we're talking about, or we could do sort
16 of an incremental analysis based on the two
17 biggest changes that I think anybody could
18 think of. And given the time constraints, I
19 think we opted for the shorter study as opposed
20 to the longer study.
21 Q. With regard to gas price forecasts between 2014
22 and the 2015 update, had there been -- within
23 the gas price forecast, does that incorporate
24 current information regarding potential

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- 1 pipelines, as well as how that would affect the
2 energy prices potentially?
3 A. (Hahn) What would give you the best impact of
4 the outlook for natural gas prices are the
5 market forward prices. You can read reports.
6 But at the end of the day, those are
7 exchange-traded transactions for real deals.
8 And that indicated to us that prices -- the
9 expectation for future prices would decline.
10 So that's what we saw in our 2015 update, and
11 that's what we still see, even if I did it
12 today.
13 Q. And those updates incorporate all the knowledge
14 that exists in the market, which would include
15 presumably the potential for additional gas
16 capacity.
17 A. (Hahn) Yes. Absolutely.
18 Q. To what extent did environmental regulations,
19 or expected environmental regulations, play a
20 role in your valuation of the assets in 2014,
21 and did that aspect change in any way when you
22 did your update?
23 A. (Hahn) Our -- the reference model that we used
24 for the 2014 La Capra study assumed compliance

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- 1 with the various renewable portfolio standards
2 and with the various environmental laws. I
3 don't think it expressly included the Clean
4 Power program the EPA has since issued. But it
5 did reflect sort of the compliance with the
6 state of environmental regulation at the time.
7 We didn't update that in the 2015 study.
8 A. (Koehler) If I could also add there? It did
9 also incorporate an assumed future carbon
10 price, which was not based on any particular
11 regulation in effect, but was intended to
12 reflect the possibility of future regulation of
13 carbon.
14 Q. So that's the CO2 pricing.
15 A. (Koehler) Correct.
16 Q. Do you have a directional estimate of what the
17 impact of updating your valuations would be
18 based on the current Clean Power Plan and other
19 environmental changes that have taken place?
20 MR. SPEIDEL: That is -- if I
21 may just object. That's a very large, very
22 broad question. The Clean Power Plan I
23 understand is something like a thousand-plus
24 pages, at least, 1500 I hear from my

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- 1 consultant. Mr. Hahn and his associate, Mr.
2 Koehler, are very intelligent men, but I don't
3 think they have the number-crunching power of
4 IBM's Watson on hand. So, perhaps a more
5 narrowly tailored question, Mr. Aslin?
6 MR. ASLIN: Certainly.
7 BY MR. ASLIN:
8 Q. Let's narrow it down to the expected CO2
9 regulations for 2020. What impact would
10 that -- would you expect that to have in the
11 valuations?
12 MR. SPEIDEL: Well, it's kind of
13 the same question.
14 MR. ASLIN: Well, no, it's a
15 more detailed question.
16 MR. SPEIDEL: Well, I think you
17 would have to understand that whatever answer
18 you receive is extremely speculative. We're
19 willing to allow some level of speculation at a
20 technical session, with the understanding that
21 it doesn't have a lot of analytical
22 consideration behind it. I think Mr. Hahn has
23 an understanding and an educated guess of what
24 might come out of the Clean Power Plan. But

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- 1 there's many moving parts in play there.
2 MR. ASLIN: I'd respectfully
3 agree that you can make an estimate of
4 directionality. That's all I was asking.
5 MR. SPEIDEL: Well, in terms of
6 a general trend in directionality, with the
7 understanding that it would be limited, we'll
8 allow that question.
9 Mr. Hahn?
10 A. (Hahn) All right. Can someone refresh my
11 memory of what the question is?
12 BY MR. ASLIN:
13 Q. Absolutely. With regard to the anticipated --
14 or the CO2 price regulations that are going
15 into effect in 2020, what direction would that
16 push your asset valuations?
17 A. (Hahn) I don't know. I haven't done that. And
18 that's far more complicated than saying, you
19 know, natural gas price futures are down, so we
20 expect LMPs to go down. If you're referring to
21 the Clean Power program, the first threshold in
22 2020 -- is that what your question deals --
23 BY MR. ASLIN:
24 Q. Yes.

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1 A. (Hahn) Haven't looked at it for New Hampshire.
2 It's on a state-by-state basis. I don't know.
3 So I can't answer your question whether it
4 would -- what direction it would go in.
5 Q. Okay. Thank you.
6 MR. ASLIN: Oh, yeah, just for
7 the record, I wanted to make it clear that the
8 Confidential Exhibit 3, which is the New
9 England model report, is not something that the
10 parties have. I think Staff maybe has and
11 Advocate Staff.
12 MR. SPEIDEL: Yes. So the
13 reason it was assigned, again, a numbering
14 scheme for purposes of this technical session
15 is so that folks can follow along, not for the
16 purposes of marking at the hearing, because
17 Ms. Ross made a few references to it.
18 MR. ASLIN: And I just wanted to
19 clarify for the record that that issue of that
20 report has not been -- the confidentiality of
21 that report is not being challenged, but
22 there's also been not a request for it at this
23 time. Most of the parties do not have it in
24 their possession.

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1 MR. SPEIDEL: That's correct.
2 The consultants of Staff have indicated that
3 they believe that to be confidential in toto
4 within their motion for confidential treatment.
5 MR. ASLIN: Yes, I think we're
6 understanding each other.
7 MR. SPEIDEL: Okay. And are you
8 complete with your questioning, sir?
9 MR. ASLIN: I was about to say,
10 yes, we have no further questions at this time.
11 Thank you.
12 MR. SPEIDEL: Thank you very
13 much. I think it's time for a break, a
14 ten-minute break. Could we please reconvene at
15 11:25? Thank you very much.
16 (Whereupon a brief recess was taken at
17 11:13 a.m., and the proceedings resumed
18 at 11:27 a.m.)
19 MR. SPEIDEL: Okay. I think
20 we've gone through all of the -- that is, the
21 moving party, the Company, and all the
22 state-affiliated questioners. And the next
23 questioner will be Mr. Aalto. Doesn't get any
24 more alphabetical than that, two As.

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1 So would you like to begin, Mr.
2 Aalto?
3 And are we on the record? I
4 presume, yes. Thank you.
5 MR. AALTO: Is this machine
6 working at this point?
7 MR. SPEIDEL: I would hope so.
8 Yes, it sounds like it.
9 MR. AALTO: Thank you.
10 EXAMINATION
11 BY MR. AALTO:
12 Q. Thank you very much, and welcome to New
13 Hampshire.
14 A. (Hahn) Good to be here, Mr. Aalto.
15 Q. I had a couple of questions about your model
16 and how you use it. Did you try to calibrate
17 your model's output for some of the past couple
18 of years with actual data on cost from the
19 utility?
20 A. (Hahn) Not cost. But as I said, we began our
21 simulation in January of 2013. And so when we
22 began this work in September-ish of 2013, we
23 had some actual data for the output. And what
24 we focused on was the output of the PSNH units.

