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STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

October 22, 2014 - 1:48 p.m. DAY 6
Concord, New Hampshire "EARLY" AFTERNOON
SESSION ONLY

RE: DE 11-250
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE:
Investigation of Scrubber Costs and
Cost Recovery

PRESENT: Commissioner Martin P. Honigberg, Presiding
Special Commissioner Michael J. Iacopino

F. Anne Ross, Esq., General Counsel

Sandy Deno - Clerk

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Wilbur A. Glahn, III, Esq. (McLane...)

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I N D E X

WITNESS PANEL: TERRANCE J. LARGE
JAMES J. VANCHO

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1 AFTERNOON SESSION

2 (Hearing resumed at 1:48 p.m.)

3 CMSR. HONIGBERG: Let's talk
4 for a minute about how late we can go
5 tonight. We can do this off the record.

6 (Discussion off the record)

7 CMSR. HONIGBERG: Back on the
8 record. Mr. Patch, I believe you have the
9 floor.

10 MR. PATCH: Yes.

11 CROSS-EXAMINATION (CONT'D)

12 BY MR. PATCH:

13 Q. Before we broke, I made reference to a
14 response that PSNH gave to a Deposition Data
15 Request No. 4. It's Attachment 21 to Mr.
16 Hachey's testimony, and it begins on Bates
17 992. And Mr. Large, I just had a question or
18 two for you about that response. I don't
19 know if you have access to that up there, or
20 should we provide you with a copy.

21 A. (Mr. Large) I believe I do. I apologize if
22 we didn't get it during the break.

23 SP. CMSR. IACOPINO: What was

1 the Bates page again?

2 MR. PATCH: It's 992.

3 A. (Mr. Large) I have it.

4 Q. And according to the question, this is where
5 we asked Mr. Long who prepared the \$11 per
6 MMBtu price assumption that appears in the --
7 and there was an exhibit to the deposition.
8 And the response was -- well, it doesn't look
9 like the response actually answered that
10 question about who prepared it. It did say
11 what was prepared. And the response person
12 obviously is Mr. Long. But do you have any
13 reason to disagree with the response in this?
14 Is this accurate, in terms of a description
15 of how the \$11 per MMBtu price assumption was
16 prepared? Have you reviewed this before?

17 A. (Mr. Large) I have reviewed it before. I'm
18 happy to clarify that I'm the person that was
19 responsible for preparing the \$11 per million
20 Btu forecast or assumption. And I'm happy to
21 give all of the details of our process of
22 assessing that, that was the value we wished
23 to use in the assumption if you'd like.

1 Q. Well, and an attachment to that response is
2 basically four pages, where there are circles
3 around the Newington gas price, which
4 apparently is what was used as the basis for
5 the \$11; is that correct?

6 A. (Mr. Large) Correct. Those are four values
7 from the daily dispatch report that's
8 prepared by our fuels purchasing group that
9 supports the dispatching of our generating
10 units.

11 Q. And those were for the months of January
12 through April of 2008; correct?

13 A. (Mr. Large) That is correct.

14 Q. And so, in preparing the \$11 per MMBtu, you,
15 being the one who prepared the assumption,
16 you did not use the EVA forecast in any way.

17 A. (Mr. Large) That's not true.

18 Q. Okay. Then if you could explain.

19 A. (Mr. Large) Certainly. I think we began
20 touching on this, and it's probably the
21 easiest way to explain it is to go to
22 Exhibit 23-15. All of the numbers are there,
23 so it provides the simplest way of being able

1 to describe it.

2 Q. So you're at Bates Page 668?

3 A. (Mr. Large) I'm sorry. I should have given
4 that. Yes.

5 Q. Go ahead.

6 A. (Mr. Large) Thank you. So, counting from the
7 left, other than the year dates, Column 6 and
8 Column 7. They're headed "New England Gas
9 (NYMEX-plus basis)"; Column 7 is "New England
10 Gas (EVA)."

11 When I began the process of trying to
12 define an assumption for natural gas prices,
13 I went to our fuels marketing group, people
14 that are responsible for obtaining this kind
15 of information -- "fuels purchase" and "fuel
16 procurement" probably the better choice of
17 words. And these were the values of
18 information: NYMEX prices certainly varying
19 over time -- and by that I mean, you know, a
20 different day had a different NYMEX price --
21 and the New England EVA forecast, which was
22 the February 28th forecast, which we've
23 spoken about previously. And I examined

1 those two numbers, conferred with
2 Mr. McDonald, with Mr. Smagula, with the
3 fuels purchasing folks. And we talked about
4 this over several days.

5 And the stark reality for me was that I
6 think the purpose in having the assumption
7 was that it be a reasonable assumption, a
8 reasonable starting place, conservatively
9 reasonable. And rather than -- well, as I
10 look at these numbers, you know, as we see
11 from the deposition record request, the
12 prices that we were experiencing here in New
13 Hampshire were \$11, and the EVA forecast for
14 calendar year 2008 of \$8.37 seems
15 substantially low. By the same token, the
16 NYMEX-plus basis price of \$14.62 was
17 substantially higher than our actual
18 experience at PSNH. The range between those
19 two numbers was 75 percent, a 75-percent
20 variance between the EVA forecast and the
21 NYMEX-plus basis price. I struggled with
22 picking one of those two. The NYMEX price
23 seemed as though it would be perceived as too

1 high. And I was confident, based upon my
2 experience and the experience that we were
3 having at that point in time, that for that
4 period of time, \$8.37 was too low. So, after
5 much debate and consideration with the others
6 that I spoke about, I knew that we had this
7 other, this third source of data, and that
8 third source of data was, in fact, our actual
9 cost of fuel delivered in New Hampshire. So
10 it would minimize argument about what's the
11 right basis, what's -- you know, it very much
12 in my mind simplified and streamlined a
13 starting-point assumption for natural gas
14 prices.

15 So, those four documents with the
16 numbers circled average \$11. I did not want
17 to make any suggestion that we were making
18 such a precise forecast. You know, I didn't
19 see any benefit of going to two or three or
20 four decimal places. And I selected \$11 per
21 million Btus as the base for our forecast for
22 natural gas. I would offer that that was
23 data available in 2008.

1 And what we did was we brought that
2 forward to 2012, four years forward, with no
3 escalation. So I viewed that as a second
4 making of conservative adjustment. And then
5 we started with \$11 per million Btus in 2012
6 and carried that forward at 2-1/2 percent.

7 Q. This is all new information, Mr. Large. It
8 wasn't in your rebuttal testimony, was it?

9 A. (Mr. Large) I did not describe the process
10 that I undertook. But we did, as provided in
11 the record request, identify what it is that
12 we used to select a basis price, yes.

13 Q. Okay. Well, let's walk through that record
14 request. I assume you mean Attachment 21 in
15 the Deposition 4. Is that what you mean?

16 A. (Mr. Large) Yes.

17 Q. And see where it says the referenced \$11
18 MMBtu price assumption was based on actual
19 reported natural gas prices rather than any
20 specific forecast? Is that what it says in
21 the first sentence?

22 A. (Mr. Large) It was not on any specific
23 forecast. So, it does say that, and I agree

1 with that.

2 Q. And it goes on to say "Forecasts available at
3 the time..." and then lists some -- it
4 doesn't list the EVA forecast, does it?

5 A. (Mr. Large) It does not.

6 Q. "...support the base assumption and
7 escalation, but were not used directly nor
8 relied upon in preparing the referenced MMBtu
9 price." Is that what it says?

10 A. (Mr. Large) That's correct.

11 Q. So you still maintain that you provided that
12 information to us before today?

13 A. (Mr. Large) What I said was the four
14 documents that follow Bates Page 992 is, in
15 fact, the arithmetic that produced the \$11
16 per million Btu.

17 Q. You signed the cover letter on the 2007 IRP
18 that was filed as an exhibit in this docket;
19 did you not?

20 A. (Mr. Large) I would believe that to be true.

21 Q. And that was part of your responsibilities in
22 the 2007 time frame; correct?

23 A. (Mr. Large) That is correct.

1 Q. And I would ask you to look at Page 159 of
2 the LCIRP.

3 MR. NEEDLEMAN: Do we have an
4 exhibit reference?

5 MR. PATCH: Exhibit 73.

6 Q. Tell me when you're there.

7 CMSR. HONIGBERG: I'm sorry,
8 Mr. Patch. What page?

9 MR. PATCH: Page 159 of
10 Exhibit 73.

11 MR. NEEDLEMAN: I don't see a
12 copy of it up here.

13 MS. AMIDON: We have a copy
14 you can...

15 (Mr. Needleman hands document to
16 witnesses.)

17 BY MR. PATCH:

18 Q. And on Page 159, Mr. Large, you see where it
19 says "Avoided Cost Methodology and Forecast,"
20 top of the page?

21 A. (Mr. Large) Yes, I do. Sorry. I had to pull
22 the papers back here.

23 Q. And then "Section A.1.1, Energy Forecast

1 Alternatives"?

2 A. (Mr. Large) Yes.

3 Q. And that's where it talks about how -- the
4 LCIRP talks about how energy forecast
5 alternatives -- basically says there are two
6 primary approaches: A market-based approach
7 and a fundamental approach; correct?

8 A. (Mr. Large) It does.

9 Q. And then there's a fairly lengthy description
10 on that page and on the next page about those
11 alternatives. And then, at sort of the very
12 end -- I could walk through a number of
13 questions associated with that, but in the
14 interest of time I'll try to avoid that.

15 And then, at the very end of that
16 section, over on the next page, bottom of
17 Page 160, it says, "In a long-range plan,
18 these procurement methods may be more
19 appropriately forecasted using the
20 fundamental numbers." Did I read that
21 correctly?

22 A. (Mr. Large) I believe you did.

23 Q. And could you explain to us what the

1 difference is between those two forecasting
2 methods?

3 A. (Mr. Large) Yes, I can. NYMEX futures is
4 their assessment of actual trades and
5 forecasted trades for the commodity at a
6 given point in time, typically provided in a
7 delivery point of Henry Hub -- so, the gas at
8 a singular location. And to that must be
9 added the transportation cost to get it from
10 that location to your desired delivery point.

11 My understanding of EVA forecasts is
12 that they -- they're referred to as
13 "fundamental forecasts," and they're built
14 upon supply and demand and production
15 capability factors.

16 Q. Now, the response that I just showed you to
17 Deposition 4 suggests that the methodology
18 that you used in connection with the Scrubber
19 in the summer of '08 was the forecast of
20 energy prices, the market-based approach, not
21 the fundamental approach. Is that what the
22 response to the data request seems to say?

23 (Witness reviews document.)

1 A. (Mr. Large) As a general statement, I would
2 agree with that. We made a number of
3 references with regard to being "consistent
4 with NYMEX approaches."

5 Q. Attachment 13 to your testimony is a later
6 report to the Commission in 08-103. I wonder
7 if you could turn to that now and look at
8 Bates Page 662.

9 A. (Mr. Large) I have that.

10 Q. As I understand it, this is a report that was
11 made to the Commission in the 08-103 docket.
12 A later report that was done on October 15th
13 of 2010; correct?

14 A. (Mr. Large) October 15, 2010, yes.

15 Q. And Page 662 is the section on "Energy
16 Service Rate Change"; correct?

17 A. (Mr. Large) Yes.

18 Q. And if you look over on the next page, on
19 663, it appears that what PSNH has done in
20 this case with the Commission is to utilize
21 both NYMEX and EVA data to come up with an
22 estimate of the impact on energy service
23 rates; correct?

1 A. (Mr. Large) That's what appears there, yes.

2 Q. So, in that case, you've used the blended
3 method that you suggested was appropriate for
4 long-range forecasting in the LCIRP; correct?

5 A. (Mr. Large) Yes.

6 Q. But that's not what you used in the summer of
7 '08, is it?

8 A. (Mr. Large) It is not the result of -- well,
9 it is not the method that I used in the
10 summer of '08. The reality is that the
11 average numbers between the EVA forecast and
12 the NYMEX forecast are very close to \$11 per
13 million Btu. I could have chosen to utilize
14 an average if I wanted to. But it was of
15 greater reason to me to make as clear and as
16 definitive the specific reference to the
17 starting point for natural gas prices. And
18 for me, that was easier to define as the
19 actual cost of fuel delivered to the state of
20 New Hampshire.

21 Q. I want you to look at Page 160 of the LCIRP.
22 And if you could look at -- it's the
23 carryover paragraph, last sentence there.

1 And I'll read it into the record, and you
2 tell me if I read it correctly. Do you have
3 that in front of you?

4 A. (Mr. Large) I apologize, Mr. Patch. The page
5 again?

6 Q. One-sixty?

7 WITNESS LARGE: Ms.
8 Chamberlin, I think we've found it.

9 MS. CHAMBERLIN: Okay.

10 A. (Mr. Large) So, 160 you say?

11 Q. Yes.

12 (Witness reviews document.)

13 A. (Mr. Large) I have Page 160.

14 Q. At the top of the page and the carryover
15 paragraphs, the last sentence reads,
16 "Instead, PSNH contracts with a consultant,
17 (Energy Ventures Associates or 'EVA') to
18 provide a quarterly long-term forecast of
19 commodity market prices, which PSNH converts
20 into forecasted energy prices." Did I read
21 that correctly?

22 A. (Mr. Large) You did.

23 Q. And I'm going to show you what -- well, first

1 of all, what PSNH provided in response to
2 Data Request 38, Frantz 638, on
3 September 12th of this year.

4 MR. PATCH: Actually, all we
5 have, Mr. Chairman, is one copy of that.
6 It's voluminous. It's mostly coal forecasts.
7 There's nothing in there about EVA. And it's
8 being offered to obviously point out what it
9 is that PSNH provided us back in September of
10 this year.

11 CMSR. HONIGBERG: You want to
12 see it, Mr. Needleman?

13 MR. NEEDLEMAN: Well, I'll go
14 up and look at it. We talked about it before
15 the break and said, if this is how they want
16 to do it, it's fine. I'm not sure how we're
17 going to handle you reviewing pages, but
18 we'll see where it goes.

19 CMSR. HONIGBERG: We'll see
20 where it goes. Fair enough.

21 BY MR. PATCH:

22 Q. Are you familiar with that response?

23 A. (Mr. Large) I am.

1 Q. Are there any Energy Ventures analyses
2 forecasts included in that package?

3 A. (Mr. Large) Would it make it easier if I just
4 accept, subject to check?

5 Q. That would be great. Thank you.

6 A. (Mr. Large) Sure.

7 Q. And then what I'd like to do is to show you
8 what PSNH provided on Friday of last week.
9 That would have been October 17th, I believe
10 is the date. After we pointed out this
11 particular section of the IRP that we just
12 read, I want to show you a copy of -- there
13 were actually three separate e-mails we
14 received from Mr. Bersak. And I'm going to
15 show you the second of three and the
16 attachment to that.

17 MR. PATCH: And we did make
18 copies of all of this for the Commissioners
19 and for all of the parties. But I just want
20 to represent to the Commission that there
21 were actually three different responses that
22 we got. The ones that I'm focused on are the
23 2008 and 2009. Not the 2007 and then the

1 later ones, but just that one of the three
2 responses. So, Ms. Goldwasser is going to
3 hand those out.

4 (Ms. Goldwasser distributes documents.)

5 MR. PATCH: And I would ask
6 that the September response, first of all, be
7 marked as an exhibit.

8 CMSR. HONIGBERG: The entire
9 packet?

10 MR. PATCH: Yes.

11 CMSR. HONIGBERG: Would the
12 parties be willing to stipulate to the fact
13 that -- the only fact I think you wanted out
14 of that, that it did not include any EVA
15 forecasts?

16 MR. NEEDLEMAN: If that's the
17 case, sure.

18 MR. BERSAK: If it's the case.
19 We want to look at it first.

20 CMSR. HONIGBERG: Why don't
21 you take a look at it. Because if you can
22 stipulate to that fact, we don't need to mark
23 a 200-page exhibit for the purpose that it

1 doesn't contain something.

2 MR. NEEDLEMAN: Why don't we
3 do that at a break so we can --

4 CMSR. HONIGBERG: Fair enough.
5 So, let's hold off on marking that. Okay.

6 MR. PATCH: Now what I would
7 ask to be marked is the response, two of
8 three of the three e-mails Mr. Bersak sent
9 us, the attachment to the second one that was
10 provided to us on Friday night, on
11 October 17th.

12 (The document, as described, was herewith
13 marked as Exhibit 122 for identification.)

14 CMSR. HONIGBERG: This is
15 Exhibit 122.

16 BY MR. PATCH:

17 Q. I'll ask you if you're familiar with this
18 response.

19 (Witness reviews document.)

20 A. (Mr. Large) I am.

21 Q. And in that response, there are handwritten
22 notations on a few of the pages. One says
23 "February of '08," one says "November of

1 '08," and one says "March of '09." Are you
2 familiar with those handwritten notes?

3 A. (Mr. Large) Well, I apologize then. Is that
4 this document?

5 Q. That's that document.

6 A. (Mr. Large) Can you help expedite me
7 finding...

8 (Mr. Patch assists witness.)

9 BY MR. PATCH:

10 Q. Maybe I can shorten this. Is it your
11 understanding that what is included in this
12 package are documents that PSNH maintains are
13 the Energy Ventures analysis forecasts for
14 February of '08 and November of '08 and March
15 of '09? Is that your understanding?

16 A. (Mr. Large) I'll validate that in a moment,
17 now that I understand. Thank you.

18 Q. Okay.

19 (Witness reviews document.)

20 A. (Mr. Large) So, in this packet is -- I think
21 I'll be working backwards and not
22 chronologically -- October 2009, August 2009,
23 March 2009, November 2008, February 2008 and

1 August 2007.

2 Q. So, as I understand -- and correct me if I'm
3 wrong -- there are two reports for 2008;
4 correct?

5 A. (Mr. Large) I believe that to be true, yes.

6 Q. And what we read in the IRP said that EVA
7 provided them quarterly; is that correct?

8 A. (Mr. Large) Yes. That's what it said there.

9 Q. Can you explain why we only got two reports
10 for 2008?

11 A. (Mr. Large) Because in 2008 there were not
12 four reports provided to the Company.

13 Q. So, can you -- you said you were under
14 contract with EVA; is that correct?

15 A. (Mr. Large) That is true.

16 Q. And did the contract -- was the contract
17 violated? Or how come you only got two in
18 2008?

19 A. (Mr. Large) The definition of "quarterly" as
20 presented there is more declarative than is
21 the reality of the frequency of which we get
22 forecasts from EVA. We can just look at the
23 dates at which these forecasts were

1 delivered, and they're not on a specific
2 calendar-quarter basis or anything like that.

3 Q. And is this the way that they came to you, as
4 they appear here? Was there anything else
5 with them? Narrative, letters,
6 correspondence, anything else? Just as they
7 appear here?

8 A. (Mr. Large) These forecasts, to the best of
9 my knowledge, show up as these spreadsheets
10 as replicated here.

11 Q. But you're telling us that, even though you
12 represented in the LCIRP that they were
13 quarterly, that, in fact, EVA doesn't provide
14 quarterly forecasts. Is that what you're
15 saying?

16 A. (Mr. Large) That's my understanding, yes.

17 Q. I'd ask you to look at Exhibit 36, which is a
18 copy of an EVA forecast from 2013. I don't
19 know if you have that available to you up
20 there.

21 A. (Mr. Large) Mr. Patch, can I close up the IRP
22 now? I'm just trying to get a sense for how
23 I can keep track of all the papers.

1 Q. Yes.

2 A. (Mr. Large) Thank you. And this stack of
3 forecasts?

4 Q. Yes.

5 (Ms. Goldwasser hands document to
6 witness.)

7 Q. Do you have in front of you Exhibit 36?

8 A. (Mr. Large) I believe so.

9 Q. Now, this is something that PSNH provided in
10 response to a data request, although I
11 believe the correspondence we received from
12 your counsel indicated that they didn't think
13 it was responsive to a data request. But
14 does it purport to be a quarterly forecast
15 from EVA?

16 A. (Mr. Large) It does say that, yes.

17 Q. I mean, it looks quite a bit different than
18 what we provided. Could you explain why?

19 A. (Mr. Large) Certainly. I believe this is
20 information that EVA produces on a generic
21 basis, and the forecasts that we were
22 referring to were the specific Northeast
23 Utilities EVA forecasts that we contracted

1 for.

2 Q. So I'm not sure I understand. And let me ask
3 one or two questions about that. You're
4 saying that what has been marked as
5 Exhibit 36 is something that you contracted
6 for differently than the information that we
7 have now marked as Exhibit 122?

8 A. (Mr. Large) The contracting for information
9 is the pile of papers, if that's Exhibit 122.

10 Q. And what about Exhibit 36?

11 A. (Mr. Large) I don't perceive this as being a
12 "contracted" piece of information provided to
13 us by EVA. This strikes me as a newsletter.

14 Q. But it has forecasts in it, doesn't it?

15 A. (Mr. Large) It does.

16 Q. But you're saying you don't know whether --
17 when did NU or PSNH start getting the form
18 that is in Exhibit 36?