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1 Q. But you do not have, then, any sense of how
2 much money the plants might have produced in
3 terms of net income during those years other
4 than through the model itself.
5 A. (Hahn) Well, we didn't estimate historically
6 whether these plants made money or lost money.
7 We did not do that, sir.
8 Q. All right. Would that kind of data have been
9 available to you if you chose to go that route,
10 or is that confidential?
11 A. (Hahn) Well, that data is not available to us.
12 It is available to Public Service of New
13 Hampshire because they would receive a
14 statement each week, and eventually each month
15 from ISO-New England telling them what their
16 revenues are. And their accounting system
17 would tell them what the costs are. So I would
18 not have access to that without the cooperation
19 of the Company.
20 Q. Presumably the Commission would have access to
21 that in terms to work up rates.
22 A. (Hahn) I can't answer that question.
23 Q. Speculation. Well, I guess I would assume that
24 it's there.

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- 1 There's been discussion in some of the
2 record -- and I don't know exactly where it
3 is -- it refers to statements by the utility
4 that during the winter there was a -- with the
5 price spikes, the existence of the plants they
6 had provided income to them or savings to the
7 customer of \$150 million. Does that sound like
8 a reasonable number to you based on your
9 assessment of the numbers? This was for a
10 couple months of operation.
11 A. (Hahn) Well, that's one of the data requests
12 that I reviewed from Mr. Smagula. I've not
13 looked at the underlying analysis of that, so I
14 can't say for sure. The question is worded
15 "production cost savings." And that could
16 be -- and I say "could be" -- or is frequently
17 deemed to be the variable fuel and O&M costs of
18 the PSNH units versus market LMPs and capacity
19 prices. And so that may or may not be the
20 whole equation. But as I said, I have not done
21 an analysis of that data request, so I don't
22 know.
23 Q. I guess the purpose of the question was, are
24 these power plants making money today, and

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- 1 that's not a part of your study in any detail?
2 A. (Hahn) No. Our study was prospective in
3 nature. It began -- the original 2014 study
4 began -- the analysis of the financial pro
5 formas began in January of 2015, and the update
6 was January 2016. So we did not do a
7 retroactive look, sir.
8 MR. AALTO: Thank you. I would
9 like to -- if my understanding is correct, we
10 can come back for more questions later. But I
11 think I'm done for the moment.
12 MR. SPEIDEL: Okay, Mr. Aalto.
13 Thank you.
14 MR. AALTO: Thank you.
15 MR. SPEIDEL: I believe the next
16 party in alphabetical order would be CLF.
17 EXAMINATION
18 BY MS. FRIGNOCA:
19 Q. Good morning.
20 A. (WITNESS PANEL) Good morning.
21 Q. Just want to -- I have some questions to
22 clarify, first.
23 When you did the initial report, the 2014
24 report, you worked with sort of a

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- 1 subconsultant, ESS. That's correct; right?
2 A. (Hahn) That's correct.
3 Q. What was the purpose of having ESS work with
4 you?
5 A. (Hahn) Well, one of the things we wanted to
6 know was were there environmental liabilities
7 associated with these plants that could have a
8 significant impact on an asset valuation. And
9 so ESS is an environmental consulting firm. La
10 Capra is not. And so we partnered with them,
11 as we have done in several other projects, and
12 asked them to take a look at that issue. They
13 spent some time with the Company's management
14 and personnel. They looked at records that the
15 Company had. They did conclude that there was
16 a potential for certain investments, but there
17 was no assurance that those investments would be
18 required. Closed-loop cooling was, I think,
19 the biggest issue they identified. But they
20 said that, you know, there was no specific
21 requirement for them -- for the Company to make
22 that investment at this time. And the Company,
23 I don't believe, forecasted that in their
24 capital addition. So we did not include it.

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- 1 Q. Okay. I'm going to backtrack to make sure I
2 understand.
3 You contracted or entered into or
4 contracted to have ESS do the environmental
5 review because that's not your area of
6 expertise.
7 A. (Hahn) Correct.
8 Q. So you know that. And so when it's important
9 to look at those costs, you work with a company
10 like ESS.
11 A. (Hahn) Yes.
12 Q. And in doing a valuation, it appears from your
13 2014 report that it was important to look at
14 environmental compliance costs when looking at
15 the valuation of these plants going into the
16 future.
17 A. (Hahn) Yes.
18 Q. So at this time, when you did your 2015 update,
19 did you ask ESS to do any update of the
20 likelihood that these environmental costs would
21 come -- the costs that they had looked at, did
22 you ask them to do any update on whether those
23 costs are more likely now?
24 A. (Hahn) We did not. Again, the update was

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1 limited to the two changes that we talked
2 about.
3 Q. Okay. So you have not, in preparing for this
4 deposition, consulted with ESS?
5 A. (Hahn) No.
6 Q. And in preparing your 2015 update, you did not
7 consult with ESS?
8 A. (Hahn) No.
9 Q. You would still agree that, if you were going
10 to do a full update rather than the limited
11 update for which you were engaged, you would
12 consult with ESS?
13 A. (Hahn) I don't know if I would. I would
14 certainly consider it. Again, if you look at
15 the process that we went through originally,
16 you know, the Company, Public Service of New
17 Hampshire, was very good about providing us
18 information about their plants. So one of the
19 first things we might do in a full update is
20 speak with them first before we engaged ESS.
21 But it's theoretically possible, if we were
22 required to do a full update of the asset
23 valuation study, that we would want to speak to
24 ESS.

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1 Q. Okay.
2 A. (Hahn) But that situation has not been proposed
3 to us.
4 Q. Let me be more -- let me ask a more pointed
5 question then. If you were asked to do a full
6 update, would you consider environmental
7 compliance costs, whether you got the
8 information from the Company or from ESS?
9 A. (Hahn) Sure. Yes. Absolutely.
10 Q. And would you agree that those environmental
11 compliance costs are important in part because
12 they are going to affect the future O&M costs
13 for each facility?
14 A. (Hahn) Well, they could. I don't know if they
15 would. But they could, sure. They could
16 require additional capital investments that
17 were not included in the Company's forecast. I
18 mean, that's inherently part of the uncertainty
19 in any asset valuation.
20 Q. All right. And you've already testified you
21 don't quite know what the impacts will be of
22 the Clean Power Plan?
23 A. (Hahn) That's right. I have not analyzed that.
24 And that's, as we talked about, a complex