19 A. (Mr. Large) I don't know.

20 Q. And that's the only one we've been provided.
21 So you don't know whether you might have them
22 going back to 2008 or 2007?

23 A. (Mr. Large) I don't. But these would not be

1 the forecast information that we would
2 utilize as referred to in the LCIRP, or
3 certainly what we utilized in the analysis
4 that we performed associated with this
5 docket.

6 Q. I mean, if you had forecasts like the one in
7 Exhibit 38 that went back to the 2005 to 2011
8 time frame, that would have been responsive
9 to the data request that TransCanada provided
10 to you; wouldn't it have been?

11 MR. NEEDLEMAN: Sounds to me
12 like we're now getting into the discovery
13 dispute.

14 CMSR. HONIGBERG: I tend to
15 agree. What do you hope to get out of that
16 question?

17 MR. PATCH: Well, Mr.
18 Chairman, there are a lot of questions as a
19 result of what we've been provided and
20 haven't been provided. You know, they said
21 they got quarterly reports. They didn't give
22 us quarterly reports for 2008; they gave us
23 two different reports. This is significantly

1 different than what they provided to us.

2 CMSR. HONIGBERG: And you're
3 getting some -- I'm sorry. I didn't mean to
4 interrupt. But you're getting actual
5 under-oath answers from a witness who
6 actually seems to know what these reports are
7 or are not and knows what the Company got
8 "quarterly," which I'll put in quotation
9 marks because, according to his testimony,
10 they don't actually come quarterly. So, it
11 seems to me you're getting good information.
12 Asking him whether a particular document
13 would have been responsive to a data request,
14 I'm not sure where that's -- what that's
15 going to get you.

16 Mr. Needleman.

17 MR. NEEDLEMAN: Yeah, I would
18 like one further clarification. I think
19 Exhibit 36, which we've just been focusing
20 on, is something TransCanada provided to us,
21 we didn't provide to them. And we just found
22 it on the Internet. So it certainly appears
23 to be a generic document.

1 MR. PATCH: I think that's
2 wrong. They provided it to us. We didn't
3 provide it to them.

4 CMSR. HONIGBERG: And I don't
5 know which one of you provided it to the
6 other. And I'm not sure how significant it
7 is at the end of the day, because it doesn't
8 seem to be what Mr. Large in any way used or
9 was referring to in the LCIRP document. I
10 think it's pretty clear that his testimony is
11 that the types of EVA forecasts he was
12 referring to are the types of documents that
13 are in Exhibit 122.

14 MR. NEEDLEMAN: And I will
15 apologize. I was mistaken. We did provide
16 it.

17 CMSR. HONIGBERG: Well, thank
18 you for clarifying that, Mr. Needleman.

19 MR. PATCH: Okay. I'll move
20 on.

21 BY MR. PATCH:

22 Q. Mr. Long [sic], you testified before this
23 Commission in the 2010 IRP docket, DE 10-261?

1 A. (Mr. Large) I did, yes.

2 Q. Do you recall the comment you made to the
3 Commission in that docket about "a lack of
4 value in planning"? And I'm quoting from a
5 transcript Day 1, Page 155 [sic]. "...sadly,
6 it [sic] has very limited value." Do you
7 recall that statement?

8 MR. NEEDLEMAN: I would like
9 Mr. Large to see the transcript, please.

10 MR. PATCH: First of all, I'd
11 like to ask him if he recalls that statement.

12 CMSR. HONIGBERG: He can
13 answer the question.

14 A. (Mr. Large) I don't recall that statement.

15 MR. PATCH: Okay. We can
16 certainly provide for the record a copy of
17 that transcript. We don't have copies of it
18 necessarily here with us today. But it's --
19 I'd ask the Commission to take official
20 notice of the transcript in that docket, Day
21 1 PM, Page 155 [sic], Lines 14 to 15.

22 BY MR. PATCH:

23 Q. And assume with me for a minute, Mr. Large,

1 that that's accurate.

2 CMSR. HONIGBERG: So that
3 request that we take notice of that
4 transcript has been made and it's on the
5 record now.

6 MR. PATCH: Thank you.

7 BY MR. PATCH:

8 Q. Well, assume for a minute, Mr. Large, that
9 that's in fact a statement that you made. Is
10 that a view that you hold personally, that
11 planning has very limited value?

12 A. (Mr. Large) It would be beneficial to me if I
13 could hear the statement again since we had
14 some interchange in between. So I apologize.
15 If I could hear it?

16 Q. Okay. Ms. Goldwasser has it electronically,
17 so I'll certainly let you read that. I can
18 ask it hypothetically, but I understand your
19 desire to see exactly what it says.

20 A. (Mr. Large) It would be beneficial to
21 understand in which context I provided that
22 answer.

23 (Ms. Goldwasser shows electronic

1 transcript on computer to witness.)

2 MR. PATCH: Okay. Well, we've
3 made the request that the Commission take
4 official notice, and we'll move on from that.

5 BY MR. PATCH:

6 Q. Mr. Long, during his deposition, said that --
7 and I'm quoting from Page 72, Line 24, to
8 Page 73, Line 1, "...long-term forecasts are
9 typically not reliable." Do you agree with
10 that?

11 A. (Mr. Large) With this, as to the definition
12 or my interpretation of those words, at any
13 given point in time long-term forecasts are
14 made, that those long-term forecasts
15 accurately predict future realities, the
16 success rate of that is very low.

17 Q. And Mr. Long told the Oversight Committee --
18 and we're at Page 75 -- and I don't recall
19 the exhibit number -- but at Page 75, he
20 said, and I'll quote, "And I guess I learned
21 a long time ago, don't predict the future
22 because you're always wrong." Do you think
23 that's fair?

1 A. (Mr. Large) I think it's consistent with the
2 answer that I just gave, that very smart,
3 very reasonable people pay lots of time and
4 energy to creating forecasts of the future.
5 And I have not done an exhaustive search of
6 every long-term forecast known to mankind,
7 but my experience would be that very, very
8 few of them accurately predict the future.

9 Q. I'm going to show you a response to
10 TransCanada 6-202 and ask that this be
11 marked.

12 CMSR. HONIGBERG: This is 123.

13 (Ms. Goldwasser hands document to witness.)

14 (The document, as described, was herewith
15 marked as Exhibit 123 for identification.)

16 Q. And in this one you were asked about a
17 portion of your testimony and sort of what
18 you customarily look to, what sources of
19 information you rely upon to validate
20 assumptions. And your response was, "Any
21 data may have a place in a prudent utility
22 business planning process, depending upon the
23 facts. Facts accepted by the NHPUC are

1 certainly valuable for understanding what the
2 Commission deems to be reasonable and
3 prudent. PSNH may examine regional or
4 national agency data or industry data to
5 validate any assumption." Did I read that
6 correctly?

7 (Witness reviews document.)

8 A. (Mr. Large) You did read the response to the
9 data request accurately. And it's referring
10 to Page 6 of our testimony, where we talk
11 about consideration of the Concord Steam
12 Corporation's filing on October 31 -- or,
13 actually, the order from the Commission of
14 October 31, 2008, in which they utilized a
15 natural gas price of about \$12 per million
16 Btu.

17 Q. Mr. Long said in his deposition at 88, Lines
18 20 to 23, "We understood" --

19 A. (Mr. Large) Can I get that?

20 Q. Sure.

21 A. (Mr. Large) Pages again, Mr. Patch?

22 Q. Page 88 of Mr. Long's deposition.

23 A. (Mr. Large) I have it. Thank you.

1 Q. And he said at Lines 20 to 23, "We understood
2 that you don't look at a short-term forecast
3 and assume that's the way it's going to be
4 forever." Do you see that?

5 (Witness reviews document.)

6 A. (Mr. Large) Yes. The full sentence is,
7 "Although we weren't in the gas business, we
8 understood that you don't look at a
9 short-term forecast and assume that's the way
10 it's going to be forever."

11 Q. And then on Page 72 and 73 of the deposition,
12 he said, "...what I've said repeatedly is
13 that long-term forecasts are typically not
14 reliable, and particularly in that time frame
15 where they were changing. Like I say, even
16 TransCanada was changing its forecast every
17 year, and they're in the business. So we're
18 not in the -- I'm not in the practice of
19 directing my subordinates to do a long-term
20 forecast and then depending on it. It's more
21 of managing what we have and complying with
22 the law." Did I read that correctly?

23 A. (Mr. Large) You read that correctly. I'm

1 trying to get a sense for the context of this
2 discussion.

3 Q. Tell me when you're ready.

4 (Witness reviews document.)

5 A. (Mr. Large) I am.

6 Q. So did he, in fact, direct you not to do a
7 long-term forecast here?

8 A. (Mr. Large) No.

9 Q. As I understand it, once the presentation was
10 made to the board in July of 2008 about the
11 significance and sensitivity to the spread
12 between the price of natural gas and the
13 price of coal, there was no responsibility to
14 keep them updated if that spread changed or
15 forecasts differed from the assumptions on
16 which the presentation was based? Is that
17 accurate?

18 A. (Mr. Large) Following the authorization of
19 the Project by the RaCC and the board, the
20 requirements were to provide construction and
21 risk updates on a very frequent basis and to
22 identify if there were any changes in the
23 capital construction forecast -- so, the

1 budget.

2 Q. So, in terms of updating that spread and
3 updating those assumptions, when I asked
4 Mr. Long that question in his deposition,
5 Page 63, Line 12, he said, "No, not me
6 particularly." In other words, it wasn't his
7 responsibility to do that. Did you consider
8 it your responsibility?

9 A. (Mr. Large) No.

10 Q. So, the only obligation, then, was to update
11 the RaCC on the status of the Project in
12 compliance with the mandate. Is that your
13 understanding?

14 A. (Mr. Large) I'm not certain about the
15 characterization of "in compliance with the
16 mandate." But what the responsibility of the
17 Project team was to RaCC was to provide them
18 updates of construction progress, mitigation
19 of risks, other new risks and ability to
20 comply with the budgeted amount of
21 \$457 million.

22 Q. So, it was obviously worthwhile to PSNH and
23 NU to do the analysis in June of 2008. Why

1 wasn't it worthwhile to update it?

2 A. (Mr. Large) Well, as I began, it was
3 worthwhile for us to do because we needed to
4 do so to be in compliance with our corporate
5 requirements, and it was the right thing to
6 do to advise our Risk and Capital Committee
7 and board of trustees about this Project.

8 Q. Attachment 5 to your testimony is the report
9 to the Commission in September of '08. I'm
10 sorry. I'm not sure that's -- maybe that is
11 Attachment 5. Anyway, it's Bates Page 497.
12 If you could turn to that for a minute.

13 A. (Mr. Large) I have Bates Page 497,
14 Attachment 1 to the September 2nd report to
15 the Commission, which is The Wall Street
16 Journal article.

17 Q. That's right. And it's part of Attachment 5
18 to your testimony; correct?

19 A. (Mr. Large) Yes.

20 Q. And this is the article that begins,
21 "Construction [costs] for power plants have
22 more than doubled since 2000"; correct?

23 A. (Mr. Large) Yes.

1 Q. And then in the second paragraph it says,
2 "The findings are bad news for consumers and
3 utilities alike and help explain why
4 power-plant development has become something
5 of a quagmire in the U.S., with no type of
6 plant emerging as a reasonably priced option
7 that can meet rising demand for electricity."
8 Do you see that?

9 A. (Mr. Large) I do? I think there are other
10 factors that have led to the quagmire as
11 well. But certainly capital construction
12 costs in a very capital-intensive industry is
13 one of them.

14 Q. And you're familiar with the PowerAdvocate
15 draft report that was done in the summer of
16 '08 that's been the subject of some questions
17 in this document?

18 A. (Mr. Large) I'm familiar that it was
19 conducted. I'm not detailed in the specifics
20 associated with it.

21 Q. I can show it to you. But they had a
22 conclusion that there were "no good and
23 reliable indicators to follow for investment

1 decisions," which seems to me to be
2 consistent with this Wall Street Journal
3 article. Would you agree?

4 A. (Mr. Large) I don't know that I do or don't
5 agree. I'm sorry.

6 Q. On Page 5 of your testimony, you say that the
7 base-case present value of economic benefits
8 to PSNH customers was approximately \$132
9 million the last time the analysis [sic] was
10 [sic] conducted; correct?

11 A. (Mr. Large) I'm sorry. I'm not flipping as
12 quickly as you are. Page again, please?

13 Q. Page 5, 10 to 12 -- Lines 10 to 12.

14 (Witness reviews document.)

15 A. (Mr. Large) Yes, that's correct.

16 Q. And also on Page 5, Lines 18 to 25, you said
17 no additional analyses were prepared by PSNH
18 beyond the one prepared in May of 2008, after
19 the Legislature decided not to change the
20 law; correct?

21 (Witness reviews document.)

22 A. (Mr. Large) I apologize, Mr. Patch. What
23 line are you referring to?

1 Q. Eighteen to 25, I believe it is, on Page 5 of
2 your prefiled rebuttal testimony.

3 A. (Mr. Large) That would be the reason why I
4 don't find it. That does not agree with what
5 I have in my testimony at those lines. Are
6 we at Bates 412?

7 Q. Bates Page 412, beginning on Line 20, "When
8 the Legislature decided not to change the
9 law..." and first of all, would you agree,
10 subject to check, that that decision was
11 actually made on April 8th of 2009?

12 A. (Mr. Large) I'll be happy to take that,
13 subject to check.

14 Q. So, what you said in the testimony was, "When
15 the Legislature decided not to change the
16 law, and instead expressly stated... that it
17 did not want a 'pause in or cancellation of
18 the Project,' the majority of contracts
19 necessary for the Project had been executed."

20 And then you went on to say, "Based upon
21 the Legislature's decision and the status of
22 the Project itself, further detailed analyses
23 of the Project were not necessary."

1 A. (Mr. Large) Yes.

2 Q. So, as I understand it, the rationale for not
3 doing an update of the analysis that was done
4 in June of 2008 was that the Legislature made
5 a decision in April of 2009 not to cancel the
6 Project.

7 A. (Mr. Large) I guess I would say there are two
8 reasons, as we stated here, that the Science
9 Technology and Energy [sic] Committee of the
10 House clearly indicated to us that they
11 wanted the Project to move forward. On the
12 Senate side of the ledger, Senate Bill 152
13 was being considered. And my recollection of
14 what that bill became over time was a study
15 bill; and as a result, if that bill had
16 passed, further analyses would have been
17 conducted. So, to do further analyses in
18 advance of the study bill becoming law didn't
19 seem reasonable at that point in time.

20 Q. As I understand it, the analysis you did in
21 the summer of '08, as we established through
22 Deposition 4, the response to that was based
23 on data from January, February, March and

1 April of 2008; correct? The assumption --
2 the natural gas price assumption.

3 A. (Mr. Large) Yes, that's in the Record
4 Request 4.

5 Q. And so, when the Legislature decided in April
6 of 2009, basically a year later, that, as you
7 say in your testimony, they decided basically
8 not to change the law; correct? That was a
9 year later. Do you know what happened to
10 those prices in that year between April of
11 2008 and April of 2009?

12 A. (Mr. Large) I do.

13 Q. Pardon?

14 A. (Mr. Large) I do.

15 Q. Okay. Would you like to tell us?

16 A. (Mr. Large) Sure. They diminished.

17 Q. Significantly?

18 A. (Mr. Large) I would say "significantly," yes.

19 Q. That's all my questions. Thank you.

20 CMSR. HONIGBERG: Ms.

21 Frignoca.

22 MS. FRIGNOCA: Yes. Thank

23 you.

1 CMSR. HONIGBERG: And I'm
2 going to ask you again to move that
3 microphone as close to you as you reasonably
4 can.

5 MS. FRIGNOCA: I will do so.

6 CROSS-EXAMINATION

7 BY MS. FRIGNOCA:

8 Q. Good afternoon. My name is Ivy Frignoca.
9 I'm an attorney at the Conservation Law
10 Foundation, and I just have a few questions
11 for you.

12 To begin, confirming that you did no
13 economic analysis past September 2008;
14 correct?

15 A. (Mr. Large) That is correct.

16 Q. And if I'm understanding the testimony right,
17 that's because you viewed that there was a
18 legislative mandate and that, in the
19 beginning of 2009, the Legislature did not
20 pass the study bill; so it was your view that
21 there was no need to do further economic
22 analysis.

23 A. (Mr. Large) I think to round that out, I said

1 this earlier today, I believe, with the
2 Commission's request of us in August for
3 specific information, from an economic
4 analysis perspective, the Company moved into
5 a compliance mode, fulfilling the obligations
6 and responding to the Commission's desire for
7 information, and that, as we monitored
8 legislative process, there was no additional
9 specific request for additional economic
10 analyses of us. And then concluding, as I
11 discussed with Mr. Patch a moment ago, Senate
12 Bill 152 was a bill to do studies, and should
13 it have passed, we would have done studies.

14 Q. Okay. So, once you moved into compliance
15 mode, your economic analysis wasn't to
16 determine whether to construct this Scrubber.
17 It was to look at whether you were prudently
18 incurring the costs of constructing the
19 Scrubber, not whether or not to build it, but
20 are we reasonably managing how we're
21 constructing it.

22 A. (Mr. Large) If I can have the premise read
23 back, because I think the first part of the

1 premise of your question I might disagree
2 with. So...

3 Q. Okay. So there's two questions I'm looking
4 at. The first one is, if I'm understanding
5 your testimony correctly, you moved into
6 compliance mode; so that meant that you were
7 not doing an economic analysis to determine
8 whether or not to build the Scrubber?

9 A. (Mr. Large) I would say that we never did an
10 economic analysis to determine if we should
11 build the Scrubber. The law required us to
12 do so. We did economic analysis to determine
13 what its impact was on customers and what the
14 risks associated with that were. That's what
15 was done before the RaCC and the board.

16 Q. Okay. So, in the summer of '08, you did an
17 analysis to determine what the rate -- what
18 the impact would be on customers. And that's
19 the last time you looked at what the impacts
20 would be on customers before beginning major
21 construction in March of 2009; correct?

22 A. (Mr. Large) Not completely. The additional
23 analyses requested by the Commission in

1 August produced additional information that
2 was provided in September.

3 Q. Okay. So, September was the last time.

4 A. (Mr. Large) Yes.

5 Q. Thank you. I just wanted to make sure I
6 understood clearly.

7 Now, one of the other items that you
8 mentioned in terms of your economic analysis
9 this morning was that, when you were doing
10 this analysis, I believe in the summer of
11 2008, that you compared installing the
12 Scrubber to building a natural gas generation
13 facility or a coal-fired generation facility.
14 Did I understand that correctly?

15 A. (Mr. Large) That was part of what was
16 submitted to the Commission in the September
17 report, yes. And a portion of that was built
18 off of what we did in the summer, yes.

19 Q. Okay. At the time that you did that
20 analysis, you understood that, by law, PSNH
21 could not build new generation facilities;
22 correct?

23 A. (Mr. Large) I believe I spoke to that

1 earlier, yes, when I described that it wasn't
2 about PSNH building a facility, but maybe the
3 best characterization of it would be a
4 cost-of-service-based merchant plant that
5 PSNH would contract from. So we were
6 attempting to simulate assumptions that
7 mirrored a regulated generation asset. So we
8 utilized PSNH's cost of capital because we
9 don't know what a merchant generator's cost
10 of capital would be.

11 Q. Well, you anticipated where I was going,
12 which I was going to ask you why you made
13 those assumptions. But now I want to make
14 sure that I understand what you're saying.

15 So, you created a model to look at what
16 the cost would be of somebody else building a
17 new generation facility from which PSNH could
18 buy power?

19 A. (Mr. Large) It would be a cost-of-service
20 generating relationship. So, another entity
21 would build the power plant to burn natural
22 gas, and the output product of that would be
23 capacity and energy that PSNH would take.

1 So, it's the replacement of a retirement of
2 Merrimack Station.

3 Q. Okay. Did you look at and compare, when you
4 did your economic analysis in the summer of
5 2008, the cost of building the Scrubber
6 versus just buying power in the ISO-New
7 England market?

8 A. (Mr. Large) We did a proxy analysis
9 associated with that as well, yes.

10 Q. You did a --

11 A. (Mr. Large) Market purchases case.

12 Q. And did you produce that market purchase case
13 to the Commission?

14 A. (Mr. Large) Absolutely.

15 Q. And did you do any market purchase analysis
16 past September of 2008?

17 A. (Mr. Large) No.

18 Q. Would you agree that it would be, more likely
19 than not, that if PSNH wasn't operating
20 Merrimack Station, that it would do a market
21 purchase scenario than look for someone else
22 to build a new power plant to replace
23 Merrimack Station?

1 A. (Mr. Large) I wouldn't necessarily agree, no.
2 Would you like me to go further and say why?

3 Q. Sure.

4 A. (Mr. Large) Okay. As we are experiencing
5 now, a shortage of available generating
6 capacity in the region is growing.