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1 issue.
2 Q. And are you familiar with the Steam Electric
3 Power Generating Effluent Guidelines, or ELGs?
4 A. (Hahn) That term does not sound familiar to me.
5 Maybe I know it by a different name, but it
6 does not sound familiar.
7 Q. Okay. How about the Federal Coal Ash Rule?
8 A. (Hahn) Again, I'm not an environmental engineer
9 and don't have -- that's not the kind of thing
10 that La Capra would look at.
11 Q. Okay. Are you familiar with any updates to
12 those NPDES permits or 316-B requirements under
13 the Clean Water Act that would require
14 closed-loop cooling systems or towers to be
15 installed at Schiller, Merrimack and Newington
16 stations?
17 A. (Hahn) As I said, we do not.
18 Q. You do not have any information about that.
19 MS. FRIGNOCA: I just want to
20 note for the record that that's all the
21 questions I have for now, in part because
22 having just been given the Confidential version
23 of the technical report, I haven't had a chance
24 to look through it and develop more detailed

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1 questions. But I am all done.
2 MR. SPEIDEL: Thank you very
3 much.
4 The next person up I think would
5 be Mr. Cronin.
6 EXAMINATION
7 BY MR. CUNNINGHAM:
8 Q. Yes, I just have a few questions on Page 2 of
9 your 2014 report.
10 A. (Hahn) You said Page 2 of the 2014 La Capra
11 report, sir?
12 Q. The second full paragraph of your report.
13 MR. SPEIDEL: That would be
14 Public Exhibit 1, Mr. Cunningham?
15 MR. CUNNINGHAM: Yes.
16 BY MR. CUNNINGHAM:
17 Q. I'm just going to read a quote. "We relied
18 heavily on PSNH data and projections related to
19 plant operating characteristics, costs and
20 revenues."
21 Could you identify for me what precise
22 documents you looked at?
23 A. (Hahn) I don't know if I can point a finger to
24 a precise document. But we asked them, for

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- 1 example, what the heat rates were, what their
2 variable O&M was, what their other O&M cost was
3 going forward. We asked them about capital
4 investments. It was our belief that, as the
5 operator of the plants, they would have a very
6 good handle on that. So we used that data that
7 we received from them.
8 Q. Did they produce the data in written form?
9 A. (Hahn) I'm sure they did. I don't recall a
10 specific document, but I'm sure that it wasn't
11 all verbal, if that's your question.
12 Q. And do you still have those documents in your
13 possession?
14 A. (Hahn) That I do not know. I don't know
15 whether we returned them or whether we kept
16 them. I don't know.
17 Q. And were any of those documents deemed
18 confidential?
19 A. (Hahn) Yes.
20 Q. Which of those documents were deemed
21 confidential?
22 A. (Hahn) Well, I think the forecast of O&M costs,
23 the forecast of capital investments, that would
24 be confidential. If I were the Company, I

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- 1 would not want that information out into the
2 public. Heat rate. Again, it's a competitive
3 market in New England. And all of that
4 information, if made public, could be used
5 potentially to the detriment of the Company.
6 So it's not unusual to have information like
7 that deemed to be confidential, in my opinion.
8 Q. And did you look at any data or such reports
9 that predated January 1, 2013?
10 A. (Hahn) I'm sorry, sir. I don't understand the
11 question.
12 Q. Well, you said the cutoff date for your
13 analysis was January 1 of 2013. Correct me if
14 I'm wrong.
15 A. (Hahn) That's when we began the hourly dispatch
16 simulations for the New England market model.
17 Q. Okay. And so if I understand that, did you
18 look at O&M data, capital projection expense
19 data that predated January 1, 2013?
20 A. (Hahn) There was actual data on these plants
21 available from the FERC Form 1 that gave you an
22 aggregate level of spending. That's publicly
23 available data that the Company files with the
24 Federal Energy Regulatory Commission, or FERC.

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- 1 (Discussion between witnesses)
2 A. (Hahn) And Mr. Koehler just confirmed for me
3 that the subscription service that we subscribe
4 to also has historical information on the
5 plants.
6 Q. Did you look at any actual PSNH documents that
7 predated January 1, 2013, aside from the FERC
8 filings?
9 A. (Hahn) I don't recall, sir. Something I'd have
10 to go check. I don't recall, as I sit here,
11 whether there were documents before
12 January 1st, 2013 or not.
13 Q. And do you recall whether or not you looked at
14 the FERC documents?
15 A. (Hahn) I think I did, yes.
16 Q. And did they play a role in your calculations?
17 A. (Hahn) It appeared to me that the forecast the
18 Company had given us was consistent with that
19 historic data, so we used it as a check. We
20 didn't do a formal analysis of 10 years' worth
21 of FERC Form 1 data, if that's what you're
22 going to ask. No, we didn't do that.
23 Q. All right. And in that same paragraph, it
24 indicates that PSNH has done its own recent

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- 1 valuation study. Did you see that study?
2 (Witness reviews document.)
3 A. (Hahn) Well, it says PSNH did not offer its own
4 valuation study.
5 Q. Let me ask you this: Did you ask for it?
6 A. (Hahn) If your question was, did we ask the
7 Company whether it had a valuation study or
8 not --
9 Q. Yes, sir.
10 A. --(Hahn) I don't recall that we did.
11 Q. From the language in this paragraph, it
12 indicates that you knew of the existence of the
13 study; correct?
14 A. (Hahn) I'm not sure that I would interpret that
15 statement that way. But again, I just don't
16 recall whether we asked them for -- I don't
17 believe we asked them for it, if that's your
18 question. Whether we knew of it, I don't
19 recall.
20 MR. SPEIDEL: Mr. Cunningham, I
21 think the language reads, "did not." That is a
22 negative; therefore, there was no study
23 prepared. I think that's the indication in
24 that language.

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1 MR. CUNNINGHAM: Well, I
2 disagree, Mr. Speidel.
3 MR. SPEIDEL: Okay. Just --
4 MR. CUNNINGHAM: It specifically
5 identified that it "had its own recent
6 valuation study." So I'm just inquiring what,
7 if any, use that La Capra made of such a study,
8 if any.
9 A. (Hahn) Well, my read of that statement is
10 consistent with Mr. Speidel. So I'm not
11 sure -- I don't believe we knew that the
12 Company had one, and we didn't ask for it.
13 Q. Just one last question. I'm particularly
14 interested in your conclusion on Page 68, 10.1,
15 DCF Results - Merrimack Station.
16 A. (Hahn) Are you referring to Page 68 of the 2014
17 report, sir?
18 Q. That's right.
19 The only reason I ask is, if you look at
20 that last sentence, EB -- how do you -- EBDA?
21 A. (Hahn) EBITDA.
22 Q. Quickly explain that, would you, please?
23 A. (Hahn) It's an acronym that stands for Earnings
24 Before Interest, Taxes, Depreciation and