7 Q. Okay. I guess let me rephrase the question
8 then, because I'm not talking about now. I'm
9 talking about from the decision-makers'
10 viewpoint in 2008, 2009. Would you agree
11 that the way ISO-New England marketplace was
12 set up, it would be more likely that energy
13 would be purchased on the market rather than
14 seeking someone else to build a new power
15 plant to replace Merrimack Station?

16 A. (Mr. Large) And again I'll disagree in this
17 regard. At some point in time, even in 2008,
18 as the decision-makers were examining these
19 alternatives, one of the viable alternatives
20 was that, at some point in time, another
21 power plant would need to be constructed in
22 this region to provide adequate capacity and
23 energy. And if we look at the recent history

1 of what's been constructed from a fossil fuel
2 perspective, combined-cycle natural gas
3 plants are all that's been constructed in the
4 last decade, 15 years.

5 Q. All right. And I think we're talking past
6 each other. I understand what you're saying,
7 and I appreciate the explanation.

8 My question was: Is it more likely that
9 the first thing PSNH would look to was to see
10 if they could replace the power by making
11 market purchases through the ISO-New England
12 market?

13 A. (Mr. Large) Well, by necessity, in that it
14 would take six to eight years to build a new
15 power plant to bring that scenario to
16 fruition. The only alternative in the very
17 short term would, in fact, be market
18 purchases. But in the long term, as I
19 stated, new capacity is going to be
20 necessary.

21 Q. Okay. You also testified this morning that
22 conditions changed after September 2008;
23 correct?

1 A. (Mr. Large) They've changed every quarter
2 since 2008, yes.

3 Q. And as those conditions changed, PSNH did not
4 do any analysis of -- economic analysis or
5 analysis regarding the migration of its
6 customers from 2008 through March of 2009;
7 correct?

8 A. (Mr. Large) As it pertains to the Scrubber
9 Project, that's correct.

10 Q. Nor did PSNH do any analysis regarding
11 whether or not it made sense to divest itself
12 of its generating assets, including Merrimack
13 Station, between September of 2008 and March
14 of 2009; correct?

15 A. (Mr. Large) We did not do a divestiture
16 analysis. Correct.

17 Q. And if I ask you the same question with
18 respect to retirement, I assume the answer
19 will also be --

20 A. (Mr. Large) We did not do a retirement
21 scenario analysis. Correct.

22 Q. And is the reason that you didn't do that is
23 because you believed you had a mandate to

1 build the Scrubber?

2 A. (Mr. Large) Beyond "believe," yeah.

3 Q. Now, you mentioned, and it's been testified
4 to a number of times, that if the Legislature
5 wanted to cap the cost of the Scrubber, or if
6 it wanted further study, it could have done
7 so in early 2009 by passing Senate Bill 152;
8 correct?

9 A. (Mr. Large) The Legislature could have done
10 whatever it chose to. So, those are two
11 possibilities, yes.

12 Q. And you also testified that you helped
13 prepare the presentations that PSNH made to
14 the Legislature during early 2009; correct?

15 A. (Mr. Large) I was a member of the team of
16 PSNH employees that did that, yes.

17 Q. And in being a member of the team, did you
18 work with your then-CEO and president,
19 Mr. Long, in preparation of his testimony?

20 A. (Mr. Large) Mr. Long was the COO and
21 president, yes.

22 Q. Thank you for correcting me. I apologize for
23 the error.

1 Were you present when he testified
2 before the Senate?

3 A. (Mr. Large) I was not.

4 Q. Attached to Mr. Long's deposition transcript,
5 which has been admitted into the record,
6 there is an Exhibit 17.

7 A. (Mr. Large) I apologize. We don't readily
8 have those. So if someone can help us, we'd
9 appreciate it.

10 Q. Sure. It's Exhibit 27-17.

11 A. (Mr. Large) Sorry.

12 Q. I can bring a copy up.

13 (Mr. Patch hands copy to witness.)

14 A. (Mr. Large) Thank you. Just to assure we're
15 on the right page, March 13, 2009, 9:00 a.m.,
16 Reps Hall, Attachment B?

17 Q. That's correct. This is Attachment B, and
18 this is the debate before the Senate
19 Committee on Energy, Environment and Economic
20 Development. And I know that you referred to
21 this in your testimony.

22 So, what this document does -- and you
23 can take a minute to look through and see if

1 you agree with me -- is that, in part, this
2 is the portion of the proceeding where
3 Mr. Long provides his presentation to the
4 Senate Committee. Would you agree with that?

5 A. (Mr. Large) I'm working my way there.

6 Q. Sure.

7 (Witness reviews document.)

8 A. (Mr. Large) I'm at Representative Pat Long,
9 which is not the "Mr. Long" we're referring
10 to.

11 (Witness reviews document.)

12 A. (Mr. Large) On Page 23?

13 Q. Yes.

14 A. (Mr. Large) Thank you.

15 Q. I was just about to say, if you refer to
16 Page 23, you can see that Mr. Long is then
17 provided an opportunity to speak to the
18 Senate Committee; correct?

19 A. (Mr. Large) Yes.

20 Q. And if you peruse through the following
21 pages -- I'm not going to ask you detailed
22 questions -- but you can see that he then
23 goes through his presentation.

1 (Witness reviews document.)

2 A. (Mr. Large) I'm sorry. I'm not sure I could
3 correlate these words here to the
4 presentation. But I believe that to be true.

5 Q. Okay. You can see that he refers to various
6 page numbers and to different slides and
7 that --

8 A. (Mr. Large) On Page 26, we begin with, "You
9 have a package in front of you." So that's
10 where --

11 Q. Yes.

12 A. (Mr. Large) Okay.

13 Q. And I assume that would be the package that
14 you helped prepare.

15 A. (Mr. Large) I would assume that that's the
16 case.

17 Q. Okay. And part of the discussion is about
18 whether there should be a study or not. And
19 I want to refer you to Mr. Long's testimony
20 on Page 33, first full paragraph that begins
21 with the words, "Our role..." and I'm going
22 to read from a sentence midway through. If
23 you feel I've taken this out of context, we

1 can do the whole paragraph.

2 But it says, "But that's not, you know,
3 what we're trying to do is to have the
4 lowest-cost power that we can for the benefit
5 of customers. But if people think that we're
6 out of line, they have recourse. They have
7 recourse through prudence review, and they
8 have recourse by, they can make a choice for
9 a different power supplier."

10 Would you agree that that is what the
11 transcript reflects Mr. Long testified to?

12 A. (Mr. Large) Yes.

13 Q. And that that indicates that your ratepayers
14 have recourse through a prudence review?

15 A. (Mr. Large) Which is what's taking place
16 today, I believe.

17 Q. Next I want to refer you to Page 39.

18 A. (Mr. Large) I have that.

19 Q. And at the bottom of the page there's
20 testimony by Mr. Long. And he says, "It is
21 the normal standard for the Public Utilities
22 Commission to review our actions and our
23 decisions, and it's done in hindsight. So it

1 certainly presents business risk, as you
2 might have a difference of opinion. We might
3 think we made a good decision. Somebody else
4 might think we made a bad decision. But I
5 think the Commission has found over and over
6 again that we're making good decisions. But
7 yes, that's normal course. And that's okay.
8 We're totally prepared for that, and we're
9 totally used to that." Turning over on to
10 the next page, he continues on. And I won't
11 read all that language. But the last
12 sentence of this paragraph says, "But
13 financially we have to be very, very
14 conservative, and we have to be very sure of
15 what we're doing, because if we're reckless
16 or if we [sic] make [sic] bad decisions,
17 it'll hurt, it'll come back on us." Did I
18 read that correctly?

19 A. (Mr. Large) Yes. There's an arrow next to
20 that section.

21 Q. Yes. And in that instance, Mr. Long was, in
22 fact, arguing to the Senate Committee that
23 there would be a prudency review, and if the

1 decision to install the Scrubber was not a
2 good decision, it would hurt. It would come
3 back on the Company; correct?

4 MR. NEEDLEMAN: Object to the
5 characterization of the question. I don't
6 think he's talking about the decision to
7 install the Scrubber. I think he's talking
8 about the price or the cost associated with
9 it.

10 CMSR. HONIGBERG: Ms.
11 Frignoca.

12 MS. FRIGNOCA: I think it's
13 very clear in this exchange that he -- this
14 testimony is him arguing that, "if we do a
15 study, then the Scrubber's not going to get
16 built. The plant's going to have to get
17 retired." And he's arguing before the
18 Committee in two places, that you don't need
19 to pass this study. "If we get it wrong,
20 then there will be a prudence review, and
21 this Commission will make that
22 determination." And this goes to the
23 statements that the Company has been making

1 all along, that it didn't know it needed to
2 do a prudency review. It just believed it
3 had a mandate.

4 CMSR. HONIGBERG: Mr.
5 Needleman.

6 MR. NEEDLEMAN: First of all,
7 I think that's Ms. Frignoca's interpretation
8 of it, certainly not mine. But second of
9 all, the document speaks for itself, and the
10 Commission can draw conclusions from it. We
11 certainly don't need this witness to try to
12 interpret what Mr. Long may have been saying.

13 CMSR. HONIGBERG: That is
14 certainly true. Is there a question you can
15 ask him that -- you can certainly ask him his
16 opinion about what was -- what all this
17 means. But his opinion is no better than
18 anyone else's as to what all of this means.

19 MS. FRIGNOCA: Okay. One
20 moment, please.

21 BY MS. FRIGNOCA:

22 Q. On the bottom of Page 34 --

23 A. (Mr. Large) I have Page 34.

1 Q. Okay. You see another arrow. And this is,
2 again, Mr. Long providing testimony. And
3 it's clear that he was there -- that your
4 company was there to provide testimony to
5 defeat the study bill; correct?

6 A. (Mr. Large) Mr. Long testified before the
7 Senate in opposition of Senate Bill 152.

8 Q. Right. And that's to defeat the study;
9 correct?

10 A. (Mr. Large) In whatever shape Senate Bill 152
11 was at that point in time, which I believe
12 was a study bill. But there may have been a
13 number of varieties as time went on.

14 Q. So I just want to be clear. So, PSNH was not
15 advocating for any study. It was saying to
16 the Legislature, "We don't think there should
17 be a study done"; correct?

18 A. (Mr. Large) We were advocating that Senate
19 Bill 152 should not pass.

20 Q. And Senate Bill 152 was to require further
21 study of the cost of the Scrubber.

22 A. (Mr. Large) And I apologize for splitting
23 hairs with you. But what I know of the

1 legislative process is that there are
2 amendments that change what a bill is at any
3 given point in time.