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1 Amortization. It is a standard term in the
2 financial accounting industry to measure
3 whether a company or an asset is profitable
4 before all of those other things.
5 Q. And it's a pretty standard application, is it
6 not, to analyze the worth of a company?
7 A. (Hahn) If you wanted to analyze the worth of a
8 company, you would look at EBITDA.
9 Q. In other words, any business appraiser would
10 look at that formulation.
11 A. (Hahn) I believe they would, sure.
12 Q. Sure. And it goes on to say, "EBITDA is not
13 only insufficient to support ongoing financing
14 and expenses and additional capital
15 expenditures, it is negative for most of the
16 remaining life," and so on. "In five of our
17 six scenarios, projected cash flow for the
18 plant is insufficient to provide a reasonable
19 internal rate of return on equity at any price,
20 so the DCF value is zero."
21 Now, you indicated in response to an
22 earlier question that you weren't asked to do a
23 divestiture analysis.
24 A. (Hahn) I did say that, yes. I was not asked to

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1 do that.
2 Q. Can you draw any conclusions from that
3 statement on whether or not this Merrimack
4 Station should be divested?
5 A. (Hahn) Well, if you look at the results of our
6 study, on a DCF, or discounted cash flow basis,
7 Merrimack, over the next 15 years, from
8 January 2015 to... I think the last year of our
9 analysis was the year 2030. So, over that
10 15-year period there was insufficient EBITDA to
11 support the other fixed costs and a positive
12 sale price. You can draw conclusions from
13 that. But that's not an analysis -- that's not
14 the analysis that was in the question that was
15 asked previously.
16 Q. Well, beyond that analysis, what other
17 information would you need to make a
18 divestiture analysis?
19 A. (Hahn) Well, as in our report, we try to
20 identify comparable market sales. I think
21 comparable market sales is useful if you're
22 selling similar assets. This one, in this
23 particular case, we didn't have many comparable
24 market sales. And the ones we had for other

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1 power plants weren't necessarily relevant to
2 these. So we did rely heavily on the DCF
3 analysis. That's stated in our report.
4 Q. So that would be a major analytical point in
5 determining whether or not divestiture was
6 appropriate for Merrimack Station?
7 A. (Hahn) I think you could take the EBITDA
8 estimates from our report with some other data
9 and use that in an analysis of ratepayer
10 benefits. I just need to tell you that we did
11 not do that.
12 Q. I understand. Thank you.
13 MR. CUNNINGHAM: That's all the
14 questions I have.
15 MR. SPEIDEL: Thank you, Mr.
16 Cunningham.
17 I believe in the order of
18 questioning, the next entity would be Granite
19 State Hydro Association.
20 MR. NORMAN: We have no
21 questions.
22 MR. SPEIDEL: No questions.
23 Therefore, I believe among the parties that are
24 present here, the next party would be NEPGA,

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1 actually.

2 MS. HOLAHAN: I'm going to --
3 Attorney Allegretti from RESA is going to ask
4 questions on behalf of NEPGA today.

5 (Discussion between Mr. Hahn and Mr.
6 Speidel.)

7 MR. SPEIDEL: If you would care
8 to.

9 Just one moment, please.

10 There's an additional clarification from Mr.
11 Hahn regarding one of Mr. Cunningham's
12 questions on behalf of Mr. Cronin.

13 A. (Hahn) Mr. Cronin [sic] asked about whether we
14 inquired whether Public Service of New
15 Hampshire had an asset valuation study of their
16 own. During a hiatus, Mr. Koehler reminded me
17 that we did ask for that, and the Company said
18 they didn't have one. So that's why that
19 interpretation of that, "did not have its own
20 valuation study," is what I believe to be
21 correct.

22 MR. SPEIDEL: Thank you, Mr.
23 Hahn.

24 Therefore, I will invite Mr.

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1 Allegretti of RESA to ask questions on behalf
2 of Granite State Hydro Association --

3 MS. HOLAHAN: No, on behalf of
4 New England Power Generators Association.

5 MR. SPEIDEL: Oh, I'm sorry.
6 NEPGA, yes. Everyone's so excited about that.

7 EXAMINATION

8 BY MR. ALLEGRETTI:

9 Q. Hello, Mr. Hahn. Nice to see you again.

10 A. (Hahn) Nice to see you, Dan.

11 Q. Earlier you referred to the Tri-State's Clean
12 Energy RFP and its potential to bring a large
13 quantity of renewable imports into New England.
14 If those imports are offered into the ISO-New
15 England energy market at a zero bid price
16 taker, all other things being equal, will that
17 have an impact on energy prices?

18 A. (Hahn) Yes, if you add cost-effective supply in
19 a competitive market and demand doesn't change,
20 prices should go down.

21 Q. That's my question. Thank you.

22 MR. SPEIDEL: Very good. Does
23 RESA have any questions to ask on its own
24 account? No.

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1 Therefore, I think we've reached
2 Berlin and Gorham among the parties present
3 here today. Would you be able to ask -- I'm
4 sorry. Oh, TransCanada. I'm sorry.

5 MR. PATCH: I just wanted to
6 note for the record we don't have any
7 questions.

8 MR. SPEIDEL: Sorry about that.

9 I just wanted to check in with
10 Berlin and Gorham because we're getting close
11 to the time. Would you be able to ask the
12 questions without the presence of Attorney
13 Boldt?

14 MR. MAHER: Yes.

15 MR. SPEIDEL: Very good. So,
16 hearing that TransCanada has no questions, I
17 invite the Cities of Berlin and Gorham's
18 attorneys to ask questions.

19 EXAMINATION

20 BY MR. MAHER:

21 Q. Good afternoon, gentlemen -- or good morning.

22 It's still --

23 A. (Hahn) Close enough.

24 Q. Were you the sole preparer of the 2014 report?

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1 A. (Hahn) The vast majority of that report was
2 written by Mr. Koehler and I. Obviously there
3 were others at La Capra who worked on this
4 project.

5 Q. Can you state the names of the other
6 individuals at La Capra that helped you on this
7 project?

8 A. (Hahn) Oh, sure. Demetrios Kordonis,
9 K-O-R-D-O-N-I-S, assisted us with a capacity
10 price forecast. I think Jeff Bower, B-O-W-E-R,
11 helped us with some of the financial analysis
12 and the market comps, looking to try and see
13 what other utility assets had been sold. I
14 think Ms. Carrie Gilbert, C-A-R-R-I-E,
15 G-I-L-B-E-R-T, would likely have assisted with
16 the renewable build-out that was in our
17 reference case. I think that's the bulk of
18 them. But there may have been others that had
19 small roles.