4 So, was PSNH opposed to a study bill?
5 Yes. The testimony that Mr. Long is speaking
6 to directly here is in opposition to Senate
7 Bill 152. I can't --

8 CMSR. HONIGBERG: So, Mr.
9 Large, assume for a moment that Senate Bill
10 152 was a study bill. If Senate Bill 152 was
11 a study bill, Mr. Long was testifying against
12 a study.

13 WITNESS LARGE: That is
14 correct. Yes. Thank you.

15 MS. FRIGNOCA: In fact, he
16 says on Page 39, on the top of Page 39,
17 "We're not advocating any study."

18 CMSR. HONIGBERG: I think
19 we're there, Ms. Frignoca.

20 MS. FRIGNOCA: Okay.

21 BY MS. FRIGNOCA:

22 Q. And referring back to Page 34, then, is it --
23 the last sentence says, "I think the only end

1 is, I guess, give you a platform to say shut
2 the plant down."

3 And is it PSNH's belief that, if further
4 study had been done, it would have been a
5 platform to shut the plant down?

6 MR. NEEDLEMAN: I'll object
7 again. I think she's calling for
8 speculation. If she wants to ask a
9 hypothetical about Mr. Large's understanding
10 of his testimony, I think you've already said
11 that's acceptable.

12 MS. FRIGNOCA: I didn't ask
13 for that characterization. I simply asked if
14 that was their position, that if there had
15 been further study, it would have been a
16 platform to shut the plant down.

17 CMSR. HONIGBERG: Mr. Large,
18 do you understand the question?

19 WITNESS LARGE: I'm not
20 certain that I do yet.

21 BY MS. FRIGNOCA:

22 Q. I'll ask it again. In early 2009, was it
23 PSNH's position that, if the study bill had

1 been passed, it would have been a platform to
2 shut the plant down?

3 A. (Mr. Large) Can you help me understand what
4 you mean by "a platform for" or "a platform
5 to"?

6 Q. I'm quoting from Mr. Long's testimony on the
7 bottom of Page 34. So, by "platform," if the
8 study bill had passed, it would have led to a
9 shutdown of Merrimack Station.

10 A. (Mr. Large) It is not my testimony that if
11 Senate Bill 152 had passed, that Merrimack
12 Station would have shut down.

13 Q. It was Mr. Long's testimony before the
14 Senate, however, that, as he said, "I think
15 the only end is, I guess, give you a platform
16 to say shut the plant down."

17 MR. NEEDLEMAN: I'm going to
18 object to the form of the question. I
19 don't --

20 CMSR. HONIGBERG: I'm going to
21 sustain the objection.

22 MS. FRIGNOCA: No further
23 questions.

1 CMSR. HONIGBERG: Mr. Fabish,
2 do you have any questions?

3 MR. FABISH: I do. Just a
4 couple minutes.

5 CROSS-EXAMINATION

6 BY MR. FABISH:

7 Q. Hi. My name is Zach Fabish. I'm an attorney
8 for the Sierra Club, and I have just a couple
9 of questions for you.

10 Could I direct your attention to, I
11 think it's Exhibit 20-9. This is the
12 June 2008 PowerAdvocate's report. I think
13 it's probably in a few different places,
14 but...

15 CMSR. HONIGBERG: Whose
16 testimony is Exhibit 20?

17 MR. FABISH: Mr. Hachey's.

18 A. (Mr. Large) I need to beg my counsel to make
19 that available to me, please.

20 MR. PATCH: Have a Bates page?

21 MR. FABISH: I don't have a
22 Bates page, no.

23 MR. PATCH: Is that an

1 attachment?

2 MR. FABISH: Yeah.

3 MR. PATCH: Attachment 9?

4 SP. CMSR. IACOPINO: Mr.

5 Fabish, Attachment 9?

6 MR. FABISH: I think so. This
7 is the Merrimack Station Clean Air Project
8 analysis, dated June 17th, 2008, by
9 PowerAdvocate.

10 MR. NEEDLEMAN: Got it.

11 (Mr. Needleman hands document to witness.)

12 CMSR. HONIGBERG: Does anybody
13 have a Bates page number that that's on?

14 MR. PATCH: Sixty-seven.

15 CMSR. HONIGBERG: Thank you.

16 A. (Mr. Large) I apologize, but I don't have a
17 Bates page-referenced document. So if you
18 can --

19 BY MR. FABISH:

20 Q. Do you have the document in front you?

21 A. (Mr. Large) I do at this point in time. But
22 if we could please utilize the upper
23 right-hand corner, that will expedite me

1 finding the right page.

2 Q. Great. How about the lower right-hand
3 corner? Will that work for you?

4 A. (Mr. Large) Either would be fine. Thank you.

5 Q. Okay. Great. Just really quickly, if you
6 take a look at Page 3.

7 A. (Mr. Large) I have Page 3.

8 Q. Excellent. So at the top of that it says
9 "Site-Specific Factors."

10 First of all, as background, are you
11 familiar with this document? Have you seen
12 it before?

13 A. (Mr. Large) I have not reviewed it
14 previously, no.

15 Q. All right. Well, then, do you see the second
16 full paragraph just above the table in the
17 middle of the page?

18 A. (Mr. Large) Begins with, "Based on the most
19 recent..."

20 Q. Yes, that would be the one.

21 A. (Mr. Large) Thank you.

22 Q. The last sentence there, beginning with --

23 (Court Reporter interrupts.)

- 1 Q. I'm sorry. The last sentence of that
2 particular paragraph begins, "This adjusted
3 cost falls within the benchmark range for
4 projects of this size, as shown below...
5 where market data indicates that construction
6 costs for wet FGD systems in the U.S. have
7 risen dramatically over the past several
8 years and are currently in the range between
9 \$250 per kilowatt and \$654 per kilowatt
10 (median \$467 for kilowatt) for similar-sized
11 systems." Do you see that?
- 12 A. (Mr. Large) I do, in the draft report from
13 June 17, 2008.
- 14 Q. Great. And just so I understand, looking at
15 a price per kilowatt, you essentially take
16 the price of the project and then divide that
17 by the capacity of the system; correct?
- 18 A. (Mr. Large) That would be the arithmetic that
19 I would utilize, yes.
- 20 Q. Okay. Great. Could I ask you to take a look
21 at, I think it's Attachment 5 to your
22 testimony.
- 23 A. (Mr. Large) That one I have.

1 Q. Great. And this I have Bates numbers for.

2 A. (Mr. Large) This is the September 2nd filing
3 to the Commission.

4 Q. Yes, it is. Yeah. So the Bates number that
5 begins on... 486, I believe. I think you
6 testified earlier that you helped prepare
7 this document?

8 A. (Mr. Large) I did.

9 Q. Okay. And so you're certainly familiar with
10 it.

11 A. (Mr. Large) Yes.

12 Q. If you could look at Bates 493?

13 A. (Mr. Large) 493?

14 Q. Yes.

15 A. (Mr. Large) I have that.

16 Q. Okay. At the bottom, big Roman II, "Project
17 Cost Estimate," and then underneath that
18 there's is a Subsection B?

19 A. (Mr. Large) Yes.

20 Q. And the sentence there reads, "The current
21 project cost estimate is in line with
22 recently published information on other
23 multiple-unit scrubber installations

1 occurring elsewhere in the country." Is that
2 correct?

3 (Witness reviews document.)

4 A. (Mr. Large) Yes.

5 Q. Okay. And there's a reference to "Oak Creek
6 Units 5 through 8" in that paragraph;
7 correct?

8 A. (Mr. Large) There is.

9 Q. And it describes project "to install a
10 Scrubber and Selective Catalytic Reduction
11 technologies" at these units?

12 A. (Mr. Large) Yes.

13 Q. Total cost of \$774 million?

14 A. (Mr. Large) Yes.

15 Q. And this document lists the megawattage for
16 those units as 525 megawatts?

17 A. (Mr. Large) That's what it appears there,
18 yes.

19 Q. Okay. And so if you take \$774 million and
20 divide that by 525 megawatts, you get \$1,474
21 per kilowatt. Is that --

22 A. (Mr. Large) Mr. Vancho and I concur that
23 that's the math.

1 Q. Okay. Great.

2 MR. FABISH: I'd like to mark
3 something as an exhibit.

4 (Ms. Frignoca distributes document.)

5 MR. FABISH: Will this be 124?
6 Or what number are we up to?

7 CMSR. HONIGBERG: Yes, 124.

8 MR. FABISH: Okay. If we
9 could mark this as 124.

10 (The document, as described, was herewith
11 marked as Exhibit 124 for identification.)

12 BY MR. FABISH:

13 Q. So, do you need a second to review the
14 document, or do you... you got it?

15 A. (Mr. Large) I do.

16 Q. So if you look down at the bottom of that
17 page, this is -- well, let me go back a bit.

18 This is Wisconsin Energy, the operator
19 of Oak Creek Power Plants, a page concerning
20 Oak Creek Power Plant. If you look down at
21 the bottom of the page where it says,
22 "Generating Capacity," it lists megawattage
23 capacities for Units 5, 6, 7 and 8.

1 A. (Mr. Large) As of March of 2014, yes.

2 Q. Hmm-hmm. It also lists just above that the
3 "Year in Service" date for those five
4 units -- or for Units 5, 6, 7 and 8; correct?

5 A. (Mr. Large) I guess I'll add a clarifier.
6 "Original" in-service date.

7 Q. Sure. So you see the generating capacity for
8 those four units as being 261 megawatts, 264
9 megawatts, 298 megawatts and 312 megawatts?

10 A. (Mr. Large) I do.

11 Q. And I know you don't have a calculator or
12 anything, but, like, what's the total
13 megawattage that adds up to?

14 A. (Mr. Large) We do have a calculator.

15 Q. Oh, you do? Fantastic.

16 A. (Mr. Large) Mr. Vancho is better with the
17 calculator than I am.

18 Looks like 1135.

19 Q. So if you divide 774 million by 1135, do you
20 get \$1,474 per kilowatt?

21 A. (Mr. Large) I'm confident you do not.

22 Q. What do you get, if we could press Mr. Vancho
23 again into service with the calculator?

1 A. (Mr. Vancho) Six eighty-one.

2 BY MR. FABISH:

3 Q. So, using the megawattage reported on
4 Wisconsin Energy's page here for Oak Creek,
5 the installed cost for that project would
6 actually be substantially less than the
7 \$1,474 listed in the September document in
8 that 08-103 document -- or docket; correct?

9 A. (Mr. Large) Well, again, I need to come back
10 to, I don't know what may or may not have
11 been done at Oak Creek with regard to
12 capacity additions in the time frame between
13 2008 and 2014. So I don't know that we're
14 comparing apples to apples.