20 Q. Are either of you or anyone that assisted you
21 certified real estate appraisers?

22 A. (Hahn) I am not, no.

23 Q. What about you, Mr. Koehler?

24 A. (Koehler) I am not.

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<p>1 Q. And to your knowledge, are any of the</p> <p>2 individuals that you just named certified real</p> <p>3 estate appraisers in the state of New Hampshire</p> <p>4 or elsewhere?</p> <p>5 A. (Hahn) They are not.</p> <p>6 Q. Okay. Are you familiar with the Uniform</p> <p>7 Standards of Professional Appraisal Practice,</p> <p>8 USPAP?</p> <p>9 A. (Hahn) I have heard of that. Yes, sir.</p> <p>10 Q. Is this -- is either the 2014 report or the</p> <p>11 2015 report compliant with any of the standards</p> <p>12 of USPAP, to your knowledge?</p> <p>13 A. (Hahn) I don't know. We prepared an energy</p> <p>14 asset valuation based on techniques that we</p> <p>15 have used for numerous other energy assets, and</p> <p>16 that's what was provided here. We're not doing</p> <p>17 a real estate appraisal.</p> <p>18 Q. Okay. So you said this is not a real estate</p> <p>19 appraisal; correct?</p> <p>20 A. It's an asset valuation. If you want to call</p> <p>21 that a real estate appraisal, fine. We did an</p> <p>22 asset valuation based upon market conditions</p> <p>23 and comparable sales.</p> <p>24 Q. Does it include good will? Is it a business</p>	<p>1 Non-Advocate Staff's authorization.</p> <p>2 MR. MAHER: Understood. And</p> <p>3 just to mirror Attorney Ross's statement, it's</p> <p>4 understood that those sorts of requests are at</p> <p>5 Non-Advocate Staff's authorization.</p> <p>6 MR. SPEIDEL: You may continue.</p> <p>7 MR. MAHER: Thank you.</p> <p>8 BY MR. MAHER:</p> <p>9 Q. Did you rely upon any comparable sales that are</p> <p>10 not -- considered any comparable sales that are</p> <p>11 not discussed in your 2014 report?</p> <p>12 A. (Hahn) I don't believe so.</p> <p>13 Q. What was your criteria for selecting your</p> <p>14 comparable sales?</p> <p>15 A. (Hahn) We tried to look at asset sales that we</p> <p>16 knew about that we could research, do secondary</p> <p>17 research. So it was based on general</p> <p>18 intelligence that we had.</p> <p>19 Q. Did you look back a certain amount of time?</p> <p>20 Was there a geographic limitation?</p> <p>21 A. (Hahn) I'm sure there was, but I don't recall</p> <p>22 those details.</p> <p>23 Q. Okay. So if I were to ask you, did you go back</p> <p>24 as far as, say, 2006, you wouldn't be able to</p>
[WITNESS PANEL: RICHARD HAHN and DANIEL KOEHLER]Page 114	[WITNESS PANEL: RICHARD HAHN and DANIEL KOEHLER]Page 116
<p>1 valuation that would include intangible items</p> <p>2 such as good will?</p> <p>3 A. (Hahn) We were valuing the assets. There would</p> <p>4 be no good will.</p> <p>5 Q. Okay. Do you maintain a work file for the</p> <p>6 asset valuations?</p> <p>7 A. (Hahn) I'm not sure I understand the question.</p> <p>8 Q. I imagine that in producing the 2014 report you</p> <p>9 compiled significant amounts of data, market</p> <p>10 studies, et cetera. Do you maintain that</p> <p>11 information, those documents, in a file that</p> <p>12 you can reproduce in order to support the</p> <p>13 conclusions in your 2014 and 2015 reports?</p> <p>14 A. (Hahn) Well, I believe we would have some data.</p> <p>15 Again, I'm not sure that we still have</p> <p>16 information we may have gotten from the</p> <p>17 Company. That would be something we need to</p> <p>18 check. But yes, we would have documents of</p> <p>19 that type.</p> <p>20 Q. If requested, and if a party was willing to</p> <p>21 sign a confidentiality agreement, would you</p> <p>22 produce that to me?</p> <p>23 MR. SPEIDEL: Again, I would</p> <p>24 like to interject that that would be subject to</p>	<p>1 tell me?</p> <p>2 A. (Hahn) Not today.</p> <p>3 Q. In terms of geographic scope, you wouldn't be</p> <p>4 able to tell me today.</p> <p>5 A. (Hahn) That's correct.</p> <p>6 Q. In your files, do you have -- if you were able</p> <p>7 to look at and produce your file, would that</p> <p>8 inform you?</p> <p>9 A. (Hahn) It might. Whatever is there will be</p> <p>10 there.</p> <p>11 Q. Did you review or consult any sales for your</p> <p>12 2015 update that was not used in your 2014</p> <p>13 report?</p> <p>14 A. (Hahn) No.</p> <p>15 Q. I notice that this is a DCF analysis. Now, did</p> <p>16 you prepare an actual spreadsheet or similar</p> <p>17 document that shows the entirety of your</p> <p>18 discounted cash flow?</p> <p>19 A. (Hahn) Yes.</p> <p>20 Q. Is that something that can be produced, in your</p> <p>21 possession?</p> <p>22 A. (Hahn) Well, I think that's a question for Mr.</p> <p>23 Speidel. We have it.</p> <p>24 MR. SPEIDEL: Again, I must</p>

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1 interject that such document production would
2 be subject to Non-Advocate Staff's
3 authorization. Insofar as the witnesses
4 present here today did not submit testimony on
5 behalf of Non-Advocate Staff in this docket,
6 therefore the usual rules of discovery do not
7 apply as it relates to such documentation.
8 However, we will consider such request for
9 documentation on a case-by-case basis. But we
10 will oppose any attempt to mandate it against
11 our will.

12 MR. MAHER: I'm just trying to
13 make sure that the record reflects the City of
14 Berlin's position that we are requesting these
15 documents and Non-Advocate Staff's position as
16 to those requests.

17 MR. SPEIDEL: Well, we would
18 have to see such requests in writing, I
19 believe.

20 MR. MAHER: I could resubmit our
21 request for documentation that was tendered to
22 Non-Advocate Staff, I believe it was on
23 October 16. I have a copy. I can resubmit it,
24 and I would like it to be made an exhibit to

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1 this deposition.

2 MR. SPEIDEL: I believe the
3 Commission denied that request for relief. It
4 was embedded within a motion to the Commission,
5 as I recall. It wasn't --

6 MR. MAHER: That is correct.

7 MR. SPEIDEL: The same documents
8 are being requested; is that correct?

9 MR. MAHER: Essentially, yes.
10 Yes, with the exception of the unredacted copy
11 of the 2014 report.

12 MR. SPEIDEL: Which you have
13 now.

14 MR. MAHER: Correct.

15 MR. SPEIDEL: Well, Non-Advocate
16 Staff will take that under advisement. Thank
17 you.

18 MR. MAHER: Thank you.

19 MR. SPEIDEL: Is that all?

20 MR. MAHER: No, I have still
21 quite a bit.

22 MR. SPEIDEL: Go on. Sorry.

23 BY MR. MAHER:

24 Q. What source documentation do you have to

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1 support your revised forecast for the price of
2 power in your 2015 update?