15 Q. Do you think it's reasonable that they would
16 have more than doubled capacity of those four
17 units in the past six years?

18 (Witness reviews document.)

19 A. (Mr. Large) Not likely, but I don't know.

20 Q. Sure. No, I understand. Assuming that this
21 is correct, that would then -- let me back up
22 here a moment. Strike that.

23 Operating under the assumption that this

1 is correct and that there hasn't been major
2 expansion in capacity at Oak Creek, that
3 means that the information in Subpart B under
4 Roman Numeral II on Bates Page 493 of this
5 document, "as-installed cost" would be
6 significantly less than what's shown in that
7 document?

8 A. (Mr. Large) Well, presuming that the
9 \$774 million figure as reported in SNL prior
10 to its construction remains accurate.

11 Q. Sure.

12 A. (Mr. Large) The arithmetic of 774 divided by
13 the much larger capacities that we added up
14 would produce a lower result.

15 Q. Okay. And that lower result?

16 A. (Mr. Large) Was 682 per --

17 Q. And that number was less than --

18 (Court Reporter interrupts.)

19 A. (Mr. Large) Was 682 per kilowatt.

20 Q. Yeah, because you rounded it; right? When I
21 did it, I rounded it.

22 MR. FABISH: Okay. I think
23 that's all I have. Thank you.

1 CMSR. HONIGBERG: Commissioner
2 Iacopino.

3 SP. CMSR. IACOPINO: Thank
4 you.

5 INTERROGATORIES BY SP. CMSR. IACOPINO:

6 Q. Mr. Large, I want to refer you back to
7 Exhibit 118, being your internal Capital
8 Project Approval Policies and Procedures.
9 And if I understood your testimony correctly,
10 these, or some version of these, were in
11 effect at the time that you made your
12 presentations to the RaCC and to the board of
13 trustees; correct?

14 A. (Mr. Large) Yes.

15 Q. On Page 5 of those procedures, there's a
16 Roman Numeral IV, "Capital Project Monitoring
17 Review."

18 A. (Mr. Large) Yes.

19 Q. And if I understand that section correctly,
20 and I've only read it today, these rules
21 require that there be a monthly report to
22 some committee. I assume the --

23 A. (Mr. Large) It would be the RaCC.

1 Q. Okay. And in that monthly report, you're
2 supposed to indicate any triggering events?

3 A. (Mr. Large) Yes.

4 Q. And the triggering events are -- well, things
5 that trigger -- things that the term
6 "triggering events" may include are listed
7 above that; correct?

8 A. (Mr. Large) Yes.

9 Q. One of which is significant increases in key
10 inputs, such as commodity price; is that
11 correct?

12 A. (Mr. Large) Yes.

13 Q. Did you -- would you be the person -- or
14 would you be the people within the Company
15 who are responsible for providing those
16 monthly reports?

17 A. (Mr. Large) Yes.

18 Q. Did you provide monthly reports to the RaCC?

19 A. (Mr. Large) Absolutely.

20 Q. Did you -- are they in any part of this
21 record, as far as you know?

22 A. (Mr. Large) I believe they would be -- well,
23 I'm not the best witness to answer that

1 question. So I can't say with certainty.
2 It's my belief that that would have been
3 included as part of the Jacobs Consultancy
4 Review. But that's my belief as opposed
5 to --

6 Q. Who is the best person, in your opinion?

7 A. (Mr. Large) Mr. Smagula would likely be the
8 best person.

9 Q. Thank you. Do you know if you reported any
10 increases in commodity prices in the course
11 of your monthly reports to the RaCC,
12 specifically gas?

13 A. (Mr. Large) I'm confident that we did not
14 report an increase in commodity prices at the
15 RaCC.

16 Q. Would that be because you interpret that to
17 mean the commodity that's actually used at
18 the plant being coal?

19 A. (Mr. Large) No. It's actually -- my
20 interpretation of those words is the
21 commodity is associated with the construction
22 effort.

23 Q. Oh, I see. Okay.

1 A. (Mr. Large) And the good fortune or bad
2 fortune is that the run-up in commodity
3 prices had occurred prior to our going to the
4 RaCC for its authorization.

5 Q. So I would be wrong, then, to interpret that
6 to mean the commodity prices that underlaid
7 your economic analysis.

8 A. (Mr. Large) I would say that it was beyond
9 what was intended, yeah.

10 Q. Well, they're your company's rules. I don't
11 pretend to know them. So I just want to make
12 sure I understand your interpretation. Okay.

13 A. (Mr. Vancho) They're typically increases in
14 the capital costs. So, certainly the
15 commodity prices -- as Mr. Large said,
16 underlying commodities associated with
17 construction costs.

18 Q. I want to also draw your attention to your
19 presentation to -- I guess the RaCC came
20 first; is that correct?

21 A. (Mr. Large) Yes.

22 Q. Was that in April of 2008? April 25, 2008?

23 A. (Mr. Large) There are numerous presentations

1 to RaCC. As you are alluding to, the monthly
2 report is a presentation to RaCC, so... the
3 one that we spent the most time on was the
4 June 25th presentation.

5 Q. Do you have an April 25th in the set of
6 discussion documents in front of you?

7 A. (Mr. Large) I appreciate your
8 characterization of the document. Yes.

9 Q. You do?

10 A. (Mr. Large) I do.

11 Q. Okay.

12 A. (Mr. Large) That's Attachment 2 to our
13 testimony, if that helps, 23-2.

14 Q. Do you have a Bates page for it?

15 A. (Mr. Large) I do. Sorry. 420.

16 Q. Thank you. I have a couple of questions
17 regarding that. The first is where somebody
18 left off with one of the witnesses yesterday.
19 Thank you.

20 The first is where somebody left off
21 with the witness yesterday; and that is, in
22 this report, there's is a reference to the
23 cost of the Project having gone up to \$425

1 million, I believe. I'm looking for that
2 page so that I can --

3 A. (Mr. Large) On Bates Page 431?

4 Q. I take it that figure came from you?

5 A. (Mr. Large) From PSNH, not me specifically.
6 I was far less engaged in project cost
7 development.

8 Q. But that figure came at some point prior to
9 the date that appears on the front of this
10 document; correct?

11 A. (Mr. Large) It would have to, yes.

12 Q. Do you know when -- the exact date when they
13 determined that the capital investment would
14 be \$425 million?

15 A. (Mr. Large) Well, I would caution that we're
16 taking that as a definitive, specific number.
17 It certainly has three digits, but I believe
18 that that was the estimate as the contracts
19 were being received and being assembled. So,
20 it was not the final estimate. It was the
21 estimate as we knew, based upon the
22 information that had come in the door at that
23 point in time. So it was the growing,

1 current thinking about the price.

2 Q. I understand that. What I'm trying to figure
3 out is -- and I know it wasn't the final
4 estimate that you came up with, or that your
5 company came up with. But what I'm trying to
6 figure out is, do you know generally when,
7 prior to April 25th, 2008, this \$425 million
8 capital investment estimate was determined?

9 A. (Mr. Large) I'm sorry. I would not.

10 Q. Okay.

11 A. (Mr. Large) Mr. Smagula would be the best
12 person to describe that.

13 Q. In your presentations and your discussion
14 documents for the Project, pretty much with
15 everybody -- with RaCC, with your board of
16 trust, with the Staff -- did you take into
17 account risks of future environmental
18 regulations?

19 A. (Mr. Large) They were inherent in the
20 economic analysis.

21 Q. Explain to me how they were "inherent" in
22 your economic analysis.

23 A. (Mr. Large) Certainly. In two ways, in my

1 view: First, specifically associated with
2 the potential for a cooling tower, we ran a
3 case that added a cooling tower into the
4 economic analysis. So there was a plus \$30
5 million capital investment case.

6 Q. Okay. Now, when did that analysis occur?

7 A. (Mr. Vancho) This was within the summer of
8 2008, this part of the RaCC presentation.

9 (Court Reporter interrupts.)

10 A. (Mr. Vancho) That we see in the RaCC
11 presentations.

12 A. (Mr. Large) And then the second component was
13 far less specific. But the capital
14 projections for future needs at Merrimack
15 Station, we included a stream of capital
16 dollars on a year-by-year basis, presuming
17 that the plant would continue to operate and
18 have capital needs. And there was an
19 inclusion of \$9 million per year for capital.
20 It was not specified to environmental work,
21 any other specific kind of work, but, I
22 guess, the word "place holder," "proxy" for
23 capital needs ongoing through the life -- the

1 remaining life of the plant.

2 Q. In your preparation of the economic analysis
3 and your sort of making plans for
4 contingencies -- I don't know if that's the
5 best way to say it. But for environmental
6 contingencies, did the fact that you had a
7 NPDES permit that was very old play any role
8 in your factoring into the economic analysis
9 that you did?

10 A. (Mr. Large) We did not make a specific --
11 other than for the cooling tower, we did not
12 make a specific capital cost adder for any
13 other NPDES equipment. As I said, we did
14 have the \$9 million a year, which was
15 straight-lined to be able to be utilized for
16 whatever purposes were necessary at that
17 point in time. It could have covered a
18 variety of different environmental costs,
19 including NPDES needs. But, as well, as has
20 been discussed here, what's ended up included
21 in the capital cost associated with the
22 Project is a very significant component of
23 what's being debated regarding our draft

1 NPDES permit.

2 Q. I'm sorry. I don't understand the last part
3 of your answer.

4 A. (Mr. Large) Sure. The whole conversation
5 about the secondary wastewater treatment
6 facility is a significant component of what's
7 being debated regarding the NPDES permit at
8 this point in time. So it was not considered
9 outside of the Scrubber cost analysis. It
10 was -- in the end, it's part of the Scrubber
11 cost analysis.

12 Q. And so do you say that's part of it, in the
13 sense of it's part of that \$9 million a year
14 that you --

15 A. (Mr. Large) No. I'm sorry. We started with
16 an estimate of \$457 million. All right?

17 Q. Okay.

18 A. (Mr. Large) We actually spent \$422 million.

19 Q. Right.

20 A. (Mr. Large) Of that \$422 million,
21 approximately \$30 million is associated with
22 the secondary wastewater treatment plant,
23 which is an item that has come forward as

1 part of the NPDES process. We didn't know
2 that at that point in time. But the dollars
3 associated with that work really has been
4 folded into the Scrubber analysis, as opposed
5 to separate from it.

6 Q. But what I'm trying to focus on is, at the
7 time that your planning was going on, when
8 you actually were doing your economic
9 analysis, did you have discussions about the
10 status of your NPDES permit?

11 A. (Mr. Large) Yes, we did.

12 Q. And who would have been included in those
13 discussions?

14 A. (Mr. Large) Mr. Smagula, Ms. Tillotson, our
15 legal team, our members of our generation
16 Staff.

17 Q. So I guess the simplest way to understand
18 your answer is that it worked out okay
19 because the Project came in under what you
20 were expecting, and it was able to absorb the
21 cost of the secondary wastewater treatment
22 plant. I understand that. But I'm trying to
23 look at this from the decision-maker's

1 planning, at the time that you're planning
2 the plant. I'm trying to figure out if,
3 other than the \$9 million and the \$30 million
4 for a cooling tower, which is a different
5 issue, if there was any --

6 A. (Mr. Large) It's an NPDES issue. But yes.

7 Q. Right. But it's different than secondary
8 wastewater treatment.

9 A. (Mr. Large) Yes.

10 Q. I'm trying to figure out if that...

11 A. (Mr. Large) May I try and help?

12 Q. Yes, please.

13 A. (Mr. Large) I believe that, fundamentally,
14 all that's left, other than those two items,
15 would be screen water intake, screen
16 upgrades. And those would certainly be cared
17 for -- the cost of those would certainly be
18 cared for within the \$9 million annually that
19 we included in our analysis.

20 Q. During the course of your discussion in the
21 planning of your economic analysis,
22 undertaking the economic analysis, did you
23 consider at all that you might need a

1 secondary wastewater treatment facility?

2 A. (Mr. Large) At the time of the development of
3 the \$457 million, we did not include an
4 estimate for a secondary wastewater treatment
5 that we later did install.

6 Q. And do you know why not?

7 A. (Mr. Large) Because we believed that the
8 effluent that we expected to discharge would
9 have been permittable.

10 Q. Okay. So you didn't believe there would be a
11 need for it.

12 A. (Mr. Large) That is correct.

13 Q. In one of your, I believe it's your
14 presentation to the board of trustees, in the
15 discussion documents that went along with
16 that, I think you were asked this question a
17 little bit earlier, there was a suggestion in
18 those documents that not going forward with
19 the Project would affect the entire fleet of
20 fossil plants. Do you recall that?

21 A. (Mr. Large) I do recall that discussion, yes.

22 Q. What was the -- why were you suggesting that?
23 What led you to make that determination for

1 your board of trustees?

2 A. (Mr. Large) "Determination" might be a strong
3 word.

4 Q. That "suggestion."

5 A. (Mr. Large) Right. We have long operated the
6 facilities as a group, as a fleet. We have a
7 maintenance force that is based in a
8 centralized location that provides services
9 to each of these facilities. We have a
10 common staff team based in Manchester that
11 provides environmental services, engineering
12 services to the facilities. So, the costs
13 associated with those administrative support
14 and additional maintenance efforts, taking
15 Merrimack Station out of the mix -- they're
16 our biggest customer -- you know, would make
17 the administrative operation of PSNH as a
18 fleet with that staff more expensive. The
19 belief is that, as we had fewer and fewer
20 megawatts of capacity, and fewer stations to
21 care for, the cost effectiveness of the way
22 that we managed it historically would be
23 significantly diminished and maybe made very

1 bad.

2 Q. Did your consideration in making that
3 suggestion to your board of trustees have
4 anything to do with environmental mercury
5 requirements?

6 A. No.

7 SP. CMSR. IACOPINO: I have no
8 further questions.

9 INTERROGATORIES BY CMSR. HONIGBERG:

10 Q. Good afternoon, gentlemen.

11 A. (Mr. Large) Good afternoon.

12 A. (Mr. Vancho) Good afternoon.

13 Q. I want to ask you, as many others have, about
14 the presentations to the RaCC, presentations
15 to the board of trustees, and also the
16 meeting with the PUC Staff.

17 I think it was Mr. Patch who asked you
18 some questions about what's been marked as
19 Exhibit 43. It's a response to a data
20 request, TransCanada 6-201. Is that a
21 document that's still somewhere up on your
22 desk?

23 A. (Mr. Large) I'm sure it is.

1 Q. I'm sure, also, that some counsel, some
2 enterprising counsel could come up with a
3 copy of it.

4 A. (Mr. Large) Is there a chance we have a Bates
5 page reference that we might --

6 Q. It's a single page. I think Mr. Needleman is
7 going to win the race.

8 MR. NEEDLEMAN: 6-201?

9 CMSR. HONIGBERG: Yes.

10 (Mr. Needleman hands document to witness.)

11 BY CMSR. HONIGBERG:

12 Q. Yes. It's a data response, 8/8/2014.

13 A. (Mr. Large) I have it, yes. Thank you.

14 Q. You see the question, the reference to Page 4
15 of your testimony? And it's a question about
16 what information was provided to the PUC and
17 the OCA and to the RaCC and to the board of
18 trustees. See that?

19 A. (Mr. Large) Yes.

20 Q. The answer says, "The facts shared with the
21 PUC Staff and OCA were the same as those
22 shared with the RaCC." Do you see that
23 sentence?

1 A. (Mr. Large) I do.

2 Q. There's no reference in that sentence to the
3 board of trustees, and I'm wondering if
4 that's intentional.

5 A. (Mr. Large) In my witness preparation, I
6 learned from my illustrious legal team that I
7 responded to the question that was asked. It
8 asked "was shared with the PUC and the OCA as
9 with the Risk and Capital Committee."

10 I can tell you further that the
11 information provided to the RaCC and the
12 board is fundamentally very much the same
13 information. We actually went through what
14 many of the differences were.

15 Q. I think that's right. I think I do
16 understand your testimony to be that some of
17 the information that is in the presentation
18 documents that were used with the RaCC and
19 the board, while not delivered in writing to
20 the PUC Staff, was delivered orally to the
21 PUC Staff; is that correct?

22 A. (Mr. Large) Yes.

23 Q. And I'm thinking specifically of some of the

1 information that's on pages -- that are
2 titled "Key Financial Takeaways" in both --
3 there's one for the RaCC, which is Bates
4 Page 447, and the Key Financial Takeaways to
5 the board of trustees is Page 470.

6 (Witness reviews document.)

7 A. (Mr. Large) Instead, I would have said it was
8 the information that was contained in the
9 financial scenarios and financial
10 sensitivities, which is summarized in the key
11 takeaways. It was more numerical in its
12 discussion.

13 Q. And one of the numbers included, that you
14 conveyed to the Staff orally, was the \$5.29
15 spread?

16 A. (Mr. Large) Yes.

17 Q. Happily, everything else I had flagged was
18 asked by somebody else, so I have no further
19 questions.

20 CMSR. HONIGBERG: Mr.

21 Needleman, do you have any redirect?

22 MR. NEEDLEMAN: Just quickly,

23 I think.

REDIRECT EXAMINATION

BY MR. NEEDLEMAN:

Q. Mr. Large, when Ms. Chamberlin was asking you questions earlier, she was focusing on Exhibit 118, which are the procedures that you employ with respect to projects that are viewed by RaCC. Do you recall that?

A. (Mr. Large) I do.

Q. And it's my understanding that, in this case, the Jacobs report did an analysis of the manner in which PSNH complied with its own internal procedures regarding the management of the Scrubber Project; is that right?

A. (Mr. Large) That's my understanding as well.

Q. Do you recall what Jacobs said?

A. (Mr. Large) I believe they found that we were in compliance with our Company's policies and procedures.

Q. And then the only other question I wanted to ask relates to what Mr. Fabish was asking a moment ago, about the Oak Creek Power Plant, Exhibit 124, if you could turn to that.

A. (Mr. Large) I have that again, yes.

1 Q. And Mr. Fabish was referring you to one of
2 your exhibits, one of the PUC presentations.
3 And I'm looking in particular at Bates Page
4 000493. Could you also have that handy?

5 A. (Mr. Large) I have it, yes.

6 Q. All right. We were focusing on this issue as
7 to what was reported to the PUC about the Oak
8 Creek Units 5 through 8 and this notion of
9 them being a total of 525 megawatts. Do you
10 recall that?

11 A. (Mr. Large) I do, yes.

12 Q. Can you go to the first page of Exhibit 124
13 that Mr. Fabish was asking you about?

14 A. (Mr. Large) I have that, yes.

15 Q. And look at the bottom of the page where it
16 lists the megawatts of the units.

17 A. (Mr. Large) Yes.

18 Q. And what's the total megawatts of Units 5 and
19 6 added together?

20 A. (Mr. Large) It's 525.

21 Q. Okay. Now can you turn over to the next page
22 of that exhibit and look at the left-hand
23 side, all the way at the bottom where it says

1 "wet flue gas desulfurization." Do you see
2 that?

3 A. (Mr. Large) I do.

4 Q. And can you read the second sentence?

5 A. (Mr. Large) I'll read the whole thing. "WFGD
6 controls are reducing sulfur dioxide (SO₂)
7 emissions by more than 90 percent. One WFGD
8 system was installed for each pair of
9 generating units."

10 Q. So, is it possible that when you made your
11 reference to "Oak Creek" in that PUC filing,
12 that you were referring to one FGD system for
13 Units 5 and 6, which total 525 megawatts?

14 A. (Mr. Large) That is possible.

15 Q. Does this do anything to refresh your
16 recollection about that?

17 A. (Mr. Large) Not specifically, unfortunately.

18 Q. Okay. Thank you. Nothing further.

19 CMSR. HONIGBERG: Thank you,
20 gentlemen. I think we have nothing else for
21 you this afternoon.

22 It would be a very good time
23 for a break and a long stretch.

1 MR. NEEDLEMAN: Sure.

2 CMSR. HONIGBERG: And when we
3 come back -- I can never remember. Who are
4 we doing next?

5 MR. NEEDLEMAN: I think it's
6 Doctors Harrison and Kaufman.

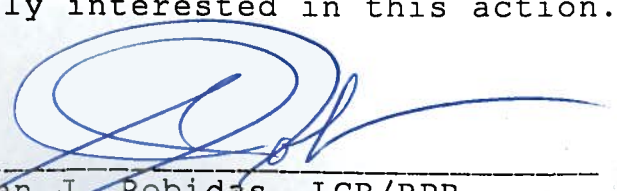
7 CMSR. HONIGBERG: All right.
8 So we'll take a 15-minute break and go
9 straight through to 5:30. Thank you all.
10 Recess taken at 3:42 p.m.

11 (Whereupon a recess was taken at 3:42 PM,
12 and the hearing resumed at 4:00 PM, which
13 will be filed under separate cover
14 identified as "Day 6 LATE Afternoon.)
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C E R T I F I C A T E

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