3 A. (Hahn) We have the updated capacity price
4 forecast and the updated natural gas price
5 forecast.

6 Q. And from what is that natural gas forecast
7 derived?

8 A. (Hahn) Well, the methodology is the same as
9 what is described in our 2014 report. It's
10 just the information available to us was
11 available in July and August of 2015 instead of
12 the first half of or the first few months of
13 2014. So the methodology that's described is
14 the same, but the market intelligence and the
15 price outlooks and actual deals we might have
16 looked at were different.

17 Q. I notice in the 2014 report that it says you
18 relied upon AURORA as part of your forecast,
19 but then you produced the -- I believe it's
20 Confidential Exhibit 3 -- market analysis or
21 the -- and I'm not sure exactly how it's been
22 labeled. What was done to the AURORA forecast
23 in order to come up with your reference
24 scenario?

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1 A. (Hahn) In the 2015 update?

2 Q. I'll start with 2014.

3 A. (Hahn) Okay. AURORA is a model that simulates
4 the dispatch of an electric system. The model
5 that we used can be used to dispatch the entire
6 grid in the entire electric United States. We
7 used it focusing on New England in an analysis
8 like this. And if you understand the ISO
9 energy market, bids are offered, load is there,
10 you choose the best bids, least cost bids to
11 serve the load. AURORA does the same thing
12 with similar inputs. It's an hourly dispatch
13 model. And so that gave us the hourly LMPs in
14 the 2014 La Capra study.

15 Now, as I said, in 2015, we did not redo
16 the dispatch. We kept the output of all the
17 units, including the Public Service units, the
18 same, but adjusted energy market revenues for
19 lower natural gas prices. There is an
20 extremely high correlation between natural gas
21 prices and electric prices. So we felt very
22 comfortable doing that.

23 Q. When you look at natural gas prices, is that at
24 Henry Hub, or is that Algonquin Citygate?

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- 1 A. (Hahn) Algonquin -- well, we look at both. But
2 of primary importance here is the generally
3 accepted New England hub for natural gas
4 delivered to New England, which is the
5 Algonquin Citygate price. There are price
6 differences between there and other points in
7 New England. They tend to be small. So there
8 is a -- the focus of the natural gas price
9 forecast, if you will, is the Algonquin
10 Citygate price.
11 Q. Did you adjust for -- did you adjust any of the
12 AURORA forecasts in coming up with your
13 reference scenario? Did you add any inputs,
14 any additional considerations or assumptions
15 that would not normally be included in AURORA's
16 projection?
17 A. (Hahn) In the 2015 update?
18 Q. 2014. Excuse me.
19 A. (Hahn) We began with our sort of reference case
20 model which we use for lots of different work
21 in New England. We did not change that
22 specifically for this project.
23 Q. Okay.
24 A. (Koehler) If I can just clarify that? We did

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- 1 make some -- in the 2014 report, we did make
2 some changes based on confidential information
3 from PSNH on operating characteristics and the
4 like, but relatively minor details. So, as a
5 whole, the forecast was similar to our base
6 case.
7 A. (Hahn) But we didn't add additional generating
8 units or retire generating units. They were
9 the same.
10 Q. Okay. I wasn't sure. Did you include any
11 market conditions into that forecast that
12 otherwise does not exist at the present?
13 A. (Hahn) I'm not sure what you mean by that
14 question, sir.
15 Q. Well, I've heard reference that you considered
16 the existence of future carbon legislation.
17 Did you consider any other factors that could
18 have impacted the market?
19 A. (Hahn) Well, I testified earlier that we did
20 assume compliance with renewable portfolio
21 standards. That's a standard assumption in our
22 modeling. Can't think of any others, but... so
23 I hope there aren't any.
24 Q. And I note with O&M specifically -- excuse me.

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- 1 I'm just trying to go through and make this as
2 streamlined as possible. Let me back up.
3 Did you use a particular definition of
4 "fair market value"?
5 A. (Hahn) We focused on the value that was
6 generated by a discounted cash flow. As I
7 said, we looked at the market comps. But
8 because of the relative -- what's the word I'm
9 looking for -- unavailability of comparable
10 sales, we focused heavily on the discounted
11 cash flow. To the extent you deem a discounted
12 cash flow to give you a fair market value, then
13 we did.
14 Q. Well, did you consider a hypothetical buyer
15 when you were generating your 2014 report? Was
16 there a specific type of buyer in mind?
17 A. (Hahn) We did not identify a specific buyer,
18 such as a merchant generating company or a
19 hedge fund or something like that because we
20 believe that they would come up with a similar
21 discounted cash flow analysis that we did, and
22 that that would be the basis of the bid. So,
23 no, we did not assume a particular type of
24 buyer.

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- 1 Q. But I note at the end of your 2014 report that
2 you state something to the effect that the
3 bundling of the hydro assets, or some of the
4 hydro assets, might yield the biggest price
5 rather than selling them off
6 station-by-station. Does that envision a
7 specific type of buyer in that scenario?
8 A. (Hahn) I don't think it does. I mean, again,
9 those units had I think the highest or second
10 highest positive discounted cash flow results.
11 So, no, I don't think it does assume a
12 particular type of buyer.
13 Q. Did you look at any projections with regard to
14 power generation that would indicate either a
15 future increase or decrease of energy as a
16 result of consumption trends or increased
17 industrial activity?
18 A. (Hahn) We did not consider sensitivities, a
19 higher or a lower load forecast, if that's what
20 you're asking about. No, we didn't. We did
21 focus on higher and lower natural gas prices.
22 We did look at a Forward Capacity Market
23 scenario that had a high retirement scenario.
24 But sensitivity to load forecast was not among

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1 them.
2 Q. So am I to understand that, in order to
3 determine the amount of power generated, you
4 based that off of historic data, with the
5 exception of Smith, in which you -- I believe
6 you said that you relied upon the certified
7 generation by FERC?
8 A. (Hahn) I'm not sure I understand the question.
9 But Mr. Koehler thinks he does, so --
10 A. (Koehler) I think I understand the confusion
11 here. For the most part, AURORA dispatches
12 units, as Dick described it. So, to the extent
13 there's any projections of PSNH unit output in
14 the future, it's taken from the dispatch that
15 AURORA has generated, you know, which is the
16 hour-by-hour decisions. And we just take that
17 output in the model.
18 Hydro units in AURORA are treated zonally.
19 So, inputs for how they operate are taken at
20 the aggregate level for a zone. So, all New
21 Hampshire hydro, the units are all in there.
22 But in terms of how they operate with pondage,
23 with their ability to capture peak, that's all
24 taken at the aggregate New Hampshire zone

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1 level. So, to try to pull dispatch of
2 individual units out of AURORA we don't think
3 is the appropriate way to do it. So, as
4 post-processing matter for the hydro units, we
5 did an independent assessment of what their
6 output would be, and we attempted to estimate
7 the long-term average production for them.
8 Q. And was that based on -- and I'm looking at
9 Page 25, second sentence -- "Instead, long-term
10 average production was estimated for eight of
11 the nine hydro units using an average of
12 historical production from the nearly 22-year
13 period of 1992 to October 2013"? So, am I to
14 understand that it was based solely off
15 historic averages?
16 A. (Koehler) For the units that did not have a
17 major change in their production over that time
18 period. And that's the reason why Smith was
19 done by a different methodology, because
20 Smith's output changed over that historic
21 record, so we didn't feel like that was the
22 appropriate way for Smith.
23 Q. Was that a weighed average, or was that a
24 straight average?

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1 A. (Koehler) I'm not sure I understand the
2 question.
3 Q. Let me rephrase. When you did your 22-year
4 average of eight of the nine hydros, did you
5 weight certain years heavier than others?
6 A. (Koehler) No, other than the extent that
7 they're different numbers. But it's an average
8 of 22 annual output numbers, yes.
9 Q. When you say "capacity supply obligations," is
10 that synonymous with "qualified capacity"?
11 A. (Hahn) Well, you have to qualify for the
12 auction, and then if you're a successful bidder
13 in the forward capacity auction, you receive a
14 capacity supply obligation. So I think you
15 could qualify for the auction, not be a
16 successful bidder, and you wouldn't get a
17 supply obligation.
18 Q. I'm just trying to understand your report. You
19 have the forward capacity auction. From that
20 you generate a capacity price forecast. And to
21 get revenues from capacity, you have to
22 multiply that price by a certain capacity
23 amount. Where does that capacity amount come
24 from?

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1 A. (Hahn) That would come from the -- well, first
2 of all, there's a different amount for each
3 station or each plant.
4 Q. Understood.
5 A. (Hahn) We assume that all of the plants,
6 including the PPAs, got capacity revenues. The
7 precise value --
8 MR. HAHN: Did we get that from
9 the FCA?
10 A. (Koehler) Yes, and it's explained. The exact
11 procedure is explained in the report. It's
12 a -- we looked at their existing obligations.
13 And certainly for years that are covered by
14 existing FCAs, we used those numbers. In terms
15 of projecting forward -- it's explained on Page
16 29 to 30 --
17 Q. Yeah.
18 A. -- (Koehler) in the 2014 La Capra report.
19 Q. And I'm looking at the second sentence in
20 Section 5.3 which says, "Each facility has
21 qualified for capacity credit in all of the
22 Forward Capacity Market auctions conducted to
23 date."
24 Does that phrase mean -- I heard that this

<p>[WITNESS PANEL: RICHARD HAHN and DANIEL KOEHLER] Page 129</p> <p>1 is a term of art, "qualified capacity." Is 2 that what is meant by that sentence? 3 (Witness reviews document.) 4 A. (Hahn) Where is the term "qualified capacity" 5 defined? 6 Q. I'm asking. I have heard that as a term of art 7 in this industry, and I'm asking is that what 8 is meant? 9 A. (Hahn) The answer is I don't know. I mean, I 10 think the definition, if it is the ISO 11 definition of "qualified capacity," will be in 12 the market rules for the forward capacity 13 auctions. But as I sit here today, I don't 14 know. 15 Q. On Page 43, in the paragraph before 16 Section 6.3, you state, "We allocated the total 17 hydro budget proportional (less FERC 18 re-licensing costs) to each unit's capacity 19 supply obligation." 20 How is that allocation done? On what 21 basis? 22 A. (Koehler) I believe you just stated it. It's 23 by the capacity supply obligation. 24 Q. So is that the same as the -- is that</p>	<p>[WITNESS PANEL: RICHARD HAHN and DANIEL KOEHLER] Page 131</p> <p>1 to be capitalized; therefore, they're treated 2 as plant in service after the year they're 3 made. So in the... we assumed a constant 4 debt/equity structure for the buyer. So there 5 would be some of that purchase price that would 6 be funded by debt, the principal and interest, 7 which would reduce EBITDA. And the equity 8 portion would be included in the equity in the 9 cash flow-to-cash flow analysis. 10 Q. So the portion that is reduced from the cash 11 flow analysis, that -- does that represent 12 specific capital expenditures that are going to 13 be made at each station? End of question. 14 A. (Hahn) Yes. 15 Q. Do those capital expenditures envision repairs 16 that are necessary to obtain the FERC 17 relicensure at the end of the DCF? 18 A. (Hahn) I'm not sure I understand the question, 19 "at the end of the DCF." 20 Q. So you're -- your DCF has a final year; 21 correct? 22 A. (Hahn) It does. 23 Q. Okay. And in each year in your DCF, I believe 24 for Smith -- let's use that as an example -- it</p>
<p>[WITNESS PANEL: RICHARD HAHN and DANIEL KOEHLER] Page 130</p> <p>1 "qualified capacity," is that the amount of 2 capacity that they enter into the -- 3 A. (Koehler) It's by our projection of their 4 capacity supply obligation, which would be the 5 capacity that has qualified and cleared in a 6 forward capacity auction. 7 Q. Do capital expenditures that are reduced from 8 each year's cash flows include repairs 9 necessary to obtain a upcoming FERC license -- 10 to satisfy the FERC relicensing procedure? 11 A. (Koehler) Could you clarify which -- which 12 stream you're talking about? 13 Q. Well, keep in mind I don't actually have the 14 DCF. That hasn't been provided to me. So I'm 15 assuming that when you make a capital 16 expenditure reduction on a yearly basis, which 17 I believe you based on information provided by 18 PSNH -- 19 A. (Hahn) Wait a minute. You said "capital 20 expenditure reduction"? 21 Q. Yeah. I imagine you are -- are you reducing 22 cash flows by a capital expenditure amount for 23 each year's cash flow in your DCF? 24 A. (Hahn) Well, capital expenditures are assumed</p>	<p>[WITNESS PANEL: RICHARD HAHN and DANIEL KOEHLER] Page 13.</p> <p>1 goes until, I believe, for 39 years, correct, 2 per the 2015 update? 3 A. (Hahn) That number is a matter of record 4 somewhere. I don't recall it. 5 Q. Okay. In year 38 or 39, do the capital 6 expenditures at Smith, in DCF, envision repairs 7 necessary to obtain a FERC relicensure? 8 A. (Koehler) No, they do not. No. The assumption 9 was that we elected to end the pro formas on 10 the year of the FERC relicensing under the 11 assumption that, assuming relicensing an 12 additional 30 years of pro forma life would 13 introduce all of these additional questions. 14 You'd have cost of relicensing, trying to 15 estimate 30 years of revenue starting in 2039, 16 say, or whatever year it is. And so we decided 17 that an investor in an asset like this would 18 not place any value, positive or negative, on 19 that uncertainty at the end of the life. So 20 there's no cost assumed for -- in most of these 21 unit cases, it would be a second relicensing, 22 because for the ones that have relicensing 23 coming up in the near term, we did assume that. 24 But then, for the out beyond, I think 30 years,</p>

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1 we elected to not include any costs, nor any
2 post-relicensing revenues for those units.
3 Q. Is there a reversionary value at the end of
4 DCF?
5 A. (Hahn) No, there's not.
6 MR. SPEIDEL: Excuse me. Any
7 sense of how many more questions we have from
8 Berlin?
9 MR. MAHER: Five minutes.
10 MR. SPEIDEL: Okay. Carry on.
11 BY MR. MAHER:
12 Q. So am I correct that you assume that there's
13 not going to be any more EBITDA at the end
14 of -- using Smith again with the 39-year life
15 -- year 40, there's a zero EBITDA under your
16 model? Is that what's assumed?
17 A. (Hahn) Yes.
18 Q. And I note on Page 65 you make reference to
19 "book life." Can you explain briefly how "book
20 life" factors into your DCF?
21 A. (Hahn) Sure. Most assets have an asset life
22 over which their investments are depreciated
23 for accounting purposes. That's referred to as
24 a "book life." There is also something called

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1 a "tax life," which can be different from the
2 book life. Usually is. And it represents the
3 period of time over which a particular
4 investment can be depreciated or amortized for
5 tax purposes.
6 So in the model, book depreciation shows
7 up as an item in the financial pro forma, just
8 as it would for any other company or asset.
9 Q. And at Page 63 you state, "Applying the
10 respective median values to the PSNH units,
11 escalating 1 percent in addition to inflation,
12 adding 15 percent for overhead yields a
13 forecast of O&M expense well below the
14 referenced scenario forecast."
15 Didn't this analysis give you pause in
16 relying upon PSNH's reported O&M expenses for
17 the purposes of your DCF?
18 A. (Hahn) It was an alternative scenario. It did
19 not give us pause to doubt what they gave us.
20 Q. Not with regard to the voracity of it. But if
21 you are running a market-based O&M sensitivity,
22 and that sensitivity is revealing that PSNH's
23 O&M is higher than market, why would you use
24 PSNH's actual O&M if you were envisioning the

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1 purchase price by another entity?
2 A. (Hahn) It was an alternative scenario we looked
3 at, just as we looked at high gas prices. Our
4 view was that the Company has operated these
5 plants for 30, 40 years. They would be a good
6 source of what it would cost to run them in the
7 future. Are there alternative estimates of
8 that? Sure. Could they be higher or lower?
9 Sure. So we tested sensitivities in the 2014
10 study. But again, the reference case assumed
11 the values that we received from the Company.
12 Q. And last question with regard to the LMM report
13 that's referenced in here. I take it that's a
14 document within your possession?
15 A. (Hahn) The LMM or the NMM?
16 Q. NMM.
17 A. (Hahn) Yes, sir, that's a document --
18 Q. That's a document in your possession. And is
19 that a document that you will produce subject
20 to signing of the confidentiality agreement?
21 MR. SPEIDEL: Again, that would
22 be subject to the authorization of Non-Advocate
23 Staff.
24 MR. MAHER: Understood.

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1 MR. SPEIDEL: And the La Capra
2 Associates entity, our consultants, have
3 plainly indicated that they believe that to be
4 confidential in toto. And there may have to be
5 ongoing discussions as to whether a
6 non-disclosure agreement with the City of
7 Berlin would provide adequate protection for La
8 Capra Associates in this specific instance.
9 MR. MAHER: City of Berlin
10 anticipates that those discussions will be had
11 in the future?
12 MR. SPEIDEL: Yes. I think
13 perhaps a bilateral meeting with Non-Advocate
14 Staff at some juncture with your
15 representatives and our representatives, and I
16 think we could discuss it. But again, it would
17 be subject to our authorization.
18 MR. MAHER: Thank you. That's
19 all the questions I have. That's all the
20 questions I have at this time. We do reserve
21 our right to ask additional questions and
22 request additional documents subject to our
23 review of the recently disclosed 2014
24 unredacted appraisal. Thank you, gentlemen.

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1 MR. SPEIDEL: Thank you very
2 much.
3 Mr. Sheehan, redirect on behalf
4 of Non-Advocate Staff?
5 MR. SHEEHAN: Thank you. We
6 just had a couple. Just one clarifying point
7 that I wanted to make.
8 EXAMINATION
9 BY MR. SHEEHAN:
10 Q. The Staff report we've been talking about, the
11 2014 Staff report, you had direct contact with
12 the Staff members who prepared that report; is
13 that correct?
14 A. (Hahn) Yes.
15 Q. And they were whom?
16 A. (Hahn) Steven Mullen, and Tom Frantz.
17 Q. Okay.
18 A. (Hahn) Mr. Frantz, I think that's how you
19 pronounce his name. The two of them and Mr.
20 Koehler and I were at that initial meeting on
21 the date that we toured the Company's
22 hydroelectric assets. And that's when they
23 asked how would you go about this and we gave
24 them some guidance and we gave them some

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1 numbers. They sent us back a spreadsheet that
2 had the estimate of the retail market price for
3 default service if you weren't going to go to
4 the market, and we said that was okay with us.
5 Q. And do you know where Mr. Mullen is now?
6 A. (Hahn) I believe he's left the Commission
7 Staff.
8 Q. And you're aware that Mr. Frantz is with the
9 settling parties in this particular document?
10 A. (Hahn) That's what I understand to be the case,
11 sir.
12 Q. Thank you.
13 MR. SHEEHAN: That's all we
14 have. Thank you.
15 MR. SPEIDEL: Well, it would
16 appear that the line of questioning is
17 concluded from the various parties. I thank
18 our consultants from La Capra Associates,
19 Messrs. Hahn and Koehler, very much for their
20 cooperation and assistance. And I thank you
21 all for your attendance and participation.
22 Therefore, I ask that we conclude the record
23 for this proceeding. Thank you.
24 (Whereupon the proceedings concluded at 12:32 p.m.)

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C E R T I F I C A T E

1
2 I, Susan J. Robidas, a Licensed
3 Shorthand Court Reporter and Notary Public
4 of the State of New Hampshire, do hereby
5 certify that the foregoing is a true and
6 accurate transcript of my stenographic
7 notes of these proceedings taken at the
8 place and on the date hereinbefore set
9 forth, to the best of my skill and ability
10 under the conditions present at the time.

11 I further certify that I am neither
12 attorney or counsel for, nor related to or
13 employed by any of the parties to the
14 action; and further, that I am not a
15 relative or employee of any attorney or
16 counsel employed in this case, nor am I
17 financially interested in this action.
18

19 Susan J. Robidas, LCR/RPR
20 Licensed Shorthand Court Reporter
21 Registered Professional Reporter
22 N.H. LCR No. 44 (RSA 310-A:173)
23
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